THE STATE OF SOUTH CAROLINA
In the Supreme Court

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S.C. SUPREME COURT

APPEAL FROM THE PUBLIC SERVICE COMMISSION

Appellate Case No. 2018-001165 and 2018-002117

Commission Docket No. 2018-2-E

South Carolina Coastal Conservation League and Southern Alliance for Clean Energy, Appellants,

v.

South Carolina Electric & Gas, CMC Steel South Carolina, South Carolina Energy Users Committee, South Carolina Solar Business Alliance, LLC, Southern Current, LLC and South Carolina Office of Regulatory Staff, Respondents;

and

South Carolina Solar Business Alliance, LLC, Appellant,

v.

South Carolina Coastal Conservation League and Southern Alliance for Clean Energy, South Carolina Electric and Gas, CMC Steel South Carolina, South Carolina Energy Users Committee, Southern Current, LLC, and South Carolina Office of Regulatory Staff,

Of whom South Carolina Electric & Gas and South Carolina Office of Regulatory Staff, are Respondents.

RECORD ON APPEAL
Volume I of IV

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2017-2-E - ORDER NO. 2017-246

APRIL 27, 2017

IN RE:	Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	) ORDER APPROVING) FUEL COSTS AND) ADOPTING) SETTLEMENT) AGREEMENT

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") and for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2016, through December 31, 2016 ("Review Period").

A. Notice and Interventions

By letter dated October 12, 2016, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines ("Notice")

in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies by January 6, 2017. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 6, 2017. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On November 29, 2016, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office October 12, 2016, letter. On December 16, 2016, the Company filed with the Commission an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to Intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("SCCCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SCSBA"), Southern Current, LLC ("Southern Current"), and CMC Steel South Carolina ("CMC Steel"). The Petitions to Intervene of SCEUC, SCCCL, SACE, SCSBA, Southern Current, and CMC Steel were not opposed by SCE&G and no other parties sought to intervene in this proceeding. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015).

B. The Settlement Agreement

On March 30, 2017, after the pre-filing of direct testimony by the parties and after all parties had been afforded a full opportunity to conduct discovery in this matter, ORS

filed with the Commission a Settlement Agreement executed by SCE&G, ORS, and SCEUC (collectively, the "Settling Parties"). SCCCL, SACE, SCSBA, Southern Current, and CMC Steel were not signatories to the Settlement Agreement. While SCCCL, SACE, SCSBA, and Southern Current opposed certain issues agreed upon by the Settling Parties, CMC Steel did not oppose the adoption of the Settlement Agreement by the Commission and sought leave to be excused from appearing at the hearing. Leave to not appear was granted to CMC Steel as requested, pursuant to a Standing Hearing Officer Directive (Order No. 2017-21-H).

Among other things, the Settling Parties agreed as follows:

1) The methodologies used by SCE&G to calculate its avoided energy and capacity costs under the Public Utility Regulatory Policies Act of 1978 ("PURPA") are reasonable and prudent.
2) Rate Schedules PR-1 and PR-2 are lawful, just, and reasonable.
3) The updated components of value for Net Energy Metering ("NEM") Distributed Energy Resources listed below in Table 1 are reasonable and prudent, comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015):

Table 1

	Current Period ($/kWh)	IRP Planning Horizon (15-Year Levelized) ($/kWh)	Components
1	$0.03273	$0.03199	Avoided Energy Costs
2	$0	$0.00172	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00004	$0.00004	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03277	$0.03375	Subtotal
12	$0.00268	$0.00276	Line Losses @ 0.9245
13	$0.03545	$0.03651	**Total Value of NEM Distributed Energy Resources**

4) SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet are lawful, just and reasonable.

5) SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

6) During the Review Period SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194,

which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

7) As a result of SCE&G's efforts to provide the DER programs, the cumulative balances of SCE&G's DER program costs as of December 31, 2016, totaled an over-collected balance of $1,709,006 in avoided costs and an under-collected balance of ($698,707) in incremental costs, which are reasonable and prudent.

8) SCE&G reasonably projected its DER program costs for the period January 1, 2017, through April 30, 2018, which are accurately reflected in Hearing Exhibit No. 5 (AWR-7 and AWR-9) attached to the direct testimony of Witness Rooks.

9) SCE&G's proposed DER Avoided Cost Component by class, as set forth below in Table 2, are reasonable and prudent:

Table 2

Class	DER Avoided Cost Component (¢/kWh)
Residential	0.015
Small General Service	0.013
Medium General Service	0.011
Large General Service	0.007

10) SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below in Table 3, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent:

Table 3

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 0.91
Small & Medium Gen. Svc.	$ 3.29
Large General Service	$ 100.00

11) The tariff sheet entitled "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs," including the rates, terms and conditions contained therein, is lawful, just, and reasonable.

12) SCE&G made reasonable efforts to maximize unit availability and minimize fuel costs and took appropriate corrective action with respect to outages that occurred during the Review Period.

13) Subject to any adjustments set forth in ORS's pre-filed direct testimony, SCE&G's accounting practices are in compliance with S.C. Code Ann. § 58-27-865 (2015).

14) SCE&G's net cumulative over-collected balance of total base fuel, variable environmental, and avoided capacity costs for the periods ending December 2016, and estimated through April 2017 are $56,504,223 and $31,505,037, respectively.

15) The appropriate fuel factors for SCE&G to charge pursuant to the Settlement Agreement for the period beginning with the first billing cycle for May 2017 and extending through the last billing cycle for April 2018 are listed below in Table 4:

Table 4

Class	Base Fuel Cost Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Environmental Fuel & Avoided Capacity Component (¢/kWh)	Total Fuel Costs Factor (¢/kWh)
Residential	2.451	0.015	0.047	2.513
Small General Service	2.451	0.013	0.039	2.503
Medium General Service	2.451	0.011	0.033	2.495
Large General Service	2.451	0.007	0.020	2.478
Lighting	2.451	0.000	0.000	2.451

16) The Settling Parties agree that the base fuel component set forth in Paragraph 15 above is projected to create an under-collected cumulative balance of base fuel costs as of April 30, 2018, of approximately ($61,000,000).

17) The Settling Parties agree that the Company be allowed carrying costs for base fuel cost component under-collected balances, as they occur and, if approved, be based on the 3-year U.S. Government Treasury Note rate plus 65 basis points.

18) The proposed rates would increase the average monthly bill for a residential customer on Rate 8 using 1,000 kilowatt hours ("kWh") from $147.53 to approximately $148.31, or by $0.78. However, the net effect on a Rate 8 Residential Bill using 1,000 kWh per month considering the Company's Revised DSM Rate Rider (Docket No. 2017-35-E), and its recently approved Pension Rider Adjustment (Docket No. 2017-56-E) would be $0.00 or 0.00%.

19) The Settling Parties agree that the fuel factors set forth above are consistent with S.C. Code Ann. § 58-27-865 (2015) and that, except as otherwise provided in the Settlement Agreement, any and all challenges to SCE&G's historical fuel costs recovery for the period ending December 2016, are not subject to further review; however, the projected fuel costs for the period beginning January 1, 2017, and thereafter, shall be an open issue in future fuel costs proceedings held under the procedure and criteria established in S.C. Code Ann. § 58-27-865 (2015).

20) With regards to plant outages not completed as of December 31, 2016, if any, and outages where final reports of SCE&G, contractors, governmental entities or others are not available, if any, the Settling Parties agree that ORS retains the right to review the reasonableness of the plant outage(s) and associated costs in the review period during which the outage is completed or when the report(s) on such outage(s) become available.

21) Upon written request, SCE&G will provide the following to the Settling Parties:

   a. Copies of the monthly fuel recovery reports currently filed with the Commission and ORS; and,

   b. Quarterly forecasts beginning with the quarter ending June 30, 2017, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/(under)-collected balance to date. SCE&G agrees it will put forth reasonable efforts to forecast the expected fuel factors to be set at its next annual fuel proceeding;

however, the Settling Parties agree that these quarterly forecasts will not be admitted into evidence in any future SCE&G proceeding.

22) The Settling Parties support the Company's effort to use Internal Revenue Code Section 174 deduction claims to reduce the variable environmental and avoided capacity cost component of the total fuel cost factor and agree that the implementation of the benefit from the deferred tax liability in the manner outlined by SCE&G witness Coffer is reasonable.

23) The Settling Parties agree that the Company's request to suspend the Bill Credit Agreement ("BCA") program indefinitely due to high response from the customers and in the manner the Company proposed is reasonable.

24) The Settling Parties agree that the Company's requests to modify the existing Community Solar program by expanding the solar panel subscription offering to all eligible customers and for certain revisions to the Community Solar tariff to align with the First Amendment of their Credit Rate Agreement with Clean Energy Collective approved in Docket No. 2016-290-E, Order No. 2017-151, are reasonable.

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

S.C. Code Ann. § 58-27-865(B) (2015) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be

appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

S.C. Code Ann. § 58-3-140(A) (2015) also vests the Commission with the "power and jurisdiction to supervise and regulate the rates and service of every public utility in this State...." In carrying out these duties in relation to the Settlement Agreement, the Commission's published "Settlement Policies and Procedures" (Revised 6/13/2006) are applicable to guide this proceeding. Specifically, Section II of the Settlement Policies and Procedures, titled "Consideration of Settlements," states:

> When a settlement is presented to the Commission, the Commission will prescribe procedures appropriate to the nature of the settlement for the Commission's consideration of the settlement... [W]hen the settlement presents issues of significant implication for other utilities, customers or the public interest, the Commission will convene an evidentiary hearing to consider the reasonableness of the settlement and whether acceptance of the settlement is just, fair, and reasonable, in the public interest, or otherwise in accordance with law or regulatory policy. Approval of such settlements shall be based upon substantial evidence in the record.

III. HEARING

In order to consider the merits of this case and determine the reasonableness of the Settling Parties' agreement, the Commission convened a hearing on this matter on April 6, 2017, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire; Matthew W. Gissendanner, Esquire; and Mitchell Willoughby, Esquire. SCEUC was represented by Scott Elliott, Esquire. SCCCL and SACE were represented by J. Blanding Holman, IV, Esquire, and Lauren Joy Bowen, Esquire. SCSBA was represented by Timothy F. Rogers, Esquire; Richard L. Whitt, Esquire; and Benjamin L. Snowden, Esquire. Southern Current was represented by Richard L. Whitt, Esquire.

CMC Steel and its counsel of record were excused from attending and did not appear at the hearing. Jeffrey M. Nelson, Esquire, and Andrew M. Bateman, Esquire, represented ORS. In this Order, ORS, SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

At the outset of the hearing, ORS counsel introduced the Settlement Agreement. The Settlement Agreement was admitted into the record as Hearing Exhibit 1 and is attached hereto and incorporated herein as Order Exhibit No. 1.

Through their personal appearances, SCE&G presented the direct testimonies and exhibits of George A. Lippard, III; Henry E. Delk, Jr.; John S. Beier; Michael D. Shinn; Keith C. Coffer, Jr.; Allen W. Rooks; John H. Raftery; and Joseph M. Lynch. The direct testimonies and exhibits of ORS witnesses Gaby Smith and Willie J. Morgan were stipulated into the record by all Parties present at the hearing.[1] Through their personal appearances, ORS presented the direct testimonies and exhibits of Robert A. Lawyer, and Brian Horii.[2] Through their personal appearances, SCCCL and SACE presented the direct testimony and exhibits of Thomas Vitolo, and SCSBA presented the direct testimony and exhibits of Paul Fleury and Ben Johnson. Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

[1]Subsequent to the Parties stipulating into the record the direct testimony and exhibits of ORS witnesses Smith and Morgan, ORS filed affidavits verifying the direct testimony and exhibits of ORS witnesses Smith and Morgan.

[2] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Beier and Shinn were presented in the second panel; Witnesses Coffer and Rooks were presented in the third panel; and Witnesses Raftery and Lynch were presented in the fourth panel. ORS Witnesses Lawyer and Horii were presented as a single panel for ORS.

In response to the direct testimony of SCCCL and SACE Witness Vitolo and SCSBA Witnesses Fleury and Johnson, SCE&G presented the rebuttal testimony of Witnesses Raftery and Lynch. SCCCL and SACE filed surrebuttal testimony of Witness Vitolo and SCSBA filed surrebuttal testimony of Witness Johnson in response to SCE&G's rebuttal testimony.

IV. REVIEW OF THE EVIDENCE AND EVIDENTIARY CONCLUSIONS

After a review of the evidence and testimonies of the witnesses as described below, and reviewing the Settlement Agreement, the Commission reaches certain factual and legal conclusions.

A. Avoided Costs, Rate Schedule PR-1, and Rate Schedule PR-2

1. SCE&G Testimony

Witness Lynch explained the Company's calculations of avoided costs for power purchases under PURPA. Following the methodology approved by the Commission in Order No. 2016-297, SCE&G uses a difference in revenue requirements ("DRR") methodology to calculate its avoided energy and avoided capacity costs. This approach involves calculating the revenue requirements between a base case and a change case. The base case is defined by SCE&G's existing fleet of generators and the hourly load profile to be supplied by these generators. The change case is the same as the base case except that the hourly loads are reduced by 100 megawatts ("MW") in each hour which is the maximum reduction required by regulation under PURPA. The avoided costs are then calculated by taking the difference in revenue requirements between the two cases. Lynch Direct at 4-5.

For avoided energy costs, Witness Lynch testified that the Company calculates the change in production costs between a base case and a change case using a very carefully constructed computer program called PROSYM. To determine long-run avoided energy costs, this program models the commitment of generating units to serve load hour-by-hour over the course of the 15-year Integrated Resource Plan ("IRP") planning horizon. Short-run avoided energy costs are calculated for the period May 2017 through April 2018. Using PROSYM to simulate the dispatch of its generation fleet over these time periods, SCE&G estimates the production costs that result from serving the base case load and the change case load. The costs are accumulated into four time-of-use periods composed of two seasons—peak (PS) and off-peak (OS) — and two daily periods—peak hours (PH) and off-peak hours (OH). After adjusting the avoided energy costs for line losses, working capital impacts, gross receipts taxes and generation taxes, the Company's calculated short-run and long-run energy costs, which are reflected in the Company's proposed PR-1 and PR-2 rate schedules, respectively, are listed as follows in Table 5 and Table 6:

Table 5

Short-Run Avoided Energy Costs ($/kWh)

Time Period	PSPH	PSOH	OSPH	OSOH
May-April	$0.03590	$0.03079	$0.03801	$0.03549

Table 6

Long-run Avoided Energy Costs ($/kWh)

Time Period	PSPH	PSOH	OSPH	OSOH
2017-2021	$0.03384	$0.02845	$0.03483	$0.03170
2022-2026	$0.03648	$0.02679	$0.03200	$0.02726
2027-2031	$0.04070	$0.03040	$0.03587	$0.02935

Id. at 5-7.

To calculate its long-run avoided capacity costs, Witness Lynch testified that the Company also uses the methodology approved by the Commission in Order No. 2016-297 to calculate the difference in the revenue requirements between a base case and a change case. Using the resource plan in its latest IRP or an updated resource plan if appropriate, SCE&G calculates the incremental capital investment related revenue required to support the existing resource plan and then develops a changed resource plan based on the assumption of a 100 MW capacity purchase at zero cost over the 15-year IRP planning horizon. The change in revenue requirements over the 15-year period between the two resource plans is associated with the 100 MW purchase and is stated as an average cost per kilowatt ("kW") year. This avoided capacity cost is then divided between summer and winter with 80% being associated with the summer season and 20% being associated with the winter season. After making adjustments for working capital and gross receipts taxes

and dividing by the number of critical peak hours in each period, the summer capacity payment is $0.01965/kWh based on 264 critical peak hours in the summer season and the winter capacity payment is $0.00675/kWh based on 192 critical peak hours in the winter season. Id. At 7-9.

Witness Lynch testified that the avoided energy costs calculated this year are slightly lower than those calculated last year, on average having decreased $0.00015 per kWh, which is less than a 0.5% reduction. Witness Lynch further testified that the Company's avoided capacity costs have decreased approximately 70% since last year because the amount of avoidable capacity in its resource plan has decreased. Specifically, Witness Lynch testified that the Company's 2016 IRP included two combustion turbines that could be avoided—one in 2029 and one in 2030—along with one-year capacity purchases that could be avoided in 2018. In the 2017 IRP, however, the capacity purchases for 2018 and 2019 have already been made and therefore are no longer avoidable. Also, this year's IRP projects the need for only one additional combustion turbine in 2031. Finally, Witness Lynch testified that this year's IRP has 320 MW of solar capacity under Purchase Power Agreements ("PPAs") with Qualifying Facilities ("QFs"), while last year's only had 278 MW. Id. At 10-11.

2. ORS Testimony

Witness Horii testified that ORS reviewed SCE&G's avoided cost calculations in order to verify the Company is using the avoided cost methodology approved by the Commission, to confirm the methodology meets PURPA requirements, and to verify the avoided cost rates requested by SCE&G in this docket are a reasonable result of the

approved avoided cost methodology. Horii Direct at 2. Witness Horii stated that the method used by SCE&G to calculate avoided capacity and avoided energy costs is consistent with the methodology approved by the Commission in Order No. 2016-297. Id. at 5. He further testified that, based upon his review, SCE&G did not make any significant changes to the avoided energy model inputs and that the variance in avoided energy costs are primarily driven by the difference in fuel forecasts between 2016 and 2017 including differences in near-term purchased power amounts and a slight change in long-term annual sales growth. Id. at 6. Witness Horii testified that the Company's updates in avoided energy costs are a reasonable and consistent result of the methodology used by SCE&G and that the method used is appropriate. Id.

Regarding avoided capacity costs, Witness Horii testified that he verified the inputs into the methodology, which included a lower load forecast, an update of combustion turbine expected useful life, financial factors such as SCE&G's corporate debt ratio and financing costs, and an update of combustion turbine direct and fixed operation and maintenance (O&M) costs based on a 2016 U.S. Energy Information Administration Report. Id. at 7. He further testified that the updates to avoided capacity costs are a reasonable and consistent result of the methodology used by the Company and that the majority of the capacity cost reduction is due to the reduction in the amount of avoidable PPAs and the change in the number of combustion turbines in the IRP base case expansion. Witness Horii testified that these changes are reasonable and that, therefore, the reduction in the avoided capacity costs are a reasonable result consistent with the DRR methodology approved by the Commission in Order No. 2016-297. Id. at 8.

3. SCCCL and SACE Testimony, Responsive Testimony, and the Commission's Conclusions

Regarding the Company's methodology used to calculate its avoided energy and avoided capacity costs, Witness Vitolo made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Vitolo suggested that SCE&G should use a 100 MW solar profile when calculating avoided energy costs. Witness Vitolo stated that it is reasonable to model the avoided energy cost associated with QFs using a solar profile because the bulk of new QFs in South Carolina are likely to be solar photovoltaic ("PV") resources given the declining costs of solar power. He further testified that using a PV profile generator would more accurately reflect the utilities' costs avoided by solar QFs being added to the system. Vitolo Direct at 5-28.

In response, Witness Lynch testified that SCE&G has used a 100 MW change in load to calculate a change in production costs and that this methodology has been used by the Company since the inception of PURPA and was most recently approved by the Commission in Order No. 2016-297. By taking this approach, SCE&G avoids the need to generate a different avoided cost tariff for every possible QF, whether solar, wind, hydro or biomass and for every possible variation of profile within those QF categories. Instead, the Company is able to present its avoided energy costs in a rate such as PR-1 that applies to solar, hydro, biomass, wind, or other renewable generation. Witness Lynch also stated that using a 100 MW solar generator to calculate avoided costs would result in annual changes that are too small to provide for calculating a robust estimate of avoided energy

costs. He also stated that the characteristics of solar PV generation profiles can be significantly different. In order to resolve these issues, SCE&G calculates its avoided energy costs by time period and pays every QF for the energy they sell during a particular time period regardless of their profile. Lynch Rebuttal at 2-3. Witness Horii agreed with Witness Lynch that the suggestion to use a resource-specific avoided cost is not realistic. Horii Cross-Examination at 58.

The Commission finds that SCE&G's methodology of using a 100 MW change in load to calculate avoided energy costs is reasonable. SCE&G's approach allows it to present its avoided energy costs in a rate such as PR-1 that applies to solar, hydro, biomass, wind, or other renewable generation. The Commission also finds that using a 100 MW solar profile would not provide an accurate estimate of the Company's avoided energy costs, since PURPA avoided costs do not limit the Company to a specific generation resource. The Company could use solar, wind, hydro, fossil fuel, or any other generation resource, depending on what is available at what cost. Thus, a generic avoided cost is appropriate. See also Order No. 2016-297.

b. Witness Vitolo recommended that SCE&G further explain its peak season and hour designations, asserting that it is unclear how these designations were calculated or selected and that they do not match the Company's other peak hour designations such as those set forth in its tariffs. He also stated that, under SCE&G's definition of peak and off-peak, avoided energy consumption during a peak season often results in less savings than the corresponding off-peak season. Vitolo Direct at 6-7.

Witness Lynch testified that the Company has used its definition of on-peak hours since it first published a PR-1 tariff in response to PURPA and adopted the same hours in its PR-2 tariff first published last year. He further testified that SCE&G's daily weekday load profile, averaged over the six months comprising the cooling season and the six months comprising the heating season, demonstrates why these on-peak hours are appropriate and reasonable. As to why these designations differ from those in the Company's tariff, Witness Lynch stated that the peak season and hours used in PR-1 and PR-2 are derived from a system perspective. SCE&G's Rate Department, though guided by these designations in designing rate schedules, may adjust these periods to address other concerns pertaining to rate design such as customer understanding and acceptance as well as the goal of revenue recovery and stability. Lynch Rebuttal at 4-6.

The Commission finds that SCE&G's designation of peak seasons and hours is reasonable and appropriate and consistent with the methodology approved by the Commission in Order No. 2016-297. The Commission further finds that it is reasonable for these designations to differ from those set forth in the Company's tariff in that SCE&G's rate schedules must take into account a variety of rate design factors that are not relevant to the methodology used to determine avoided costs.

c. Witness Vitolo also asserted that the Company made several errors in using the DRR method to calculate its avoided generation capacity costs. Specifically, Witness Vitolo testified that the Company: 1) failed to include the 2019 generation capacity shortfall in its avoided generation cost calculations; 2) failed to include opportunity costs in its revenue requirements calculations; 3) used an erroneous method to determine the

appropriate generation capacity payment split between summer and winter seasons; and 4) failed to include a performance adjustment factor ("PAF"). Vitolo Direct at 7-8.

Regarding the Company's future capacity shortfall, Witness Lynch testified that SCE&G's PR-2 rate was filed with the Company's testimony on February 23, 2017. Subsequent to this filing, but before the Company filed its IRP on February 28, 2017, SCE&G was notified that a QF cancelled its PPA to sell 40 MWs of solar capacity starting in 2019. Losing this 40 MWs of solar capacity, half of which the Company considers to be firm capacity, left a shortfall of 20 MWs in its resource plan. Witness Lynch testified the Company does not believe the change is material enough to warrant a further update to the PR-2 rate, that SCE&G recently completed negotiations on a PPA which will more than replace the lost capacity, and that the Company will incorporate these changes in future updates. Lynch Rebuttal at 6-7.

Witness Lynch also disagreed that the Company used an ambiguous retirement schedule in calculating its avoided capacity costs. He testified that, when the Mercury and Air Toxics Standards (MATS) regulations were passed, SCE&G conducted a retirement analysis that was first reported in its 2012 IRP and that showed a slight economic benefit to retiring McMeekin 1 & 2 and Urquhart 3 when the new nuclear units came online. In 2016, SCE&G updated its retirement analysis, which showed that, because of lower natural gas prices, there was an economic advantage to its customers in continuing to operate these units on natural gas. Id. at 8.

Regarding Witness Vitolo's testimony on opportunity costs, Witness Lynch testified that in order to sell capacity to a neighboring utility, it must be firm and dependable

capacity. However, Witness Lynch noted that a solar QF does not have firm capacity as it is an intermittent resource and, therefore SCE&G could not sell solar capacity. He further testified that, when SCE&G purchases firm capacity to serve its customers, it passes those costs onto its customers. Similarly, when SCE&G sells firm capacity, he testified that the benefits of such a sale should accrue to SCE&G's customers, not to the QF as proposed by Witness Vitolo. Finally, he testified that, if there were a lucrative market for solar capacity, the solar facility would not be selling its energy to SCE&G at the Company's avoided cost rates, but instead would sell its capacity directly to interested purchasers at higher prices. Id. at 9. On cross-examination, Witness Horii was not persuaded that a willing buyer would be available, and that there may not be any realizable savings even if there was an off-system sale. He supports an emphasis on realizable avoided cost savings, not just theoretical value. Horii Cross-Examination at 59-60.Regarding the calculation of the appropriate generation capacity payment split between summer and winter, Witness Lynch testified that the split is based on the relative number of hours that loads fall within 95% of their respective seasonal peaks, and that this methodology was approved by the Commission in Order No. 2016-297. In responding to Witness Vitolo's recommendation that the methodology be modified based on an analysis of the single annual peak, Witness Lynch stated that SCE&G believes a correct analysis requires the analysis of each season separately because the reliability risk on SCE&G's system is different, especially with respect to demand. He testified that, when weather is normal in summer and winter, SCE&G is a summer peaking system; however, SCE&G's system can also peak in the winter if the winter weather is very cold. He further stated that SCE&G's forecasters

estimate that the peak demand forecast assuming normal weather could increase by as much as 150 MWs in the summer and by about 500 MWs in the winter due to abnormal weather. Accordingly, Witness Lynch testified that the Company continues to believe that the 80/20% split is appropriate at this time. Id. at 10-11. Also, SCSBA witness Johnson used an 82%-18% summer/winter peak allocation. Johnson Direct at 73.

Regarding Witness Vitolo's recommendation that SCE&G should pay QFs a PAF in order to treat the QF capacity equally with a utility's generating units, Witness Lynch testified that it is not reasonable or meaningful to compare the intermittent capacity of a solar QF, which only provides energy as weather permits, with the firm capacity of a more dependable generating unit such as a combustion turbine. Based on data reflecting the maximum hourly output of a large solar generator on SCE&G's system, Witness Lynch testified that solar facilities provide little, if any, firm dependable capacity to SCE&G's system that the Company can reliably call upon to serve its customers. Id. at 11-12.

The Commission finds that SCE&G properly calculated its avoided capacity costs in a manner consistent with its IRP. The record reflects the loss of a 40 MW PPA is not material enough to warrant updating the Company's proposed PR-2 Rate Schedule at this time, especially in light of the additional capacity that will result from the recently negotiated PPA. The Commission further notes that the Company proposes to update the PR-2 Rate Schedule twice a year, unless a significant event warrants updates be made more frequently, and that this process reflects a reasonable and appropriate balance between the need to update rates to reflect updated information in the Company's future capacity needs while also providing rate stability and continuity. The Commission also finds that it is

reasonable and appropriate for the Company not to consider opportunity costs in its revenue requirements calculation in that a solar QF does not have firm capacity as it is an intermittent resource and does not add to the Company's opportunity, if such opportunity exists, to sell firm capacity. The Commission further finds that SCE&G's calculation of the appropriate generation capacity payment split between summer and winter seasons is reasonable and consistent with the methodology approved in Order No. 2016-297. The Commission also concludes that it is unreasonable to employ a PAF to the capacity payment because there is no guarantee of performance with regard to capacity from solar facilities.

d. Regarding transmission and distribution ("T&D") capacity, Witness Vitolo stated DERs, in aggregate and on average over time, reduce the need for T&D capacity investments. He testified that, if the DER alleviates some of the strain on the system during transmission or distribution system peaks, then that resource reduces pressure on that system and helps to defer or avoid future upgrades to that system. He also stated that energy efficiency resources are regularly credited with avoided or deferred T&D investments. Vitolo Direct at 20-21.

Witness Lynch responded by stating that, with the NEM solar capacity distributed throughout the system, the current impact on any single transmission line is less than 1,000 kW. SCE&G's transmission planning engineers consider this level of load, which is 0.1% of the total load, to be no more than noise on the system and it does not have any expected impact on the need for future transmission lines. Lynch Rebuttal at 13-14. Witness Lynch further testified that it is not clear whether the solar generators increase the strain on

distribution lines or decrease it. However, he noted that Company data shows that solar output is likely to increase the strain on the distribution system. Regardless, he testified that SCE&G's distribution engineers must plan the distribution line assuming the solar output is zero because solar is an intermittent resource. Id. at 14. Witness Lynch also testified that other energy resources, such as energy efficiency, may be credited with avoiding transmission and distribution costs. However, he opined that in considering a program such as energy efficiency, the effects of which are dispersed around a system, an analysis of the localized impact will demonstrate the impact to be too small to affect the transmission system. He also stated that, with respect to the distribution system, energy efficiency is not an intermittent resource like a solar generator, so there may be justification for an avoided cost credit. Id. at 15.

The Commission agrees with the position of SCE&G. The Company must design its transmission and distribution system so as to provide safe and reliable electric service, even when intermittent generation sources such as solar facilities and other small QFs are not producing power.

e. Regarding SCE&G's proposed PR-2 rate schedule, Witness Vitolo recommended that the Company should update the rate schedule on an annual or biennial basis, instead of twice a year or more often as recommended by SCE&G. Witness Vitolo testified that biannual updates create uncertainty for QF developers and that the DRR methodology is complex and opaque. Vitolo Direct at 19.

In response, Witness Lynch stated that SCE&G's projection of long-run avoided costs are based on an uncertain future and can change with the addition of more solar

facilities and with updated expectations for future fuel prices and load growth. Since SCE&G's PR-2 rate is based on long-run avoided costs and is used to price long-term power purchase agreements, Witness Lynch stated that SCE&G believes it is critical to keep the PR-2 rate up to date with current information and therefore it must be updated at least twice a year and perhaps more frequently if conditions warrant. Witness Lynch also testified that this process does not burden a potential QF with uncertainty in any way in that the Company has committed to a precise avoided cost level and, therefore, there is no uncertainty. Moreover, by calculating the energy component of avoided costs separately from the capacity component, Witness Lynch testified that the methodology is quite understandable and transparent. Lynch Rebuttal at 12-13.

The Commission agrees with SCE&G. In order to provide up-to-date information, SCE&G's proposal to update its proposed PR-2 Rate Schedule twice a year or more often as may be necessary is reasonable and consistent with Commission Order No. 2016-297.

4. SCSBA Testimony, Responsive Testimony, and the Commission's Conclusions

SCSBA also addressed a number of issues regarding the Company's calculations of its avoided costs. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Johnson testified that he compared the approved avoided cost rates of Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") to the avoided cost rates proposed by SCE&G in this proceeding, which showed that the Company's proposed rates are lower than those of DEC and DEP. However,

Witness Johnson testified that SCE&G's proposed avoided energy and avoided capacity costs should not be significantly lower than those of DEC or DEP, because they all operate in the Carolinas, use many of the same technologies to generate electricity, use many of the same suppliers, and draw from the same general labor pool. He also testified that it is reasonable to expect the wholesale price for capacity and energy in SCE&G's service area to be reasonably similar to that of neighboring utilities, particularly over the long run. Johnson Direct at 4-13.

In response, Witness Lynch testified that avoided costs are specific to each utility and reflect its mix of generating resources and load characteristics. Furthermore, he stated that the utility's IRP and expectations for the future affect each company's long-run avoided costs. Witness Lynch also noted that the mix of generators on SCE&G's system and the DEC and DEP systems is different. Specifically, he testified that DEP reported in its 2016 IRP that approximately 17% of its generation was to be sourced with natural gas, i.e., with combined-cycle and combustion turbine units. In contrast, SCE&G reported in its 2017 IRP that 34% of its generation in 2016 was sourced with natural gas. Witness Lynch stated that this difference in the mix of generating facilities demonstrates that SCE&G is in a better position to capture the benefits of low natural gas prices, which may help explain the Company's lower avoided energy costs. Lynch Rebuttal at 20-21. Responding to Witness Johnson's suggestion that the avoided cost rates should be similar because of transmission connections between SCE&G and other utilities, Witness Lynch also testified that there are myriad factors that impede perfection in trading. For example, Witness Lynch stated that utilities first meet their own customer load demands; therefore,

trading takes place on the margin with marginal units. He also stated that these trades can be impeded by a constrained intertie, a transmission charge, and, for small trades, a benefit margin that is too small. Uncertainty also can be a major impediment in that, because a utility commits its capacity to a sale, it will balance its need for resources and reserves against a forecast of near term demand. Id. at 21.

The Commission finds that the reasonableness of SCE&G's proposed avoided cost rates cannot be determined by comparing them to those of DEC and DEP or of other utilities. The Commission recognizes that each company's avoided costs are based on a number of factors including its mix of generating resources, load characteristics, resource plans, and operating assumptions. The Commission further finds that a number of market imperfections can lead to a difference in avoided costs among utilities. As the Commission finds SCE&G properly followed and applied the methodology approved in Order No. 2016-297 to calculate its avoided costs, comparing the proposed costs to those of other utilities is, therefore, unnecessary.

b. Witness Johnson also testified that the public interest is best served by establishing rates that leave ratepayers indifferent as to whether energy and capacity is obtained from QFs or from the utility itself under traditional rate base regulation. Johnson Direct at 16. Witness Johnson stated that retail customers are better served by regulatory decisions that set avoided cost rates at a point that is closer to the long-run incremental costs that are incurred by utilities when they build and operate their own generating plants. Id. at 34.

Witness Lynch testified that avoided cost rates should not be set to the utility's cost to build but, instead, should be set equal to the utility's actual avoided cost.[3] Under any other circumstances, Witness Lynch testified that ratepayers would not be indifferent to purchases from a QF. He also noted that the rates in the Company's PR-2 tariff reflect SCE&G's long-term avoided costs. Lynch Rebuttal at 22-23.

The Commission agrees with SCE&G. The methodology approved by the Commission in Order No. 2016-297 sets forth the proper manner in which to determine the Company's actual avoided cost. SCE&G has properly complied with and followed this methodology.

c. Witness Johnson next testified that, in calculating the present worth of the revenue requirements under base case assumptions and under a change case, SCE&G did not adequately achieve resource optimization and did not adequately analyze changes to the revenue requirement which would occur in a real-life scenario matching the change case. He also testified that the Company does not compute its rate base or develop its operating expenses, revenues, and miscellaneous sources of income in a manner that is equivalent to the way its revenue requirements would be developed in a retail rate case. For this reason, Witness Johnson suggested that the Company's implementation of the DRR method is flawed. Johnson Direct at 41-42. Witness Johnson also testified that the PROSYM model used by SCE&G to calculate its avoided costs has certain disadvantages. Id. at 47.

[3] Witness Horii stated that SCE&G's use of realizable avoided costs instead of theoretical avoided costs is reasonable. Horii Cross-Examination at 59-60.

Witness Lynch disagreed, noting that much of the costs that are needed in a rate case are fixed with respect to a resource planning study. In calculating avoided costs, Witness Lynch stated that SCE&G computes the difference in revenue requirements between a base plan and a change plan and that costs that do not change from one plan to the next will cancel out when a difference is taken. Therefore, Witness Lynch stated that it is unnecessary to go through the laborious process of collecting all the costs needed for a rate case only to add the same figure to both the base plan and the change plan yielding a net effect of zero. With respect to developing a resource optimization plan, Witness Lynch stated that SCE&G believes the calculation of avoided costs should be made using its IRP, which is an optimal resource plan in the sense that after adding a significant amount of base load nuclear capacity, future capacity additions should be peaking. Witness Lynch also testified that PROSYM is a standard production costing model that is used at many utilities and has been used by SCE&G for many years. Lynch Rebuttal at 23-24.

The Commission agrees with SCE&G. The Company properly calculated its avoided costs in compliance with the methodology approved by the Commission in Order No. 2016-297. The Commission also finds that it is appropriate for SCE&G to use PROSYM, which is a standard production costing model used in the industry.

d. Witness Johnson testified that he developed estimates of the Company's avoided capacity costs using the Proxy Unit method based on a hypothetical nuclear plant, combined-cycle plant, and combustion turbine. He stated that these calculations suggest SCE&G's proposed rates are below the capacity-related cost of building and operating these three types of generating units over their entire economic life.

For this reason, Witness Johnson stated that it is appropriate for the Commission to increase the avoided cost rates to be closer to those of DEC and DEP. He also testified that higher avoided cost rates would be more consistent with the long-run incremental cost of new capacity and would better encourage QF development within SCE&G's service area. Johnson Direct at 48-49.

Witness Lynch disagreed, stating that Witness Johnson failed to explain how the cost to construct these proxy plants relate to the costs SCE&G would avoid through a QF purchase, i.e., the avoided cost rates that leave ratepayers indifferent. He further noted that ratepayers would not be indifferent to the choice of paying the different capacity costs of a nuclear plant, a combined-cycle plant, or a combustion turbine. Rather, given the choice, Witness Lynch testified that ratepayers would choose to pay the capacity cost of the least expensive generating facility—a combustion turbine. Lynch Rebuttal at 24-25.

The Commission finds SCE&G properly calculated its avoided costs using the methodology approved by the Commission in Order No. 2016-297. As stated previously, SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities is inappropriate. PURPA allows avoided costs to be based on purchased capacity, not restricted to a utility's own generation resource. Lynch Direct at 3. The Commission further finds that using the Proxy method as recommended by Witness Johnson would not add further accuracy to the estimate of SCE&G's avoided costs and, therefore, declines to modify the approved methodology in the manner suggested by Witness Johnson.

e. Witness Johnson next addressed the Company's variable energy costs, noting that natural gas prices have fluctuated over both short and medium time frames, although stating that they have exhibited a tendency to trend higher over the long term. Witness Johnson testified that the instability of natural gas prices and difficulties associated with predicting these prices is one of the principal disadvantages or risks associated with using this fuel source. Witness Johnson further testified that, in developing his long-run avoided energy cost estimates, he evaluated multiple scenarios using a number of different assumptions based upon historical natural gas prices. Johnson Direct at 57-68.

In response, Witness Lynch agreed that future natural gas prices are uncertain, but stated that a simple trend line based on historical natural gas prices cannot be used with confidence to project future prices as a result of the recent advancements in fracking technology. Instead, Witness Lynch testified that SCE&G uses the price of futures contracts traded on the New York Mercantile Exchange ("NYMEX") over the next three years and then applies a growth rate to project prices over the longer term. Witness Lynch stated that NYMEX prices have been used in SCE&G's fuel hearings for many years because they represent publicly available information and also are good indicators of gas prices in the short term. He also noted that SCE&G applied a 3.2% escalation rate to these short-term gas prices, which is higher than the rate of 2.0% suggested by Witness Johnson and increases the Company's calculated avoided energy costs. Lynch Rebuttal at 25-26.

The Commission finds that SCE&G's methodology to estimate future natural gas prices is reasonable and consistent with the methodology approved in Order No. 2016-297. Also, to the extent possible, the Company's methodology relies on market determined

prices as reflected in NYMEX futures contracts. The Commission notes that the Company has used this methodology for a number of years to estimate future natural gas prices and concludes that Witness Johnson's recommended changes to this methodology would not result in more accurate estimates of future natural gas prices.

f. Witness Johnson also suggested that the Company's proposed avoided capacity rates are lower than his avoided capacity cost estimates because of the simplified inputs and assumptions used by the Company in performing its analysis. He stated that SCE&G used simplified assumptions in which it did not analyze its revenue requirements in detail and did not adequately consider some of the things it probably would implement in actual practice to minimize the revenue requirement burden on its retail customers. Specifically, Witness Johnson stated that SCE&G will have excess generating capacity after the nuclear units come online and will have the option of selling energy and capacity on the wholesale market to reduce its revenue requirement. Johnson Direct at 78-82.

Witness Lynch responded by testifying this recommendation is similar to the recommendations of Witness Vitolo regarding the Company's "opportunity costs." For the same reasons raised in response to that recommendation, Witness Lynch testified that SCE&G cannot sell firm, dependable capacity that is backed by an intermittent resource such as a solar QF. Lynch Rebuttal at 26-27.

For the same reasons addressed previously with respect to the similar recommendations advanced by Witness Vitolo, the Commission disagrees with the recommendations of Witness Johnson. The Commission finds that it is reasonable and

appropriate for the Company not to consider selling capacity when possible over the resource plan because a solar QF does not have firm capacity as it is an intermittent resource and does not add to the Company's opportunity to sell firm capacity.

g. Witness Johnson further testified that his calculations and assumptions are more consistent with the theoretical underpinnings of the DRR method. He also testified that the Company failed to utilize the full power of the modeling process to evaluate multiple expansion plans, or to adequately analyze the impact of the block of QF power under each expansion plan. Witness Johnson stated that to accurately measure avoided costs, several scenarios should have been evaluated, corresponding to different assumptions concerning the timing of when the new V.C. Summer nuclear units are completed, and the cost and availability of alternative capacity and energy sources which can be inserted into the expansion plan in order to compensate for the delay. Johnson Direct at 82-85.

Witness Lynch responded by stating that, in theory, the DRR method specifies use of a capacity expansion model that develops new expansion plans and calculates both the difference in energy and capacity costs between two plans. However, he stated that calculating avoided costs strictly in this manner is not practical and is subject to criticism as being overly complex and opaque. Witness Lynch testified that SCE&G has overcome these objections by separating the calculation of avoided energy and avoided capacity costs. Because SCE&G uses basic accounting techniques such as fixed charge schedules to calculate the fixed costs of each plan, Witness Lynch explained that the relevancy is clear and the method transparent and easy to understand. He also noted that a QF requires

a long-term contract and that, if the new nuclear units are delayed, the delay likely will be only for a relatively short period. Lynch Rebuttal 27-28.

The Commission agrees with SCE&G. The methodology used by the Company is the same as that previously approved by the Commission in Order No. 2016-297. The Commission does not find that the circumstances warrant modifying the methodology at this time and, therefore, declines to adopt the changes recommended by Witness Johnson.

5. The Commission's Overall Conclusions Regarding Avoided Costs, Rate Schedule PR-1, and Rate Schedule PR-2

Based upon the evidence of record, and after reviewing the testimonies of the parties of record and the Settlement Agreement, the Commission finds and concludes that SCE&G properly calculated its avoided energy and avoided capacity costs under PURPA using the methodology approved by the Commission in Order No. 2016-297. The Commission further concludes that the methodology remains reasonable, prudent, and appropriate, and that no adjustments to the methodology are warranted at this time. The Commission also finds and concludes that SCE&G's proposed PR-1 and PR-2 Rate Schedules set forth rates, credits, and charges, that are lawful, just, and reasonable and are based on reasonable methodologies.

C. NEM Distributed Energy Resources Methodology

1. SCE&G Testimony

Witness Lynch testified that, by way of its Order No. 2015-194 issued in Docket No. 2014-246-E, the Commission approved the following 11 components of value for NEM Distributed Energy Resources:

Net Energy Metering Methodology

1. +/- Avoided Energy
2. +/-Energy Losses/Line Losses
3. +/- Avoided Capacity
4. +/- Ancillary Services
5. +/- T&D Capacity
6. +/- Avoided Criteria Pollutants
7. +/- Avoided CO_2 Emission Cost
8. +/- Fuel Hedge
9. +/-Utility Integration & Interconnection Costs
10. +/- Utility Administration Costs
11. +/- Environmental Costs

= Total Value of NEM Distributed Energy Resources

He also testified that, in Docket No. 2016-2-E, the Company calculated the value for these components and, in Order No. 2016-297, the Commission determined that those values complied with the NEM Methodology approved by the Commission in Order No. 2015-194. As set forth in Table 6 to his direct testimony, Witness Lynch stated that the Company updated these components of value by calculating the current value and one for the value over the IRP planning horizon. Witness Lynch further provided information on SCE&G's evaluation of each component and its estimate of the associated value. Lynch Direct at 12-20. Witness Rooks also sponsored the Company's proposed "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet which updates the total value of NEM Distributed Energy Resources to reflect the components of value for NEM Distributed Energy Resources enumerated by Witness Lynch. Rooks Direct at 16-17; See also Exhibit AWR-14, Hearing Exhibit No. 5.

2. ORS Testimony

Witness Lawyer testified that the Company determined that the value of distributed generation, according to the methodology established in Docket No. 2014-246-E, was a

derivative of four components: 1) avoided energy; 2) avoided capacity; 3) avoided criteria pollutants; and 4) line losses/energy losses. He further testified that the Company's calculation of the NEM Incentive is consistent with the Settlement Agreement in Docket No. 2014-246-E and the methodology approved in Commission Order No. 2015-194. Lawyer Direct at 3-4.

3. SCCCL and SACE Testimony, Responsive Testimony, and the Commission Conclusions

Regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology, Witness Vitolo made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Vitolo testified that SCE&G's description of avoided line losses associated with DERs is inadequate and that the Company erred in calculating line losses. Specifically, Witness Vitolo stated that the Company used annual average system losses as the basis for calculating marginal losses rather than losses associated with the temporal solar profile and failed to allocate transmission losses as marginal. He also testified that avoided marginal transmission and distribution line losses have capacity implications. Witness Vitolo further stated that QFs connected at the distribution level should be reimbursed for transmission level savings and that small QFs and NEM DERs should be reimbursed for both transmission level and distribution-level savings. Vitolo Direct at 24-29.

In response, Witness Lynch testified that the PR-1 and PR-2 rates and the 11-point NEM methodology all involve the adjustment of QF energy supplied over many hours of

the year. He also stated that the critical peak period also includes hours covering 6 of 12 months. Therefore, Witness Lynch testified that the use of an average loss factor is appropriate. He also stated that SCE&G has calculated system line losses for many years and believes that the estimation of losses for each hour of the year or for many incremental levels would be a burdensome enterprise that would yield little or no value. Lynch Rebuttal at 16. Witness Lynch further testified that to estimate marginal line losses on the distribution system, SCE&G doubled the average line losses as agreed to by Witness Vitolo. On the transmission system, however, Witness Lynch stated that the Company believes that marginal losses should be approximated by average losses and that marginal line losses in a network will be less than those on the distribution system. Id. at 16-17.

He further testified that, to estimate marginal losses, SCE&G's analysis considered lowering the loads at each substation to effect a 100 MW decrease across the system, and then eliminating a source of energy from the Company's Hagood Unit to balance the system. Under these circumstances, the analysis showed that power had to flow a greater distance to serve the load and losses increased, meaning that average losses were greater than marginal losses. After performing several similar analyses, the Company concluded that average transmission losses are the best estimate to use for marginal losses. Id. at 17.

Regarding the capacity implications associated with avoided marginal transmission and distribution line losses, Witness Lynch testified that SCE&G applies line losses for both energy and capacity as appropriate. Responding to Witness Vitolo's testimony regarding the reimbursement of transmission and distribution level savings, Witness Lynch testified payments or credits to small QFs and NEMs are subsidized by SCE&G's DER

program and that, therefore, reimbursement is not at issue. He further stated that the PR-1 rate for small QFs and the NEM avoided cost methodology have loss factor adjustments and that larger QFs likely will flow power back onto the transmission system and will incur, not avoid transmission level losses. Id. at 18.

The Commission finds that the Company's calculation of line losses is appropriate and that average transmission losses are the best estimate to use for marginal losses. The Commission also finds that the Company properly applied line losses for both energy and capacity in a manner consistent with the methodology approved in Order No. 2015-194.

b. Witness Vitolo also recommended that an adjustment should be made to SCE&G's reserve margin, stating that DER resources have capacity value, and that capacity value also translates into a reduced reserve margin requirement. He further stated that the avoided T&D line losses of 8-9% are reliable and this portion of avoided generation capacity should be counted towards reducing the level of peak load for which SCE&G should plan. Vitolo Direct at 28.

In response, Witness Lynch testified that DERs are intermittent supply sources and it is necessary for SCE&G to maintain a reserve margin to back up these sources and that, therefore, there is no reserve margin benefit from DER resources. Lynch Rebuttal at 19.

The Commission agrees with SCE&G. It is appropriate for the Company to maintain a reserve margin to back up DERs, which are intermittent supply sources. Accordingly, DER resources do not result in a reserve margin benefit for the Company.

c. Witness Vitolo next testified that, to the extent distributed energy generators help to alleviate costs associated with environmental compliance at SCE&G's

other facilities, those savings should be reflected in the NEM calculation. He stated that avoided environmental costs, such as costs associated with coal combustion residuals, are financial, quantifiable, and a direct result of DER generation. Vitolo Direct at 29-30.

Witness Lynch noted that the Settlement Agreement entered into by the parties of record to Docket No. 2014-246-E, including CCL and SACE, affirmatively states that "[t]he environmental compliance and/or Utility system costs might be accounted for in the Avoided Energy component, but, if not, should be accounted for separately. The Avoided Energy component must specify if these are included." Witness Lynch testified that there are no environmental costs that are not already included in the other specific components of the methodology and, for this reason, SCE&G appropriately assigned a zero avoided cost value to this component. Lynch Rebuttal at 19.

The Commission finds that the Company properly accounted for avoided environmental costs and that there are no other environmental costs that are not already included in the other specific components of the methodology. The Company is directed to address the cost-effectiveness of separately accounting for environmental costs in its next fuel proceeding.

4. SCSBA Testimony

SCSBA did not present any testimony regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology.

5. The Commission's Overall Conclusions Regarding NEM Distributed Energy Resources Methodology

Based upon the evidence of record, and after reviewing the testimony of the parties of record and the Settlement Agreement, the Commission finds that SCE&G properly

evaluated the components of value for NEM Distributed Energy Resources as shown in Table 6 of Witness Lynch's testimony in accordance with the NEM methodology approved by the Commission in Order No. 2015-194.

D. DER Programs and Costs

1. SCE&G Testimony

Witness Raftery discussed the performance of the Company's DER programs during the Review Period, and the costs associated with offering these DER programs during the Review Period. These programs include offering utility-scale DER programs, customer-scale NEM incentives, Performance Based Incentives, BCA program, and developing the Company's Community Solar program. Witness Raftery also discussed the Company's DER cost projections for the forecast period January 1, 2017, through April 30, 2018. Raftery Direct at 1-14.

As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled an over-recovery of $1,709,006 in avoided costs and an under-recovery of ($698,707) in incremental costs. For the period January 1, 2017, through April 30, 2018, the Company projects that DER program costs will include $4,884,429 in avoided costs and $14,792,163 in incremental costs. Id. at 4. Witness Rooks provided actual data on the Company's DER avoided and incremental costs for the historical Review Period and the projected DER costs for the period January 1, 2017, through April 30, 2018. Witness Rooks also sponsored the Company's proposed "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff. Rooks Direct at 1-19.

Witness Raftery further testified that SCE&G expects to have 48,044 kW in utility-scale solar generating capacity on its system by the end of 2017 or early 2018 and thereby meet its utility-scale goals. Raftery Direct at 7. He stated that, as of December 31, 2016, SCE&G had 2,781 customers participating in its customer-scale DER goals and anticipates the Company likely will meet its goal by the end of 2017 or early 2018. Id. at 9. Because of the accelerated high customer response to its current programs, Witness Raftery testified that the Company is requesting approval to indefinitely suspend its BCA program. If granted, the Company requests that customers with approved applications for BCA DER participation, as well as those that have signed interconnection agreements as of the issuance date of the Commission's Order be permitted to proceed as a BCA program participant, provided that their system also be interconnected within 12 months of the Commission's Order. Id. at 10.

Witness Raftery also testified that, based on overall NEM adoption levels experienced in the second half of 2016, SCE&G forecasts that it will meet Act 236's net metering limit or cap of 2% in early 2020. Id. at 11. Regarding the Company's Community Solar program, Witness Raftery stated that SCE&G has determined there is customer interest in the ability to subscribe to Community Solar as an alternative to the currently approved purchase model. Similar to the Low-Income Community Solar program, participants will be able to subscribe to panels in the Community Solar facility and receive the associated $0.01 per kWh credit on their SCE&G bill for their pro-rata share of the solar farm's production. Residential customers can subscribe to panels up to a 100% energy offset equivalent or 20 kW, whichever is less. Municipalities (Rate 3), Churches

(Rate 12), and Schools (Rate 22) can subscribe to panels up to a 100% energy offset equivalent or 1,000 kW, whichever is less. In order to participate in the Community Solar program as a subscriber, customers will be charged a monthly fee of $0.20 per kW per month on their monthly bill. SCE&G is also requesting approval of certain revisions to its Community Solar tariff regarding the treatment of excess credits for purchasing customers to align the tariff with the First Amendment to the Credit Rate Agreement between Clean Energy Collective, LLC ("CEC") and SCE&G for which approval was requested in Docket No. 2016-290-E. Id. at 12-13.

2. ORS Testimony

Witness Lawyer testified that the Company's calculations are in compliance with Act No. 236 of 2014 and Commission Orders, and that the Company's calculations support SCE&G's proposed DER program charges. Lawyer Direct at 5. Witness Lawyer also testified that ORS reviewed the Company's request to suspend the BCA indefinitely, which it found to be reasonable. Id. at 5-6. Witness Lawyer further testified that the Company's proposal to expand its Community Solar program to all eligible customers, regardless of income, and to revise the Community Solar tariff to align with the First Amendment to the Company's Credit Rate Agreement with CEC is reasonable. Id. at 6.

3. SCCCL and SACE Testimony

SCCCL and SACE did not present any testimony regarding the DER programs offered by the Company during the Review Period or the associated costs.

4. SCSBA Testimony, Responsive Testimony, and the Commission's Conclusions

In response to SCE&G's proposal to suspend the BCA program, Witness Fleury stated that SCSBA would like to see BCA applications accepted by the Company for the remainder of the year. Fleury Direct at 9. He testified that, as of January 1, 2017, there appears to be approximately 16,500 kW of available capacity left before SCE&G meets its customer-scale goal and suggested that capacity should be allocated for commercial customers to participate in the BCA program. Id.

Witness Raftery responded to these recommendations and stated that, while the suggestion appears to be a harmless request to delay the suspension of its BCA program until December 31, 2017, the means by which the SCSBA seeks to implement its suggestion deprives SCE&G of the benefit that the Company is entitled to under Act 236 and therefore is contrary to the law. Act 236 directs SCE&G to implement Customer Scale programs and that the results of those Customer Scale programs are counted toward the goal of procuring one percent (1%) of Customer Scale DER generation capacity. Witness Raftery testified that SCE&G has committed itself financially to achieving the statutory goal of procuring one percent (1%) of Customer Scale DER generation capacity by implementing an NEM program. He also stated that SCSBA's suggestion to prohibit SCE&G from receiving credit for the results of its NEM program, after the SCSBA has already agreed otherwise, would be inappropriate, would have a negative impact upon

SCE&G reaching its Customer Scale DER generation capacity goal, and would be unlawful. He also testified that SCSBA's suggestion is a departure from the Settlement Agreement that SCSBA entered into with SCE&G and others in Docket No. 2015-54-E, which provided that any generation capacity procured by SCE&G through its Customer Scale DER programs (i.e., net energy metering) would be counted toward SCE&G achieving its one percent (1%) Customer Scale DER generation capacity goal. Raftery Rebuttal at 2-6.

The Commission agrees with SCE&G and declines to adopt the alternative recommendations of Witness Fleury to modify the BCA program inasmuch as they are contrary to the requirements of Act 236 and the Settlement Agreement entered into by SCE&G and others in Docket No. 2015-54-E. Further, such recommendations are also detrimental to non-commercial customers, since under Witness Fleury's proposal, none of the 16,500 kW remaining before SCE&G reaches its customer-scale goal will be available to such customers. Fleury Direct at 9.

5. The Commission's Overall Conclusions Regarding DER Programs and Cost

The Commission finds that the evidence presented by SCE&G establishes that, during the Review Period, SCE&G offered DER programs and took appropriate steps to fulfill its DER goals approved by the Commission in Order No. 2015-194. The Commission further finds that the Company's DER programs and the associated costs are reasonable and prudent and are designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130. The Commission further finds that SCE&G's proposal

to suspend its BCA program is reasonable and approved. The Commission also finds that SCE&G's proposal to expand its Community Solar program to all eligible customers, regardless of income, and to revise the Community Solar tariff to align with the First Amendment to the Company's Credit Rate Agreement with CEC is reasonable and should be approved.

E. Fuel Purchasing Practices, Environmental Costs, Plant Operations, Fuel Inventory Management, and Section 174 Deductions

1. SCE&G Testimony

SCE&G witnesses testified in support of the Settlement Agreement and on issues related to the prudency of SCE&G's fuel purchasing practices, plant operations, and fuel inventory management, and explained the regulatory atmosphere governing environmental compliance for SCE&G. Witness Lippard discussed the operating performance of the V.C. Summer Nuclear Station. Lippard Direct at 1-6. Witness Delk reviewed the operating performance of the Company's fossil/hydro units and of South Carolina Generating Company's Williams Electric Generating Station. Delk Direct at 1-11. Witness Shinn discussed the Company's procurement and delivery activities for coal and No. 2 fuel oil for electric generation, the changes that have occurred in coal markets since the last annual fuel adjustment hearing, and how these changes affected coal procurement during the Review Period and are anticipated to affect future procurement. Witness Shinn also discussed the procurement and delivery of limestone for the wet scrubbers at Wateree and Williams Stations, the nuclear fuel purchasing processes for SCE&G generation, uranium prices, and the near-term outlook of coal and uranium prices. Shinn Direct at 1-24. Witness Beier provided testimony about the natural gas purchasing processes for SCE&G

generation and discussed natural gas prices as well as the near-term outlook. Beier Direct at 1-8. Witness Rooks provided actual fuel cost data for the historical Review Period, and projected fuel costs for the period January 1, 2017, through April 30, 2017; and recommended fuel rates for the period of May 2017 through April 2018. Rooks Direct at 1-19.

Witness Coffer discussed the Company's election to claim significant research and experimentation deductions pursuant to Section 174 ("Section 174 Deductions") of the Internal Revenue Code, the resulting effect on the Company's Accumulated Deferred Income Tax ("ADIT") liabilities and the Company's proposal to reduce its variable environmental and avoided capacity cost component ("Environmental Component") of its total fuel cost factor to pass the benefits of these Section 174 Deductions and related increased ADIT liability to customers in an effective and efficient manner. Coffer Direct at 2-3.

Witness Coffer testified that the lower current tax liability arising from the accelerated Section 174 Deduction represents a significant cash benefit for the Company and that an ADIT liability is recognized for this cash benefit, which has the effect of lowering rate base in SCE&G's non- Base Load Review Act ("BLRA") related electric business. Due to the size of the ADIT liability being created, rate base could be lowered to the extent that the Company temporarily exceeds its authorized return on equity (ROE) of 10.25%. To avoid this, and consistent with Order No. 2016-820, the Company proposes to reduce the Environmental Component of its total fuel cost factor effective concurrently with the implementation date of the Company's upcoming revised rates under the BLRA.

As such, the Company will utilize a significant portion of the cash benefit generated from the Section 174 Deduction to offset a portion of its Environmental Component costs and forego recovery through customer rates. In order to maximize the benefit to customers based on continuing spend for the Units, the Company will determine the reduction based on its ADIT liability balances as of September 30, 2017. At such time the Company will submit revised tariff sheets reflecting the updated (lower) Environmental Component to the Commission for approval. Coffer Direct at 5-6.

2. ORS Testimony[4]

Witness Smith's direct testimony presented the results of the ORS Audit Department's examination of the Company's books and records pertaining to the Fuel Adjustment Clause operation for the Review Period, and the Company's estimated calculations for the months of January 2017 through April 2017. Smith Direct at 1-13. Based on the ORS Audit Department's examination of the Company's books and records, and the Company's operation of the fuel cost recovery mechanism, Witness Smith verified that the Company's books and records accurately reflect the fuel costs incurred by the Company in accordance with previous Commission orders and with S.C. Code Ann. § 58-27-865 (2015). Id. at 13.

Witness Morgan's direct testimony presented the ORS's findings resulting from its review of the Company's fuel expenses and power plant operations used in the generation of electricity during the Review Period. Morgan Direct at 1-10. Based on ORS's review

[4] The direct testimony of ORS witnesses Smith and Morgan was stipulated into the record by all parties and subsequently verified by ORS.

of the Company's operation of its generating facilities during the Review Period, Witness Morgan verified that the Company made reasonable efforts to maximize unit availability and minimize fuel costs during the Review Period. Id. at 4. Witness Morgan also verified that ORS supports the Company's efforts to ensure that customers receive the benefit of the Section 174 Deduction deferred income tax liability as proposed by the Company. Id. at 10.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's fuel purchasing practices, environmental costs, plant operations, fuel inventory management, operations of the power plants during the Review Period, or the Section 174 deductions.

4. Commission Conclusions Regarding Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

As reflected in the evidence of record, no party challenged the reasonableness or prudency of SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period. Based upon the evidence and testimony of the witnesses and after reviewing the Settlement Agreement, the Commission therefore finds and concludes that SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period are reasonable and prudent. The Commission also finds that the Company's proposal to reduce the Environmental Component of its total fuel cost factor in an amount based on its ADIT liability balances as of September 30, 2017 and to make the reduction

concurrent with the implementation of the Company's 2017 BLRA revised rates request is reasonable and should be approved.

F. Proposed Base Fuel Component

1. SCE&G Testimony

Witness Rooks testified that the actual base fuel over-collected balance was $52,599,284 at December 31, 2016, and the projected over-collected balance to be $29,465,939 at the end of April 2017. Rooks Direct at 5. Witness Rooks also testified that a Base Fuel Component of 2.723 cents per kWh is projected to recover all base fuel costs in the forecast period in addition to eliminating the projected over-collected balance by the end of April 2018. Id. However, Witness Rooks further testified that the Company is sensitive to the impact of its BLRA increases on customers during peak construction years for its new nuclear project, and is continually looking for ways to mitigate rate impacts while balancing the need for timely recovery of its costs. Id. at 11-12.

In furtherance of that objective and for this proceeding, Witness Rooks testified that the Company proposes to increase its Base Fuel Component by less than what it is statutorily permitted to ensure no per kWh impacts to its fuel factors for all classes when combined with its proposed Pension Component Rider decrease filed with the Commission on February 23, 2017, in Docket No. 2017-56-E ("Pension Rider Adjustment"). Id. at 12. This factor adjustment will minimize rate impacts to customers in 2017, but also will result in the Company not fully recovering its Base Fuel Costs in the succeeding 12-month period and is projected to result in an under-collected balance of ($53,586,340) as of April 2018. Id.; See also Exhibit AWR-10, Hearing Exhibit No. 5. The Company requested that it be

permitted to apply carrying costs to any under-collected balances that result during the May 2017 through April 2018 time period. The carrying cost rate that would be applied to these balances, should they occur, would be the rate of interest as of the final day of each month during the recovery period for 3-Year U.S. Government Treasury Notes, as reported in the Wall Street Journal, plus an all-in spread of 65 basis points (0.65 percentage points). Witness Rooks further noted that the Commission has allowed similar treatment with respect to the application of carrying costs to fuel cost recovery for SCE&G in past proceedings, including Docket No. 2014-2-E. Rooks Direct at 12-13.

2. ORS Testimony

Witness Morgan's testimony states that the Company has three proceedings that will affect the Company's rates effective May 1, 2017. These include the Fuel Adjustment and DERP Charge, which are addressed in this docket, the Company's Annual Demand Side Management (DSM) Review, and the Pension Rider Adjustment proceeding. According to Witness Morgan's testimony, the net impact across these proceedings, as proposed by the Company, would result in a $0.33 or 0.22% increase on the average monthly bill for a residential customer on Rate 8 using 1,000 kWh. Morgan Direct at 8. In an effort to further mitigate rate impacts to customers and considering that the Company will continue to file updates for the BLRA on an annual basis, ORS recommends adjusting the proposed Base Fuel Component so that the net effect across these proceedings results in a $0.00 or 0.00% increase to the residential customer. Id.

ORS recommends that the Company increase the deferred under-collected balance by approximately ($7,402,000) to bring the total under-recovery balance to approximately

($61,000,000) in base fuel costs. ORS also recommends that carrying costs be allowed for any under-collected balances, as they occur, and, if approved, be based on the 3-Year U.S. Government Treasury Note rate plus 65 basis points as proposed by the Company. Id.

In support of this recommendation, Witness Morgan further testified that the Company maintained a significant under-recovery balance for several years during the Annual Fuel Reviews from 2009 through 2013 in order to mitigate the rate impacts to its customers, and that ORS considers this additional measure of relief for ratepayers to be reasonable, appropriate, and warranted. Id. at 9. Witness Morgan testified that, if approved, the net effect on the average monthly bill for a residential customer on Rate 8 using 1,000 kWh would be $0.00. Id.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's proposed base fuel component or ORS's proposal to increase SCE&G's deferred under-collected balance.

4. Commission Conclusions Regarding the Proposed Base Fuel Cost Component

As reflected in the evidence of record, no party challenged SCE&G's proposed Base Fuel Cost Component or ORS's recommended adjustments. Based upon the evidence and testimony of the witnesses and after reviewing the Settlement Agreement, the Commission therefore finds and concludes that SCE&G's proposed Base Fuel Component, adjusted as proposed by ORS, is reasonable and prudent and is consistent with S.C. Code Ann. § 58-27-865 (2015). The Commission also finds and concludes that the Company should be allowed carrying costs for Base Fuel Cost Component under-collected balances,

as they occur, based on the 3-year U.S. Government Treasury Note rate plus 65 basis points.

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The methodologies used by SCE&G to calculate its avoided energy and avoided capacity costs under PURPA as described in the testimony of SCE&G Witness Lynch and supported by the testimony of ORS Witness Horii are reasonable and prudent and consistent with the methodology approved by the Commission in Order No. 2016-297.

SCE&G's proposed Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of service, are lawful, just, and reasonable.

SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

The updated components of value for NEM Distributed Energy Resources as shown in Table 6 on page 15 of the direct testimony of SCE&G Witness Lynch are reasonable and prudent, comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet, including the rates, terms, and conditions, are lawful, just, and reasonable.

SCE&G's calculation of and method of accounting for avoided costs and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

During the Review Period, SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194, which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

As a result of SCE&G's efforts to provide the DER programs, the over-collected balance of the DER program costs as of December 31, 2016, totaled $1,709,006 in avoided costs and an under-collected balance of ($698,707) in incremental costs, which costs are reasonable and prudent.

SCE&G's proposed DER Avoided Cost Components by class are reasonable and prudent. SCE&G's proposed monthly per account DER Incremental Cost Component by class properly allocates SCE&G's DER program incremental costs and are reasonable and prudent.

SCE&G's proposals to indefinitely suspend its BCA program and to adjust its Community Solar Program are reasonable and prudent.

SCE&G's proposed "Adjustment for Fuel, Variable Environmental& Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheet, including the rates, terms, and conditions, is lawful, just, and reasonable.

SCE&G's fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) were reasonable and prudent.

SCE&G's proposal to use Section 174 Deductions to reduce the Environmental Component of its total fuel cost factor in an amount based on its ADIT liability balances as of September 30, 2017, and to make the reduction concurrent with the implementation of the Company's 2017 BLRA revised rates request is reasonable and prudent.

Approval of the Settlement Agreement is consistent with the standards for fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865 (2015). The Settlement Agreement allows recovery by SCE&G of fuel costs as precisely and promptly as possible and in a manner to assure public confidence and minimize abrupt changes in charges to customers. Additionally, the Commission finds and concludes that the Settlement Agreement, while being final and conclusive for the Review Period, affords the Settling Parties with the opportunity to review costs and operational data in future fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865 (2015). As such, it is in the public interest as a reasonable resolution of the issues in this case. We also find that the resolution of issues among the Settling Parties as set forth in the Settlement Agreement does not appear to inhibit economic development.

IT IS THEREFORE ORDERED THAT:

1. The Settlement Agreement, incorporated herein by this reference, and attached hereto as Order Exhibit No. 1, is found to be a reasonable resolution to the issues in this case, is in the public interest, and is therefore hereby adopted and approved.

2. The fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G are reasonable and prudent for the period January 1, 2016, through December 31, 2016.

3. The methodologies used by SCE&G to calculate its avoided energy and avoided capacity costs under PURPA are reasonable and prudent and consistent with the methodology approved by the Commission in Order No. 2016-297.

4. Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of services, are lawful, just, and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2017.

5. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

6. The updated components of value for NEM Distributed Energy Resources listed in Table 1 below comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs

or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015):

Table 1

	Current Period ($/kWh)	IRP Planning Horizon (15-Year Levelized) ($/kWh)	Components
1	$0.03273	$0.03199	Avoided Energy Costs
2	$0	$0.00172	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00004	$0.00004	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03277	$0.03375	Subtotal
12	$0.00268	$0.00276	Line Losses @ 0.9245
13	$0.03545	$0.03651	**Total Value of NEM Distributed Energy Resources**

7. SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" and "Adjustment for Fuel, Variable Environmental& Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheets are lawful, just and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2017.

8. SCE&G's DER programs offered during the Review Period were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512,

and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

9. SCE&G's proposals to indefinitely suspend its BCA program and to adjust its Community Solar Program are reasonable and prudent.

10. SCE&G's proposed monthly per kWh DER Avoided Cost Components by class, as set forth below in Table 2 properly allocates SCE&G's DER program avoided costs, are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2017:

Table 2

Class	DER Avoided Cost Component (¢/kWh)
Residential	0.015
Small General Service	0.013
Medium General Service	0.011
Large General Service	0.007

11. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below in Table 3, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2017:

Table 3

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 0.91
Small & Medium Gen. Svc.	$ 3.29
Large General Service	$ 100.00

12. SCE&G shall set its Base Fuel Cost Component, Variable Environmental Cost Components and Total Fuel Cost Factors consistent with the amounts set forth in the Table 4 below effective for bills rendered on and after the first billing cycle for May 2017:

Table 4

Class	Base Fuel Cost Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Environmental Fuel & Avoided Capacity Component (¢/kWh)	Total Fuel Costs Factor (¢/kWh)
Residential	2.451	0.015	0.047	2.513
Small General Service	2.451	0.013	0.039	2.503
Medium General Service	2.451	0.011	0.033	2.495
Large General Service	2.451	0.007	0.020	2.478
Lighting	2.451	0.000	0.000	2.451

13. SCE&G shall be allowed to recover carrying costs for base fuel cost component under-collected balances as they occur. The carrying cost rate that shall be applied to these balances, should they occur, is the rate of interest as of the final day of each month during the recovery period for 3-year U.S. Government Treasury Notes, as reported in the Wall Street Journal, plus an all-in spread of 65 basis points (0.65 percentage points).

14. SCE&G's proposal to use Section 174 Deductions to reduce the Environmental Component of its total fuel cost factor in an amount based on its ADIT liability balances as of September 30, 2017, and to make the reduction concurrent with the implementation of the Company's 2017 BLRA revised rates request is reasonable and prudent.

15. The Parties shall abide by all terms of the Settlement Agreement.

16. SCE&G shall file with the Commission the tariff sheets and rate schedules approved by this Order and all other retail tariff sheets within ten (10) days of receipt of this Order, and also serve copies on the Parties. The fuel rates reflected in any such tariff sheets shall be consistent with the components and factors set forth herein. The revised tariffs should be electronically filed in a text searchable PDF format using the Commission's DMS System (https://dms.psc.sc.gov/). An additional copy should be sent via e-mail to etariff@psc.sc.gov to be included in the Commission's ETariff system (https://etariff.psc.sc.gov). SCE&G shall provide a reconciliation of each tariff rate change approved as a result of this order to each tariff rate revision filed in the ETariff system. Such reconciliation shall include an explanation of any differences and be submitted separately from the Company's ETariff filing. Each tariff sheet shall contain a reference to this Order and its effective date at the bottom of each page.

17. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865(B) (2015).

18. SCE&G shall continue to file the monthly reports as previously required. The Settling Parties shall also be provided a copy of the monthly reports upon written request.

19. SCE&G shall account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to revenues with a corresponding deferred debit or credit. ORS shall monitor the cumulative recovery amount.

20. SCE&G shall submit monthly reports of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater to the Commission and ORS.

21. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield. Chairman

ATTEST:

Comer H. Randall, Vice Chairman

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2017-2-E

March 30, 2017

IN RE:	Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	**SETTLEMENT AGREEMENT**

This Settlement Agreement is made among the South Carolina Office of Regulatory Staff ("ORS"), South Carolina Energy Users Committee, and South Carolina Electric & Gas Company ("SCE&G" or "Company") (collectively referred to as the "Settling Parties" or sometimes individually as a "Settling Party").

WHEREAS, the above-captioned proceeding has been established by the Public Service Commission of South Carolina ("Commission") pursuant to the procedure established in S.C. Code Ann. § 58-27-865 (2015), and the Settling Parties to this Settlement Agreement are parties of record in the above-captioned docket;

WHEREAS, the Settling Parties have varying legal positions regarding the issues in this proceeding;

WHEREAS, the Settling Parties have engaged in discussions to determine if a settlement would be in their best interest;

WHEREAS, following these discussions the Settling Parties have each determined that their interests and the public interest would be best served by settling matters in the above-captioned case under the terms and conditions set forth below:

A. STIPULATION OF SETTLEMENT AGREEMENT, TESTIMONY, AND WAIVER OF CROSS EXAMINATION

A.1. The Settling Parties agree to stipulate into the record before the Commission this Settlement Agreement.

A.2. The Settling Parties agree to stipulate into the record before the Commission the direct testimony and exhibits of the following witnesses without objection, change, amendment or cross-examination with the exception of changes comparable to that which would be presented via an errata sheet or through a witness noting a correction.

a. SCE&G witnesses:

i. George A. Lippard, III

ii. Keith C. Coffer, Jr.

iii. Michael D. Shinn

iv. Henry E. Delk, Jr.

v. Joseph M. Lynch

vi. Allen W. Rooks

vii. John H. Raftery

viii. John S. Beier

b. ORS witnesses:

i. Willie J. Morgan

ii. Robert A. Lawyer

iii. Gaby Smith

iv. Brian Horri

The Settling Parties further agree to stipulate into the record before the Commission the rebuttal testimony of the following witnesses without objection, change, amendment or cross-

examination with the exception of changes comparable to that which would be presented via an errata sheet or through a witness noting a correction.

c. SCE&G witnesses:

i. Joseph M. Lynch

ii. John H. Raftery

The Settling Parties reserve the right to engage in redirect of witnesses as may be necessary to respond to issues raised by the examination of their witnesses, if any, by non-parties or parties that are not signatories to this Settlement Agreement.

A.3. The Settling Parties agree that no other evidence will be offered in this proceeding by them other than the Stipulated Testimony and Exhibits, and this Settlement Agreement, unless such evidence is required to respond to an issue raised by a non-settling party.

B. SETTLEMENT TERMS

B.1. As a compromise, the Settling Parties agree to the proposal set out immediately below, and this proposal is hereby adopted, accepted, and acknowledged as the agreement of the Settling Parties.

Avoided Costs, Net Energy Metering, and Distributed Energy Resources

B.2. As a compromise and without constraining, inhibiting, or impairing their arguments or positions in future proceedings, the Settling Parties agree to resolve the matters at issue in this proceeding by agreeing as follows:

a. The methodologies used by SCE&G to calculate its avoided energy and avoided capacity costs under the Public Utility Regulatory Policies Act of 1978 ("PURPA") as described in the testimony of SCE&G witness Lynch are reasonable and prudent.

b. Rate Schedules PR-1 and PR-2, attached hereto as Attachments A and B, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of service, are lawful, just, and reasonable. If approved by the Commission, Rate Schedules PR-1 and PR-2 shall become effective for the period beginning with the first billing cycle for May 2017.

c. The updated components of value for Net Energy Metering ("NEM") Distributed Energy Resources ("DER") as shown in Table 6 on page 15 in the testimony of SCE&G witness Lynch and listed below are reasonable and prudent, comply with the NEM methodology approved in Commission Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

	Current Period ($/kWh)	**IRP Planning Horizon (15-Year Levelized) ($/kWh)**	**Components**
1	$0.03273	$0.03199	Avoided Energy Costs
2	$0	$0.00172	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00004	$0.00004	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03277	$0.03376	Subtotal
12	$0.00268	$0.00276	Line Losses @ 0.9245
13	$0.03545	$0.03651	**Total Value of NEM Distributed Energy Resources**

d. SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet, attached hereto as Attachment C, including the rates, terms, and conditions, are lawful, just, and reasonable, and, if approved by the Commission, shall become effective for the period beginning with the first billing cycle for May 2017.

e. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the review period of January 1, 2016, through December 31, 2016 ("Actual Period"), were reasonable and prudent, were consistent with methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

f. During the Actual Period SCE&G offered DER programs and took steps to fulfill its DER goals approved in Commission Order No. 2015-194. The programs and steps were reasonable, prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as prescribed by S.C. Code Ann. § 58-39-130 (2015).

g. The cumulative balances of SCE&G's DER program costs as of December 31, 2016, totaled an over-collected balance of $1,709,006 in avoided costs and an under-collected balance of ($698,707) in incremental costs, which are reasonable and prudent.

h. SCE&G reasonably projected its DER program costs for the period January 1, 2017, through April 30, 2018, which are accurately reflected in Exhibit No. ___ (AWR-7) and Exhibit No. ___ (AW-R-9) attached to the direct testimony of Allen W. Rooks.

i. SCE&G's proposed DER Avoided Cost Component by class, as set forth below, are reasonable and prudent, and, if approved by the Commission, shall become effective for the period beginning with the first billing cycle for May 2017.

Class	DER Avoided Cost Component (¢/kWh)
Residential	0.015
Small General Service	0.013
Medium General Service	0.011
Large General Service	0.007

j. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below, properly allocate SCE&G's DER program incremental costs, are reasonable and prudent, and, if approved by the Commission, shall become effective for the period beginning with the first billing cycle for May 2017.

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 0.91
Small & Medium Gen. Svc.	$ 3.29
Large General Service	$ 100.00

k. The tariff sheet entitled, "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs," attached hereto as Attachment D, including the rates, terms, and conditions, is lawful, just, and reasonable, and, if approved by the Commission, shall become effective for the period beginning with the first billing cycle for May 2017.

Fuel Expenses and Power Plant Operations

B.3. ORS's review of SCE&G's operation of its generating facilities resulted in ORS concluding that SCE&G made reasonable efforts to maximize unit availability and minimize fuel

costs. Additionally, ORS determined that SCE&G took appropriate corrective action with respect to outages that occurred during the Actual Period. Further, ORS concluded that, subject to any adjustments set forth in ORS's pre-filed direct testimony, SCE&G's accounting practices are in compliance with S.C. Code Ann. § 58-27-865 (2015).

B.4. The Settling Parties agree to accept all recommendations, if any, in ORS witnesses Smith's and Morgan's testimonies and exhibits pertaining to SCE&G's fuel expenses and power plant operations for the Actual Period, and January 1, 2017, through April 30, 2017 ("Estimated Period"), as well as forecasted expenses for the period May 1, 2017 through April 30, 2018 ("Forecasted Period"). Accordingly, SCE&G's net cumulative over-collected balance of total base fuel, variable environmental, and avoided capacity costs for the periods ending December 2016, and estimated through April 2017, are $56,504,223 and $31,505,037, respectively. As of December 2016, the net cumulative over-collected balance of $56,504,223 consists of cumulative over-collected base fuel costs of $52,599,284 and cumulative over-collected environmental and avoided capacity costs of $3,904,939. As of April 2017, the estimated net cumulative over-collected balance of $31,505,037 consists of cumulative over-collected base fuel costs of $29,465,939 and cumulative over-collected environmental and avoided capacity costs of $2,039,098.

Fuel Factors

B.5. The Settling Parties agree that the appropriate fuel factors for SCE&G to charge pursuant to this Settlement Agreement for the period beginning with the first billing cycle for May 2017 and extending through the last billing cycle for April 2018 are listed below and set forth in Attachment D.

Class	Base Fuel Cost Component (¢/kWh)	DER Avoided Cost Component (¢/kWh)	Environmental Fuel & Avoided Capacity Component (¢/kWh)	Total Fuel Costs Factor (¢/kWh)
Residential	2.451	0.015	0.047	2.513
Small General Service	2.451	0.013	0.039	2.503
Medium General Service	2.451	0.011	0.033	2.495
Large General Service	2.451	0.007	0.020	2.478
Lighting	2.451	0.000	0.000	2.451

B.6. The Settling Parties agree that the base fuel cost component set forth in Paragraph B.5 above is projected to create an under-collected cumulative balance of base fuel costs as of April 30, 2018, of approximately ($61,000,000).

B.7. The Settling Parties agree that the Company be allowed carrying costs for base fuel cost component under-collected balances, as they occur, and if approved, be based on the 3-year U.S. Government Treasury Note rate plus 65 basis points.

B.8. If approved by the Commission, the proposed rates would increase the average monthly bill for a residential customer on Rate 8 using 1,000 kWh from $147.53 to approximately $148.31, or by $0.78. The net effect on a Rate 8 Residential Bill using 1,000 kWh per month including the Company's Annual DSM Review (Docket No. 2017-35-E), if approved by the Commission, and its recently approved Pension Rider Adjustment (Docket No. 2017-56-E) would be $0.00 or 0.00%.

B.9. The Settling Parties agree the fuel factors set forth above are consistent with S.C. Code Ann. § 58-27-865 (2015). The Settling Parties further agree that, except as provided in Paragraph B.2 and B.10 herein, any and all challenges to SCE&G's historical fuel costs recovery for the period ending December 2016, are not subject to further review; however, the projected fuel costs for the period beginning January 1, 2017, and thereafter, shall be an open issue in future

fuel costs proceedings held under the procedure and criteria established in S.C. Code Ann. § 58-27-865 (2015).

Other

B.10. With regards to plant outages not completed as of December 31, 2016, if any, and outages where final reports of SCE&G, contractors, governmental entities or others are not available, if any, the Settling Parties agree that ORS retains the right to review the reasonableness of the plant outage(s) and associated costs in the review period during which the outage is completed or when the report(s) on such outage(s) become available.

B.11. Upon written request, SCE&G will provide the following to the Settling Parties:

a. Copies of the monthly fuel recovery reports currently filed with the Commission and ORS; and,

b. Quarterly forecasts beginning with the quarter ending June 30, 2017, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over (under)-collected balance to date. SCE&G agrees it will put forth reasonable efforts to forecast the expected fuel factors to be set at its next annual fuel proceeding; however, the Settling Parties agree that these quarterly forecasts will not be admitted into evidence in any future SCE&G proceeding.

B.12. The Settling Parties support the Company's effort to use Internal Revenue Code Section 174 deduction claims to reduce the variable environmental and avoided capacity cost component of the total fuel cost factor and agree to the implementation of the benefit from the deferred tax liability in the manner outlined by SCE&G witness Coffer is reasonable.

B.13. The Settling Parties agree that the Company's request to suspend the BCA program indefinitely due to high response from customers and in the manner the Company proposed is reasonable.

B.14 The Settling Parties agree that the Company's requests to modify the existing Community Solar program by expanding the solar panel subscription offering to all eligible customers and for certain revisions to the Community Solar tariff to align with the First Amendment of their Credit Rate Agreement with Clean Energy Collective approved in Docket No. 2016-290-E, Order No. 2017-151, are reasonable.

C. REMAINING SETTLEMENT TERMS AND CONDITIONS

C.1 The Settling Parties agree this Settlement Agreement is reasonable, in the public interest, and in accordance with law and regulatory policy. This Settlement Agreement in no way constitutes a waiver or acceptance of the position of any Settling Party concerning the requirements of S.C. Code Ann. § 58-27-865 (2015) in any future proceeding.

C.2. Further, ORS is charged with the duty to represent the public interest of South Carolina pursuant to S.C. Code Ann. § 58-4-10(B) (2015). S.C. Code Ann. § 58-4-10(B)(1) through (3) reads in part as follows:

> "…'public interest' means a balancing of the following:
>
> (1) Concerns of the using and consuming public with respect to public utility services, regardless of the class of customer;
> (2) Economic development and job attraction and retention in South Carolina; and
> (3) Preservation of the financial integrity of the State's public utilities and continued investment in and maintenance of utility facilities so as to provide reliable and high quality utility services."

C.3. The Settling Parties agree to cooperate in good faith with one another in recommending to the Commission that this Settlement Agreement be accepted and approved by

the Commission as a fair, reasonable, and full resolution in the above-captioned proceeding. The Settling Parties agree to use reasonable efforts to defend and support any Commission order issued approving this Settlement Agreement and the terms and conditions contained herein.

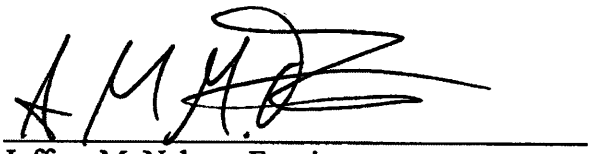
C.4. This written Settlement Agreement contains the complete agreement of the Settling Parties. There are no other terms and conditions to which the Settling Parties have agreed. This Settlement Agreement integrates all discussions among the Settling Parties into the terms of this written document. The Settling Parties agree that this Settlement Agreement will not constrain, inhibit or impair their arguments or positions held in future proceedings, nor will this Settlement Agreement or any of the matters agreed to in it be used as evidence or precedent in any future proceeding. If the Commission should decline to approve this Settlement Agreement in its entirety, then any Settling Party desiring to do so may withdraw from this Settlement Agreement without penalty.

C.5. This Settlement Agreement shall be interpreted according to South Carolina law. The above terms and conditions fully represent the agreement of the Settling Parties hereto. Therefore, each Settling Party acknowledges its consent and agreement to this Settlement Agreement by authorizing its counsel to affix his or her signature to this document where indicated below. Counsel's signature represents his or her representation that his or her client has authorized the execution of the agreement. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any Settling Party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Settlement Agreement.

[PARTY SIGNATURES TO FOLLOW ON SEPARATE PAGES]

WE AGREE:

Representing and binding the South Carolina Office of Regulatory Staff



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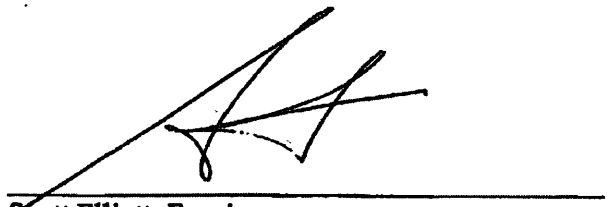
WE AGREE:

Representing and binding South Carolina Energy Users Committee



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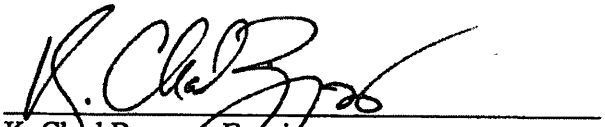
WE AGREE:

Representing and binding South Carolina Electric & Gas Company



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Attachment A

SOUTH CAROLINA ELECTRIC & GAS COMPANY — **ELECTRICITY**

RATE PR-1 — **SMALL POWER PRODUCTION, COGENERATION**

AVAILABILITY

Available to Small Power Producers and Cogenerators that are a Qualifying Facility as defined by the Federal Energy Regulatory Commission (FERC) Order No. 70 under Docket No. RM 79-54. This schedule is not available for Qualifying Facilities that have power production capacity greater than 100 KW.

CHARACTER OF SERVICE

Energy supplied by the Qualifying Facility must be at 60 hertz and voltage, phase and power factor approved by the Company.

Energy supplied by the Qualifying Facility must be at a voltage level compatible with the voltage level of the Company's system at the point of delivery.

MONTHLY RATE
(Seller Charges & Credits)

For Qualifying Facilities, Company will pay Seller a monthly credit equal to the Energy Credit and the Capacity Credit reduced by the Seller Charge.

I. Energy Credit:

Company shall pay Seller the following rates per KWH for energy delivered by the Seller to Company's system.

		Summer (June -September)	Winter (October-May)
1.	On-Peak	$0.03590	$0.03801
2.	Off-Peak	$0.03079	$0.03549

The South Carolina Power Excise Tax of $.0005 per KWH is included in the energy credits above.

DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS FOR ENERGY CREDITS

A. On-Peak Hours:

Summer Months of June - September:

The on-peak Summer hours are defined to be 10:00 a.m.-10:00 p.m. Monday-Friday.

Winter Months of October - May:

1. November through April: The on-peak hours are defined as those hours between 6:00 a.m.-1:00 p.m. and 5:00 p.m.-10:00 p.m., Monday-Friday.
2. October and May: The on-peak hours are defined as those hours between 10:00 a.m.-10:00p.m., Monday-Friday.

B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

II. Capacity Credit:

In addition to the energy credit, the Company shall pay the Seller $0.02079 per kWh for energy delivered by the Seller to the Company's system during critical peak Summer hours. The Company shall pay the Seller $0.00715 per kWh for energy delivered by the Seller to the Company's system during critical peak Winter hours.

DETERMINATION OF CRITICAL PEAK HOURS FOR CAPACITY CREDITS

A. Critical Peak Hours:

Summer Months of June - August:

The critical peak Summer hours are defined to be 2:00 p.m. - 6:00 p.m. Monday-Friday.

Winter Months of December - February:

The critical peak Winter hours are defined to be 6:00 a.m. - 9:00 a.m. Monday-Friday.

III. Seller Charge:

Seller shall pay the following Seller Charge each monthly billing period $ 4.50

BILLING MONTH

A Billing Month is defined in this schedule as the time period between successive meter readings for the purpose of monthly billing. Readings are taken approximately once each month.

MONTHLY RATE DETERMINATION

The Seller will be liable to the Company each billing month for the Seller Charge regardless of the amount of energy delivered by the Seller to the Company.
The Company will be liable to the Seller each billing month an amount determined as the total kWh delivered to the Company's system times the cost per kWh as specified herein.

PAYMENT TERMS

Payments due the Seller under this schedule shall be payable to the Seller within fifteen (15) days of the billing date.

Payment due the Company under this schedule is due and payable to the Company within fifteen (15) days of the billing date.

LIMITING PROVISIONS

Company shall not be liable for purchase of electricity from Qualifying Facility until such facility and Company have executed an Agreement for Purchase of Power from Small Power Production facility or Cogeneration Facility.

Effective Upon Approval of the
Public Service Commission of South Carolina

Attachment B

SOUTH CAROLINA ELECTRIC & GAS COMPANY — **ELECTRICITY**

RATE PR-2 — **SMALL POWER PRODUCTION, COGENERATION**
(Page 1 of 2)

AVAILABILITY

Available to Small Power Producers and Cogenerators that are a Qualifying Facility as defined by the Federal Energy Regulatory Commission (FERC) Order No. 70 under Docket No. RM 79-54 that have power production capacity greater than 100 kW and less than or equal to 80 MW, and entering into a power purchase agreement ("Seller") with South Carolina Electric & Gas Company. This schedule is not available for Qualifying Facilities that have power production capacity greater than 80 MW or equal to or less than 100 KW.

CHARACTER OF SERVICE

Energy supplied by the Qualifying Facility must be at 60 hertz and voltage, phase and power factor approved by the Company.

Energy supplied by the Qualifying Facility must be at a voltage level compatible with the voltage level of the Company's system at the point of delivery.

MONTHLY RATES

For a Qualifying Facility as described in the Availability section above, the Company will pay Seller an amount equal to the Energy Payment and the Capacity Payment reduced by the Seller Charge. The Company will pay this amount monthly.

I. Energy Payment:

Company shall pay the Seller the following rates per kWh for energy delivered by the Seller to Company's system:

A. For the period 2017 - 2021:

		For Energy Supplied at Transmission Level		For Energy Supplied at Distribution Level	
		Summer (Jun. - Sep.)	Non-Summer (Oct. - May)	Summer (Jun. - Sep.)	Non-Summer (Oct. - May)
1.	On-Peak	$ 0.03384	$ 0.03483	$ 0.03384	$ 0.03483
2.	Off-Peak	$ 0.02845	$ 0.03170	$ 0.02845	$ 0.03170

B. For the period 2022 - 2026:

		For Energy Supplied at Transmission Level		For Energy Supplied at Distribution Level	
		Summer (Jun. - Sep.)	Non-Summer (Oct. - May)	Summer (Jun. - Sep.)	Non-Summer (Oct. - May)
1.	On-Peak	$ 0.03648	$ 0.03200	$ 0.03648	$ 0.03200
2.	Off-Peak	$ 0.02879	$ 0.02726	$ 0.02879	$ 0.02726

C. For the period 2027 - 2031:

		For Energy Supplied at Transmission Level		For Energy Supplied at Distribution Level	
		Summer (Jun. - Sep.)	Non-Summer (Oct. - May)	Summer (Jun. - Sep.)	Non-Summer (Oct. - May)
1.	On-Peak	$ 0.04070	$ 0.03587	$ 0.04070	$ 0.03587
2.	Off-Peak	$ 0.03040	$ 0.02935	$ 0.03040	$ 0.02935

The South Carolina Power Excise Tax of $.0005 per kWh is included in the energy payments above.

Transmission Level is defined as voltages equal to or greater than 33 kV. Distribution Level is defined as voltages less than 33 kV.

DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS FOR ENERGY PAYMENTS

A. On-Peak Hours:

Summer Months of June - September:

The on-peak Summer hours are defined to be 10:00 a.m. - 10:00 p.m. Monday-Friday.

Non-Summer Months of October - May:

1. November through April: The on-peak hours are defined as those hours between 6:00 a.m. - 1:00 p.m. and 5:00 p.m. - 10:00 p.m., Monday-Friday.
2. October and May: The on-peak hours are defined as those hours between 10:00 a.m. - 10:00p.m., Monday - Friday.

B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

Effective Upon Approval of the
Public Service Commission of South Carolina

Attachment B

SOUTH CAROLINA ELECTRIC & GAS COMPANY — **ELECTRICITY**

RATE PR-2 — **SMALL POWER PRODUCTION, COGENERATION**
(Page 2 of 2)

II. Capacity Payment:

In addition to the energy payment, the Company shall pay the Seller the following capacity payment per kWh for energy delivered by the Seller to the Company's system during Critical Peak hours.

For Energy Supplied at Transmission Level		For Energy Supplied at Distribution Level	
Summer (Jun. - Aug.)	Winter (Dec. - Feb.)	Summer (Jun. - Aug.)	Winter (Dec. - Feb.)
$ 0.01985	$ 0.00675	$ 0.01985	$ 0.00675

Transmission Level is defined as voltages equal to or greater than 33 kV. Distribution Level is defined as voltages less than 33 kV.

DETERMINATION OF CRITICAL PEAK HOURS FOR CAPACITY PAYMENTS

A. Critical Peak Hours:

Summer Months of June - August:

The critical peak Summer hours are defined to be 2:00 p.m. - 6:00 p.m. Monday-Friday.

Winter Months of December - February:

The critical peak Winter hours are defined to be 6:00 a.m. - 9:00 a.m. Monday-Friday.

III. Seller Charge:

Seller shall pay the following Seller Charge each monthly billing period: $ 45.00

BILLING MONTH

A Billing Month is defined in this schedule as the time period between successive meter readings for the purpose of monthly billing. Readings are taken approximately once each month.

MONTHLY RATE DETERMINATION

The Seller will be liable to the Company each billing month for the Seller Charge regardless of the amount of energy delivered by the Seller to the Company.

The Company will be liable to the Seller each billing month for an amount determined as the total kWh delivered to the Company's system times the cost per kWh as specified herein.

PAYMENT TERMS

Payments due the Seller under this schedule shall be payable to the Seller within fifteen (15) days of the billing date.

Payment due the Company under this schedule is due and payable to the Company within fifteen (15) days of the billing date.

LIMITING PROVISIONS

Company shall not be liable for purchase of electricity from a Qualifying Facility until such facility and Company have executed a power purchase agreement.

Effective Upon Approval of the
Public Service Commission of South Carolina

RIDER TO RETAIL RATES

NET ENERGY METERING FOR RENEWABLE ENERGY FACILITIES ("NEM")
(Page 1 of 4)

AVAILABILITY

This rider is available in conjunction with the Company's Retail Electric Service Rates, for a Customer-Generator. The customer's generating system must be manufactured, installed and operated in accordance with governmental and industry standards and must fully conform with the Company's current interconnection standards as approved by the Public Service Commission of South Carolina.

This rider is available on a first come, first serve basis until the total nameplate generating capacity of net energy metering systems equals 2% of the previous five-year average of the Company's South Carolina retail electric peak demand.

CHARACTER OF SERVICE

The applicable character of service is specific to the rate schedule that the customer receives service under.

RATE PER MONTH

The applicable rate per month shall be from the appropriate rate schedule as referenced in the availability section above. The monthly bill shall be determined as follows:

For electric service under a time-of-use rate schedule:

1. The basic facilities charge shall be determined and billed as set forth in the applicable rate schedule as described in the Availability section above.

2. Any demand charges shall be determined and billed as set forth in the applicable rate schedule as described in the Availability section above.

3. If a customer-generator's energy consumption exceeds the electricity provided by the customer-generator during a monthly billing period, the customer-generator shall be billed in kWh for the net electricity supplied by the Utility.

   If a customer-generator's energy generation exceeds the electricity provided by the Utility during a monthly billing period, the customer-generator shall be credited for the excess kWh generated during that billing period.

   Energy charges (or credits) shall be based on the rates in the applicable rate schedules as described in the availability section above. For on-peak energy, the customer's monthly usage amount in kilowatt-hours shall be reduced by the total of (a) any on-peak excess energy delivered to the Company in the current month plus (b) any accumulated on-peak excess energy balance remaining from prior months. Total on-peak energy in kilowatt-hours billed to customers shall never be less than zero. For off-peak energy, the customer's monthly usage shall be reduced by the total of (a) any off-peak excess energy delivered to the Company in the current month plus (b) any accumulated off-peak excess energy balance remaining from prior months plus (c) any accumulated on-peak excess energy balance from the current month or prior months that was not used to reduce on-peak usage. Total off-peak energy in kilowatt-hours billed to customers shall also never be less than zero. For any billing month during which excess energy exceeds the customer's usage in total, producing a net credit, the respective energy charges for the billing month shall be zero. Any excess energy credits shall carry forward on the following month's bill by first applying excess on-peak kWh against on-peak kWh charges and excess off-peak kWh against off-peak kWh charges, then applying any remaining on-peak kWh against any remaining off-peak kWh charges. Credits shall not offset the basic facilities charge or the demand charge for the applicable rate schedule.

4. Excess energy not used in the current billing month to reduce billed kWh usage shall be accumulated and used to reduce usage in future months. For all affected billing statements rendered during November billing cycles, any accumulated excess energy not used to reduce billed kWh usage shall be paid to the customer-generator at the Company's avoided cost, zeroing out the customer generator's account of excess energy. The avoided cost is the off-peak winter energy credit as approved in the Company's Rate PR-1, Small Power Production and Cogeneration schedule.

RIDER TO RETAIL RATES

NET ENERGY METERING FOR RENEWABLE ENERGY FACILITIES ("NEM")
(Page 2 of 4)

For electric service under a standard, non time-of-use rate schedule:

1. The basic facilities charge shall be determined and billed as set forth in the applicable rate schedule as described in the Availability section above.

2. Any demand charges shall be determined and billed as set forth in the applicable rate schedule as described in the Availability section above.

3. If a customer-generator's energy consumption exceeds the electricity provided by the customer-generator during a monthly billing period, the customer-generator shall be billed in kWh for the net electricity supplied by the Utility.

   If a customer-generator's energy generation exceeds the electricity provided by the Utility during a monthly billing period, the customer-generator shall be credited for the excess kWh generated during that billing period.

   Energy charges (or credits) shall be based on the rates in the applicable rate schedules as described in the availability section above. For purposes of calculating monthly energy, the customer's usage shall be reduced by the total of (a) any excess energy delivered to the Company in the current month plus (b) any accumulated excess energy balance remaining from prior months. Total energy in kilowatt-hours billed to customers shall never be less than zero. For any billing month during which excess energy exceeds the customer's usage in total, producing a net credit, the respective energy charges for the billing month shall be zero. Credits shall not offset the basic facilities charge or the demand charge for the applicable rate schedule.

4. Excess energy not used in the current billing month to reduce billed kWh usage shall be accumulated and used to reduce usage in future months. For all affected billing statements rendered during November billing cycles, any accumulated excess energy not used to reduce billed kWh usage shall be paid to the customer-generator at the Company's avoided cost, zeroing out the customer generator's account of excess energy. The avoided cost is the off-peak winter energy credit as approved in the Company's Rate PR-1, Small Power Production and Cogeneration schedule.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge plus the demand charge, if any, as stated in the applicable rate.

DEFINITIONS

1. Customer-Generator means the owner, operator, lessee, or customer-generator lessee of an electric energy generation unit which:

   (A) generates electricity from a Renewable Energy Resource;
   (B) has an electrical generating system with a capacity of:
      (i) not more than the lesser of one thousand kilowatts (1,000 kW AC) or one hundred percent (100%) of contract demand if a non-residential customer; or
      (ii) not more than twenty kilowatts (20 kW AC) if a residential customer;
   (C) is located on a single premises owned, operated, leased, or otherwise controlled by the customer;
   (D) is interconnected and operates in parallel phase and synchronization with an electrical utility and complies with the applicable interconnection standards;
   (E) is intended primarily to offset part or all of the customer-generator's own electrical energy requirements; and
   (F) meets all applicable safety, performance, interconnection, and reliability standards established by the commission, the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the federal Energy Regulatory Commission, and any local governing authorities.

2. Renewable Energy Resource means solar photovoltaic and solar thermal resources, wind resources, hydroelectric resources, geothermal resources, tidal and wave energy resources, recycling resources, hydrogen fuel derived from renewable resources, combined heat and power derived from renewable resources, and biomass resources.

RIDER TO RETAIL RATES

NET ENERGY METERING FOR
RENEWABLE ENERGY FACILITIES ("NEM")
(Page 3 of 4)

3. Retail Electric Service Rates shall mean Rates 1, 2, 3, 5, 6, 7, 8, 9 (metered), 11, 12, 13, 14, 16, 20, 21, 21A, 22, 23, 24, and 28.

4. Excess energy delivered to the Company shall be defined as energy produced by the customer's renewable energy generating facility that exceeds the energy delivered by the Company during a given time period. This excess energy shall be used to reduce energy delivered and billed by the Company during the current or a future month, as provided in the Rate Per Month section above.

5. The On-Peak and Off-Peak periods shall be defined in the applicable time-of-use rate schedules.

GENERAL PROVISIONS

1. To qualify for this rider, the customer must first qualify for and be served on one of the rate schedules as described in the availability section above. The customer must also meet all other qualifications as outlined in the availability section above.

2. All provisions of the applicable rate schedules described above including, but not limited to Billing Demand, Determination of On- and Off-Peak Hours, Adjustment for Fuel Costs, Demand Side Management Component, Pension Costs Component, Storm Damage Component, Sales and Franchise Tax, Payment Terms, and Special Provisions will apply to service supplied under this rider.

3. Customers electing service under this NEM Rider are eligible to remain on the Rider until December 31, 2025, or until such time as the customer elects to terminate service under the Rider, whichever occurs first. The rates set forth here are subject to Commission Order No. 2015-194 in Docket No. 2014-246-E entered under the terms of S.C. Code § 58-40-20(F)(4). Eligibility for this rate will terminate as set forth in Order No. 2015-194. The value of distributed energy resource generation shall be computed using the methodology contained in Commission Order No. 2015-194 in Docket No. 2014-246-E and updated annually coincident in time with the Company's filing in the fuel clause. The value for the period May 2017 – April 2018 is $0.03651 per kWh.

4. Service on this NEM Rider will be closed to new participants as of January 1, 2021, or after statutory caps described in S.C. Code Ann. § 58-39-130 have been reached, whichever occurs first.

5. When no contract demand level is available for a non-residential customer, connected load as determined by the Company shall be used as a proxy for contract demand when determining the capacity of the electrical generating system.

6. Customers who elect NEM service after January 1, 2021, will receive service in accordance with the NEM tariff in effect at the time at which the customer requests NEM service.

7. Customers served under this rider are not eligible for the Company's Small Power Production, Cogeneration Rate PR-1.

8. The customer must execute an application to interconnect generation and an interconnection agreement prior to receiving service under this rider.

9. The Company will retain ownership of Renewable Energy Credits ("RECs").

10. In the event the Company determines that it is necessary to increase the capacity of facilities beyond those required to serve the Customer's electrical requirement or to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, the Customer shall pay the estimated cost of the required transformer or other equipment above the estimated cost which Company would otherwise have normally incurred to serve the Customer's electrical requirement, in advance of receiving service under this Rider.

Attachment C

SOUTH CAROLINA ELECTRIC & GAS COMPANY **ELECTRICITY**

RIDER TO RETAIL RATES

NET ENERGY METERING FOR RENEWABLE ENERGY FACILITIES ("NEM")
(Page 4 of 4)

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

METERING REQUIREMENTS

Customer must furnish, install, own, and maintain a meter socket to measure 100% of the Customer's generator output and that is connected on the Customer's side of the delivery point. Company will furnish, install, own, and maintain a generation meter. Company will also furnish, install, own and maintain a bi-directional billing meter to measure the kWh delivered from Company to Customer and to measure kWh received from Customer by Company. The billing meter will be configured for demand and/or time-of-use measurement as required by the applicable rate. All metering shall be at a location that is approved by the Company. At Company's sole option, the generator meter requirement may be waived for customers served under a net metering rider on or before December 31, 2015.

TERM OF CONTRACT

Contracts shall be for a period not to exceed the term of the contract under which the customer currently receives electric service. There shall be a separate contract for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are part of this rider.

ATTACHMENT D

SOUTH CAROLINA ELECTRIC & GAS COMPANY **ELECTRICITY**

ADJUSTMENT FOR FUEL, VARIABLE ENVIRONMENTAL & AVOIDED CAPACITY, AND DISTRIBUTED ENERGY RESOURCE COSTS

RETAIL RATES
(Page 1 of 2)

APPLICABILITY

This adjustment is applicable to and is part of the Utility's South Carolina retail electric rate schedules.

The fuel, variable environmental & avoided capacity, and DER avoided costs, to be recovered in an amount rounded to the nearest one-thousandth of a cent per kilowatt-hour, will be determined by the following formulas:

$$F_C = \frac{E_F}{S} + \frac{G_F}{S_1}$$

$$F_{EC} = \frac{E_{EC} + G_{EC}}{S_2}$$

$$F_{AC} = \frac{E_{AC} + G_{AC}}{S_2}$$

Total Fuel Rate per kWh $= F_C + F_{EC} + F_{AC}$

Where:

F_C = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one-thousandth of a cent.

E_F = Total projected system fuel costs:

(A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees. The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.

PLUS

(B) Fuel costs related to purchased power such as those incurred in unit power and limited term power purchases where the fossil fuel costs associated with energy purchased are identifiable and are identified in the billing statement, and also including avoided energy costs incurred by the Utility. Also, the cost of "firm generation capacity purchases," which are defined as purchases made to cure a capacity deficiency or to maintain adequate reserve levels. Costs of "firm generation capacity purchases" includes the total delivered costs of firm generation capacity purchased and excludes generation capacity reservation charges, generation capacity option charges and any other capacity charges.

PLUS

(C) Fuel costs related to purchased power (including transmission charges), such as short term, economy and other such purchases, where the energy is purchased on an economic dispatch basis, including the total delivered cost of economy purchases of electric power defined as purchases made to displace higher cost generation at a cost which is less than the purchasing Utility's avoided variable costs for the generation of an equivalent quantity of electric power.

Energy receipts that do not involve money payments such as diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.

MINUS

(D) The cost of fuel recovered through intersystem sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.

Energy deliveries that do not involve billing transactions such as diversity energy and payback of storage energy are not defined as sales relative to this fuel calculation.

S = Projected system kilowatt-hour sales excluding any intersystem sales.

G_F = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in E_F and S.

S_1 = Projected jurisdictional kilowatt-hour sales, for the period covered by the fuel costs included in E_F.

F_{EC} = Customer class variable environmental and avoided capacity costs per kilowatt-hour included in base rates, rounded to the nearest one-thousandth of a cent.

Effective Upon Approval by the Public Service Commission of South Carolina

ATTACHMENT D

SOUTH CAROLINA ELECTRIC & GAS COMPANY **ELECTRICITY**

ADJUSTMENT FOR FUEL, VARIABLE ENVIRONMENTAL & AVOIDED CAPACITY, AND DISTRIBUTED ENERGY RESOURCE COSTS **RETAIL RATES** (Page 2 of 2)

E_{EC} = The projected variable environmental costs including: a) the cost of ammonia, lime, limestone, urea, dibasic acid, and catalysts consumed in reducing or treating emissions, plus b) the cost of emission allowances, as used, including allowances for SO2, NOx, mercury and particulates minus net proceeds of sales of emission allowances, and c) as approved by the Commission, all other variable environmental costs incurred in relation to the consumption of fuel and air emissions caused thereby, including but not limited to environmental reagents, other environmental allowances, and emission related taxes. Any environmental related costs recovered through intersystem sales would be subtracted from the totals produced by subparts a), b), and c). This component also includes avoided capacity costs incurred by the Utility.

These environmental and avoided capacity costs will be allocated to retail customer classes based upon the customer class firm peak demand allocation from the prior year.

G_{EC} = Cumulative difference between jurisdictional customer class environmental fuel revenues billed and jurisdictional customer class environmental costs at the end of the month preceding the projected period utilized in E_{EC} and S_2.

F_{AC} = Customer class DER avoided costs per kilowatt-hour included in base rates, rounded to the nearest one-thousandth of a cent.

E_{AC} = The projected DER avoided costs paid to distributed generators as most recently determined by the Public Service Commission of South Carolina. These avoided costs will be allocated to retail electric customer classes based upon the customer class firm peak demand allocation from the prior year.

G_{AC} = Cumulative difference between jurisdictional customer class avoided cost revenues billed and jurisdictional customer class avoided costs at the end of the month preceding the projected period utilized in E_{AC} and S_2.

S_2 = The projected jurisdictional customer class kilowatt-hour sales.

The appropriate revenue-related tax factor is to be included in these calculations.

FUEL RATES PER KWH BY CLASS

The total fuel costs in cents per kilowatt-hour by customer class as determined by the Public Service Commission of South Carolina in Order No. ____-___ are as follows for the period May, 2017 through April, 2018:

Customer Class	F_C Rate	+	F_{EC} Rate	+	F_{AC} Rate	=	Total Fuel Rate
Residential	2.451		0.047		0.015		2.513
Small General Service	2.451		0.039		0.013		2.503
Medium General Service	2.451		0.033		0.011		2.495
Large General Service	2.451		0.020		0.007		2.478
Lighting	2.451		0.000		0.000		2.451

The incremental costs associated with SCE&G's Distributed Energy Resource Programs, to be recovered in an amount rounded to the nearest cent per account, will be determined by the following formulas:

Total Fuel Rate per Account

$$F_{IC} = \frac{E_{DC} + G_{DC}}{C}$$

Where:

F_{IC} = Fuel cost per account included in base rate, rounded to the nearest cent, not to exceed $12 for residential customers, $120 for small/medium general service customers, and $1,200 for large general service customers.

E_{DC} = The projected incremental costs associated with SCE&G's Distributed Energy Resource Program as determined by the Public Service Commission of South Carolina

G_{DC} = Cumulative difference between jurisdictional customer class distributed energy component revenues billed and jurisdictional customer class incremental costs associated with SCE&G's Distribued Energy Resource Program at the end of the month preceding the projected period utilized in E_{DC} and C.

C = The jurisdictional customer class account totals.

FUEL RATES PER ACCOUNT PER MONTH BY CLASS

The total fuel costs in dollars per account by customer class as determined by the Public Service Commission of South Carolina in Order No. ____-___ are as follows for the period May, 2017 through April, 2018:

Customer Class	F_{IC} Rate
Residential	$ 0.91
Small & Medium General Service	$ 3.29
Large General Service	$ 100.00

Effective Upon Approval by the Public Service Commission of South Carolina

Action Item 7

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**February 07, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	**2018-92**

THIS DIRECTIVE SHALL SERVE AS THE COMMISSION'S ORDER ON THIS ISSUE.

SUBJECT:
DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration the South Carolina Solar Business Alliance, Incorporated's Petition to Intervene.

COMMISSION ACTION:
Grant the Petition to Intervene filed on behalf of South Carolina Solar Business Alliance, Inc.

PRESIDING: Randall SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER	
BOCKMAN	☐	☑	☐		
ELAM	☐	☑	☐		
FLEMING	☑	☑	☐		
HAMILTON	☐	☑	☐		
HOWARD	☐	☑	☐		
RANDALL	☐	☑	☐		
WHITFIELD	☐	☐	☐	Absent	Family Sick Leave

(SEAL)

RECORDED BY: J. Schmieding

ACCEPTED FOR PROCESSING - 2018 February 8 8:40 AM - SCPSC - 2018-2-E - Page 1 of 1

Action Item 13

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**February 21, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	**2018-129**

THIS DIRECTIVE SHALL SERVE AS THE COMMISSION'S ORDER ON THIS ISSUE.

SUBJECT:
DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration the Petition to Intervene Filed on Behalf of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy.

COMMISSION ACTION:
Grant the Petition to Intervene filed on behalf of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☐	☑	☐	
ELAM	☐	☑	☐	
FLEMING	☐	☑	☐	
HAMILTON	☐	☑	☐	
HOWARD	☐	☑	☐	
RANDALL	☑	☑	☐	
WHITFIELD	☐	☑	☐	

(SEAL)

RECORDED BY: J. Schmieding

ACCEPTED FOR PROCESSING - 2018 February 21 3:19 PM - SCPSC - 2018-2-E - Page 1 of 1

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E – ORDER NO. 2018-322

APRIL 30, 2018

IN RE:	Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))	ORDER APPROVING FUEL COSTS

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") and for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2017, through December 31, 2017 ("Review Period").

A. Notice and Interventions

By letter dated October 4, 2017, the Clerk's Office of the Commission instructed the Company to publish, by January 5, 2018, a Notice of Hearing and Prefile Testimony Deadlines

("Notice") in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 5, 2018. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 5, 2017, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office October 4, 2017, letter. On December 15, 2017, the Company filed with the Commission an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("SCCCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SCSBA"), Southern Current, LLC ("Southern Current"), CMC Steel South Carolina ("CMC Steel"), Wal-Mart Stores, East, LP ("Wal-Mart"), Sam's East, Inc. ("Sam's"), and Solbright Energy Solutions, LLC ("Solbright"). SCE&G did not oppose the petitions to intervene and no other parties sought to intervene in this proceeding. By letters dated March 2, 2018, and March 5, 2018, Solbright, Wal-Mart, and Sam's requested to withdraw their petitions to intervene, which requests were granted by Order Nos. 2018-175 and 2018-176, both dated March 14, 2018. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party to this proceeding pursuant to S.C. Code Ann. § 58-4-10(B) (2015).

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

S.C. Code Ann. § 58-27-865(B) (2015) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

III. HEARING

In order to consider the merits of this case, the Commission convened a hearing on this matter on April 10-11, 2018, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire; Matthew W. Gissendanner, Esquire; and Benjamin P. Mustian, Esquire. SCEUC was represented by Scott Elliott, Esquire. SCCCL and SACE were represented by Katherine C. Ottenweller, Esquire. SCSBA was represented by Richard L. Whitt, Esquire, and Benjamin L. Snowden, Esquire. Southern Current was represented by Richard L. Whitt, Esquire. CMC Steel and its counsel of record were excused from attending and did not appear at the hearing. Andrew M. Bateman, Esquire, and Jenny R. Pittman, Esquire, represented ORS. In this Order, ORS, SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

SCE&G presented the direct testimonies and exhibits of George A. Lippard, III; Henry E. Delk, Jr.; J. Darrin Kahl; Michael D. Shinn; Allen W. Rooks; John H. Raftery; and Dr. Joseph M. Lynch. ORS presented the direct testimonies and exhibits of Gaby Smith, Michael Seaman-Huynh,

Sarah W. Johnson, and Brian Horii.[1] SCCCL and SACE presented the direct testimony and exhibits of Devi Glick. SCSBA presented the direct testimony of Dr. Ben Johnson. Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

In response to the direct testimony of SCCCL and SACE Witness Glick, SCSBA Witness Ben Johnson, and ORS witnesses Seaman-Huynh and Horii, SCE&G presented the rebuttal testimony of Witnesses Rooks and Lynch. SCCCL and SACE filed surrebuttal testimony of Witness Glick, SCSBA filed surrebuttal testimony of Witness Ben Johnson, and ORS filed surrebuttal testimony of Witness Horii in response to SCE&G's rebuttal testimony.

IV. REVIEW OF THE EVIDENCE AND EVIDENTIARY CONCLUSIONS

After hearing the evidence and testimony of the witnesses discussed below, the Commission reaches factual and legal conclusions, also discussed below.

A. Avoided Costs, PR-1, and PR-2

1. SCE&G Testimony

SCE&G Witness Lynch explained the Company's calculations of avoided costs for power purchases under the Public Utilities Regulatory Policies Act of 1978 ("PURPA"). SCE&G uses a difference in revenue requirements ("DRR") methodology to calculate its avoided energy and capacity costs. This approach involves calculating the revenue requirements between a base case and a change case. The base case is defined by SCE&G's existing fleet of generators and the hourly load profile to be supplied by these generators. The change case is the same as the base case except

[1] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Kahl and Shinn were presented in the second panel; and Witnesses Rooks, Raftery and Lynch were presented in the third panel. ORS Witnesses Seaman-Huynh and Smith were presented in the first panel for ORS, and Witnesses Sarah Johnson and Horii were presented in the second panel.

that the hourly loads are reduced by a 100-megawatt ("MW") profile which is the maximum reduction required by regulation under PURPA. The avoided costs are then calculated by taking the difference in revenue requirements between the two cases.

For avoided energy costs, Witness Lynch testified that the Company calculates the change in production costs between a base case and a change case using a computer program called PROSYM. To determine long-run avoided energy costs, this program models the commitment of generating units to serve load hour-by-hour over the course of the 15-year Integrated Resource Plan ("IRP") planning horizon. Short-run avoided energy costs are calculated for the period May 2018 through April 2019. Using PROSYM to simulate the dispatch of its generation fleet over these time periods, SCE&G estimates the production costs that result from serving the base case load and the change case load.

Witness Lynch explained that SCE&G traditionally derived the change case from the base case by subtracting 100 MWs from every hour of the base case load profile. The Company then collected avoided energy costs into four time periods composed of two seasons—peak season and off-peak season—and two daily periods—peak hours and off-peak hours. Using these four time-of-use periods results in four avoided energy costs, one for each time period. Witness Lynch testified that, in this proceeding, the Company proposed to calculate its PR-2 rate for solar QFs by deriving the change case from the base case by subtracting a 100 MW solar profile only from the base case. Because the solar distribution of energy is captured in the solar profile, avoided energy costs are not collected into separate time periods but simply added over all hours.

Witness Lynch testified that, in this proceeding, SCE&G is proposing to limit its PR-2 Rate to solar qualifying facilities ("QFs") and that the Company must separate solar QFs from non-solar

QFs in order to pay each type of QF the correct avoided costs. Witness Lynch explained that, as more and more solar generation facilities interconnect with SCE&G's system, the benefit of each additional solar generation facility to the Company's system is diminished. Witness Lynch further testified that, in order to measure this effect, the Company performed a study titled "Avoided Energy Cost Methods Study for Solar QFs" ("Methods Study"), which he sponsored as Hearing Exhibit No. 5 (JML-3).

Witness Lynch also testified that SCE&G has determined that during the months of May through October, or "Summer," the Company needs resource reserves of at least 14% of the projected summer peak demand to serve reliably during peak times and at least 12% during the remaining periods. Witness Lynch also testified for the months of November through April, or "Winter," SCE&G needs a minimum of 21% of its projected winter peak demand to serve reliably during winter peak periods and at least 14% during the remaining periods. In support of this determination, Witness Lynch sponsored the Company's Reserve Margin Study, identified as Hearing Exhibit No. 5 (JML-2).

Witness Lynch further testified that the Methods Study compared the difference in revenue requirements between the base case and three different change cases using a traditional 100 MW round-the-clock profile, a 100 MW South Carolina solar profile, and a 100 MW North Carolina solar profile. After levelizing the avoided energy costs and averaging them over 10 random seed runs, Witness Lynch testified that the results show that using the round-the-clock profile to develop the change case results in over-estimating the avoided energy costs by $4.85 per MWH. Witness Lynch explained that, as more and more solar is added to the system, the value of each additional increment of solar is reduced. Specifically, Witness Lynch stated that SCE&G's system first

experiences a morning peak demand with little contribution from solar facilities. As the day progresses and solar facilities begin generating energy, SCE&G's residual system load profile experiences a steep ramping down of load to a bottom level of load followed by a steep ramping up in load to an afternoon or evening peak demand. In sum, Witness Lynch testified that the additional energy from solar generation causes the system to experience decreasing minimum loads between the morning and evening peak. Witness Lynch also testified that, while solar energy coming onto the system certainly has value, it also causes operational issues that result in positive variable integration costs that lower the avoided cost. Based on this analysis, Witness Lynch testified that the Company's Avoided Energy Costs for the PR-2 rate are as follows:

Solar QF Avoided Energy Costs ($/kWh)

Time Period	Annual
2018-2022	$0.02853
2023-2027	$0.02994
2028-2032	$0.03414

To develop avoided capacity costs, Witness Lynch testified that the Company takes a similar approach. Using the difference in revenue requirements methodology, SCE&G calculates the difference in the revenue requirements between the base case and the change case. Using the resource plan in its latest IRP or an updated resource plan if appropriate, SCE&G calculates the incremental capital investment related revenue required to support the existing resource plan. As with its calculation of avoided energy costs for solar, SCE&G derives a change case in its resource plan by considering the impact of a QF purchase from a 100 MW solar facility.

Witness Lynch further testified that SCE&G currently has 865 MWs of solar capacity under Power Purchase Agreements ("PPAs") and the addition of another 100 MWs of solar has no

effect on the resource plan. Witness Lynch further explained that, given the amount of solar generation that is currently projected to be interconnected to SCE&G's system, adding additional blocks of 100 MW of solar generation does not affect the Company's future capacity needs.

In order to study this issue, Witness Lynch testified that the Company performed a study titled "On Calculating the Capacity Benefit of Solar QFs ("Solar Capacity Benefit Study")" to analyze the impact of solar on its daily peak demands. This study shows that, on more than 80% of the days during the winter months of October through March, solar has no effect on SCE&G's daily peak demand because the winter peak occurs either early in the morning before solar begins to generate energy or in the evening after solar is no longer generating. Since SCE&G's Reserve Margin Study shows that SCE&G needs as much capacity in the winter as it does in the summer, Witness Lynch testified that a generating resource has to provide capacity in the winter as well as the summer in order to avoid the need for capacity and thereby have capacity value. Because solar does not provide capacity during the winter period, Witness Lynch testified that the Company is unable to avoid any of its projected future capacity needs and, therefore, the avoided capacity cost of solar for these winter months is zero.

SCE&G also analyzed the impact of solar on summer days and determined that, 800 MWs of solar can be expected to reduce the daily peak demand on average over non-peak days approximately 21% with only 9.6% for the last 100 MWs. Witness Lynch testified that, because only the incremental values are relevant for avoided cost calculations, the last 100 MWs of solar will reduce the summer peak by about 19.5 MWs on peak days and 9.6 MWs on the rest of the days, which translates into a peak effect of approximately 9.9 MWs and a base effect of approximately 9.6 MWs. Witness Lynch stated that, considering this small impact in summer and

no impact in winter from additional solar generation, SCE&G is not able to reduce capacity additions in its resource plan and therefore there are no avoided capacity costs.

Witness Lynch also testified that the Company plans to negotiate contracts with any non-solar QF for which the PR-1 rate is not appropriate. He explained that, in the past and prior to the development of the PR-2 rate, SCE&G for many years offered a PR-1 rate as well as an offer to negotiate a contract with any QF that did not qualify for the PR-1 rate. This response to PURPA worked satisfactorily for many years and SCE&G proposes to return to that arrangement for non-solar QFs of greater than 100 kilowatts ("kW") and up to 80 MW.

Regarding the Company's PR-1 Rate, Witness Lynch explained that, for the same reasons discussed regarding the PR-2 Rate, SCE&G must separate solar QFs from non-solar QFs in order to pay each type of QF the correct avoided costs. He testified that, if SCE&G does not distinguish its pricing between solar and non-solar QFs, then the amount SCE&G and its customers would be paying for solar energy would be more than the Company's actual avoided costs, which is contrary to the explicit intent of PURPA.

For solar QFs on PR-1, SCE&G used the same methodology to estimate avoided energy costs as it did for solar QFs on PR-2. The only difference is the time period over which the avoided energy costs are estimated. The short-run avoided energy costs in the PR-1 rate are calculated for the period May 2018 through April 2019. Witness Lynch also testified that the avoided capacity cost for solar QFs subject to the PR-1 rate is zero because, as with the PR-2 rate, incremental solar QFs do not affect the resource plan and therefore avoid no future resources or their cost.

For non-solar QFs on PR-1, Witness Lynch testified that SCE&G used PROSYM to estimate the change in production costs that result from serving the base case load and the change

case by subtracting a 100 MW round-the-clock power purchase profile. He stated that the avoided costs are accumulated into the four time-of-use periods described previously and a non-solar QF would be paid based on how much energy it produces in each of these four time-of-use periods. For avoided capacity, Witness Lynch explained that, because the PR-1 rate is designed for small QFs with a capacity rating of up to 100 kWs, SCE&G does not believe there will ever be enough capacity from these small non-solar QFs to affect its resource plan and, therefore, the avoided capacity costs for PR-1 are zero. Witness Lynch also stated that SCE&G proposes to change the PR-1 Rate for non-solar QFs by eliminating the critical peak hours as a way to credit QFs for their capacity value. He stated that it is more appropriate to simply add an avoided capacity credit to the avoided energy cost to deliver the capacity value to a solar QF. He also stated that the addition of so much solar on SCE&G's system shifts the Company's previously experienced effective peak hour and that it is inappropriate to look only to certain hours selected from past experience in which to pay out a capacity credit. Finally, he stated that since SCE&G's need for capacity spans the entire year, it is necessary to spread avoided capacity costs throughout the year to reflect the Company's reliability risk as explained in the Reserve Margin Study.

Based on these recommendations, Witness Lynch testified that the PR-1 Rates are as follows:

PR-1 RATE: AVOIDED ENERGY COST
Non-Solar QFs ($/kWh)

Time Period	Peak Season Peak Hours	Peak Season Off-Peak Hours	Off-Peak Season Peak Hours	Off-Peak Season Off-Peak Hours
May-April	$0.03233	$0.02886	$0.03445	$0.03298

Solar QFs ($/kWh)

Time Period	Year Round
May-April	$0.03256

He stated that the avoided capacity costs for solar and non-solar QFs are zero.

2. ORS, SCCCL, SACE, and SCSBA Testimony

Regarding the Company's methodology used to calculate its avoided energy and capacity costs, ORS, SCCCL, SACE, and SCSBA made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. ORS witness Horii testified that ORS reviewed SCE&G's avoided cost calculations in order to verify the Company is using the avoided cost methodology approved by the Commission, to confirm the methodology meets PURPA requirements, and to verify the avoided cost rates requested by SCE&G in this docket are a reasonable result of the approved avoided cost methodology. Witness Horii stated that the method used by SCE&G to calculate avoided energy costs is consistent with SCE&G'sprior practice. He further testified that, the use of a 100 MW solar profile is a valid application of the DRR methodology for the specific case of a solar generator and that, given SCE&G's assertion that the vast majority of recent and future QF resources are solar, it is an improvement to use an avoided energy cost which more closely tracks

the avoided energy for solar generation. He also testified that SCE&G's fuel price forecasts which SCE&G used in calculating the avoided energy cost for both the 2017 and 2018 fuel adjustment proceedings are consistent and similar and that there appear to be no major changes in network configurations or import/export assumptions used by SCE&G. In sum, Witness Horii testified that the updates in SCE&G's avoided energy costs are a reasonable and consistent result of the methodology used by SCE&G and that the method used by SCE&G to calculate avoided energy costs for solar generators is appropriate.

The Commission finds that SCE&G's avoided energy costs are reasonable and that the use of a 100 MW solar profile to calculate avoided energy costs is appropriate. As discussed by Witness Lynch, as more and more solar is added to SCE&G's system, the value of each additional increment of solar is reduced. Therefore, it is appropriate for the Company to use an avoided energy cost which more closely track the avoided energy for solar generation.

b. Regarding avoided capacity costs, Witness Horii disagreed with the Company's position that new solar projects will have no value and noted that SCE&G has not adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs. Although Witness Horii stated SCE&G may be correct that there are no winter capacity reductions from additional solar, he expressed concern that parties have not had adequate opportunity to evaluate the accuracy of the winter capacity constraint. Witness Horii further testified as to his belief that SCE&G is overestimating the amount of reserve capacity the utility needs in the winter because of purported flaws in the Reserve Margin Study and that the Company's forecast of future summer and winter peak demands is inconsistent. As a result of these concerns and the uncertainty of this new position, Witness Horii recommended that SCE&G's

position of zero avoided capacity costs be rejected at this time. He further recommended that, because he was unable to produce an independent estimate of avoided capacity costs for a 100 MW change in supply, the current capacity value should be maintained for both PR-1 and PR-2 until a better capacity value can be provided in the next rate update.

SCCCL-SACE witness Glick also testified that SCE&G has historically used a 14% winter reserve margin and that it has increased its winter reserve margin to 21%, reflecting a 50% increase over the winter reserve margin used by the Company last year. She also stated that the Company's proposed winter reserve margin is substantially higher than that of Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Southern Company, and Santee Cooper. Witness Glick testified that, while a robust reserve margin is necessary to protect system reliability, this increase in SCE&G's winter reserve margin has a profound impact on system costs for ratepayers by requiring substantially more winter capacity than last year's plan.

In response, Witness Lynch testified that the Company has experienced a significant increase in new solar capacity with signed PPAs, reflecting 865 MW of capacity currently under contract and 17% of SCE&G's 2018 forecasted system peak demand of 5,077 MW. Witness Lynch explained that, as more and more solar is added, the usefulness or value of each successive addition decreases and that solar has reached the zero point for capacity because of the amount of solar under contract. He also disagreed that SCE&G's capacity needs are greater in the summer than in the winter, explaining that the seasonal peak demand forecasts and the seasonal reserve margins show that SCE&G's incremental capacity need is 112 MWs in the summer and 449 MWs in the winter.

Witness Lynch also testified that Witness Horii's suggested winter reserve margin results from an error in Witness Horii's calculations but, even so, the Company's 2019 winter need for capacity is 185 MW greater than the summer need. Witness Lynch also testified that SCE&G's estimate of the peak demand falls within the 95% confidence interval derived from Witness Horii's calculations. As a result, Witness Lynch testified that SCE&G's calculations are not statistically different from Witness Horii's and therefore should be considered a reasonable estimate of its forecasted winter capacity needs. Witness Lynch also disagreed with Witness Horii's recommendation to maintain the current avoided capacity costs values for both PR-1 and PR-2, explaining that, while these payments represent a pass through of costs and would be recoverable through SCE&G's fuel clause, SCE&G's customers ultimately would pay more for this purchased power than PURPA intends.

Witness Lynch also testified that, previously, SCE&G has not had a winter reserve margin, but only a summer reserve margin. He further disagreed with Witness Glick's suggestion that SCE&G's winter reserve margin was unreasonable when compared to those of other utilities. Specifically, Witness Lynch stated that PJM has a 16% summer reserve margin and a 27% winter reserve margin, both of which are greater than SCE&G's current summer and proposed winter reserve margin. He also testified that Florida electric utilities plan to a 20% reserve margin, which likely refers to a summer reserve margin, but that SCE&G's demand side risk is greater in winter than in summer. He also testified that, as his methodology and that of Witness Horii reflect, SCE&G's winter peak can increase approximately 500 MW due to abnormal winter weather, reflecting the need for at least a 6% increase in reserve margin, winter over summer. Accordingly, Witness Lynch testified that SCE&G's 21% reserve margin is reasonable.

The Commission finds that SCE&G's proposal to set avoided capacity costs for its PR-1 and PR-2 rates at zero is reasonable at this time, in the absence of a viable alternative proposal being presented by any other party. Since last year's fuel proceeding, SCE&G has had a dramatic change in circumstances with 865 MW of solar capacity now under contract.[2] The Company's analysis shows that the addition of another 100 MW of solar has no effect on its resource plan and, therefore, does not affect SCE&G's future capacity needs. The Commission also finds that SCE&G's determination that it needs as much capacity in the winter as it does in the summer is appropriate. The calculation of generation required in the winter as presented by SCE&G, including a significant reserve margin, is accepted by the Commission at this time, but remains a subject upon which alternative calculation would be entertained in future fuel proceedings. Moreover, while the Commission accepts that there is significant winter need at this time, it is imperative that the Company take all appropriate measures to aggressively pursue economic demand side management and energy efficiency programs, targeted at reducing the winter peak and repositioning the Company to once again recognize an avoided capacity factor for solar generators. A generating resource has to provide capacity in the winter as well as in the summer in order to avoid the need for capacity and thereby have capacity value. The Commission therefore concludes that, because additional solar does not provide capacity during the winter period, the Company is unable to avoid any of its projected future capacity needs from additional solar. The Commission further reiterates that no other party presented an alternative estimate of SCE&G's avoided capacity costs. The Commission also disagrees with Witness Horii's suggestion that the

[2] The Commission recognizes that this 865 MW of solar capacity under contract falls under the PR-2 rates established in Order Nos. 2016-297 and 2017-246, which provides a capacity payment for solar generation.

Company's current avoided capacity costs be maintained until the next rate update. There is no evidence to demonstrate that maintaining such rates would be appropriate or that it would not result in SCE&G's customers having to pay for excessive avoided capacity costs. In fuel proceedings before this Commission, mere assertions that fail to offer and justify an alternative just and reasonable rate are of limited value in the final determination of a final just, reasonable, and appropriate rate. During the hearing, the Commission heard several complaints that SCE&G was not forthcoming with discovery production. However, the Commission did not receive any Motion to Compel nor any other indication of disputes in the discovery process, prior to the hearing. Accordingly, the Commission finds that SCE&G's proposed avoided capacity cost for solar of zero is reasonable and appropriate.

The Commission also finds that SCE&G's winter reserve margin of 21% is reasonable. While the reserve margins calculated by Witness Horii and Witness Lynch differ to a degree, the differences are not significantly different. Furthermore, both witnesses recognize that SCE&G has a higher demand-side risk in the winter than in the summer. Accordingly, the Commission finds that it is appropriate for SCE&G to use a 14% reserve margin for the summer and a 21% reserve margin in the winter, based on the evidence presented in this case. The increased reserves represent a novel approach to becoming a winter-peaking utility in this fuel case. This change has potentially adverse implications for certain types of generators going forward, and the Commission considers this issue to be of significant importance in future fuel proceedings. It is appropriate to use the most recently filed Integrated Resource Plan for purposes of avoided cost calculations in fuel proceedings, and the Commission expects that the Company's Integrated Resource Plan will be consistent with all assertions and assumptions made in the calculation of avoided costs.

c. Witness Horii also disagreed with SCE&G's proposal to no longer provide a standard rate offer for non-solar resources. He testified that the lack of a published rate would increase the uncertainty and engagement costs for new resources.

In response, Witness Lynch testified that since there are no non-solar QFs currently seeking a PPA, there is no need for such a published tariff. Should a non-solar QF desire to enter into a PPA, Witness Lynch testified that SCE&G will negotiate a contract with that party. Witness Lynch stated that this approach has worked satisfactorily for SCE&G since PURPA was passed and only when the number of solar PPA applications significantly increased did the Company believe it would be more efficient to have a separate published rate for these QFs.

The Commission agrees with SCE&G. The record contains no evidence that a non-solar QF has recently sought to enter into a PPA agreement with the Company and, therefore, there is no need for a published non-solar QF tariff. Accordingly, the Commission finds that the Company should negotiate contracts with any non-solar QFs that are not eligible for the Company's non-solar PR-1 Rate as it did historically, prior to the establishment of the PR-2 Rate. If, in the future, non-solar QFs become more prevalent, a standard offer tariff may be appropriate.

d. Witness Glick testified that, in this proceeding, SCE&G has proposed a substantial change to the avoided cost methodology approved by the Commission in prior dockets and that solar QFs are denied the benefits of deferring the addition of any new capacity that the Company proposes building. She also testifies that the Company did not use the methodology approved in Docket 2017-2-E to calculate the avoided generation capacity value.

In response and as discussed previously, Witness Lynch explained that SCE&G has not changed the methodology; rather there has been a change in the result caused by the significant

increase in new solar capacity with PPAs since the Company's last fuel proceeding. Witness Lynch also testified that as more and more solar is added, the usefulness or value of each successive addition decreases and that solar has reached the zero point for capacity because of the amount of solar under contract.

For the same reasons stated previously, the Commission agrees with the Company. The difference in revenue approach involves calculating the revenue requirements between a base case and a change case. In this proceeding, the Company proposes to calculate the change case using a 100 MW solar profile instead of a 100 MW round-the-clock profile as it has done in the past. The Commission finds that this does not reflect a change in methodology; rather, this is a change in the analysis that is warranted by the substantial amount of solar currently under contract with the Company. Even so, because the vast majority of recent and future QF resources are solar, it is appropriate for SCE&G to use an avoided cost which more closely tracks the avoided costs for solar generation. The Commission expects SCE&G to continue to refine the solar profile as more installations come online and update the profile accordingly, such that solar continues to be given all due credit for the benefits of its generation. The Commission further notes that, in the Company's last two fuel proceedings, SCCCL, SACE, and SCSBA all requested that the Company be required to use a solar profile so that it could more accurately estimate the avoided costs to be paid to solar QFs.

e. Witness Glick testified that the Company erred by failing to include in its revenue requirement calculations opportunity costs, which are the loss of potential gain from other alternatives when one alternative is chosen. Specifically, Witness Glick argued that additional

solar would allow SCE&G to sell capacity in the market thereby increasing the value of additional solar.

In response, Witness Lynch testified that in order to sell capacity to a neighboring utility, it must be firm and dependable capacity. However, Witness Lynch noted that a solar QF does not have firm capacity as it is an intermittent resource and, therefore SCE&G could not sell solar capacity. He further testified that when SCE&G purchases firm capacity to serve its customers, it passes those costs onto its customers. Similarly, when SCE&G sells firm capacity, he testified that the benefits of such a sale should accrue to SCE&G's customers, not to the QF as proposed by Witness Glick. Finally, he testified that if there were a lucrative market for solar capacity, the solar facility would not be selling its energy to SCE&G at the Company's avoided cost rates but instead would sell its capacity directly to interested purchasers at higher prices.

It is reasonable and appropriate for the Company not to consider opportunity costs in its revenue requirements calculation, because a solar QF does not have firm capacity as it is an intermittent resource and does not add to the Company's opportunity to sell firm capacityThe Commission therefore declines to adopt the position recommended by SCCCL and SACE.

f. Witness Glick also recommended that SCE&G should pay QFs a performance adjustment factor in order to treat the QF capacity equally with a utility's generating unit.

Witness Lynch disagreed with this suggestion, stating that it is not reasonable or meaningful to compare the intermittent capacity of a solar QF, which only provides energy as weather permits, with the firm capacity of a more dependable generating unit such as a combustion turbine. Based on data reflecting the maximum hourly output of a large solar generator on

SCE&G's system, Witness Lynch testified that solar facilities provide little, if any, firm dependable capacity to SCE&G's system that the Company can reliably call upon to serve its customers.

The Commission agrees with the Company. The Commission concludes that it is unreasonable to employ a performance adjustment factor to the capacity payment because there is no guarantee of performance with regard to capacity from solar facilities.

g. SCSBA Witness Ben Johnson testified that QF rates should be set equal to the cost of having the utility build and operate its own generating units. Witness Johnson also testified that the public interest is best achieved by establishing rates that leave ratepayers indifferent as to whether energy and capacity is obtained from QFs or from the utility itself under traditional rate base regulation. Witness Johnson stated that retail customers are better served by regulatory decisions that set avoided cost rates at a point that is closer to the long-run incremental costs that are incurred by utilities when they build and operate their own generating plants.

Witness Lynch testified that avoided cost rates should not be set to the utility's cost to build but, instead, should be set equal to the utility's actual avoided cost. Under any other circumstances, Witness Lynch testified that ratepayers would not be indifferent to purchases from a QF. He also noted that the rates in the Company's PR-2 tariff reflect SCE&G's long-term avoided costs.

The Commission agrees with SCE&G. The methodology used appropriately by the Company in this proceeding sets forth a proper manner in which to determine the Company's actual avoided cost. As SCE&G has properly employed this method, the Commission concludes that SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities is unreasonable and inappropriate.

h. Witness Ben Johnson next testified that SCE&G analyzed different generation expansion plans and the associated energy costs, but did not develop a comprehensive, detailed analysis of its revenue requirement and does not show the corresponding revenue requirement for these expansion plans or that this approach is consistent with minimizing revenue requirements. Witness Johnson also testified that the PROSYM model used by SCE&G to calculate its avoided costs has certain disadvantages.

In response, Witness Lynch testified that, for the PR-2 Rate, incremental solar beyond 865 MWs of solar capacity already under contract does not alter its resource plan and, therefore, the difference in capital-related revenue requirement is zero. He further testified that a comprehensive, detailed revenue requirement is not needed for the calculation of avoided costs which are based on incremental effects.

The Commission agrees with the Company. The Commission also finds that it is appropriate for SCE&G to use PROSYM, which is a standard production costing model used in the industry. Accordingly, the Commission finds that Witness Johnson's recommendations are unnecessary in this proceeding, as discussed below.

i. Witness Ben Johnson testified that he developed estimates of the Company's avoided capacity costs using the Proxy Unit method based on a hypothetical nuclear plant, combined-cycle plant, and combustion turbine. He stated that these calculations suggest SCE&G's proposed rates are below the capacity-related cost of building and operating these three types of generating units over their entire economic life. For this reason, Witness Johnson stated that it is appropriate for the Commission to increase the avoided cost rates to be closer to those of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. He also testified that higher

avoided cost rates would be more consistent with the long-run incremental cost of new capacity and would better encourage QF development within SCE&G's service area.

Witness Lynch disagreed, stating that Witness Johnson failed to explain how the cost to construct these proxy plants relate to the costs SCE&G would avoid through a QF purchase, *i.e.*, the avoided cost rates that leave ratepayers indifferent. He further noted that ratepayers would not be indifferent to the choice of paying the different capacity costs of a nuclear plant, a combined-cycle plant, or a combustion turbine. Rather, given the choice, Witness Lynch testified that ratepayers would choose to pay the capacity cost of the least expensive generating facility—a combustion turbine.

The Commission finds that Witness Johnson's recommendation is unreasonable. SCE&G properly calculated its avoided costs using a reasonable methodology. As stated previously, SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities, without regard to cost, is unreasonable and inappropriate. The Commission further finds that using the proxy method as recommended by Witness Johnson would not add further accuracy to the estimate of SCE&G's avoided costs and, therefore, declines to modify the methodology in the manner suggested by Witness Johnson.

j. Witness Ben Johnson next addressed the Company's variable energy costs, noting that natural gas prices have fluctuated over both short and medium time frames, although stating that they have exhibited a tendency to trend higher over the long term. Witness Johnson testified that the instability of natural gas prices and difficulties associated with predicting these prices is one of the principal disadvantages or risks associated with using this fuel source. Witness Johnson further testified that, in developing his long-run avoided cost estimates, he evaluated

multiple scenarios using a number of different assumptions based upon historical natural gas prices.

In response, Witness Lynch agreed that future natural gas prices are uncertain but stated that a simple trend line based on historical natural gas prices cannot be used with confidence to project future prices as a result of the recent advancements in fracking technology. Instead, Witness Lynch testified that SCE&G uses the price of futures contracts traded on the NYMEX over the next three years and then applies a growth rate to project prices over the longer term. Witness Lynch stated that NYMEX prices have been used in SCE&G's fuel hearings for many years because they represent publicly available information and also are good indicators of gas prices in the short term, and that they are equally useful in the present proceeding

The Commission finds that SCE&G's methodology to estimate future natural gas prices is. The Company has used this methodology for a number of years to estimate future natural gas prices. The Commission therefore concludes that Witness Johnson's recommended changes to this methodology in this proceeding is unnecessary and would not result in more accurate estimates of future natural gas prices.

k. Witness Ben Johnson further addressed the Company's decision to abandon the new nuclear units and suggests that the Company did not consider the benefits of a balanced generating portfolio in developing its proposed QF rates.

Witness Lynch disagreed with Witness Johnson and testified that SCE&G is aware of the resource mix. He further testified that the Company believes that the addition of 865 MW of solar capacity helps to have a more balanced generating portfolio. However, Witness Lynch stated that

SCE&G, like most utilities, believes that gas-fired generation is the most economical choice of dispatchable generation for the next few years.

The Commission finds that the Company has experienced a substantial growth in solar generation on its system which undoubtedly will provide a more balanced generation portfolio. The Commission therefore disagrees with Witness Johnson's suggestion.

l. Regarding the Company's proposed changes to the avoided capacity rates for solar and to Rate PR-1 and PR-2, Witness Ben Johnson testified that not compensating QFs for their reliability benefits is intensely and unlawfully discriminatory. He also objected to limiting Rate PR-2 to solar projects and asserts that this would establish an arbitrary distinction between solar and non-solar technologies. Witness Johnson also objected to SCE&G's proposal to update Rate PR-2 on an as-needed basis. Finally, Witness Johnson testified that solar and non-solar generators should not be paid different prices.

In response, Witness Lynch testified that, in the context of avoided costs, the issue is not what benefits or value QFs will receive. Rather, Witness Lynch stated that the issue is what capacity costs are being avoided and, simply put, if no capacity costs are avoided, then the avoided cost is zero. Witness Lynch also testified that the Company's proposal to distinguish between solar and non-solar projects is not arbitrary since SCE&G only has solar projects requesting avoided cost rates and the determination of avoided cost depends strongly on the type of project under consideration. When a non-solar project seeks to enter into a PPA with SCE&G and requests its avoided costs, Witness Lynch stated that some specification has to be made as to what the project's power producing characteristics will be.

Regarding battery storage projects, Witness Raftery testified that SCE&G will issue an RFP to collect information on solar plus battery projects with the intention of having a project or two placed online and that SCE&G then will be better able to analyze the impacts of these types of projects on its system. Finally, Witness Lynch testified that SCE&G believes it is sufficient to have a scheduled update of the PR-2 rate once a year at the fuel hearing with the option, but not the requirement, to update it more frequently on an as needed basis. Witness Lynch also testified that QFs should be paid their avoided cost. He stated that solar QFs all have similar characteristics and avoid costs at approximately the same rate and that, for this reason, providing a standard rate for solar QFs, such as PR-2 and PR-1, is efficient and reasonable. Witness Lynch also testified that because non-solar QFs may have significantly different characteristics; these projects should be considered on an individual basis and separate, specific PPAs should be negotiated for each such project. And, even though it is not possible to accurately estimate the impact small non-solar QFs (under 100 kW) have on the system individually, Witness Lynch stated that the impact they do have is so small that establishing a separate rate for these facilities would be meaningless.

The Commission finds that the Company's proposed changes to Rate PR-1 and PR-2 are reasonable. Avoided capacity costs should be calculated based on how much future capacity can be avoided and, if no such capacity can be avoided, the avoided capacity cost should be zero. In order for SCE&G to pay the appropriate amount of avoided costs and therefore prevent customers from having to pay for avoided costs that are too high, it also is appropriate for SCE&G to distinguish between solar and non-solar QFs in its Rate PR-1 and PR-2 and to pay different avoided costs based on their different characteristics. The Commission also agrees with SCE&G's proposal to update Rate PR-2 once a year, but disagrees with its proposal to be permitted to update

Rate PR-2 more frequently than annually. If the Company were permitted to update this rate more than annually, it would result in near-continuous litigation.. Allowing updates to the PR-2 Rate only during the annual fuel proceeding recognizes the importance of stability and certainty for both the generating facilities developers and the Company. The Commission also recognizes that, in previous proceedings, SCCCL, SACE, and SCSBA recommended that Rate PR-2 be updated on an annual or biennial basis and that semiannual updates create uncertainty for QF developers.

m. Witness Ben Johnson also testified that the Commission should be moving in the direction of requiring stronger, more precise price signals to help guide competitive investment decisions and that the elimination of the capacity rate makes the solar rate structure even less granular than it is now.

Witness Lynch responded by stating that PURPA requires SCE&G to purchase the power produced by any and all QFs that desire to sell power at the Company's avoided cost. He further testified that SCE&G is prohibited by law from turning away less efficient QFs, so the use of avoided costs is not a good vehicle to enhance competitive markets.

The Commission agrees with the Company. Given the requirements of PURPA, it is not appropriate to use avoided costs to encourage competitive investment decisions. To the extent that avoided capacity costs are achieved by PURPA generators, those costs must be included in the rate paid for such power acquisition.

n. Witness Ben Johnson further testified that electrical energy is a joint product when viewed across time and that capacity used to generate electricity during the peak daytime hours is also available for use during other hours. He further testified that a reasonable share of the annual fixed costs of capacity should also be recovered during many other hours of the year,

including the early morning hours of December through February, when extreme peaks also sometimes occur. Witness Johnson therefore suggested that avoided costs should include a markup to provide a mechanism for joint and common costs.

Witness Lynch disagreed and testified that a markup suggests that SCE&G should pay more than its avoided cost which is contrary to the intent of PURPA. If SCE&G avoids any joint and common costs through the purchase of power from a QF, Witness Lynch testified that those costs should be reflected in its avoided cost rate but without a markup. In response to Witness Johnson's suggestion that a combined-cycle generating facility that provides capacity in the winter will also provide capacity in the summer, Witness Lynch stated that if SCE&G has to build a combined-cycle unit to meet its winter peak, but which also satisfies the need for summer capacity, then the fixed costs are incurred. In contrast, Witness Lynch noted that adding solar capacity, which only has an impact on capacity in the summer, does not avoid any of those fixed costs.

The Commission agrees with SCE&G. The Company properly calculated its avoided costs using the a reasonable methodology, and the Commission finds it would be inappropriate to markup avoided costs to provide a mechanism for joint and common costs.

3. The Commission's Overall Conclusions Regarding Avoided Costs, PR-1, and PR-2

Based upon the evidence of record, and after reviewing the testimony of the parties of record, the Commission finds and concludes that SCE&G properly calculated its avoided energy and capacity costs under PURPA using the difference in revenue requirements methodology. The Commission further concludes that the difference in revenue requirements methodology remains reasonable, prudent, and appropriate, and that SCE&G's proposal to use a 100 MW solar profile to calculate avoided costs is warranted and appropriate. The Commission also finds and concludes

that SCE&G's proposed PR-1 and PR-2 Rate Schedules set forth rates, credits, and charges, that are lawful, just, and reasonable and are based on reasonable methodologies.

B. NEM Distributed Energy Resources Methodology

1. SCE&G Testimony

Company Witness Lynch testified that, by way of its Order No. 2015-194 issued in Docket No. 2014-246-E, the Commission approved the following 11 components of value for NEM Distributed Energy Resources:

Net Energy Metering Methodology
1. +/- Avoided Energy
2. +/-Energy Losses/Line Losses
3. +/- Avoided Capacity
4. +/- Ancillary Services
5. +/- T&D Capacity
6. +/- Avoided Criteria Pollutants
7. +/- Avoided CO_2 Emission Cost
8. +/- Fuel Hedge
9. +/-Utility Integration & Interconnection Costs
10. +/- Utility Administration Costs
11. +/- Environmental Costs

= Total Value of NEM Distributed Energy Resources

He also testified that, in Docket No. 2017-2-E, the Company calculated the value for these components and, in Order No. 2017-246, the Commission determined that those values complied with the NEM Methodology approved by the Commission in Order No. 2015-194. As set forth in Table 10 to his direct testimony, Witness Lynch stated that the Company updated these components of value by calculating the current value and one for the value over the IRP planning horizon. Witness Lynch further provided information on SCE&G's evaluation of each component and its estimate of the associated value. Witness Rooks also sponsored the Company's proposed "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet which

updates the total value of NEM Distributed Energy Resource to reflect the components of value for NEM Distributed Energy Resources enumerated by Witness Lynch.

2. ORS Testimony

ORS Witness Sarah Johnson testified that the Company's calculation of the NEM Incentive is consistent with the methodology approved in Commission Order No. 2015-194 and that the value of the customers' distributed generation was calculated using the amount from the NEM tariff approved in Commission Order No. 2017-246. Witness Horii similarly testified that SCE&G is following the methodology approved by the Commission in Order No. 2015-194 in evaluating the value of each component of the NEM DERs Total Value stack. Witness Horii testified that SCE&G bases its NEM DERs avoided energy and capacity costs on the PURPA avoided cost values and that the PURPA avoided energy cost decreased from last year, leading to a reduction in the NEM DERs avoided energy cost. With respect to the component of value for avoided capacity, Witness Horii stated that this value is based on the PURPA avoided capacity cost values and that, should the Commission reject the Company's proposed avoided capacity cost value, the Total Value of NEM Distributed Energy Resources would be impacted. Regarding the value for T&D Capacity, Witness Horii noted that SCE&G's practice of designing transmission and distribution circuits to assume DER is not generating due to weather factors or because DER resources are off line follows the Commission-approved methodology but it is a conservative approach.

3. SCCCL and SACE Testimony, Responsive Testimony, and the Commission Conclusions

Regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology, Witness Glick made a number of recommendations. Each of these

recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Glick testified that SCE&G's description of avoided line losses associated with DERs is inadequate and that the Company erred in calculating line losses. Specifically, Witness Glick stated that the Company used annual average system losses as the basis for calculating marginal losses rather than losses associated with the temporal solar profile and failed to calculate transmission losses as marginal. She also testified that avoided marginal transmission and distribution line losses have capacity implications. Witness Glick further stated that QFs connected at the distribution level should be reimbursed for transmission level savings and that small QFs and NEM DERs should be reimbursed for both transmission level and distribution-level savings.

In response, Witness Lynch first noted that the recommendations advanced by Witness Glick had been previously raised in Docket No. 2017-2-E and that the Commission had found in Order No. 2017-246 that "the Company's calculation of line losses is appropriate and that average transmission losses are the best estimate to use for marginal losses." Nevertheless, Witness Lynch also testified that the PR-1 and PR-2 rates and the 11-point NEM methodology all involve the adjustment of QF energy supplied over many hours of the year. Therefore, Witness Lynch testified that the use of an annual average system loss factor is appropriate. He also stated that SCE&G has calculated system line losses for many years and believes that the estimation of losses for each hour of the year or for many incremental levels would be a burdensome enterprise that would yield little or no value. Witness Lynch further testified that to estimate marginal line losses on the distribution system, SCE&G doubled the average line losses as agreed to by Witness Glick. On

the transmission system, however, Witness Lynch stated the Company believes that marginal losses should be approximated by average losses and that marginal line losses in a network will be less than those on the distribution system.

He further testified that to estimate marginal losses, SCE&G's analysis considered lowering the loads at each substation to effect a 100 MW decrease across the system, and then eliminating a source of energy from the Company's Hagood Unit to balance the system. Under these circumstances, the analysis showed that power had to flow a greater distance to serve the load and losses increased, meaning that average losses were greater than marginal losses. After performing several similar analyses, the Company concluded that average transmission losses are the best estimate to use for marginal losses.

Regarding the capacity implications associated with avoided marginal transmission and distribution line losses, Witness Lynch testified that SCE&G applies line losses for both energy and capacity as appropriate. Responding to Witness Glick's testimony regarding the reimbursement of transmission and distribution level savings, Witness Lynch testified payments or credits to small QFs and NEMs are subsidized by SCE&G's DER program and that, therefore, reimbursement is not at issue. He further stated that the PR-1 rate for small QFs and the NEM avoided cost methodology have loss factor adjustments and that larger QFs likely will flow power back onto the transmission system and will incur, not avoid, transmission level losses.

The Commission finds that the Company's calculation of line losses is appropriate, that average transmission losses are the best estimate to use for marginal losses, and that the Company properly applied line losses for both energy and capacity in a manner consistent with the methodology approved in Order No. 2015-194.

b. Regarding transmission and distribution ("T&D") capacity, Witness Glick stated DERs, in aggregate and on average over time, reduces the need for T&D capacity investments. She testified that if the DER alleviates some of the strain on the system during transmission or distribution system peaks, then that resource reduces pressure on that system and helps to defer or avoid future upgrades to that system. She also stated that energy efficiency resources are regularly credited with avoided or deferring T&D investments.

Witness Lynch responded by stating that, with the NEM solar capacity distributed throughout the system, the current impact on any single transmission line is less than 1,500 kW. SCE&G's transmission planning engineers consider this level of load, which is 0.1% of the total load, to be no more than noise on the system and it does not have any expected impact on the need for future transmission lines. Witness Lynch further testified that it is not clear whether the solar generators increase the strain on distribution lines or decrease it. However, he noted that Company data shows that solar output is likely to increase the strain on the distribution system. Regardless, he testified that SCE&G's distribution engineers must plan the distribution line assuming the solar output is zero because solar is an intermittent resource. Witness Lynch also testified that other energy resources, such as energy efficiency, may be credited with avoiding transmission and distribution costs. However, he opined that in considering a program such as energy efficiency, the effects of which are dispersed around a system, an analysis of the localized impact will demonstrate the impact to be too small to affect the transmission system. He also stated that with respect to the distribution system, energy efficiency is not an intermittent resource like a solar generator so there may be justification for an avoided cost credit.

The Commission agrees with the position of SCE&G. The Company must design its transmission and distribution system so as to provide safe and reliable electric service, even when intermittent generation sources such as solar facilities and other small QFs are not producing power.

c. Witness Glick also recommended that an adjustment should be made to reflect an impact on SCE&G's reserve margin, stating that DER resources have capacity value, and that capacity value also translates into a reduced reserve margin requirement. She further stated that the avoided T&D line losses of 8% to 9% are reliable and this portion of avoided generation capacity should be counted towards reducing the level of peak load for which SCE&G should plan.

In response, Witness Lynch testified that the Commission previously found it is appropriate for SCE&G to maintain a reserve margin to back up DERs which are intermittent supply resources and that, accordingly, DER resources do not result in a reserve margin benefit for the Company.

The Commission agrees with SCE&G. The Commission finds that it is appropriate for the Company to maintain a reserve margin to back up DERs, which are intermittent supply sources. Accordingly, DER resources do not result in a reserve margin benefit for the Company.

d. Witness Glick next testified that to the extent distributed energy generators help to alleviate costs associated with environmental compliance at SCE&G's other facilities, those savings should be reflected in the NEM calculation. She stated that avoided environmental costs, such as costs associated with coal combustion residuals, are financial, quantifiable, and a direct result of DER generation.

Witness Lynch again noted that the Commission previously found that the Company's methodology properly accounts for avoided environmental costs and that there are no other

environmental costs that are not already included in the other specific components of this methodology. Witness Lynch also noted that the Settlement Agreement entered into by the parties of record to Docket No. 2014-246-E, including SCCCL and SACE, affirmatively states that "[t]he environmental compliance and/or Utility system costs might be accounted for in the Avoided Energy component, but, if not, should be accounted for separately. The Avoided Energy component must specify if these are included." Witness Lynch testified that there are no environmental costs that are not already included in the other specific components of the methodology and, for this reason, SCE&G appropriately assigned a zero avoided cost value to this component.

The Commission finds that the Company properly accounted for avoided environmental costs and that there are no other environmental costs that are not already included in the other specific components of the methodology. The Commission also finds that, while it may be possible to separately account for environmental costs, there is no net change to the Total Value of NEM Distributed Energy Resources. Thus, requiring the Company to undertake this exercise would require it to devote additional time and energy and incur additional costs related to the fuel proceeding with no corresponding or substantial benefit.

4. SCSBA Testimony

SCSBA did not present any testimony regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology.

5. The Commission's Overall Conclusions Regarding NEM Distributed Energy Resources Methodology

Based upon the evidence of record, and after reviewing the testimony of the parties of record and the Settlement Agreement entered into by the parties of record to Docket No. 2014-

246-E, the Commission finds that SCE&G properly evaluated the components of value for NEM Distributed Energy Resources as shown in Table 10 of Witness Lynch's testimony, as corrected, in accordance with the NEM methodology approved by the Commission in Order No. 2015-194.

C. DER Programs and Costs

1. SCE&G Testimony

Company Witness Raftery discussed the performance of the Company's DER programs during the Review Period, and the costs associated with offering these DER programs during the Review Period. These programs include offering utility-scale DER programs and customer-scale NEM incentives, Performance Based Incentives, Bill Credit Agreements ("BCA") programs, and developing the Company's Community Solar program. Witness Raftery also discussed the Company's DER cost projections for the forecast period January 1, 2018, through April 30, 2019. As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled ($1,504,690) in avoided costs and $798,039 in incremental costs. For the period January 1, 2018, through April 30, 2019, the Company projects that DER program costs will include $9,304,269 in avoided costs and $25,313,951 in incremental costs.

Witness Rooks provided actual data on the Company's DER avoided and incremental costs for the historical Review Period and the projected DER costs for the period January 1, 2018, through April 30, 2019. As reflected in Hearing Exhibit No. 4 (AWR-7), Witness Rooks testified that the Company's forecasted DERP Avoided Cost Components for the period May 2018 through April 2019 should be as follows: 0.042 cents per kWh for the Residential rate class; 0.038 cents per kWh for the Small General Service rate class; 0.032 cents per kWh for the Medium General Service rate class; and 0.019 cents per kWh for the Large General Service rate class. He also

testified that, as reflected in Hearing Exhibit No. 4 (AWR-9), the Company's DERP Incremental Costs by class should be: $1.00 per account per month for the Residential rate class; $5.37 per account per month for the Small/Medium General Service rate class; and $100.00 per account per month for the Large General Service rate class. Witness Rooks also sponsored the Company's proposed "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff.

Witness Raftery further testified that, as of December 31, 2017, nine solar farms totaling 48.16 MW have been constructed and interconnected to SCE&G's distribution system. As such, Witness Raftery testified SCE&G has achieved the 1% goal for Utility-scale facilities set forth in Act 236. Witness Raftery also stated that, as of December 31, 2017, SCE&G had 6,161 customers participating in its customer-scale DER programs representing approximately 56.81 MW of solar generating capacity on SCE&G's system and, therefore, has achieved the 1% goal for Customer-scale facilities set forth in Act 236.

Witness Raftery also testified that, based on overall NEM adoption levels experienced since July 1, 2016, SCE&G forecasts that it will approachAct 236's net metering limit or cap of 2% in April or May 2019. Regarding the Company's Community Solar program, Witness Raftery stated that, pursuant to the Credit Rate Agreement between SCE&G and the Clean Energy Collective, LLC ("CEC") which was approved by the Commission in Order No. 2016-707, CEC is actively constructing three community solar facilities totaling 16 MW. Witness Raftery also testified that, as of February 15, 2018, 95 Low-Income customers have purchased or subscribed to a total of 0.526 MW of community solar, 903 residential customers have purchased or subscribed to a total of 5.55 MW of community solar, and 22 churches, schools, and municipalities have

purchased or subscribed to a total of 9.45 MW of community solar. Witness Raftery testified that the remaining 0.474 MW of capacity is reserved for Low-Income customers and continues to be marketed through SCE&G, CEC, and 8 customer assistance agencies. Witness Raftery also advised the Commission that SCE&G is exploring moving forward with the additional 1% Utility-scale investment contemplated in S.C. Code Ann. § 58-39-130(D) and that, if SCE&G identifies competitive projects that provide system benefits, the Company anticipates applying to the Commission for approval to move forward with the contracts and deployment.

2. ORS Testimony

Witness Sarah Johnson testified that the Company's calculations are in compliance with Act No. 236 of 2014 and Commission Orders, and that the Company's calculations support the following annual proposed DERP Charges: Residential $12.00, Small and Medium General Service $64.39, and Large General Service $1,200.00.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the DER programs offered by the Company during the Review Period or the associated costs.

4. The Commission's Overall Conclusions Regarding DER Programs and Cost

The Commission finds that the evidence presented by SCE&G establishes that, during the Review Period, SCE&G offered DER programs and took appropriate steps to fulfill its DER goals approved by the Commission in Order No. 2015-194. The Commission further finds that the Company's DER programs and the associated costs are reasonable and prudent and are designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130.

D. Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

1. SCE&G Testimony

SCE&G witnesses testified on issues related to the prudency of SCE&G's fuel purchasing practices, plant operations, and fuel inventory management, and explained the regulatory atmosphere governing environmental compliance for SCE&G. SCE&G Witness Lippard discussed the operating performance of the V.C. Summer Nuclear Station. SCE&G Witness Delk reviewed the operating performance of the Company's fossil/hydro units and of South Carolina Generating Company's Williams Electric Generating Station. Company Witness Shinn discussed the Company's procurement and delivery activities for coal and No. 2 fuel oil for electric generation, the changes that have occurred in coal markets since the last annual fuel adjustment hearing, and how these changes affected coal procurement during the Review Period and are anticipated to affect future procurement. Witness Shinn also discussed the procurement and delivery of limestone for the wet scrubbers at Wateree and Williams Stations, the nuclear fuel purchasing processes for SCE&G generation, uranium prices, and the near-term outlook of coal and uranium prices. SCE&G Witness Kahl provided testimony about the natural gas purchasing processes for SCE&G generation and discussed natural gas prices as well as the near-term outlook.

SCE&G Witness Rooks provided actual fuel cost data for the historical Review Period, and projected fuel costs for the period January 1, 2017, through April 30, 2018; and recommended fuel rates for the period of May 2018 through April 2019. Hearing Exhibit No. 4 (AWR-5) shows the Company's forecasted variable environmental & avoided capacity costs and the allocation of those costs to retail customer classes for the period of May 2018 through April 2019. This exhibit also details forecasted sales data by class, over/under recovery computations, and calculates the

projected Variable Environmental & Avoided Capacity Cost Components per kWh for the same period. The Variable Environmental & Avoided Capacity Components produced by these calculations are projected to recover all costs and are as follows: 0.083 cents per kWh for the Residential rate class; 0.075 cents per kWh for the Small General Service rate class; 0.063 cents per kWh for the Medium General Service rate class; and 0.039 cents per kWh for the Large General Service rate class.

2. ORS Testimony

ORS Witness Smith testified and presented the results of the ORS Audit Department's examination of the Company's books and records pertaining to the Fuel Adjustment Clause operation for the Actual Period, and the Company's estimated calculations for the months of January 2018 through April 2018. Based on the ORS Audit Department's examination of the Company's books and records, and the Company's operation of the fuel cost recovery mechanism, Witness Smith testified that the Company's books and records accurately reflect the fuel costs incurred by the Company in accordance with previous Commission orders and with S.C. Code Ann. § 58-27-865 (2015). Witness Seaman-Huynh testified to the ORS's findings resulting from its review of the Company's fuel expenses and power plant operations used in the generation of electricity during the Review Period. Based on ORS's review of the Company's operation of its generating facilities during the Review Period, Witness Seaman-Huynh testified that the Company made reasonable efforts to maximize unit availability and minimize fuel costs during the Review Period. Witness Seaman-Huynh also testified that, in Order No. 2017-246, the Commission approved SCE&G's proposal to use the Internal Revenue Service ("IRS") Section 174 deduction claims to lower its Environmental Components based on its Accumulated Deferred Income Taxes

("ADIT") liability balances as of September 30, 2017. In reviewing the Company's books and records, Witness Seaman-Huynh testified that ORS did not find the Company made any adjustments to its Environmental Capacity Components during the Actual Period attributed to the IRS Section 174 deduction claims.

In response, Witness Rooks testified that, in Order No. 2017-246 the Commission approved SCE&G's proposal to use Section 174 research and experimentation tax benefits related to the construction of V.C. Summer Units 2 and 3 to reduce the Environmental Component of its total fuel cost factor in an amount based on its ADIT liability balances as of September 30, 2017, and "to make the reduction concurrent with the implementation of the Company's 2017 BLRA revised rates request." *See* Commission Order No. 2017-246 at p. 54. However, Witness Rooks testified that SCE&G did not seek a 2017 BLRA revised rates update and, instead, filed and later withdrew an abandonment petition. Witness Rooks testified that, among other things, the abandonment petition sought recovery of the costs of the abandoned plant without an increase in rates and proposed using Section 174 tax benefits, as well as additional tax benefits arising from abandonment, as a means to reduce capital cost recovery. Witness Rooks further testified that, on January 12, 2018, SCE&G along with Dominion Energy, Inc. filed a joint petition ("Joint Petition") which reflected a proposed rate decrease and also provided for the use of all tax benefits related to the abandoned nuclear construction project, both Section 174 and the tax abandonment deduction, for the benefit of customers. Witness Rooks testified that, for these reasons, SCE&G did not make an adjustment to its Environmental Component in 2017 attributed to the IRS Section 174 deduction claims, and that the deduction will be considered in the Joint Petition.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's fuel purchasing practices, environmental costs, plant operations, fuel inventory management, or the operations of the power plants during the Review Period.

4. Commission Conclusions Regarding Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

As reflected in the evidence of record, no party challenged the reasonableness or prudency of SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period. With respect to the Section 174 deductions approved by the Commission in Order No. 2017-246, the Commission finds that SCE&G's proposal to consider these deductions in the Joint Petition docket is reasonable. Based upon the evidence and testimony of the witnesses, the Commission therefore finds and concludes that SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period are reasonable and prudent.

E. Proposed Base Fuel Component

1. SCE&G Testimony

Witness Rooks testified that the actual base fuel under-collected balance was $2,355,695 at December 31, 2017, and the projected over-collected balance to be $50,536,981 at the end of April 2018. Witness Rooks also testified that a Base Fuel Component of 2.457 cents per kWh is projected to recover all base fuel costs in the forecast period in addition to eliminating the projected over-collected balance by the end of April 2019. Witness Rooks further testified that, in compliance with Commission Order No. 2013-776 and pursuant to the Company's February 22, 2018, letter in Docket No. 2013-382-E, the Company plans to apply gains from recently settled

interest rate swaps in the amount of $113,739,272 to reduce its base fuel cost under-collection balance. Witness Rooks also testified that, although the fuel cost statute permits utilities to recover their prudently incurred fuel costs as precisely and promptly as possible, for this proceeding and to mitigate rate impacts to its retail electric customers, the Company is proposing to maintain its Base Fuel component at 2.451 cents per kWh. Witness Rooks further testified that the Company is proposing that the Variable Environmental & Avoided Capacity Cost components be increased for the May 2018-April 2019 time period and to increase its DER Incremental Cost Components per account per month to $1.00 for Residential customers and $5.37 for Small/Medium General Service customers. The per account per month fee for Large General Service customers will remain unchanged at $100.00 to comply with the DERP Act caps. When combining the Company's 2018 proposals for Fuel and DSM cost recovery, Witness Rooks testified that the average monthly bill for residential customers using 1,000 kWh per month would increase from $147.53 to $147.70. This $0.17 per month impact would become effective with the first billing cycle of May 2018.

2. ORS Testimony

Witness Seaman-Huynh testified that as of December 2017, the Company had a base fuel cumulative under-recovery balance of $2,355,695, a variable environmental and avoided capacity over-recovery balance of ($2,272,425), and DERP avoided costs over-recovery balance of ($1,504,687). As shown on Hearing Exhibit No. 14 (GS-5), page 2 of 2, ORS projects the Company to have a base fuel cumulative over-recovery balance of ($50,536,981), a variable environmental and avoided capacity over-recovery balance of ($1,051,097), and DERP avoided costs over recovery balance of ($479,920) as of April 30, 2018. Witness Seaman-Huynh also testified that ORS recommends the Commission approve the Company's current Base Fuel Component remain

in effect for bills rendered on and after the first billing cycle for May 2018 and continue through the last billing cycle for April 2019. He also testified that ORS recommends that the Commission approve the Company's proposed Environmental and Avoided Capacity Components and DERP Avoided Cost Components for the period of May 2018 through April 2019. Witness Seaman-Huynh further testified that ORS reviewed the Company's proposal to apply gains from recently settled interest rate swaps to reduce its Base Fuel Component. The Company's proposal is in compliance with Commission Order No. 2013-776 and ORS supports the Company's proposal.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's proposed base fuel component.

4. Commission Conclusions Regarding the Proposed Base Fuel Cost Component

As reflected in the evidence of record, no party challenged SCE&G's proposed Base Fuel Cost Component. Based upon the evidence and testimony of the witnesses, the Commission therefore finds and concludes that SCE&G's proposed Base Fuel Component is reasonable and prudent and is consistent with S.C. Code Ann. § 58-27-865 (2015).

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The methodologies used by SCE&G to calculate its avoided energy and capacity costs under PURPA as described in the testimony of SCE&G Witness Lynch are reasonable and prudent.

SCE&G's proposed Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of service, are lawful, just, and reasonable.

SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

The updated components of value for NEM Distributed Energy Resources as shown in Table 10 on page 27 of the direct testimony of SCE&G Witness Lynch are reasonable and prudent, comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet, including the rates, terms, and conditions, are lawful, just, and reasonable.

SCE&G's calculation of and method of accounting for avoided costs and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

During the Review Period, SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194, which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

As a result of SCE&G's efforts to provide the DER programs, the balance of the DER program costs as of December 31, 2017, totaled ($1,504,690) in avoided costs and $798,039 in incremental costs, which costs are reasonable and prudent.

SCE&G's proposed DER Avoided Cost Components by class are reasonable and prudent. SCE&G's proposed monthly per account DER Incremental Cost Components by class properly allocates SCE&G's DER program incremental costs and are reasonable and prudent.

SCE&G's proposed "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheet, including the rates, terms, and conditions, is lawful, just, and reasonable.

SCE&G's fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) are reasonable and prudent.

IT IS THEREFORE ORDERED THAT:

1. The fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G are reasonable and prudent for the period January 1, 2017, through December 31, 2017.

2. The methodologies used by SCE&G to calculate its avoided energy and avoided capacity costs under PURPA are reasonable and prudent.

3. Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of services, are lawful, just, and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2018.

4. SCE&G must update its Rate Schedules PR-1 and PR-2 during each annual fuel proceeding and is specifically denied its request for leave to update the Rates on an interim or "as-needed" basis.

5. SCE&G shall continue to develop and refine its solar profile as more data becomes available. The Company shall detail further refinements to this profile to the Commission in the next annual fuel proceeding.

6. SCE&G shall investigate and implement economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak.

7. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

8. The updated components of value for NEM Distributed Energy Resources listed in the table below comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

	Current Period ($/kWh)	IRP Planning Horizon (15-Year Levelized) ($/kWh)	Components
1	$0.03070	$0.03010	Avoided Energy Costs
2	$0	$0	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00008	$0.00008	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03078	$0.03018	Subtotal
12	$0.00251	$0.00246	Line Losses @ 0.9245
13	$0.03329	$0.03264	**Total Value of NEM Distributed Energy Resources**

9. SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" and "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheets are lawful, just and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2018.

10. SCE&G's DER programs offered during the Review Period were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

11. SCE&G's proposed monthly per account DER Avoided Cost Components by class, as set forth below, properly allocate SCE&G's DER program avoided costs, are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	DER Avoided Cost Component (cents/kWh)
Residential	0.042
Small General Svc.	0.038
Medium General Svc.	0.032
Large General Svc.	0.019

12. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 1.00
Small & Medium Gen. Svc.	$ 5.37
Large General Service	$ 100.00

13. SCE&G shall set its Base Fuel Cost Component, Variable Environmental & Avoided Capacity Cost Components and Total Fuel Cost Factors consistent with the amounts set forth in the table below effective for bills rendered on and after the first billing cycle of May 2018.

Class	Base Fuel Cost Component (cents/kWh)	DERP Avoided Cost Component	Variable Environmental & Avoided Capacity Cost Component (cents/kWh)	Total Fuel Costs Factor (cents/kWh)
Residential	2.451	0.042	0.083	2.576
Small General Service	2. 451	0.038	0.075	2.564
Medium General Service	2. 451	0.032	0.063	2.546
Large General Service	2. 451	0.019	0.039	2.509
Lighting	2. 451	0.000	0.000	2.451

14. SCE&G shall file with the Commission the tariff sheets and rate schedules approved by this Order and all other retail tariff sheets within ten (10) days of receipt of this Order, and also serve copies on the Parties. The fuel rates reflected in any such tariff sheets shall be consistent with the components and factors set forth herein. The revised tariffs should be electronically filed in a text searchable PDF format using the Commission's DMS System (https://dms.psc.sc.gov/). An additional copy should be sent via e-mail to etariff@psc.sc.gov to be included in the Commission's ETariff system (https://etariff.psc.sc.gov). SCE&G shall provide a reconciliation of each tariff rate change approved as a result of this order to each tariff rate revision filed in the ETariff system. Such reconciliation shall include an explanation of any differences and be submitted separately from the Company's ETariff filing. Each tariff sheet shall contain a reference to this Order and its effective date at the bottom of each page.

15. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865(B) (2015).

16. SCE&G shall continue to file the monthly reports as previously required.

17. SCE&G shall account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit. ORS shall monitor the cumulative recovery amount.

18. SCE&G shall submit monthly reports of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater to the Commission and ORS.

19. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

Comer H. Randall, Vice Chairman

Commissioner Fleming, Dissenting

While I agree with the uncontested matters of the fuel docket, with all due respect and appreciation for my fellow commissioners, I am unable to support this Order for the SCE&G fuel case and respectfully dissent regarding the PR1 and PR2 rates.

I would like to reiterate the positions made by ORS in their closing arguments that I found troubling.

- There was not enough time for the parties to engage in discovery in this docket and SCE&G either did not respond to discovery requests, responded late, or only responded partially. In my opinion, the condensed time period of this docket and these allegations of how SCE&G conducted discovery did not allow the other parties enough time to properly litigate this matter.

Based on the evidence of record, I concur with ORS and find that:

- SCE&G failed to establish its avoided capacity costs using the methodology approved by the Commission in Order No. 2016-297;
- The PR-1 Rate is not reasonable regarding avoided capacity costs;
- The PR-2 Rate is not reasonable regarding avoided capacity costs.
- There are errors in SCE&G's Reserve Margin calculations, as outlined in ORS Witness Horii's Direct and Surrebuttal Testimonies.

Other aspects that I disagree with include setting the winter reserve margin at 21%, which seems excessive, and whether SCE&G is in fact a winter peaking utility, which seems inconsistent with their historic load profile. Further, I feel that gains in energy efficiency and demand side management can play an important role in this regard.

I found that ORS's arguments in this docket to be persuasive. As such, I believe the Commission should reject SCE&G's position that avoided capacity cost should be set at $0.00 and find that SCE&G should maintain the previously set 2017 avoided capacity cost.

Last, I am concerned that the $0.00 avoided capacity cost could prove to be disruptive to the dynamic solar development that has occurred in S.C. since the passage of Act 236. Therefore, I am not supporting this Order.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E – ORDER NO. 2018-322(A)

May 2, 2018

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))	AMENDED ORDER APPROVING FUEL COSTS

I. INTRODUCTION

This Order amends Commission Order No. 2018-322 to correct two typographical errors. The first error is to correct a sentence on page 23 of the original Order that reads, "The Commission finds that SCE&G's methodology to estimate future natural gas prices is." This sentence should be: "The Commission finds that SCE&G's methodology to estimate future natural gas prices is reasonable." The second error is on page 48 of the original Order, in the first line of Ordering Paragraph 11, "monthly per account DER Avoided Cost Components" should be "monthly per kWh DER Avoided Cost Components." Neither of these errors affects the substance of the Order, and the Order is otherwise as it was originally issued.

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") and for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission

must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2017, through December 31, 2017 ("Review Period").

A. Notice and Interventions

By letter dated October 4, 2017, the Clerk's Office of the Commission instructed the Company to publish, by January 5, 2018, a Notice of Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 5, 2018. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 5, 2017, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office October 4, 2017, letter. On December 15, 2017, the Company filed with the Commission an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("SCCCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SCSBA"), Southern Current, LLC ("Southern Current"), CMC Steel South Carolina ("CMC Steel"), Wal-

Mart Stores, East, LP ("Wal-Mart"), Sam's East, Inc. ("Sam's"), and Solbright Energy Solutions, LLC ("Solbright"). SCE&G did not oppose the petitions to intervene and no other parties sought to intervene in this proceeding. By letters dated March 2, 2018, and March 5, 2018, Solbright, Wal-Mart, and Sam's requested to withdraw their petitions to intervene, which requests were granted by Order Nos. 2018-175 and 2018-176, both dated March 14, 2018. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party to this proceeding pursuant to S.C. Code Ann. § 58-4-10(B) (2015).

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

S.C. Code Ann. § 58-27-865(B) (2015) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

III. HEARING

In order to consider the merits of this case, the Commission convened a hearing on this matter on April 10-11, 2018, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire; Matthew W. Gissendanner, Esquire; and Benjamin P. Mustian, Esquire. SCEUC was represented by Scott Elliott, Esquire. SCCCL and SACE were represented by Katherine C. Ottenweller, Esquire. SCSBA was represented by Richard L. Whitt, Esquire, and Benjamin L. Snowden, Esquire. Southern Current was represented by Richard L. Whitt, Esquire. CMC Steel and its counsel of record were excused from attending and did not appear at the hearing. Andrew M. Bateman, Esquire, and Jenny R. Pittman, Esquire, represented

ORS. In this Order, ORS, SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

SCE&G presented the direct testimonies and exhibits of George A. Lippard, III; Henry E. Delk, Jr.; J. Darrin Kahl; Michael D. Shinn; Allen W. Rooks; John H. Raftery; and Dr. Joseph M. Lynch. ORS presented the direct testimonies and exhibits of Gaby Smith, Michael Seaman-Huynh, Sarah W. Johnson, and Brian Horii.[1] SCCCL and SACE presented the direct testimony and exhibits of Devi Glick. SCSBA presented the direct testimony of Dr. Ben Johnson. Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

In response to the direct testimony of SCCCL and SACE Witness Glick, SCSBA Witness Ben Johnson, and ORS witnesses Seaman-Huynh and Horii, SCE&G presented the rebuttal testimony of Witnesses Rooks and Lynch. SCCCL and SACE filed surrebuttal testimony of Witness Glick, SCSBA filed surrebuttal testimony of Witness Ben Johnson, and ORS filed surrebuttal testimony of Witness Horii in response to SCE&G's rebuttal testimony.

IV. REVIEW OF THE EVIDENCE AND EVIDENTIARY CONCLUSIONS

After hearing the evidence and testimony of the witnesses discussed below, the Commission reaches factual and legal conclusions, also discussed below.

A. Avoided Costs, PR-1, and PR-2

1. SCE&G Testimony

[1] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Kahl and Shinn were presented in the second panel; and Witnesses Rooks, Raftery and Lynch were presented in the third panel. ORS Witnesses Seaman-Huynh and Smith were presented in the first panel for ORS, and Witnesses Sarah Johnson and Horii were presented in the second panel.

SCE&G Witness Lynch explained the Company's calculations of avoided costs for power purchases under the Public Utilities Regulatory Policies Act of 1978 ("PURPA"). SCE&G uses a difference in revenue requirements ("DRR") methodology to calculate its avoided energy and capacity costs. This approach involves calculating the revenue requirements between a base case and a change case. The base case is defined by SCE&G's existing fleet of generators and the hourly load profile to be supplied by these generators. The change case is the same as the base case except that the hourly loads are reduced by a 100-megawatt ("MW") profile which is the maximum reduction required by regulation under PURPA. The avoided costs are then calculated by taking the difference in revenue requirements between the two cases.

For avoided energy costs, Witness Lynch testified that the Company calculates the change in production costs between a base case and a change case using a computer program called PROSYM. To determine long-run avoided energy costs, this program models the commitment of generating units to serve load hour-by-hour over the course of the 15-year Integrated Resource Plan ("IRP") planning horizon. Short-run avoided energy costs are calculated for the period May 2018 through April 2019. Using PROSYM to simulate the dispatch of its generation fleet over these time periods, SCE&G estimates the production costs that result from serving the base case load and the change case load.

Witness Lynch explained that SCE&G traditionally derived the change case from the base case by subtracting 100 MWs from every hour of the base case load profile. The Company then collected avoided energy costs into four time periods composed of two seasons—peak season and off-peak season—and two daily periods—peak hours and off-peak hours. Using these four time-of-use periods results in four avoided energy costs, one for each time period. Witness Lynch

testified that, in this proceeding, the Company proposed to calculate its PR-2 rate for solar QFs by deriving the change case from the base case by subtracting a 100 MW solar profile only from the base case. Because the solar distribution of energy is captured in the solar profile, avoided energy costs are not collected into separate time periods but simply added over all hours.

Witness Lynch testified that, in this proceeding, SCE&G is proposing to limit its PR-2 Rate to solar qualifying facilities ("QFs") and that the Company must separate solar QFs from non-solar QFs in order to pay each type of QF the correct avoided costs. Witness Lynch explained that, as more and more solar generation facilities interconnect with SCE&G's system, the benefit of each additional solar generation facility to the Company's system is diminished. Witness Lynch further testified that, in order to measure this effect, the Company performed a study titled "Avoided Energy Cost Methods Study for Solar QFs" ("Methods Study"), which he sponsored as Hearing Exhibit No. 5 (JML-3).

Witness Lynch also testified that SCE&G has determined that during the months of May through October, or "Summer," the Company needs resource reserves of at least 14% of the projected summer peak demand to serve reliably during peak times and at least 12% during the remaining periods. Witness Lynch also testified for the months of November through April, or "Winter," SCE&G needs a minimum of 21% of its projected winter peak demand to serve reliably during winter peak periods and at least 14% during the remaining periods. In support of this determination, Witness Lynch sponsored the Company's Reserve Margin Study, identified as Hearing Exhibit No. 5 (JML-2).

Witness Lynch further testified that the Methods Study compared the difference in revenue requirements between the base case and three different change cases using a traditional 100 MW

round-the-clock profile, a 100 MW South Carolina solar profile, and a 100 MW North Carolina solar profile. After levelizing the avoided energy costs and averaging them over 10 random seed runs, Witness Lynch testified that the results show that using the round-the-clock profile to develop the change case results in over-estimating the avoided energy costs by $4.85 per MWH. Witness Lynch explained that, as more and more solar is added to the system, the value of each additional increment of solar is reduced. Specifically, Witness Lynch stated that SCE&G's system first experiences a morning peak demand with little contribution from solar facilities. As the day progresses and solar facilities begin generating energy, SCE&G's residual system load profile experiences a steep ramping down of load to a bottom level of load followed by a steep ramping up in load to an afternoon or evening peak demand. In sum, Witness Lynch testified that the additional energy from solar generation causes the system to experience decreasing minimum loads between the morning and evening peak. Witness Lynch also testified that, while solar energy coming onto the system certainly has value, it also causes operational issues that result in positive variable integration costs that lower the avoided cost. Based on this analysis, Witness Lynch testified that the Company's Avoided Energy Costs for the PR-2 rate are as follows:

Solar QF Avoided Energy Costs ($/kWh)

Time Period	Annual
2018-2022	$0.02853
2023-2027	$0.02994
2028-2032	$0.03414

To develop avoided capacity costs, Witness Lynch testified that the Company takes a similar approach. Using the difference in revenue requirements methodology, SCE&G calculates the difference in the revenue requirements between the base case and the change case. Using the

resource plan in its latest IRP or an updated resource plan if appropriate, SCE&G calculates the incremental capital investment related revenue required to support the existing resource plan. As with its calculation of avoided energy costs for solar, SCE&G derives a change case in its resource plan by considering the impact of a QF purchase from a 100 MW solar facility.

Witness Lynch further testified that SCE&G currently has 865 MWs of solar capacity under Power Purchase Agreements ("PPAs") and the addition of another 100 MWs of solar has no effect on the resource plan. Witness Lynch further explained that, given the amount of solar generation that is currently projected to be interconnected to SCE&G's system, adding additional blocks of 100 MW of solar generation does not affect the Company's future capacity needs.

In order to study this issue, Witness Lynch testified that the Company performed a study titled "On Calculating the Capacity Benefit of Solar QFs ("Solar Capacity Benefit Study")" to analyze the impact of solar on its daily peak demands. This study shows that, on more than 80% of the days during the winter months of October through March, solar has no effect on SCE&G's daily peak demand because the winter peak occurs either early in the morning before solar begins to generate energy or in the evening after solar is no longer generating. Since SCE&G's Reserve Margin Study shows that SCE&G needs as much capacity in the winter as it does in the summer, Witness Lynch testified that a generating resource has to provide capacity in the winter as well as the summer in order to avoid the need for capacity and thereby have capacity value. Because solar does not provide capacity during the winter period, Witness Lynch testified that the Company is unable to avoid any of its projected future capacity needs and, therefore, the avoided capacity cost of solar for these winter months is zero.

SCE&G also analyzed the impact of solar on summer days and determined that, 800 MWs of solar can be expected to reduce the daily peak demand on average over non-peak days approximately 21% with only 9.6% for the last 100 MWs. Witness Lynch testified that, because only the incremental values are relevant for avoided cost calculations, the last 100 MWs of solar will reduce the summer peak by about 19.5 MWs on peak days and 9.6 MWs on the rest of the days, which translates into a peak effect of approximately 9.9 MWs and a base effect of approximately 9.6 MWs. Witness Lynch stated that, considering this small impact in summer and no impact in winter from additional solar generation, SCE&G is not able to reduce capacity additions in its resource plan and therefore there are no avoided capacity costs.

Witness Lynch also testified that the Company plans to negotiate contracts with any non-solar QF for which the PR-1 rate is not appropriate. He explained that, in the past and prior to the development of the PR-2 rate, SCE&G for many years offered a PR-1 rate as well as an offer to negotiate a contract with any QF that did not qualify for the PR-1 rate. This response to PURPA worked satisfactorily for many years and SCE&G proposes to return to that arrangement for non-solar QFs of greater than 100 kilowatts ("kW") and up to 80 MW.

Regarding the Company's PR-1 Rate, Witness Lynch explained that, for the same reasons discussed regarding the PR-2 Rate, SCE&G must separate solar QFs from non-solar QFs in order to pay each type of QF the correct avoided costs. He testified that, if SCE&G does not distinguish its pricing between solar and non-solar QFs, then the amount SCE&G and its customers would be paying for solar energy would be more than the Company's actual avoided costs, which is contrary to the explicit intent of PURPA.

For solar QFs on PR-1, SCE&G used the same methodology to estimate avoided energy costs as it did for solar QFs on PR-2. The only difference is the time period over which the avoided energy costs are estimated. The short-run avoided energy costs in the PR-1 rate are calculated for the period May 2018 through April 2019. Witness Lynch also testified that the avoided capacity cost for solar QFs subject to the PR-1 rate is zero because, as with the PR-2 rate, incremental solar QFs do not affect the resource plan and therefore avoid no future resources or their cost.

For non-solar QFs on PR-1, Witness Lynch testified that SCE&G used PROSYM to estimate the change in production costs that result from serving the base case load and the change case by subtracting a 100 MW round-the-clock power purchase profile. He stated that the avoided costs are accumulated into the four time-of-use periods described previously and a non-solar QF would be paid based on how much energy it produces in each of these four time-of-use periods. For avoided capacity, Witness Lynch explained that, because the PR-1 rate is designed for small QFs with a capacity rating of up to 100 kWs, SCE&G does not believe there will ever be enough capacity from these small non-solar QFs to affect its resource plan and, therefore, the avoided capacity costs for PR-1 are zero. Witness Lynch also stated that SCE&G proposes to change the PR-1 Rate for non-solar QFs by eliminating the critical peak hours as a way to credit QFs for their capacity value. He stated that it is more appropriate to simply add an avoided capacity credit to the avoided energy cost to deliver the capacity value to a solar QF. He also stated that the addition of so much solar on SCE&G's system shifts the Company's previously experienced effective peak hour and that it is inappropriate to look only to certain hours selected from past experience in which to pay out a capacity credit. Finally, he stated that since SCE&G's need for capacity spans

the entire year, it is necessary to spread avoided capacity costs throughout the year to reflect the Company's reliability risk as explained in the Reserve Margin Study.

Based on these recommendations, Witness Lynch testified that the PR-1 Rates are as follows:

PR-1 RATE: AVOIDED ENERGY COST
Non-Solar QFs ($/kWh)

Time Period	Peak Season Peak Hours	Peak Season Off-Peak Hours	Off-Peak Season Peak Hours	Off-Peak Season Off-Peak Hours
May-April	$0.03233	$0.02886	$0.03445	$0.03298

Solar QFs ($/kWh)

Time Period	Year Round
May-April	$0.03256

He stated that the avoided capacity costs for solar and non-solar QFs are zero.

2. ORS, SCCCL, SACE, and SCSBA Testimony

Regarding the Company's methodology used to calculate its avoided energy and capacity costs, ORS, SCCCL, SACE, and SCSBA made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. ORS witness Horii testified that ORS reviewed SCE&G's avoided cost calculations in order to verify the Company is using the avoided cost methodology approved by the Commission, to confirm the methodology meets PURPA requirements, and to verify the avoided cost rates requested by SCE&G in this docket are a reasonable result of the approved avoided cost methodology. Witness Horii stated that the method used by SCE&G to calculate

avoided energy costs is consistent with SCE&G'sprior practice. He further testified that, the use of a 100 MW solar profile is a valid application of the DRR methodology for the specific case of a solar generator and that, given SCE&G's assertion that the vast majority of recent and future QF resources are solar, it is an improvement to use an avoided energy cost which more closely tracks the avoided energy for solar generation. He also testified that SCE&G's fuel price forecasts which SCE&G used in calculating the avoided energy cost for both the 2017 and 2018 fuel adjustment proceedings are consistent and similar and that there appear to be no major changes in network configurations or import/export assumptions used by SCE&G. In sum, Witness Horii testified that the updates in SCE&G's avoided energy costs are a reasonable and consistent result of the methodology used by SCE&G and that the method used by SCE&G to calculate avoided energy costs for solar generators is appropriate.

The Commission finds that SCE&G's avoided energy costs are reasonable and that the use of a 100 MW solar profile to calculate avoided energy costs is appropriate. As discussed by Witness Lynch, as more and more solar is added to SCE&G's system, the value of each additional increment of solar is reduced. Therefore, it is appropriate for the Company to use an avoided energy cost which more closely track the avoided energy for solar generation.

b. Regarding avoided capacity costs, Witness Horii disagreed with the Company's position that new solar projects will have no value and noted that SCE&G has not adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs. Although Witness Horii stated SCE&G may be correct that there are no winter capacity reductions from additional solar, he expressed concern that parties have not had adequate opportunity to evaluate the accuracy of the winter capacity constraint. Witness Horii further

testified as to his belief that SCE&G is overestimating the amount of reserve capacity the utility needs in the winter because of purported flaws in the Reserve Margin Study and that the Company's forecast of future summer and winter peak demands is inconsistent. As a result of these concerns and the uncertainty of this new position, Witness Horii recommended that SCE&G's position of zero avoided capacity costs be rejected at this time. He further recommended that, because he was unable to produce an independent estimate of avoided capacity costs for a 100 MW change in supply, the current capacity value should be maintained for both PR-1 and PR-2 until a better capacity value can be provided in the next rate update.

SCCCL-SACE witness Glick also testified that SCE&G has historically used a 14% winter reserve margin and that it has increased its winter reserve margin to 21%, reflecting a 50% increase over the winter reserve margin used by the Company last year. She also stated that the Company's proposed winter reserve margin is substantially higher than that of Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Southern Company, and Santee Cooper. Witness Glick testified that, while a robust reserve margin is necessary to protect system reliability, this increase in SCE&G's winter reserve margin has a profound impact on system costs for ratepayers by requiring substantially more winter capacity than last year's plan.

In response, Witness Lynch testified that the Company has experienced a significant increase in new solar capacity with signed PPAs, reflecting 865 MW of capacity currently under contract and 17% of SCE&G's 2018 forecasted system peak demand of 5,077 MW. Witness Lynch explained that, as more and more solar is added, the usefulness or value of each successive addition decreases and that solar has reached the zero point for capacity because of the amount of solar under contract. He also disagreed that SCE&G's capacity needs are greater in the summer than in

the winter, explaining that the seasonal peak demand forecasts and the seasonal reserve margins show that SCE&G's incremental capacity need is 112 MWs in the summer and 449 MWs in the winter.

Witness Lynch also testified that Witness Horii's suggested winter reserve margin results from an error in Witness Horii's calculations but, even so, the Company's 2019 winter need for capacity is 185 MW greater than the summer need. Witness Lynch also testified that SCE&G's estimate of the peak demand falls within the 95% confidence interval derived from Witness Horii's calculations. As a result, Witness Lynch testified that SCE&G's calculations are not statistically different from Witness Horii's and therefore should be considered a reasonable estimate of its forecasted winter capacity needs. Witness Lynch also disagreed with Witness Horii's recommendation to maintain the current avoided capacity costs values for both PR-1 and PR-2, explaining that, while these payments represent a pass through of costs and would be recoverable through SCE&G's fuel clause, SCE&G's customers ultimately would pay more for this purchased power than PURPA intends.

Witness Lynch also testified that, previously, SCE&G has not had a winter reserve margin, but only a summer reserve margin. He further disagreed with Witness Glick's suggestion that SCE&G's winter reserve margin was unreasonable when compared to those of other utilities. Specifically, Witness Lynch stated that PJM has a 16% summer reserve margin and a 27% winter reserve margin, both of which are greater than SCE&G's current summer and proposed winter reserve margin. He also testified that Florida electric utilities plan to a 20% reserve margin, which likely refers to a summer reserve margin, but that SCE&G's demand side risk is greater in winter than in summer. He also testified that, as his methodology and that of Witness Horii reflect,

SCE&G's winter peak can increase approximately 500 MW due to abnormal winter weather, reflecting the need for at least a 6% increase in reserve margin, winter over summer. Accordingly, Witness Lynch testified that SCE&G's 21% reserve margin is reasonable.

The Commission finds that SCE&G's proposal to set avoided capacity costs for its PR-1 and PR-2 rates at zero is reasonable at this time, in the absence of a viable alternative proposal being presented by any other party. Since last year's fuel proceeding, SCE&G has had a dramatic change in circumstances with 865 MW of solar capacity now under contract.[2] The Company's analysis shows that the addition of another 100 MW of solar has no effect on its resource plan and, therefore, does not affect SCE&G's future capacity needs. The Commission also finds that SCE&G's determination that it needs as much capacity in the winter as it does in the summer is appropriate. The calculation of generation required in the winter as presented by SCE&G, including a significant reserve margin, is accepted by the Commission at this time, but remains a subject upon which alternative calculation would be entertained in future fuel proceedings. Moreover, while the Commission accepts that there is significant winter need at this time, it is imperative that the Company take all appropriate measures to aggressively pursue economic demand side management and energy efficiency programs, targeted at reducing the winter peak and repositioning the Company to once again recognize an avoided capacity factor for solar generators. A generating resource has to provide capacity in the winter as well as in the summer in order to avoid the need for capacity and thereby have capacity value. The Commission therefore concludes that, because additional solar does not provide capacity during the winter period, the

[2] The Commission recognizes that this 865 MW of solar capacity under contract falls under the PR-2 rates established in Order Nos. 2016-297 and 2017-246, which provides a capacity payment for solar generation.

Company is unable to avoid any of its projected future capacity needs from additional solar. The Commission further reiterates that no other party presented an alternative estimate of SCE&G's avoided capacity costs. The Commission also disagrees with Witness Horii's suggestion that the Company's current avoided capacity costs be maintained until the next rate update. There is no evidence to demonstrate that maintaining such rates would be appropriate or that it would not result in SCE&G's customers having to pay for excessive avoided capacity costs. In fuel proceedings before this Commission, mere assertions that fail to offer and justify an alternative just and reasonable rate are of limited value in the final determination of a final just, reasonable, and appropriate rate. During the hearing, the Commission heard several complaints that SCE&G was not forthcoming with discovery production. However, the Commission did not receive any Motion to Compel nor any other indication of disputes in the discovery process, prior to the hearing. Accordingly, the Commission finds that SCE&G's proposed avoided capacity cost for solar of zero is reasonable and appropriate.

The Commission also finds that SCE&G's winter reserve margin of 21% is reasonable. While the reserve margins calculated by Witness Horii and Witness Lynch differ to a degree, the differences are not significantly different. Furthermore, both witnesses recognize that SCE&G has a higher demand-side risk in the winter than in the summer. Accordingly, the Commission finds that it is appropriate for SCE&G to use a 14% reserve margin for the summer and a 21% reserve margin in the winter, based on the evidence presented in this case. The increased reserves represent a novel approach to becoming a winter-peaking utility in this fuel case. This change has potentially adverse implications for certain types of generators going forward, and the Commission considers this issue to be of significant importance in future fuel proceedings. It is appropriate to use the

most recently filed Integrated Resource Plan for purposes of avoided cost calculations in fuel proceedings, and the Commission expects that the Company's Integrated Resource Plan will be consistent with all assertions and assumptions made in the calculation of avoided costs.

c. Witness Horii also disagreed with SCE&G's proposal to no longer provide a standard rate offer for non-solar resources. He testified that the lack of a published rate would increase the uncertainty and engagement costs for new resources.

In response, Witness Lynch testified that since there are no non-solar QFs currently seeking a PPA, there is no need for such a published tariff. Should a non-solar QF desire to enter into a PPA, Witness Lynch testified that SCE&G will negotiate a contract with that party. Witness Lynch stated that this approach has worked satisfactorily for SCE&G since PURPA was passed and only when the number of solar PPA applications significantly increased did the Company believe it would be more efficient to have a separate published rate for these QFs.

The Commission agrees with SCE&G. The record contains no evidence that a non-solar QF has recently sought to enter into a PPA agreement with the Company and, therefore, there is no need for a published non-solar QF tariff. Accordingly, the Commission finds that the Company should negotiate contracts with any non-solar QFs that are not eligible for the Company's non-solar PR-1 Rate as it did historically, prior to the establishment of the PR-2 Rate. If, in the future, non-solar QFs become more prevalent, a standard offer tariff may be appropriate.

d. Witness Glick testified that, in this proceeding, SCE&G has proposed a substantial change to the avoided cost methodology approved by the Commission in prior dockets and that solar QFs are denied the benefits of deferring the addition of any new capacity that the

Company proposes building. She also testifies that the Company did not use the methodology approved in Docket 2017-2-E to calculate the avoided generation capacity value.

In response and as discussed previously, Witness Lynch explained that SCE&G has not changed the methodology; rather there has been a change in the result caused by the significant increase in new solar capacity with PPAs since the Company's last fuel proceeding. Witness Lynch also testified that as more and more solar is added, the usefulness or value of each successive addition decreases and that solar has reached the zero point for capacity because of the amount of solar under contract.

For the same reasons stated previously, the Commission agrees with the Company. The difference in revenue approach involves calculating the revenue requirements between a base case and a change case. In this proceeding, the Company proposes to calculate the change case using a 100 MW solar profile instead of a 100 MW round-the-clock profile as it has done in the past. The Commission finds that this does not reflect a change in methodology; rather, this is a change in the analysis that is warranted by the substantial amount of solar currently under contract with the Company. Even so, because the vast majority of recent and future QF resources are solar, it is appropriate for SCE&G to use an avoided cost which more closely tracks the avoided costs for solar generation. The Commission expects SCE&G to continue to refine the solar profile as more installations come online and update the profile accordingly, such that solar continues to be given all due credit for the benefits of its generation. The Commission further notes that, in the Company's last two fuel proceedings, SCCCL, SACE, and SCSBA all requested that the Company be required to use a solar profile so that it could more accurately estimate the avoided costs to be paid to solar QFs.

e. Witness Glick testified that the Company erred by failing to include in its revenue requirement calculations opportunity costs, which are the loss of potential gain from other alternatives when one alternative is chosen. Specifically, Witness Glick argued that additional solar would allow SCE&G to sell capacity in the market thereby increasing the value of additional solar.

In response, Witness Lynch testified that in order to sell capacity to a neighboring utility, it must be firm and dependable capacity. However, Witness Lynch noted that a solar QF does not have firm capacity as it is an intermittent resource and, therefore SCE&G could not sell solar capacity. He further testified that when SCE&G purchases firm capacity to serve its customers, it passes those costs onto its customers. Similarly, when SCE&G sells firm capacity, he testified that the benefits of such a sale should accrue to SCE&G's customers, not to the QF as proposed by Witness Glick. Finally, he testified that if there were a lucrative market for solar capacity, the solar facility would not be selling its energy to SCE&G at the Company's avoided cost rates but instead would sell its capacity directly to interested purchasers at higher prices.

It is reasonable and appropriate for the Company not to consider opportunity costs in its revenue requirements calculation, because a solar QF does not have firm capacity as it is an intermittent resource and does not add to the Company's opportunity to sell firm capacityThe Commission therefore declines to adopt the position recommended by SCCCL and SACE.

f. Witness Glick also recommended that SCE&G should pay QFs a performance adjustment factor in order to treat the QF capacity equally with a utility's generating unit.

Witness Lynch disagreed with this suggestion, stating that it is not reasonable or meaningful to compare the intermittent capacity of a solar QF, which only provides energy as weather permits, with the firm capacity of a more dependable generating unit such as a combustion turbine. Based on data reflecting the maximum hourly output of a large solar generator on SCE&G's system, Witness Lynch testified that solar facilities provide little, if any, firm dependable capacity to SCE&G's system that the Company can reliably call upon to serve its customers.

The Commission agrees with the Company. The Commission concludes that it is unreasonable to employ a performance adjustment factor to the capacity payment because there is no guarantee of performance with regard to capacity from solar facilities.

g. SCSBA Witness Ben Johnson testified that QF rates should be set equal to the cost of having the utility build and operate its own generating units. Witness Johnson also testified that the public interest is best achieved by establishing rates that leave ratepayers indifferent as to whether energy and capacity is obtained from QFs or from the utility itself under traditional rate base regulation. Witness Johnson stated that retail customers are better served by regulatory decisions that set avoided cost rates at a point that is closer to the long-run incremental costs that are incurred by utilities when they build and operate their own generating plants.

Witness Lynch testified that avoided cost rates should not be set to the utility's cost to build but, instead, should be set equal to the utility's actual avoided cost. Under any other circumstances, Witness Lynch testified that ratepayers would not be indifferent to purchases from a QF. He also noted that the rates in the Company's PR-2 tariff reflect SCE&G's long-term avoided costs.

The Commission agrees with SCE&G. The methodology used appropriately by the Company in this proceeding sets forth a proper manner in which to determine the Company's actual avoided cost. As SCE&G has properly employed this method, the Commission concludes that SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities is unreasonable and inappropriate.

h. Witness Ben Johnson next testified that SCE&G analyzed different generation expansion plans and the associated energy costs, but did not develop a comprehensive, detailed analysis of its revenue requirement and does not show the corresponding revenue requirement for these expansion plans or that this approach is consistent with minimizing revenue requirements. Witness Johnson also testified that the PROSYM model used by SCE&G to calculate its avoided costs has certain disadvantages.

In response, Witness Lynch testified that, for the PR-2 Rate, incremental solar beyond 865 MWs of solar capacity already under contract does not alter its resource plan and, therefore, the difference in capital-related revenue requirement is zero. He further testified that a comprehensive, detailed revenue requirement is not needed for the calculation of avoided costs which are based on incremental effects.

The Commission agrees with the Company. The Commission also finds that it is appropriate for SCE&G to use PROSYM, which is a standard production costing model used in the industry. Accordingly, the Commission finds that Witness Johnson's recommendations are unnecessary in this proceeding, as discussed below.

i. Witness Ben Johnson testified that he developed estimates of the Company's avoided capacity costs using the Proxy Unit method based on a hypothetical nuclear

plant, combined-cycle plant, and combustion turbine. He stated that these calculations suggest SCE&G's proposed rates are below the capacity-related cost of building and operating these three types of generating units over their entire economic life. For this reason, Witness Johnson stated that it is appropriate for the Commission to increase the avoided cost rates to be closer to those of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. He also testified that higher avoided cost rates would be more consistent with the long-run incremental cost of new capacity and would better encourage QF development within SCE&G's service area.

Witness Lynch disagreed, stating that Witness Johnson failed to explain how the cost to construct these proxy plants relate to the costs SCE&G would avoid through a QF purchase, *i.e.*, the avoided cost rates that leave ratepayers indifferent. He further noted that ratepayers would not be indifferent to the choice of paying the different capacity costs of a nuclear plant, a combined-cycle plant, or a combustion turbine. Rather, given the choice, Witness Lynch testified that ratepayers would choose to pay the capacity cost of the least expensive generating facility—a combustion turbine.

The Commission finds that Witness Johnson's recommendation is unreasonable. SCE&G properly calculated its avoided costs using a reasonable methodology. As stated previously, SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities, without regard to cost, is unreasonable and inappropriate. The Commission further finds that using the proxy method as recommended by Witness Johnson would not add further accuracy to the estimate of SCE&G's avoided costs and, therefore, declines to modify the methodology in the manner suggested by Witness Johnson.

j. Witness Ben Johnson next addressed the Company's variable energy costs, noting that natural gas prices have fluctuated over both short and medium time frames, although stating that they have exhibited a tendency to trend higher over the long term. Witness Johnson testified that the instability of natural gas prices and difficulties associated with predicting these prices is one of the principal disadvantages or risks associated with using this fuel source. Witness Johnson further testified that, in developing his long-run avoided cost estimates, he evaluated multiple scenarios using a number of different assumptions based upon historical natural gas prices.

In response, Witness Lynch agreed that future natural gas prices are uncertain but stated that a simple trend line based on historical natural gas prices cannot be used with confidence to project future prices as a result of the recent advancements in fracking technology. Instead, Witness Lynch testified that SCE&G uses the price of futures contracts traded on the NYMEX over the next three years and then applies a growth rate to project prices over the longer term. Witness Lynch stated that NYMEX prices have been used in SCE&G's fuel hearings for many years because they represent publicly available information and also are good indicators of gas prices in the short term, and that they are equally useful in the present proceeding

The Commission finds that SCE&G's methodology to estimate future natural gas prices is reasonable. The Company has used this methodology for a number of years to estimate future natural gas prices. The Commission therefore concludes that Witness Johnson's recommended changes to this methodology in this proceeding is unnecessary and would not result in more accurate estimates of future natural gas prices.

k. Witness Ben Johnson further addressed the Company's decision to abandon the new nuclear units and suggests that the Company did not consider the benefits of a balanced generating portfolio in developing its proposed QF rates.

Witness Lynch disagreed with Witness Johnson and testified that SCE&G is aware of the resource mix. He further testified that the Company believes that the addition of 865 MW of solar capacity helps to have a more balanced generating portfolio. However, Witness Lynch stated that SCE&G, like most utilities, believes that gas-fired generation is the most economical choice of dispatchable generation for the next few years.

The Commission finds that the Company has experienced a substantial growth in solar generation on its system which undoubtedly will provide a more balanced generation portfolio. The Commission therefore disagrees with Witness Johnson's suggestion.

l. Regarding the Company's proposed changes to the avoided capacity rates for solar and to Rate PR-1 and PR-2, Witness Ben Johnson testified that not compensating QFs for their reliability benefits is intensely and unlawfully discriminatory. He also objected to limiting Rate PR-2 to solar projects and asserts that this would establish an arbitrary distinction between solar and non-solar technologies. Witness Johnson also objected to SCE&G's proposal to update Rate PR-2 on an as-needed basis. Finally, Witness Johnson testified that solar and non-solar generators should not be paid different prices.

In response, Witness Lynch testified that, in the context of avoided costs, the issue is not what benefits or value QFs will receive. Rather, Witness Lynch stated that the issue is what capacity costs are being avoided and, simply put, if no capacity costs are avoided, then the avoided cost is zero. Witness Lynch also testified that the Company's proposal to distinguish between solar

and non-solar projects is not arbitrary since SCE&G only has solar projects requesting avoided cost rates and the determination of avoided cost depends strongly on the type of project under consideration. When a non-solar project seeks to enter into a PPA with SCE&G and requests its avoided costs, Witness Lynch stated that some specification has to be made as to what the project's power producing characteristics will be.

Regarding battery storage projects, Witness Raftery testified that SCE&G will issue an RFP to collect information on solar plus battery projects with the intention of having a project or two placed online and that SCE&G then will be better able to analyze the impacts of these types of projects on its system. Finally, Witness Lynch testified that SCE&G believes it is sufficient to have a scheduled update of the PR-2 rate once a year at the fuel hearing with the option, but not the requirement, to update it more frequently on an as needed basis. Witness Lynch also testified that QFs should be paid their avoided cost. He stated that solar QFs all have similar characteristics and avoid costs at approximately the same rate and that, for this reason, providing a standard rate for solar QFs, such as PR-2 and PR-1, is efficient and reasonable. Witness Lynch also testified that because non-solar QFs may have significantly different characteristics; these projects should be considered on an individual basis and separate, specific PPAs should be negotiated for each such project. And, even though it is not possible to accurately estimate the impact small non-solar QFs (under 100 kW) have on the system individually, Witness Lynch stated that the impact they do have is so small that establishing a separate rate for these facilities would be meaningless.

The Commission finds that the Company's proposed changes to Rate PR-1 and PR-2 are reasonable. Avoided capacity costs should be calculated based on how much future capacity can be avoided and, if no such capacity can be avoided, the avoided capacity cost should be zero. In

order for SCE&G to pay the appropriate amount of avoided costs and therefore prevent customers from having to pay for avoided costs that are too high, it also is appropriate for SCE&G to distinguish between solar and non-solar QFs in its Rate PR-1 and PR-2 and to pay different avoided costs based on their different characteristics. The Commission also agrees with SCE&G's proposal to update Rate PR-2 once a year, but disagrees with its proposal to be permitted to update Rate PR-2 more frequently than annually. If the Company were permitted to update this rate more than annually, it would result in near-continuous litigation.. Allowing updates to the PR-2 Rate only during the annual fuel proceeding recognizes the importance of stability and certainty for both the generating facilities developers and the Company. The Commission also recognizes that, in previous proceedings, SCCCL, SACE, and SCSBA recommended that Rate PR-2 be updated on an annual or biennial basis and that semiannual updates create uncertainty for QF developers.

m. Witness Ben Johnson also testified that the Commission should be moving in the direction of requiring stronger, more precise price signals to help guide competitive investment decisions and that the elimination of the capacity rate makes the solar rate structure even less granular than it is now.

Witness Lynch responded by stating that PURPA requires SCE&G to purchase the power produced by any and all QFs that desire to sell power at the Company's avoided cost. He further testified that SCE&G is prohibited by law from turning away less efficient QFs, so the use of avoided costs is not a good vehicle to enhance competitive markets.

The Commission agrees with the Company. Given the requirements of PURPA, it is not appropriate to use avoided costs to encourage competitive investment decisions. To the extent that

avoided capacity costs are achieved by PURPA generators, those costs must be included in the rate paid for such power acquisition.

n. Witness Ben Johnson further testified that electrical energy is a joint product when viewed across time and that capacity used to generate electricity during the peak daytime hours is also available for use during other hours. He further testified that a reasonable share of the annual fixed costs of capacity should also be recovered during many other hours of the year, including the early morning hours of December through February, when extreme peaks also sometimes occur. Witness Johnson therefore suggested that avoided costs should include a markup to provide a mechanism for joint and common costs.

Witness Lynch disagreed and testified that a markup suggests that SCE&G should pay more than its avoided cost which is contrary to the intent of PURPA. If SCE&G avoids any joint and common costs through the purchase of power from a QF, Witness Lynch testified that those costs should be reflected in its avoided cost rate but without a markup. In response to Witness Johnson's suggestion that a combined-cycle generating facility that provides capacity in the winter will also provide capacity in the summer, Witness Lynch stated that if SCE&G has to build a combined-cycle unit to meet its winter peak, but which also satisfies the need for summer capacity, then the fixed costs are incurred. In contrast, Witness Lynch noted that adding solar capacity, which only has an impact on capacity in the summer, does not avoid any of those fixed costs.

The Commission agrees with SCE&G. The Company properly calculated its avoided costs using the a reasonable methodology, and the Commission finds it would be inappropriate to markup avoided costs to provide a mechanism for joint and common costs.

3. The Commission's Overall Conclusions Regarding Avoided Costs, PR-1, and PR-2

Based upon the evidence of record, and after reviewing the testimony of the parties of record, the Commission finds and concludes that SCE&G properly calculated its avoided energy and capacity costs under PURPA using the difference in revenue requirements methodology. The Commission further concludes that the difference in revenue requirements methodology remains reasonable, prudent, and appropriate, and that SCE&G's proposal to use a 100 MW solar profile to calculate avoided costs is warranted and appropriate. The Commission also finds and concludes that SCE&G's proposed PR-1 and PR-2 Rate Schedules set forth rates, credits, and charges, that are lawful, just, and reasonable and are based on reasonable methodologies.

B. NEM Distributed Energy Resources Methodology

1. SCE&G Testimony

Company Witness Lynch testified that, by way of its Order No. 2015-194 issued in Docket No. 2014-246-E, the Commission approved the following 11 components of value for NEM Distributed Energy Resources:

Net Energy Metering Methodology
1. +/- Avoided Energy
2. +/-Energy Losses/Line Losses
3. +/- Avoided Capacity
4. +/- Ancillary Services
5. +/- T&D Capacity
6. +/- Avoided Criteria Pollutants
7. +/- Avoided CO_2 Emission Cost
8. +/- Fuel Hedge
9. +/-Utility Integration & Interconnection Costs
10. +/- Utility Administration Costs
11. +/- Environmental Costs

= Total Value of NEM Distributed Energy Resources

He also testified that, in Docket No. 2017-2-E, the Company calculated the value for these components and, in Order No. 2017-246, the Commission determined that those values complied

with the NEM Methodology approved by the Commission in Order No. 2015-194. As set forth in Table 10 to his direct testimony, Witness Lynch stated that the Company updated these components of value by calculating the current value and one for the value over the IRP planning horizon. Witness Lynch further provided information on SCE&G's evaluation of each component and its estimate of the associated value. Witness Rooks also sponsored the Company's proposed "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet which updates the total value of NEM Distributed Energy Resource to reflect the components of value for NEM Distributed Energy Resources enumerated by Witness Lynch.

2. ORS Testimony

ORS Witness Sarah Johnson testified that the Company's calculation of the NEM Incentive is consistent with the methodology approved in Commission Order No. 2015-194 and that the value of the customers' distributed generation was calculated using the amount from the NEM tariff approved in Commission Order No. 2017-246. Witness Horii similarly testified that SCE&G is following the methodology approved by the Commission in Order No. 2015-194 in evaluating the value of each component of the NEM DERs Total Value stack. Witness Horii testified that SCE&G bases its NEM DERs avoided energy and capacity costs on the PURPA avoided cost values and that the PURPA avoided energy cost decreased from last year, leading to a reduction in the NEM DERs avoided energy cost. With respect to the component of value for avoided capacity, Witness Horii stated that this value is based on the PURPA avoided capacity cost values and that, should the Commission reject the Company's proposed avoided capacity cost value, the Total Value of NEM Distributed Energy Resources would be impacted. Regarding the value for T&D Capacity, Witness Horii noted that SCE&G's practice of designing transmission and

distribution circuits to assume DER is not generating due to weather factors or because DER resources are off line follows the Commission-approved methodology but it is a conservative approach.

3. SCCCL and SACE Testimony, Responsive Testimony, and the Commission Conclusions

Regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology, Witness Glick made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Glick testified that SCE&G's description of avoided line losses associated with DERs is inadequate and that the Company erred in calculating line losses. Specifically, Witness Glick stated that the Company used annual average system losses as the basis for calculating marginal losses rather than losses associated with the temporal solar profile and failed to calculate transmission losses as marginal. She also testified that avoided marginal transmission and distribution line losses have capacity implications. Witness Glick further stated that QFs connected at the distribution level should be reimbursed for transmission level savings and that small QFs and NEM DERs should be reimbursed for both transmission level and distribution-level savings.

In response, Witness Lynch first noted that the recommendations advanced by Witness Glick had been previously raised in Docket No. 2017-2-E and that the Commission had found in Order No. 2017-246 that "the Company's calculation of line losses is appropriate and that average transmission losses are the best estimate to use for marginal losses." Nevertheless, Witness Lynch also testified that the PR-1 and PR-2 rates and the 11-point NEM methodology all involve the

adjustment of QF energy supplied over many hours of the year. Therefore, Witness Lynch testified that the use of an annual average system loss factor is appropriate. He also stated that SCE&G has calculated system line losses for many years and believes that the estimation of losses for each hour of the year or for many incremental levels would be a burdensome enterprise that would yield little or no value. Witness Lynch further testified that to estimate marginal line losses on the distribution system, SCE&G doubled the average line losses as agreed to by Witness Glick. On the transmission system, however, Witness Lynch stated the Company believes that marginal losses should be approximated by average losses and that marginal line losses in a network will be less than those on the distribution system.

He further testified that to estimate marginal losses, SCE&G's analysis considered lowering the loads at each substation to effect a 100 MW decrease across the system, and then eliminating a source of energy from the Company's Hagood Unit to balance the system. Under these circumstances, the analysis showed that power had to flow a greater distance to serve the load and losses increased, meaning that average losses were greater than marginal losses. After performing several similar analyses, the Company concluded that average transmission losses are the best estimate to use for marginal losses.

Regarding the capacity implications associated with avoided marginal transmission and distribution line losses, Witness Lynch testified that SCE&G applies line losses for both energy and capacity as appropriate. Responding to Witness Glick's testimony regarding the reimbursement of transmission and distribution level savings, Witness Lynch testified payments or credits to small QFs and NEMs are subsidized by SCE&G's DER program and that, therefore, reimbursement is not at issue. He further stated that the PR-1 rate for small QFs and the NEM

avoided cost methodology have loss factor adjustments and that larger QFs likely will flow power back onto the transmission system and will incur, not avoid, transmission level losses.

The Commission finds that the Company's calculation of line losses is appropriate, that average transmission losses are the best estimate to use for marginal losses, and that the Company properly applied line losses for both energy and capacity in a manner consistent with the methodology approved in Order No. 2015-194.

b. Regarding transmission and distribution ("T&D") capacity, Witness Glick stated DERs, in aggregate and on average over time, reduces the need for T&D capacity investments. She testified that if the DER alleviates some of the strain on the system during transmission or distribution system peaks, then that resource reduces pressure on that system and helps to defer or avoid future upgrades to that system. She also stated that energy efficiency resources are regularly credited with avoided or deferring T&D investments.

Witness Lynch responded by stating that, with the NEM solar capacity distributed throughout the system, the current impact on any single transmission line is less than 1,500 kW. SCE&G's transmission planning engineers consider this level of load, which is 0.1% of the total load, to be no more than noise on the system and it does not have any expected impact on the need for future transmission lines. Witness Lynch further testified that it is not clear whether the solar generators increase the strain on distribution lines or decrease it. However, he noted that Company data shows that solar output is likely to increase the strain on the distribution system. Regardless, he testified that SCE&G's distribution engineers must plan the distribution line assuming the solar output is zero because solar is an intermittent resource. Witness Lynch also testified that other energy resources, such as energy efficiency, may be credited with avoiding transmission and

distribution costs. However, he opined that in considering a program such as energy efficiency, the effects of which are dispersed around a system, an analysis of the localized impact will demonstrate the impact to be too small to affect the transmission system. He also stated that with respect to the distribution system, energy efficiency is not an intermittent resource like a solar generator so there may be justification for an avoided cost credit.

The Commission agrees with the position of SCE&G. The Company must design its transmission and distribution system so as to provide safe and reliable electric service, even when intermittent generation sources such as solar facilities and other small QFs are not producing power.

c. Witness Glick also recommended that an adjustment should be made to reflect an impact on SCE&G's reserve margin, stating that DER resources have capacity value, and that capacity value also translates into a reduced reserve margin requirement. She further stated that the avoided T&D line losses of 8% to 9% are reliable and this portion of avoided generation capacity should be counted towards reducing the level of peak load for which SCE&G should plan.

In response, Witness Lynch testified that the Commission previously found it is appropriate for SCE&G to maintain a reserve margin to back up DERs which are intermittent supply resources and that, accordingly, DER resources do not result in a reserve margin benefit for the Company.

The Commission agrees with SCE&G. The Commission finds that it is appropriate for the Company to maintain a reserve margin to back up DERs, which are intermittent supply sources. Accordingly, DER resources do not result in a reserve margin benefit for the Company.

d. Witness Glick next testified that to the extent distributed energy generators help to alleviate costs associated with environmental compliance at SCE&G's other facilities,

those savings should be reflected in the NEM calculation. She stated that avoided environmental costs, such as costs associated with coal combustion residuals, are financial, quantifiable, and a direct result of DER generation.

Witness Lynch again noted that the Commission previously found that the Company's methodology properly accounts for avoided environmental costs and that there are no other environmental costs that are not already included in the other specific components of this methodology. Witness Lynch also noted that the Settlement Agreement entered into by the parties of record to Docket No. 2014-246-E, including SCCCL and SACE, affirmatively states that "[t]he environmental compliance and/or Utility system costs might be accounted for in the Avoided Energy component, but, if not, should be accounted for separately. The Avoided Energy component must specify if these are included." Witness Lynch testified that there are no environmental costs that are not already included in the other specific components of the methodology and, for this reason, SCE&G appropriately assigned a zero avoided cost value to this component.

The Commission finds that the Company properly accounted for avoided environmental costs and that there are no other environmental costs that are not already included in the other specific components of the methodology. The Commission also finds that, while it may be possible to separately account for environmental costs, there is no net change to the Total Value of NEM Distributed Energy Resources. Thus, requiring the Company to undertake this exercise would require it to devote additional time and energy and incur additional costs related to the fuel proceeding with no corresponding or substantial benefit.

4. SCSBA Testimony

SCSBA did not present any testimony regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology.

5. The Commission's Overall Conclusions Regarding NEM Distributed Energy Resources Methodology

Based upon the evidence of record, and after reviewing the testimony of the parties of record and the Settlement Agreement entered into by the parties of record to Docket No. 2014-246-E, the Commission finds that SCE&G properly evaluated the components of value for NEM Distributed Energy Resources as shown in Table 10 of Witness Lynch's testimony, as corrected, in accordance with the NEM methodology approved by the Commission in Order No. 2015-194.

C. DER Programs and Costs

1. SCE&G Testimony

Company Witness Raftery discussed the performance of the Company's DER programs during the Review Period, and the costs associated with offering these DER programs during the Review Period. These programs include offering utility-scale DER programs and customer-scale NEM incentives, Performance Based Incentives, Bill Credit Agreements ("BCA") programs, and developing the Company's Community Solar program. Witness Raftery also discussed the Company's DER cost projections for the forecast period January 1, 2018, through April 30, 2019. As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled ($1,504,690) in avoided costs and $798,039 in incremental costs. For the period January 1, 2018, through April 30, 2019, the Company projects that DER program costs will include $9,304,269 in avoided costs and $25,313,951 in incremental costs.

Witness Rooks provided actual data on the Company's DER avoided and incremental costs for the historical Review Period and the projected DER costs for the period January 1, 2018,

through April 30, 2019. As reflected in Hearing Exhibit No. 4 (AWR-7), Witness Rooks testified that the Company's forecasted DERP Avoided Cost Components for the period May 2018 through April 2019 should be as follows: 0.042 cents per kWh for the Residential rate class; 0.038 cents per kWh for the Small General Service rate class; 0.032 cents per kWh for the Medium General Service rate class; and 0.019 cents per kWh for the Large General Service rate class. He also testified that, as reflected in Hearing Exhibit No. 4 (AWR-9), the Company's DERP Incremental Costs by class should be: $1.00 per account per month for the Residential rate class; $5.37 per account per month for the Small/Medium General Service rate class; and $100.00 per account per month for the Large General Service rate class. Witness Rooks also sponsored the Company's proposed "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff.

Witness Raftery further testified that, as of December 31, 2017, nine solar farms totaling 48.16 MW have been constructed and interconnected to SCE&G's distribution system. As such, Witness Raftery testified SCE&G has achieved the 1% goal for Utility-scale facilities set forth in Act 236. Witness Raftery also stated that, as of December 31, 2017, SCE&G had 6,161 customers participating in its customer-scale DER programs representing approximately 56.81 MW of solar generating capacity on SCE&G's system and, therefore, has achieved the 1% goal for Customer-scale facilities set forth in Act 236.

Witness Raftery also testified that, based on overall NEM adoption levels experienced since July 1, 2016, SCE&G forecasts that it will approachAct 236's net metering limit or cap of 2% in April or May 2019. Regarding the Company's Community Solar program, Witness Raftery stated that, pursuant to the Credit Rate Agreement between SCE&G and the Clean Energy

Collective, LLC ("CEC") which was approved by the Commission in Order No. 2016-707, CEC is actively constructing three community solar facilities totaling 16 MW. Witness Raftery also testified that, as of February 15, 2018, 95 Low-Income customers have purchased or subscribed to a total of 0.526 MW of community solar, 903 residential customers have purchased or subscribed to a total of 5.55 MW of community solar, and 22 churches, schools, and municipalities have purchased or subscribed to a total of 9.45 MW of community solar. Witness Raftery testified that the remaining 0.474 MW of capacity is reserved for Low-Income customers and continues to be marketed through SCE&G, CEC, and 8 customer assistance agencies. Witness Raftery also advised the Commission that SCE&G is exploring moving forward with the additional 1% Utility-scale investment contemplated in S.C. Code Ann. § 58-39-130(D) and that, if SCE&G identifies competitive projects that provide system benefits, the Company anticipates applying to the Commission for approval to move forward with the contracts and deployment.

2. ORS Testimony

Witness Sarah Johnson testified that the Company's calculations are in compliance with Act No. 236 of 2014 and Commission Orders, and that the Company's calculations support the following annual proposed DERP Charges: Residential $12.00, Small and Medium General Service $64.39, and Large General Service $1,200.00.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the DER programs offered by the Company during the Review Period or the associated costs.

4. The Commission's Overall Conclusions Regarding DER Programs and Cost

The Commission finds that the evidence presented by SCE&G establishes that, during the Review Period, SCE&G offered DER programs and took appropriate steps to fulfill its DER goals approved by the Commission in Order No. 2015-194. The Commission further finds that the Company's DER programs and the associated costs are reasonable and prudent and are designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130.

D. Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

1. SCE&G Testimony

SCE&G witnesses testified on issues related to the prudency of SCE&G's fuel purchasing practices, plant operations, and fuel inventory management, and explained the regulatory atmosphere governing environmental compliance for SCE&G. SCE&G Witness Lippard discussed the operating performance of the V.C. Summer Nuclear Station. SCE&G Witness Delk reviewed the operating performance of the Company's fossil/hydro units and of South Carolina Generating Company's Williams Electric Generating Station. Company Witness Shinn discussed the Company's procurement and delivery activities for coal and No. 2 fuel oil for electric generation, the changes that have occurred in coal markets since the last annual fuel adjustment hearing, and how these changes affected coal procurement during the Review Period and are anticipated to affect future procurement. Witness Shinn also discussed the procurement and delivery of limestone for the wet scrubbers at Wateree and Williams Stations, the nuclear fuel purchasing processes for SCE&G generation, uranium prices, and the near-term outlook of coal

and uranium prices. SCE&G Witness Kahl provided testimony about the natural gas purchasing processes for SCE&G generation and discussed natural gas prices as well as the near-term outlook.

SCE&G Witness Rooks provided actual fuel cost data for the historical Review Period, and projected fuel costs for the period January 1, 2017, through April 30, 2018; and recommended fuel rates for the period of May 2018 through April 2019. Hearing Exhibit No. 4 (AWR-5) shows the Company's forecasted variable environmental & avoided capacity costs and the allocation of those costs to retail customer classes for the period of May 2018 through April 2019. This exhibit also details forecasted sales data by class, over/under recovery computations, and calculates the projected Variable Environmental & Avoided Capacity Cost Components per kWh for the same period. The Variable Environmental & Avoided Capacity Components produced by these calculations are projected to recover all costs and are as follows: 0.083 cents per kWh for the Residential rate class; 0.075 cents per kWh for the Small General Service rate class; 0.063 cents per kWh for the Medium General Service rate class; and 0.039 cents per kWh for the Large General Service rate class.

2. ORS Testimony

ORS Witness Smith testified and presented the results of the ORS Audit Department's examination of the Company's books and records pertaining to the Fuel Adjustment Clause operation for the Actual Period, and the Company's estimated calculations for the months of January 2018 through April 2018. Based on the ORS Audit Department's examination of the Company's books and records, and the Company's operation of the fuel cost recovery mechanism, Witness Smith testified that the Company's books and records accurately reflect the fuel costs incurred by the Company in accordance with previous Commission orders and with S.C. Code

Ann. § 58-27-865 (2015). Witness Seaman-Huynh testified to the ORS's findings resulting from its review of the Company's fuel expenses and power plant operations used in the generation of electricity during the Review Period. Based on ORS's review of the Company's operation of its generating facilities during the Review Period, Witness Seaman-Huynh testified that the Company made reasonable efforts to maximize unit availability and minimize fuel costs during the Review Period. Witness Seaman-Huynh also testified that, in Order No. 2017-246, the Commission approved SCE&G's proposal to use the Internal Revenue Service ("IRS") Section 174 deduction claims to lower its Environmental Components based on its Accumulated Deferred Income Taxes ("ADIT") liability balances as of September 30, 2017. In reviewing the Company's books and records, Witness Seaman-Huynh testified that ORS did not find the Company made any adjustments to its Environmental Capacity Components during the Actual Period attributed to the IRS Section 174 deduction claims.

In response, Witness Rooks testified that, in Order No. 2017-246 the Commission approved SCE&G's proposal to use Section 174 research and experimentation tax benefits related to the construction of V.C. Summer Units 2 and 3 to reduce the Environmental Component of its total fuel cost factor in an amount based on its ADIT liability balances as of September 30, 2017, and "to make the reduction concurrent with the implementation of the Company's 2017 BLRA revised rates request." *See* Commission Order No. 2017-246 at p. 54. However, Witness Rooks testified that SCE&G did not seek a 2017 BLRA revised rates update and, instead, filed and later withdrew an abandonment petition. Witness Rooks testified that, among other things, the abandonment petition sought recovery of the costs of the abandoned plant without an increase in rates and proposed using Section 174 tax benefits, as well as additional tax benefits arising from

abandonment, as a means to reduce capital cost recovery. Witness Rooks further testified that, on January 12, 2018, SCE&G along with Dominion Energy, Inc. filed a joint petition ("Joint Petition") which reflected a proposed rate decrease and also provided for the use of all tax benefits related to the abandoned nuclear construction project, both Section 174 and the tax abandonment deduction, for the benefit of customers. Witness Rooks testified that, for these reasons, SCE&G did not make an adjustment to its Environmental Component in 2017 attributed to the IRS Section 174 deduction claims, and that the deduction will be considered in the Joint Petition.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's fuel purchasing practices, environmental costs, plant operations, fuel inventory management, or the operations of the power plants during the Review Period.

4. Commission Conclusions Regarding Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

As reflected in the evidence of record, no party challenged the reasonableness or prudency of SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period. With respect to the Section 174 deductions approved by the Commission in Order No. 2017-246, the Commission finds that SCE&G's proposal to consider these deductions in the Joint Petition docket is reasonable. Based upon the evidence and testimony of the witnesses, the Commission therefore finds and concludes that SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period are reasonable and prudent.

E. Proposed Base Fuel Component

1. SCE&G Testimony

Witness Rooks testified that the actual base fuel under-collected balance was $2,355,695 at December 31, 2017, and the projected over-collected balance to be $50,536,981 at the end of April 2018. Witness Rooks also testified that a Base Fuel Component of 2.457 cents per kWh is projected to recover all base fuel costs in the forecast period in addition to eliminating the projected over-collected balance by the end of April 2019. Witness Rooks further testified that, in compliance with Commission Order No. 2013-776 and pursuant to the Company's February 22, 2018, letter in Docket No. 2013-382-E, the Company plans to apply gains from recently settled interest rate swaps in the amount of $113,739,272 to reduce its base fuel cost under-collection balance. Witness Rooks also testified that, although the fuel cost statute permits utilities to recover their prudently incurred fuel costs as precisely and promptly as possible, for this proceeding and to mitigate rate impacts to its retail electric customers, the Company is proposing to maintain its Base Fuel component at 2.451 cents per kWh. Witness Rooks further testified that the Company is proposing that the Variable Environmental & Avoided Capacity Cost components be increased for the May 2018-April 2019 time period and to increase its DER Incremental Cost Components per account per month to $1.00 for Residential customers and $5.37 for Small/Medium General Service customers. The per account per month fee for Large General Service customers will remain unchanged at $100.00 to comply with the DERP Act caps. When combining the Company's 2018 proposals for Fuel and DSM cost recovery, Witness Rooks testified that the average monthly bill for residential customers using 1,000 kWh per month would increase from $147.53 to $147.70. This $0.17 per month impact would become effective with the first billing cycle of May 2018.

2. ORS Testimony

Witness Seaman-Huynh testified that as of December 2017, the Company had a base fuel cumulative under-recovery balance of $2,355,695, a variable environmental and avoided capacity over-recovery balance of ($2,272,425), and DERP avoided costs over-recovery balance of ($1,504,687). As shown on Hearing Exhibit No. 14 (GS-5), page 2 of 2, ORS projects the Company to have a base fuel cumulative over-recovery balance of ($50,536,981), a variable environmental and avoided capacity over-recovery balance of ($1,051,097), and DERP avoided costs over recovery balance of ($479,920) as of April 30, 2018. Witness Seaman-Huynh also testified that ORS recommends the Commission approve the Company's current Base Fuel Component remain in effect for bills rendered on and after the first billing cycle for May 2018 and continue through the last billing cycle for April 2019. He also testified that ORS recommends that the Commission approve the Company's proposed Environmental and Avoided Capacity Components and DERP Avoided Cost Components for the period of May 2018 through April 2019. Witness Seaman-Huynh further testified that ORS reviewed the Company's proposal to apply gains from recently settled interest rate swaps to reduce its Base Fuel Component. The Company's proposal is in compliance with Commission Order No. 2013-776 and ORS supports the Company's proposal.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's proposed base fuel component.

4. Commission Conclusions Regarding the Proposed Base Fuel Cost Component

As reflected in the evidence of record, no party challenged SCE&G's proposed Base Fuel Cost Component. Based upon the evidence and testimony of the witnesses, the Commission

therefore finds and concludes that SCE&G's proposed Base Fuel Component is reasonable and prudent and is consistent with S.C. Code Ann. § 58-27-865 (2015).

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The methodologies used by SCE&G to calculate its avoided energy and capacity costs under PURPA as described in the testimony of SCE&G Witness Lynch are reasonable and prudent.

SCE&G's proposed Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of service, are lawful, just, and reasonable.

SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

The updated components of value for NEM Distributed Energy Resources as shown in Table 10 on page 27 of the direct testimony of SCE&G Witness Lynch are reasonable and prudent, comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet, including the rates, terms, and conditions, are lawful, just, and reasonable.

SCE&G's calculation of and method of accounting for avoided costs and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with

methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

During the Review Period, SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194, which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

As a result of SCE&G's efforts to provide the DER programs, the balance of the DER program costs as of December 31, 2017, totaled ($1,504,690) in avoided costs and $798,039 in incremental costs, which costs are reasonable and prudent.

SCE&G's proposed DER Avoided Cost Components by class are reasonable and prudent. SCE&G's proposed monthly per account DER Incremental Cost Components by class properly allocates SCE&G's DER program incremental costs and are reasonable and prudent.

SCE&G's proposed "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheet, including the rates, terms, and conditions, is lawful, just, and reasonable.

SCE&G's fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) are reasonable and prudent.

IT IS THEREFORE ORDERED THAT:

1. The fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G are reasonable and prudent for the period January 1, 2017, through December 31, 2017.

2. The methodologies used by SCE&G to calculate its avoided energy and avoided capacity costs under PURPA are reasonable and prudent.

3. Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of services, are lawful, just, and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2018.

4. SCE&G must update its Rate Schedules PR-1 and PR-2 during each annual fuel proceeding and is specifically denied its request for leave to update the Rates on an interim or "as-needed" basis.

5. SCE&G shall continue to develop and refine its solar profile as more data becomes available. The Company shall detail further refinements to this profile to the Commission in the next annual fuel proceeding.

6. SCE&G shall investigate and implement economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak.

7. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

8. The updated components of value for NEM Distributed Energy Resources listed in the table below comply with the NEM methodology approved by the Commission in Order No.

2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

	Current Period ($/kWh)	IRP Planning Horizon (15-Year Levelized) ($/kWh)	Components
1	$0.03070	$0.03010	Avoided Energy Costs
2	$0	$0	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00008	$0.00008	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03078	$0.03018	Subtotal
12	$0.00251	$0.00246	Line Losses @ 0.9245
13	$0.03329	$0.03264	**Total Value of NEM Distributed Energy Resources**

9. SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" and "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheets are lawful, just and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2018.

10. SCE&G's DER programs offered during the Review Period were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

11. SCE&G's proposed monthly per kWh DER Avoided Cost Components by class, as set forth below, properly allocate SCE&G's DER program avoided costs, are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	DER Avoided Cost Component (cents/kWh)
Residential	0.042
Small General Svc.	0.038
Medium General Svc.	0.032
Large General Svc.	0.019

12. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 1.00
Small & Medium Gen. Svc.	$ 5.37
Large General Service	$ 100.00

13. SCE&G shall set its Base Fuel Cost Component, Variable Environmental & Avoided Capacity Cost Components and Total Fuel Cost Factors consistent with the amounts set forth in the table below effective for bills rendered on and after the first billing cycle of May 2018.

Class	Base Fuel Cost Component (cents/kWh)	DERP Avoided Cost Component	Variable Environmental & Avoided Capacity Cost Component (cents/kWh)	Total Fuel Costs Factor (cents/kWh)
Residential	2.451	0.042	0.083	2.576
Small General Service	2. 451	0.038	0.075	2.564
Medium General Service	2. 451	0.032	0.063	2.546
Large General Service	2. 451	0.019	0.039	2.509
Lighting	2. 451	0.000	0.000	2.451

14. SCE&G shall file with the Commission the tariff sheets and rate schedules approved by this Order and all other retail tariff sheets within ten (10) days of receipt of this Order, and also serve copies on the Parties. The fuel rates reflected in any such tariff sheets shall be consistent with the components and factors set forth herein. The revised tariffs should be electronically filed in a text searchable PDF format using the Commission's DMS System (https://dms.psc.sc.gov/). An additional copy should be sent via e-mail to etariff@psc.sc.gov to be included in the Commission's ETariff system (https://etariff.psc.sc.gov). SCE&G shall provide a reconciliation of each tariff rate change approved as a result of this order to each tariff rate revision filed in the ETariff system. Such reconciliation shall include an explanation of any differences and be submitted separately from the Company's ETariff filing. Each tariff sheet shall contain a reference to this Order and its effective date at the bottom of each page.

15. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865(B) (2015).

16. SCE&G shall continue to file the monthly reports as previously required.

17. SCE&G shall account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit. ORS shall monitor the cumulative recovery amount.

18. SCE&G shall submit monthly reports of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater to the Commission and ORS.

19. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield. Chairman

ATTEST:

Comer H. Randall, Vice Chairman

Commissioner Fleming, Dissenting

While I agree with the uncontested matters of the fuel docket, with all due respect and appreciation for my fellow commissioners, I am unable to support this Order for the SCE&G fuel case and respectfully dissent regarding the PR1 and PR2 rates.

I would like to reiterate the positions made by ORS in their closing arguments that I found troubling.

- There was not enough time for the parties to engage in discovery in this docket and SCE&G either did not respond to discovery requests, responded late, or only responded partially. In my opinion, the condensed time period of this docket and these allegations of how SCE&G conducted discovery did not allow the other parties enough time to properly litigate this matter.

Based on the evidence of record, I concur with ORS and find that:

- SCE&G failed to establish its avoided capacity costs using the methodology approved by the Commission in Order No. 2016-297;
- The PR-1 Rate is not reasonable regarding avoided capacity costs;
- The PR-2 Rate is not reasonable regarding avoided capacity costs.
- There are errors in SCE&G's Reserve Margin calculations, as outlined in ORS Witness Horii's Direct and Surrebuttal Testimonies.

Other aspects that I disagree with include setting the winter reserve margin at 21%, which seems excessive, and whether SCE&G is in fact a winter peaking utility, which seems inconsistent with their historic load profile. Further, I feel that gains in energy efficiency and demand side management can play an important role in this regard.

I found that ORS's arguments in this docket to be persuasive. As such, I believe the Commission should reject SCE&G's position that avoided capacity cost should be set at $0.00 and find that SCE&G should maintain the previously set 2017 avoided capacity cost.

Last, I am concerned that the $0.00 avoided capacity cost could prove to be disruptive to the dynamic solar development that has occurred in S.C. since the passage of Act 236. Therefore, I am not supporting this Order.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E - ORDER NO. 2018-708

OCTOBER 30, 2018

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)))	ORDER DENYING REHEARING OR RECONSIDERATION

This matter comes before the Public Service Commission of South Carolina ("Commission") upon the Petitions for Rehearing or Reconsideration ("Petition") pursuant to S.C. Code § 58-27-2150 and 10 S.C. Code Ann. Regs. 103-825. Four parties, including the Office of Regulatory Staff ("ORS"), the South Carolina Coastal Conservation League, ("SCCCL"), the South Carolina Energy Users Committee ("Energy Users"), and the South Carolina Solar Business Alliance ("SBA"), have filed petitions requesting that the Commission rehear or reconsider its findings and conclusions in Order No. 2018-322(A) ("Order") in Docket No. 2018-2-E. South Carolina Electric & Gas Company ("SCE&G") did not file a petition.

The parties raise numerous issues which they ask the Commission to reconsider or rehear and to reach different findings and conclusions. The Order was comprehensive, supported by the evidence of record, and consistent with the statutes which govern fuel proceedings. All the concerns raised by the petitions are properly handled in a single Commission order, since many of the concerns raised are similar or identical.

First, as to the principal concern raised by the South Carolina Energy Users Committee, we clarify now that it was the Commission's intention, having received no objection and with mutual agreement, to order SCE&G to, upon written request by any party of record, provide to that party (1) copies of the monthly fuel recovery reports currently filed with the Commission and ORS and (2) quarterly forecasts beginning with the quarter ending June 30, 2018, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/under-collected balance to date.

In previous fuel proceedings, SCE&G and the other parties - then parties to settlement agreements - would mutually consent that SCE&G would put forth reasonable efforts to forecast its expected fuel factors to be set at the next annual fuel proceeding and that these quarterly good-faith forecasts would not be admitted into evidence in any future SCE&G proceeding. In this proceeding the parties wish to be similarly bound by all aspects of those legacy agreements and so we impose the duties and limitations historically included in the parties' settlements in previous fuel proceedings into our decision and Order in this Docket. In effect, we grant the Energy Users' Petition and, to the extent that other parties have sought the same relief in their respective petitions, that relief is also granted.

Several of the petitions have raised the issue that our Order improperly shifted the burden of proof from SCE&G to the Intervenors or ORS. That contention is a mischaracterization of Order No. 2018-322(A). The Commission did not shift the burden from SCE&G to the other parties, and the burden of proof always resides, as it must, with SCE&G. However, the other parties do have a burden of persuasion that their proposed

alternatives are reasonable and viable if they seek adoption of those alternatives, as they did in this proceeding.

The Petitioners assert that they presented alternatives to SCE&G's proposed avoided capacity cost factor, but none of those parties offered probative evidence of a computed factor as opposed to a mere concept for deriving a factor, such as ORS Witness Horii proposed for Commission consideration. None of the proposals of those parties represent fully viable alternatives. Consequently, the parties failed to meet their burden of persuasion to prove to this Commission the reasonableness and viability of any alternatives to SCE&G's proposal.

Several of the parties assert that SCE&G's responses to their discovery requests were insufficient to allow them to prepare evidence by which they might have proposed alternatives to SCE&G's proposed avoided-cost factor. For example, the ORS complains that, "SCE&G failed to cooperate by providing complete and reliable data in a timely manner and, therefore, had the ability to dictate the extent to which other parties could present their cases."[1] Various discovery devices are available to enable a party to gather information to prepare and present evidence in our proceedings. If there were a discovery dispute, the proper mechanism to require a party to provide properly discoverable information is a motion to compel. No party moved to compel discovery in this proceeding.

Moreover, this Commission understood that all discovery issues were actually resolved prior to the hearing. For example, by its March 7th filing, the South Carolina Solar Business Alliance stated that, as a result of avoided cost issues being considered as a

[1] ORS Petition at pg. 6

part of the fuel case, it needed an additional 90 days to prepare its case, or, in the alternative, it requested that the case be continued until the parties had "ample time to complete discovery requests and report back to the Commission." SBA argued that the issues were too complicated for adequate preparation in the existing timeframe. However, in resolution of the Petitioners' shared concerns about adequacy of time for discovery, the parties later advised the Commission of an agreement among the parties, subsequently approved by the Commission by Directive Order No. 2018-178, that the company and the parties had resolved their differences. Specifically, they informed the Commission that these issues had been resolved through a commitment from SCE&G to provide discovery responses prior to their due date and to agree to extensions of SBA's prefiled testimony deadlines. Therefore, this Commission issued an Order on March 14th approving the parties' settlement resolving SBA's initial request for a 90-day delay. The parties availed themselves of the concession by SCE&G with the filing of their direct and surrebuttal testimony. Having received the benefit of accelerated discovery production and additional time to file testimony, and this Commission's approval of such a settlement, the parties' position describing a lack of cooperation and time for preparation seems inconsistent with the prehearing representations and agreements.

There is a contention by the South Carolina Solar Business Alliance that using the approved avoided capacity factor from the most recent fuel case should enjoy a presumption of reasonableness and could be adopted as an alternative to SCE&G's proposal. In this case, those Petitioners would have the Commission extract a single element (the avoided capacity factor) out of a historical fuel factor and ignore the effects

of the passage of time and all attendant changing circumstances. Pursuant to South Carolina Code Section 58-27-865(B), the fuel statute's recognition of changing environments and the appropriate and commensurate regulatory response compels us to revisit, reset, and redefine the fuel factors during these annual proceedings.

The use of a previously approved factor might be appropriate in the circumstance in which no party had satisfactorily proven its case. That is not the circumstance here. In Order No. 2018-322(A), this Commission made specific individual findings as to each element of SCE&G's proposed rates and we implicitly or explicitly found the underlying methodology for deriving them to be reasonable. Regarding this subject, SCE&G, upon whom the burden of proof resides, has met its burden.

The SBA would have the Commission use post-hearing compliance filings to fill in evidentiary gaps after the hearing. While such a filing may be used to address a recalculation of narrow and specific adjustments to a proposed rate, it is inappropriate and improper for a party to attempt to use post-hearing compliance filings as a method to force an adverse party to generate the moving party's own proposals. Even if that were done, the proposal of such a factor would be effectively unavailable for cross-examination by the parties or exploration by this Commission.

Of course, nothing in this Order or in Order No. 2018-322(A) would preclude any party in future fuel proceedings from preparing and presenting evidence of alternatives to any proposal or concerning any presented issue.

IT IS THEREFORE ORDERED:

1. SCE&G shall, upon written request by any party of record, provide to that party (1) copies of the monthly fuel recovery reports currently filed with the Commission and ORS and (2) quarterly forecasts beginning with the quarter ending June 30, 2018, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/under-collected balance to date. SCE&G shall put forth reasonable efforts to forecast its expected fuel factors to be set at the next annual fuel proceeding, and these quarterly good-faith forecasts shall not be admitted into evidence in any future SCE&G proceeding.

2. All other relief requested in the Petitions for Rehearing or Reconsideration are denied.

Comer H. "Randy" Randall, Chairman

ATTEST:

Jocelyn Boyd, Chief Clerk/Administrator

ACCEPTED FOR PROCESSING - 2018 March 28 2:06 PM - SCPSC - 2017-2-E - Page 1 of 1

SOUTH CAROLINA PUBLIC SERVICE COMMISSION

STANDING HEARING OFFICER DIRECTIVE

DOCKET NOS. 2017-2-E and 2018-2-E ORDER NO. 2018-36-H

MARCH 28, 2018

Standing Hearing Officer: David Butler

DOCKET DESCRIPTION:
Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company

MATTER UNDER CONSIDERATION:
Request of Counsel for the South Carolina Coastal Conservation League ("SCCCL") and the Southern Alliance for Clean Energy ("SACE") for Expedited Treatment of the Petition for an Order Requiring South Carolina Electric & Gas Company ("SCE&G") to Comply with Commission Order No. 2018-55 ("the Petition")

STANDING HEARING OFFICER'S ACTION:
Counsel for SCCCL and SACE requests expedited treatment for the Petition cited above, given the overlap with Docket No. 2018-2. Counsel notes that SCE&G cites to Rule 103-830 (B) (1) – (2) in seeking service directly from the Clerk and an additional 30 days to respond. Counsel also asserts that those rule provisions refer specifically to Petitions for Declaratory Orders and Petitions for a Rule to Show Cause, and the Petition filed by counsel is neither of these. Thus, counsel believes that SCE&G is not entitled to service directly from the Clerk, nor is SCE&G entitled to 30 days to respond. I agree. The Rule cited only applies to Petitions for Declaratory Orders and Petitions for a Rule to Show Cause, not Petitions such as the one contemplated here.

SCE&G has indicated that it intends to respond to the Motion to Bifurcate filed by the South Carolina Solar Business Alliance in Docket No. 2018-2-E by April 2, 2018. As Counsel points out, a response to the SCCCL and SACE Petition would allow the Commission to rule on the matters before the scheduled April 10, 2018 hearing. It appears that the Petition at issue was served on SCE&G electronically and by first class mail on March 21. Given these facts, and the clear need for expedited treatment of the Petition, SCE&G (and other parties who may wish to respond) shall file and serve its response to the Petition at issue on April 2, 2018, which is the same day that it has determined that it will respond to the Solar Business Alliance's Motion to Birfurcate.

Action Item 3

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**April 04, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:

DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration the Motion to Bifurcate Issues Filed on Behalf of South Carolina Solar Business Alliance, Incorporated.

COMMISSION ACTION:

On March 26 we received a Motion to Bifurcate Issues from the South Carolina Solar Business Alliance ("Alliance) in Docket No. 2018-2-E. The Motion requests that certain matters be removed from consideration in this fuel proceeding. Specifically, the Alliance asks us to separate the issues of SCE&G's PR-2 Rate update and any proposed changes requested to the avoided cost methodology from the rest of the issues. The reason for the request is, essentially, that due process is not being afforded because of the procedural schedule. The motion argues that the Alliance has had insufficient time to address SCE&G's proposed change to its avoided cost methodology in this case.

However, Docket No. 2018-2-E was established in October 2017, and a Notice of Hearing and Prefile Testimony Deadlines was issued and noticed no later than December 17, 2017. The Notice of Hearing explicitly states that the avoided costs will be considered in the case. Moreover, this is consistent with prior practice. For several prior annual proceedings, SCE&G has consistently included avoided costs in its PR-2 Rate, and updated that rate during the fuel proceedings – exactly as it proposes to do now.

I would note that in our Order 2016-297 in Docket No. 2016-2-E (which, like 2017-2-E, is an annual SCE&G fuel case in which the Alliance was a party) stated that, "In accordance with Act 236 of 2014, any adjustments to the PR-1 or PR-2 tariff should be considered as part of the Company's annual fuel proceeding." Additionally, S.C. Code § 58-27-865(A)(2)(c) requires us to include avoided costs under PURPA as part of fuel costs related to purchased power.

Likewise, the Alliance did not challenge our decision that SCE&G's proposed changes to avoided cost methodology and updates to PR-2 should be considered in the 2018 fuel case. As a result, the Alliance is barred from seeking the same relief which was previously rejected in Order No. 2018-55 in Docket No. 2017-2-E.

Any due process concern must be examined carefully to make sure that all parties are given an adequate opportunity to honor their rights under the law. In this instance, the motion before us fails to convince me that such rights have been violated. Of course, avoided cost, which is required by statute to be considered in fuel proceedings, largely results in the PR-2 schedules. Therefore, both the PR-2 schedule and avoided cost matters have been incorporated into these fuel proceedings in the past. Further, the motion today is made by a party that was also a party to those proceedings.

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Given all the circumstances, I move that we deny the Alliance's motion.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☑	☑	☐	
ELAM	☐	☑	☐	
FLEMING	☐	☑	☐	
HAMILTON	☐	☑	☐	
HOWARD	☐	☑	☐	
RANDALL	☐	☑	☐	
WHITFIELD	☐	☑	☐	

(SEAL)

RECORDED BY: J. Schmieding

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ACCEPTED FOR PROCESSING - 2018 April 5 4:28 PM - SCPSC - 2018-2-E - Page 1 of 4

SOUTH CAROLINA PUBLIC SERVICE COMMISSION

STANDING HEARING OFFICER DIRECTIVE

DOCKET NOS. 2017-2-E and 2018-2-E - ORDER NO. 2018-42-H

APRIL 5, 2018

Standing Hearing Officer: David Butler

DOCKET DESCRIPTION:

Annual Review of Base Rates for Fuel Costs of South Carolina Electric & Gas Company

Annual Review of Base Rates for Fuel Costs of South Carolina Electric & Gas Company

MATTER UNDER CONSIDERATION:

Petition for an Order Requiring South Carolina Electric & Gas Company to Comply with Commission Order No. 2018-55

STANDING HEARING OFFICER'S ACTION:

This matter comes before this Standing Hearing Officer on the Petition of the South Carolina Coastal Conservation League ("SCCCL") and Southern Alliance for Clean Energy ("SACE") (together, the "Petitioners") for an Order requiring South Carolina Electric & Gas Company ("SCE&G" or the "Company") to comply with Commission Order No. 2018-55, dated January 24, 2018.

By way of background, the Petitioners state that in the Docket No. 2017-2-E SCE&G fuel docket, specifically in Order No. 2017-246, the Commission granted SCE&G's request to update avoided cost rates every six months. On December 22, 2017, SCE&G requested a waiver of the provision that it file a six-month update to avoided cost rates, citing, among other things, uncertainty due to recent events such as the abandonment of new nuclear units at the V.C. Summer Station. The Petitioners and other objected to the waiver request, expressing concern that there would be significant proposed changes to the methodology that would be inconsistent with federal law, and other authorities. On January 24, 2018, the Commission issued Order No. 2018-55 in Docket No. 2017-2-E, granting SCE&G's request for a waiver. The Commission agreed in that Order that uncertainty driven by recent events, as well as judicial economy, warranted addressing the issues raised in the context of the annual fuel proceeding. The Commission also noted that any proposed changes to avoided cost calculations should be considered in the next annual fuel proceeding, which was scheduled for hearing on April 10, 2018. Order No. 2018-55 also

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adopted the request of the Petitioners that SCE&G be required put the proposed rate in its pre-filed testimony in the fuel proceeding.

The Petitioners argue that it appears that the methodology utilized by SCE&G to calculate avoided cost values in its testimony filed on February 23, 2018, has been significantly altered from the methodology that was approved by the Commission in Docket No. 2017-2-E. In last year's filing, SCE&G used, according to the Petitioners, a capacity valuation methodology where it first calculated the capacity value over a 15-year planning period using a difference in revenue requirement methodology. Then it allocated that capacity value based on the frequency with which load was within 95% of seasonal peak. This year, the Petitioners state that the Company took the position that QF capacity has no value at all because it does not provide peak contribution in the winter. The Petitioners assert that this is a completely different methodology that has profound impacts on the capacity value of qualifying facilities, and that SCE&G has used updated inputs also to calculate avoided cost values. The Petitioners note that all of the avoided cost numbers filed on that date incorporate similar changes to the underlying methodology, but that, to date, no new avoided cost methodology has been approved by the Commission. Their belief is that the "currently approved" avoided cost methodology as "approved" in the 2017 Order must be applied exactly to this year's avoided costs and the PR-2 rate, without change to any parameters except for updated data. Further, the Intervenors state that "SCE&G, having been directed by Order 2017-246 to follow this methodology," has failed to follow the Commission's order.

Accordingly, the Petitioners request that the Commission issue an order requiring SCE&G to "comply with Order No. 2018-55" by filing an updated PR-2 rate based on "approved methodology," and for other relief. The Office of Regulatory Staff supports the relief sought by the Petitioners. However, SCE&G moves to dismiss the Petition.

SCE&G asserts, among other things, that Order No. 2018-55, dated January 24, 2018, clearly states that Rate PR-2 should be appropriately addressed in the context of the fuel case in April, and that the Company "is planning to implement changes to certain aspects of its avoided cost calculation." The Order concluded that SCE&G should be required "to put that proposed rate in its pre-filed testimony." The Commission made no finding in Order 2018-55 that SCE&G should be required to update its Rate PR-2 based on any "prior approved" methodology or that it go into effect as soon as possible. Rather, Order No. 2018-55 specifically sets out that issues regarding updates to Rate PR-2 should be addressed and decided in the fuel case on the basis that it would "promote judicial economy and allow the issue to be addressed expeditiously." According to SCE&G, the pre-filed testimony of Dr. Lynch in Docket No. 2018-2-E contained the proposed Rate PR-2, which reflected the changes in the Company's prior filings. Thus, SCE&G asserts that it is

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in compliance with the provisions of Order No. 2018-55, which simply required SCE&G to include its "proposed" Rate PR-2 in its testimony.

I agree. After a review of the relevant documents in this case, I conclude that the SCE&G Motion to Dismiss the Petition must be granted. Clearly, there is no provision of Order No. 2018-55 that requires SCE&G to file an updated PR-2 rate based on a specific methodology, even one that the Commission has previously found reasonable. Further, Order No. 2017-246 does not "approve," nor require for future use, a methodology, but simply finds the methodology used in that fuel case under Docket No. 2017-2-E to be reasonable under the facts in that case. It is notable that, in Order 2017-246, the Commission, although it does recognize that the 2017 methodology is consistent with the 2016 methodology, does not rule out the consideration of other methodologies, although it rejects an alternate methodology proposed by another witness in that case. Accordingly, the Commission clearly examined the methodology to be used under the facts of the 2017 case, and may allow proposed changes from prior such methodologies, if given the proper evidentiary basis to do so. The South Carolina Supreme Court has held that the Commission may not merely rely on past practices to rule on current cases, without specific evidentiary support. See Porter v. South Carolina Public Service Commission, 333 S.C. 12, 507 S.E. 2d 328 (1998).

It should be pointed out that, although the Commission found in Order No. 2017-246 that the 2017 methodology was consistent with the 2016 methodology, the Commission was not establishing a "standard methodology," but was only declaring that the 2017 methodology was like the 2016 methodology. Further, the Commission examined each methodology in each respective fuel case, and found each one to be reasonable and prudent, while recognizing the similarity of the two in Order No. 2017-346. It should be noted that the Commission-approved Settlement Agreement in Docket No. 2017-2-E states only that the methodologies used to calculate avoided costs in that case were reasonable and prudent. There is no mention of the methodology used from the year before. See Settlement Agreement attached to Commission Order No. 2017-246 at p. 3. Also, compare and contrast the "consistent" language in that Order discussing avoided cost with the language describing the updated components of value for NEM Distributed Energy Resources between two years. "The updated components of value for NEM Distributed Energy Resources as shown in Table 6 on page 15 of the direct testimony of SCE&G Witness Lynch are reasonable and prudent, comply with the NEM methodology approved by the Commission in Order No. 2015-194..." (emphasis added). If the Commission had intended to approve a standard for avoided cost methodology, it would have used the "comply" terminology described above, i.e. the Commission would have stated that the 2017 methodology complied with the 2016 methodology. This was not the case.

Finally, I would point out that disputes over the proper methodology for calculating avoided costs, and the submission of alternate methodologies are not unique to this Docket. See SCE&G Docket Nos. 2016-2-E and 2017-2-E, for similar disputes. The present Docket is only the latest in a series of such disputes. The Commission must hear each case and decide the case based on the evidence presented. See South Carolina Energy Users Committee v. South Carolina Electric & Gas Company, 410 S.C. 348, 764 S.E. 2d 913 (2014).

In sum, SCE&G's Motion to Dismiss the Petition is granted, based on the discussion herein.

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SOUTH CAROLINA PUBLIC SERVICE COMMISSION

STANDING HEARING OFFICER DIRECTIVE

DOCKET NOS. 2017-2-E and 2018-2-E - ORDER NO. 2018-44-H

APRIL 9, 2018

Standing Hearing Officer: David Butler

DOCKET DESCRIPTION:

Annual Review of Base Rates for Fuel Costs of South Carolina Electric & Gas Company

Annual Review of Base Rates for Fuel Costs of South Carolina Electric & Gas Company

MATTER UNDER CONSIDERATION:

Petition to Reconsider Order No. 2018-42-H

STANDING HEARING OFFICER'S ACTION:

This matter comes before this Standing Hearing Officer on the Petition of the South Carolina Coastal Conservation League ("SCCCL") and Southern Alliance for Clean Energy ("SACE") (together, the "Petitioners") to reconsider Order No. 2018-42-H, which granted a Motion to Dismiss filed by South Carolina Electric & Gas Company ("SCE&G"). Order No. 2018-42-H dismissed the Petitioners' Petition for an Order requiring SCE&G to comply with Commission Order No. 2018-55, dated January 24, 2018. After examination of the Petitioners' arguments, I dismiss the Petition to Reconsider.

Clearly, the dispute described by the Petition to Reconsider and the various documents filed by SCE&G is over the meaning of the last sentence in Commission Order No. 2018-55, which reads as follows: "One point the Coastal Conservation League made in its response was a request to require SCE&G to put that proposed rate in its prefiled testimony in the fuel proceeding, and I agree that we ought to require SCE&G to do that." SCCCL and SACE argue that this meant that SCE&G was required to file not just the newly proposed rates with methodology changes, but also the semi-annual PR-2 update without changing the underlying methodology, since this is what SCCCL and SACE referenced and requested as relief in their January 16, 2018 Response to SCE&G's Request for a Waiver of Commission Order 2017-246. See Petition to Reconsider at 2. In turn, SCE&G argues that since the Commission used the terminology "proposed" rate in Order No. 2018-55, the Commission could not have meant that the information based on the previous methodology was to be included in the prefiled testimony, since that rate based on the older methodology was not "proposed" to the Commission for approval. See SCE&G Motion to Dismiss at 5-6.

It is noteworthy that SCCCL and SACE requested the same information that they seek here in discovery, and that the Company provided the four avoided energy costs for PR-2 under the methodology approved in Docket No. 2017-2-E and other information related to SCE&G's calculated avoided energy costs. The Company furnished the information on March 16, 2018, which meant that SCCCL and SACE had the ability and information to propose alternate rates in their direct testimony, which was prefiled in this Docket on March 23, 2018, but the Petitioners chose not to do so.

Accordingly, even if the Petitioners are correct in their interpretation of the Commission's language in Order No. 2018-55, they are not prejudiced by the absence of the information in SCE&G prefiled testimony. Since they have the information, they may use it at trial in the cross-examination of the witnesses for SCE&G, some of whom would have been clearly involved in developing the information provided in the data request.

Considering the fact that the Petitioners are not prejudiced in this matter, no matter how the relevant phrase in Order No. 2018-55 is interpreted, the Petition to Reconsider is denied. The Petitioners (or other parties) may use the desired information as described above in the trial of this case.

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Action Item 12

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**April 25, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:
DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration South Carolina Electric & Gas Company's Annual Review of Base Rates for Fuel Costs.

COMMISSION ACTION:
Mr. Chairman, fuel cases have become vastly more complex than they have been historically, and I shall attempt to be thorough in my motion.

First, Mr. Chairman, I move that we approve the fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G as reasonable and prudent for the period January 1, 2017, through December 31, 2017. These matters, which historically were the central issues in our annual fuel proceedings, were essentially uncontested during this proceeding.

Second, Mr. Chairman, I move that we find the methodologies used by SCE&G to calculate its avoided energy costs under PURPA are reasonable and prudent, and that, likewise, the resulting avoided energy costs proposed by SCE&G are also reasonable and prudent. Moreover, since effectively all new Qualifying Facilities requesting to connect with SCE&G are solar installations, it is appropriate that a solar profile be used in valuing the contributions of the installations to SCE&G's system. It is my understanding that SCE&G was operating with limited data when developing the current solar profile. I move that we expect and require that SCE&G continue to refine the solar profile as more installations come online and update the profile such that solar is given all due credit for the benefits of their generation.

Third, Mr. Chairman, I move that we find the avoided capacity cost proposed by SCE&G reasonable and prudent. This, above all, was the most litigated and contested point at hearing – and with good reason. The avoided capacity cost being proposed is $0.00. I think that this represents a novel approach by SCE&G to characterize itself as a winter-peaking utility, which is different from my historic understanding of the company's load profile. The implications of a winter-peaking system load upon avoided capacity for solar-dependent generators is severe. Indeed, it seems to be that, but for having to make up for some 300 MW of solar power that is not available during peak demand in the winter, it would still be a summer-peaking utility. I would strongly urge the utility to investigate and implement additional Demand-Side Management and Energy Efficiency measures targeted at reducing load during the winter peak, such that the utility would be positioned to avoid capacity cost with solar generation.

Point in fact, however, we were not presented with a viable avoided capacity cost factor by any party except SCE&G. The other parties took great pains to explain how they believe

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SCE&G inappropriately derived its factor, but the parties failed to present an alternative for us to consider. In these fuel proceedings, it is not legally sound under 58-27-865(A)(2)(c) to assert that, because a party disagrees with the newly proposed factor, then a legacy factor approved in a prior proceeding should be maintained. Moreover, it is not sufficient for a litigating party to meet its burden of proof by asking a utility, after the hearing, to develop a new factor pursuant to that party's specifications for inclusion in rates – an approach several parties would have us do as suggested by proposed orders.

We are, however, bound to the record as it exists. For these reasons, I think we should approve SCE&G's proposed PR-1 and PR-2 rates for use beginning with the first billing cycle in May 2018. Mr. Chairman, I would point out that this decision will have positive impacts for ratepayers of all classes.

Fourth, Mr. Chairman, I move that we find SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology found reasonable in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, et seq. (2015). Additionally, the updated components of value for NEM Distributed Energy Resources proposed by the Company properly evaluates and/or quantifies all categories of potential costs or benefits to SCE&G's system at this time. Accordingly, SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" and "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariffs are just and reasonable and approved for use beginning with the first billing cycle in May 2018.

I also move that we find SCE&G's DER programs offered during the Review Period were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

Mr. Chairman, the resulting fuel factor after adjustments for a Residential customer is going to be 2.576 cents per kWh.

I would take a moment to note the following things. While the parties have been afforded due process in this proceeding, I have reflected upon the greatly increased complexity of fuel cases going forward, and would request that Commission Staff set an appropriate procedural schedule in future fuel proceedings, affording the parties ample opportunity to perform analyses and make recommendations. Further, while the avoided capacity rate will be set at $.00 for the next year – and it is only effective for one year - the parties will be free to revisit the rate in the next annual fuel case proceeding. Mr. Chairman, with the increased complexity of the litigation in this and foreseeable fuel proceedings, I recommend that we require the matter of setting the PR-1 and PR-2 rates, and the underlying avoided capacity and avoided energy costs be raised and settled only in the annual proceeding. I think that having a new hearing on the issues more than once per year is simply unworkable and would ultimately result in near-continuous litigation and would fail to provide adequate certainty to solar developers and the Company. I would also note that in the interim time, while the proposed avoided capacity rate has been established, the benefits of the resulting rates will flow directly to the customers.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☐	☑	☐	

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ELAM	☐	☑	☐		
FLEMING	☐	☐	☑		
HAMILTON	☐	☑	☐		
HOWARD	☐	☐	☐	Absent	Family Sick Leave
RANDALL	☐	☑	☐		
WHITFIELD	☐	☑	☐		

(SEAL)

RECORDED BY: J. Schmieding

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Action Item 13

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**May 23, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:
DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration of the Petition for Rehearing and/or Reconsideration Filed on Behalf of the Office of Regulatory Staff.

COMMISSION ACTION:
Mr. Chairman, we've received four Petitions - one from each party of record other than the company to reconsider or rehear our Order No. 2018-322(A) in Docket No. 2018-2-E. The parties raise numerous issues which they ask the Commission to reconsider or rehear and to reach different findings and conclusions. In my view, our Order was comprehensive, supported by the evidence of record, and consistent with the statutes which govern fuel proceedings. I would like to address all the concerns raised by the Petitions in my single motion, since many of the concerns raised are similar or identical.

First, as to the principal concern raised by the South Carolina Energy Users Committee, I move that we clarify now that it was our intention that, having received no objection and with mutual agreement, to order SCE&G to, upon written request by any party of record, provide to that party (1) copies of the monthly fuel recovery reports currently filed with the Commission and ORS and (2) quarterly forecasts beginning with the quarter ending June 30, 2018, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/under-collected balance to date. In previous fuel proceedings, SCE&G and the other parties then parties to settlement agreements would mutually consent that SCE&G would put forth reasonable efforts to forecast its expected fuel factors to be set at the next annual fuel proceeding and that these quarterly good-faith forecasts would not be admitted into evidence in any future SCE&G proceeding. I understand that the parties wish to be similarly bound by all aspects of those legacy agreements and so, Mr. Chairman, I move we impose the duties and limitations historically included in the parties' settlements in previous fuel proceedings into our decision and order in this docket. In effect, Mr. Chairman, I move that we grant the Energy Users' Petition and, to the extent that other parties have sought the same relief in their respective Petitions, that relief should be granted.

Mr. Chairman, several of the Petitions have raised the issue that our Order improperly shifted the burden of proof from SCE&G to the Intervenors or ORS. That contention is a mischaracterization of our Order. We did not shift the burden from SCE&G to the other parties, and the burden of proof always resides, as it must, with SCE&G. However, the other parties do have a burden of persuasion that their proposed alternatives are reasonable and viable if they seek adoption of those alternatives, as they did here. In fact, the Petitioners assert that they presented alternatives to SCE&G's proposed avoided capacity cost factor, but none of those parties offered probative evidence of a computed factor as opposed to a mere concept for deriving a factor, as ORS Witness Horii proposed for our consideration. None of

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the proposals of those parties represent fully viable alternatives. Consequently, the parties failed to meet their burden of persuasion to prove to this Commission the reasonableness and viability of any alternatives to SCE&G's proposal.

Several of the parties assert that SCE&G's responses to their discovery requests were insufficient to allow them to prepare evidence by which they might have proposed alternatives to SCE&G's proposed avoided-cost factor. For example, the ORS complains that, "SCE&G failed to cooperate by providing complete and reliable data in a timely manner and, therefore, had the ability to dictate the extent to which other parties could present their cases." Various discovery devices are available to enable a party to gather information to prepare and present evidence in our proceedings. If there were a discovery dispute, the proper mechanism to require a party to provide properly discoverable information is a motion to compel. No party moved to compel discovery in this proceeding. Moreover, this Commission understood that all discovery issues were actually resolved prior to the hearing. For example, by its March 7th filing, the Solar Business Alliance stated that, as a result of the PR-1 and PR-2 and avoided-cost issues being considered as a part of the fuel case, it needed an additional 90 days to prepare its case, or, in the alternative, it requested that the case be continued until the parties had, "ample time to complete discovery requests and report back to the Commission." SBA considered that the issues were too complicated for adequate preparation in the existing timeframe.

In resolution of the Petitioners' shared concerns about adequacy of time for discovery, the parties advised the Commission of an agreement among the parties subsequently approved by the Commission by Directive Order No. 2018-178, issued March 14, 2018 that the company and the parties had resolved their differences as to the procedural schedule in this case. Specifically, they informed the Commission that these issues had been resolved through a commitment from SCE&G to provide discovery responses prior to their due date and to agree to extensions of SBA's prefiled testimony deadlines. Therefore, this Commission issued an order on March 14th approving the parties' settlement resolving SBA's initial request for a 90-day delay.

The parties availed themselves of the concession by SCE&G with the filing of their direct and surrebuttal testimony. Having received the benefit of accelerated discovery production and additional time to file testimony, and this Commission's approval of such a settlement, the parties' position describing a lack of cooperation and time for preparation seems inconsistent with the prehearing representations.

There is a contention by the Solar Business Alliance that using the approved factor from the most recent fuel case should enjoy a presumption of reasonableness and could be adopted as an alternative to SCE&G's proposal. Unlike a mere concept, a previously approved factor has already been litigated. In this case, those Petitioners would have us extract a single element out of a historical fuel factor and ignore the effects of the passage of time and all attendant changing circumstances. Pursuant to South Carolina Code Section 58-27-865(B), the fuel statute's recognition of changing environments and the appropriate and commensurate regulatory response compels us to revisit, reset, and redefine the fuel factors during these annual proceedings. The use of a previously approved factor might be appropriate in the circumstance in which no party had satisfactorily proven its case. That is not the circumstance here.

In Order No. 2018-322(A), this Commission made specific individual findings as to each element of SCE&G's proposed rates and we implicitly or explicitly found the underlying methodology for deriving them to be reasonable. Regarding this subject, SCE&G, upon whom the burden of proof resides, has met its burden.

The Solar Business Alliance would have us use post-hearing compliance filings to fill in

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evidentiary gaps after the hearing. While such a filing may be used to address a recalculation of narrow and specific adjustments to a proposed rate, it is inappropriate and improper for a party to attempt to use post-hearing compliance filings as a method to force an adverse party to generate the moving party's own proposals. Even if that were done, the proposal of such a factor would be effectively unavailable for cross-examination by the parties or exploration by this Commission.

I would note, finally, that nothing in this motion or in our Order No. 2018-322(A) would preclude any party to this proceeding from preparing and presenting evidence of alternatives to any proposal or concerning any issue in future fuel proceedings.

For these reasons, Mr. Chairman, I move that we grant reconsideration to the South Carolina Energy Users' Petition, which would also include granting reconsideration to the other Petitioners to the extent that they sought the same relief regarding the quarterly and monthly reports. Mr. Chairman, I move that we deny reconsideration and/or rehearing on all other matters brought before us and all other petitions for reconsideration and/or rehearing.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☑	☑	☐	
ELAM	☐	☑	☐	
FLEMING	☐	☐	☑	
HAMILTON	☐	☑	☐	
HOWARD	☐	☑	☐	
RANDALL	☐	☑	☐	
WHITFIELD	☐	☑	☐	

(SEAL)

RECORDED BY: J. Schmieding

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Action Item 14

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**May 23, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:
DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration of the Petition for Rehearing or Reconsideration Filed on Behalf of the South Carolina Energy Users Committee.

COMMISSION ACTION:
Mr. Chairman, we've received four Petitions - one from each party of record other than the company to reconsider or rehear our Order No. 2018-322(A) in Docket No. 2018-2-E. The parties raise numerous issues which they ask the Commission to reconsider or rehear and to reach different findings and conclusions. In my view, our Order was comprehensive, supported by the evidence of record, and consistent with the statutes which govern fuel proceedings. I would like to address all the concerns raised by the Petitions in my single motion, since many of the concerns raised are similar or identical.

First, as to the principal concern raised by the South Carolina Energy Users Committee, I move that we clarify now that it was our intention that, having received no objection and with mutual agreement, to order SCE&G to, upon written request by any party of record, provide to that party (1) copies of the monthly fuel recovery reports currently filed with the Commission and ORS and (2) quarterly forecasts beginning with the quarter ending June 30, 2018, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/under-collected balance to date. In previous fuel proceedings, SCE&G and the other parties then parties to settlement agreements would mutually consent that SCE&G would put forth reasonable efforts to forecast its expected fuel factors to be set at the next annual fuel proceeding and that these quarterly good-faith forecasts would not be admitted into evidence in any future SCE&G proceeding. I understand that the parties wish to be similarly bound by all aspects of those legacy agreements and so, Mr. Chairman, I move we impose the duties and limitations historically included in the parties' settlements in previous fuel proceedings into our decision and order in this docket. In effect, Mr. Chairman, I move that we grant the Energy Users' Petition and, to the extent that other parties have sought the same relief in their respective Petitions, that relief should be granted.

Mr. Chairman, several of the Petitions have raised the issue that our Order improperly shifted the burden of proof from SCE&G to the Intervenors or ORS. That contention is a mischaracterization of our Order. We did not shift the burden from SCE&G to the other parties, and the burden of proof always resides, as it must, with SCE&G. However, the other parties do have a burden of persuasion that their proposed alternatives are reasonable and viable if they seek adoption of those alternatives, as they did here. In fact, the Petitioners assert that they presented alternatives to SCE&G's proposed avoided capacity cost factor, but none of those parties offered probative evidence of a computed factor as opposed to a mere concept for deriving a factor, as ORS Witness Horii proposed for our consideration. None of

the proposals of those parties represent fully viable alternatives. Consequently, the parties failed to meet their burden of persuasion to prove to this Commission the reasonableness and viability of any alternatives to SCE&G's proposal.

Several of the parties assert that SCE&G's responses to their discovery requests were insufficient to allow them to prepare evidence by which they might have proposed alternatives to SCE&G's proposed avoided-cost factor. For example, the ORS complains that, "SCE&G failed to cooperate by providing complete and reliable data in a timely manner and, therefore, had the ability to dictate the extent to which other parties could present their cases." Various discovery devices are available to enable a party to gather information to prepare and present evidence in our proceedings. If there were a discovery dispute, the proper mechanism to require a party to provide properly discoverable information is a motion to compel. No party moved to compel discovery in this proceeding. Moreover, this Commission understood that all discovery issues were actually resolved prior to the hearing. For example, by its March 7th filing, the Solar Business Alliance stated that, as a result of the PR-1 and PR-2 and avoided-cost issues being considered as a part of the fuel case, it needed an additional 90 days to prepare its case, or, in the alternative, it requested that the case be continued until the parties had, "ample time to complete discovery requests and report back to the Commission." SBA considered that the issues were too complicated for adequate preparation in the existing timeframe.

In resolution of the Petitioners' shared concerns about adequacy of time for discovery, the parties advised the Commission of an agreement among the parties subsequently approved by the Commission by Directive Order No. 2018-178, issued March 14, 2018 that the company and the parties had resolved their differences as to the procedural schedule in this case. Specifically, they informed the Commission that these issues had been resolved through a commitment from SCE&G to provide discovery responses prior to their due date and to agree to extensions of SBA's prefiled testimony deadlines. Therefore, this Commission issued an order on March 14th approving the parties' settlement resolving SBA's initial request for a 90-day delay.

The parties availed themselves of the concession by SCE&G with the filing of their direct and surrebuttal testimony. Having received the benefit of accelerated discovery production and additional time to file testimony, and this Commission's approval of such a settlement, the parties' position describing a lack of cooperation and time for preparation seems inconsistent with the prehearing representations.

There is a contention by the Solar Business Alliance that using the approved factor from the most recent fuel case should enjoy a presumption of reasonableness and could be adopted as an alternative to SCE&G's proposal. Unlike a mere concept, a previously approved factor has already been litigated. In this case, those Petitioners would have us extract a single element out of a historical fuel factor and ignore the effects of the passage of time and all attendant changing circumstances. Pursuant to South Carolina Code Section 58-27-865(B), the fuel statute's recognition of changing environments and the appropriate and commensurate regulatory response compels us to revisit, reset, and redefine the fuel factors during these annual proceedings. The use of a previously approved factor might be appropriate in the circumstance in which no party had satisfactorily proven its case. That is not the circumstance here.

In Order No. 2018-322(A), this Commission made specific individual findings as to each element of SCE&G's proposed rates and we implicitly or explicitly found the underlying methodology for deriving them to be reasonable. Regarding this subject, SCE&G, upon whom the burden of proof resides, has met its burden.

The Solar Business Alliance would have us use post-hearing compliance filings to fill in

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evidentiary gaps after the hearing. While such a filing may be used to address a recalculation of narrow and specific adjustments to a proposed rate, it is inappropriate and improper for a party to attempt to use post-hearing compliance filings as a method to force an adverse party to generate the moving party's own proposals. Even if that were done, the proposal of such a factor would be effectively unavailable for cross-examination by the parties or exploration by this Commission.

I would note, finally, that nothing in this motion or in our Order No. 2018-322(A) would preclude any party to this proceeding from preparing and presenting evidence of alternatives to any proposal or concerning any issue in future fuel proceedings.

For these reasons, Mr. Chairman, I move that we grant reconsideration to the South Carolina Energy Users' Petition, which would also include granting reconsideration to the other Petitioners to the extent that they sought the same relief regarding the quarterly and monthly reports. Mr. Chairman, I move that we deny reconsideration and/or rehearing on all other matters brought before us and all other petitions for reconsideration and/or rehearing.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☑	☑	☐	
ELAM	☐	☑	☐	
FLEMING	☐	☐	☑	
HAMILTON	☐	☐	☐	
HOWARD	☐	☑	☐	
RANDALL	☐	☑	☐	
WHITFIELD	☐	☑	☐	

(SEAL)

RECORDED BY: J. Schmieding

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PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**May 23, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:

DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration the Petition for Rehearing and/or Reconsideration Filed on Behalf of the South Carolina Solar Business Alliance, Incorporated.

COMMISSION ACTION:

Mr. Chairman, we've received four Petitions - one from each party of record other than the company to reconsider or rehear our Order No. 2018-322(A) in Docket No. 2018-2-E. The parties raise numerous issues which they ask the Commission to reconsider or rehear and to reach different findings and conclusions. In my view, our Order was comprehensive, supported by the evidence of record, and consistent with the statutes which govern fuel proceedings. I would like to address all the concerns raised by the Petitions in my single motion, since many of the concerns raised are similar or identical.

First, as to the principal concern raised by the South Carolina Energy Users Committee, I move that we clarify now that it was our intention that, having received no objection and with mutual agreement, to order SCE&G to, upon written request by any party of record, provide to that party (1) copies of the monthly fuel recovery reports currently filed with the Commission and ORS and (2) quarterly forecasts beginning with the quarter ending June 30, 2018, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/under-collected balance to date. In previous fuel proceedings, SCE&G and the other parties then parties to settlement agreements would mutually consent that SCE&G would put forth reasonable efforts to forecast its expected fuel factors to be set at the next annual fuel proceeding and that these quarterly good-faith forecasts would not be admitted into evidence in any future SCE&G proceeding. I understand that the parties wish to be similarly bound by all aspects of those legacy agreements and so, Mr. Chairman, I move we impose the duties and limitations historically included in the parties' settlements in previous fuel proceedings into our decision and order in this docket. In effect, Mr. Chairman, I move that we grant the Energy Users' Petition and, to the extent that other parties have sought the same relief in their respective Petitions, that relief should be granted.

Mr. Chairman, several of the Petitions have raised the issue that our Order improperly shifted the burden of proof from SCE&G to the Intervenors or ORS. That contention is a mischaracterization of our Order. We did not shift the burden from SCE&G to the other parties, and the burden of proof always resides, as it must, with SCE&G. However, the other parties do have a burden of persuasion that their proposed alternatives are reasonable and viable if they seek adoption of those alternatives, as they did here. In fact, the Petitioners assert that they presented alternatives to SCE&G's proposed avoided capacity cost factor, but

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none of those parties offered probative evidence of a computed factor as opposed to a mere concept for deriving a factor, as ORS Witness Horii proposed for our consideration. None of the proposals of those parties represent fully viable alternatives. Consequently, the parties failed to meet their burden of persuasion to prove to this Commission the reasonableness and viability of any alternatives to SCE&G's proposal.

Several of the parties assert that SCE&G's responses to their discovery requests were insufficient to allow them to prepare evidence by which they might have proposed alternatives to SCE&G's proposed avoided-cost factor. For example, the ORS complains that, "SCE&G failed to cooperate by providing complete and reliable data in a timely manner and, therefore, had the ability to dictate the extent to which other parties could present their cases." Various discovery devices are available to enable a party to gather information to prepare and present evidence in our proceedings. If there were a discovery dispute, the proper mechanism to require a party to provide properly discoverable information is a motion to compel. No party moved to compel discovery in this proceeding. Moreover, this Commission understood that all discovery issues were actually resolved prior to the hearing. For example, by its March 7th filing, the Solar Business Alliance stated that, as a result of the PR-1 and PR-2 and avoided-cost issues being considered as a part of the fuel case, it needed an additional 90 days to prepare its case, or, in the alternative, it requested that the case be continued until the parties had, "ample time to complete discovery requests and report back to the Commission." SBA considered that the issues were too complicated for adequate preparation in the existing timeframe.

In resolution of the Petitioners' shared concerns about adequacy of time for discovery, the parties advised the Commission of an agreement among the parties subsequently approved by the Commission by Directive Order No. 2018-178, issued March 14, 2018 that the company and the parties had resolved their differences as to the procedural schedule in this case. Specifically, they informed the Commission that these issues had been resolved through a commitment from SCE&G to provide discovery responses prior to their due date and to agree to extensions of SBA's prefiled testimony deadlines. Therefore, this Commission issued an order on March 14th approving the parties' settlement resolving SBA's initial request for a 90-day delay.

The parties availed themselves of the concession by SCE&G with the filing of their direct and surrebuttal testimony. Having received the benefit of accelerated discovery production and additional time to file testimony, and this Commission's approval of such a settlement, the parties' position describing a lack of cooperation and time for preparation seems inconsistent with the prehearing representations.

There is a contention by the Solar Business Alliance that using the approved factor from the most recent fuel case should enjoy a presumption of reasonableness and could be adopted as an alternative to SCE&G's proposal. Unlike a mere concept, a previously approved factor has already been litigated. In this case, those Petitioners would have us extract a single element out of a historical fuel factor and ignore the effects of the passage of time and all attendant changing circumstances. Pursuant to South Carolina Code Section 58-27-865(B), the fuel statute's recognition of changing environments and the appropriate and commensurate regulatory response compels us to revisit, reset, and redefine the fuel factors during these annual proceedings. The use of a previously approved factor might be appropriate in the circumstance in which no party had satisfactorily proven its case. That is not the circumstance here.

In Order No. 2018-322(A), this Commission made specific individual findings as to each element of SCE&G's proposed rates and we implicitly or explicitly found the underlying methodology for deriving them to be reasonable. Regarding this subject, SCE&G, upon whom the burden of proof resides, has met its burden.

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The Solar Business Alliance would have us use post-hearing compliance filings to fill in evidentiary gaps after the hearing. While such a filing may be used to address a recalculation of narrow and specific adjustments to a proposed rate, it is inappropriate and improper for a party to attempt to use post-hearing compliance filings as a method to force an adverse party to generate the moving party's own proposals. Even if that were done, the proposal of such a factor would be effectively unavailable for cross-examination by the parties or exploration by this Commission.

I would note, finally, that nothing in this motion or in our Order No. 2018-322(A) would preclude any party to this proceeding from preparing and presenting evidence of alternatives to any proposal or concerning any issue in future fuel proceedings.

For these reasons, Mr. Chairman, I move that we grant reconsideration to the South Carolina Energy Users' Petition, which would also include granting reconsideration to the other Petitioners to the extent that they sought the same relief regarding the quarterly and monthly reports. Mr. Chairman, I move that we deny reconsideration and/or rehearing on all other matters brought before us and all other petitions for reconsideration and/or rehearing.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☑	☑	☐	
ELAM	☐	☑	☐	
FLEMING	☐	☐	☑	
HAMILTON	☐	☑	☐	
HOWARD	☐	☑	☐	
RANDALL	☐	☑	☐	
WHITFIELD	☐	☑	☐	

(SEAL)

RECORDED BY: J. Schmieding

ACCEPTED FOR PROCESSING - 2018 May 23 6:04 PM - SCPSC - 2018-2-E - Page 3 of 3

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**May 23, 2018**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2018-2-E**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:
DOCKET NO. 2018-2-E - Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company - Staff Presents for Commission Consideration the Petition for Rehearing or Reconsideration Filed on Behalf of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy.

COMMISSION ACTION:
Mr. Chairman, we've received four Petitions - one from each party of record other than the company to reconsider or rehear our Order No. 2018-322(A) in Docket No. 2018-2-E. The parties raise numerous issues which they ask the Commission to reconsider or rehear and to reach different findings and conclusions. In my view, our Order was comprehensive, supported by the evidence of record, and consistent with the statutes which govern fuel proceedings. I would like to address all the concerns raised by the Petitions in my single motion, since many of the concerns raised are similar or identical.

First, as to the principal concern raised by the South Carolina Energy Users Committee, I move that we clarify now that it was our intention that, having received no objection and with mutual agreement, to order SCE&G to, upon written request by any party of record, provide to that party (1) copies of the monthly fuel recovery reports currently filed with the Commission and ORS and (2) quarterly forecasts beginning with the quarter ending June 30, 2018, of the expected fuel factors to be set at SCE&G's next annual fuel proceeding and SCE&G's historical over/under-collected balance to date. In previous fuel proceedings, SCE&G and the other parties then parties to settlement agreements would mutually consent that SCE&G would put forth reasonable efforts to forecast its expected fuel factors to be set at the next annual fuel proceeding and that these quarterly good-faith forecasts would not be admitted into evidence in any future SCE&G proceeding. I understand that the parties wish to be similarly bound by all aspects of those legacy agreements and so, Mr. Chairman, I move we impose the duties and limitations historically included in the parties' settlements in previous fuel proceedings into our decision and order in this docket. In effect, Mr. Chairman, I move that we grant the Energy Users' Petition and, to the extent that other parties have sought the same relief in their respective Petitions, that relief should be granted.

Mr. Chairman, several of the Petitions have raised the issue that our Order improperly shifted the burden of proof from SCE&G to the Intervenors or ORS. That contention is a mischaracterization of our Order. We did not shift the burden from SCE&G to the other parties, and the burden of proof always resides, as it must, with SCE&G. However, the other parties do have a burden of persuasion that their proposed alternatives are reasonable and viable if they seek adoption of those alternatives, as they did here. In fact, the Petitioners assert that they presented alternatives to SCE&G's proposed avoided capacity cost factor, but none of those parties offered probative evidence of a computed factor as opposed to a mere

ACCEPTED FOR PROCESSING - 2018 May 23 6:05 PM - SCPSC - 2018-2-E - Page 1 of 3

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Several of the parties assert that SCE&G's responses to their discovery requests were insufficient to allow them to prepare evidence by which they might have proposed alternatives to SCE&G's proposed avoided-cost factor. For example, the ORS complains that, "SCE&G failed to cooperate by providing complete and reliable data in a timely manner and, therefore, had the ability to dictate the extent to which other parties could present their cases." Various discovery devices are available to enable a party to gather information to prepare and present evidence in our proceedings. If there were a discovery dispute, the proper mechanism to require a party to provide properly discoverable information is a motion to compel. No party moved to compel discovery in this proceeding. Moreover, this Commission understood that all discovery issues were actually resolved prior to the hearing. For example, by its March 7th filing, the Solar Business Alliance stated that, as a result of the PR-1 and PR-2 and avoided-cost issues being considered as a part of the fuel case, it needed an additional 90 days to prepare its case, or, in the alternative, it requested that the case be continued until the parties had, "ample time to complete discovery requests and report back to the Commission." SBA considered that the issues were too complicated for adequate preparation in the existing timeframe.

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I would note, finally, that nothing in this motion or in our Order No. 2018-322(A) would preclude any party to this proceeding from preparing and presenting evidence of alternatives to any proposal or concerning any issue in future fuel proceedings.

For these reasons, Mr. Chairman, I move that we grant reconsideration to the South Carolina Energy Users' Petition, which would also include granting reconsideration to the other Petitioners to the extent that they sought the same relief regarding the quarterly and monthly reports. Mr. Chairman, I move that we deny reconsideration and/or rehearing on all other matters brought before us and all other petitions for reconsideration and/or rehearing.

PRESIDING: Whitfield SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER
BOCKMAN	☑	☑	☐	
ELAM	☐	☑	☐	
FLEMING	☐	☐	☑	
HAMILTON	☐	☑	☐	
HOWARD	☐	☑	☐	
RANDALL	☐	☑	☐	
WHITFIELD	☐	☑	☐	

(SEAL)

RECORDED BY: J. Schmieding

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PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

CLERK'S OFFICE

NOTICE OF HEARING AND PREFILE TESTIMONY DEADLINES

DOCKET NO. 2018-2-E

South Carolina Electric & Gas Company – Annual Review of Base Rates for Fuel Costs

S.C. Code Ann. Section 58-27-865 (Supp. 2017) established a procedure for annual hearings to allow the Commission and all interested parties to review the fuel purchasing practices and policies of South Carolina Electric & Gas Company and for the Commission to determine if any adjustment in the fuel cost recovery mechanism is necessary and reasonable. Section 58-27-865(B) states, in part, "Upon conducting public hearings in accordance with the law, the Commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the Commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period." Coincident with this proceeding and pursuant to S.C. Code Ann. § 58-39-140, the Commission will also determine whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the distributed energy resource program previously approved by the Commission.

PLEASE TAKE NOTICE that a hearing, pursuant to 10 S.C. Code Ann. Regs. 103-817, 58-39-140, 58-27-865 on the above matter has been scheduled to begin on **Tuesday, April 10, 2018, at 10:30 a.m.**, before the Commission in the Commission's Hearing Room at 101 Executive Center Drive, Suite 100, Saluda Building, Columbia, South Carolina 29210.

Any person who wishes to participate in this matter as a party of record, should file a Petition to Intervene in accordance with the Commission's Rules of Practice and Procedure on or before **January 25, 2018**, by filing the Petition to Intervene with the Commission, by providing a copy to the Office of Regulatory Staff and by providing a copy to all parties of record. For the receipt of future Commission correspondence, please include an email address in the Petition to Intervene. ***Please refer to Docket No. 2018-2-E and mail a copy to all other parties in this docket.*** Any person who seeks to intervene and who wishes to testify and present evidence at the hearing should notify, in writing, the Commission; the Office of Regulatory Staff at 1401 Main Street, Suite 900, Columbia, South Carolina 29201; and K. Chad Burgess, Esquire, South Carolina Electric & Gas Company, 220 Operation Way, MC C222, Cayce, South Carolina 29033-3701, on or before **January 25, 2018**. ***Please refer to Docket No. 2018-2-E.***

For the most recent information regarding this docket, including changes in scheduled dates included in this Notice, please refer to www.psc.sc.gov and ***Docket No. 2018-2-E.***

INSTRUCTIONS TO ALL PARTIES OF RECORD (Applicants, Petitioners, and Intervenors only):
All Parties of Record must prefile testimony with the Commission and with all Parties of Record. Prefiled Testimony Deadlines: Applicant's **Direct Testimony** Due: **2/23/2018**; Other Parties of Record **Direct Testimony** Due: **3/22/2018**; Applicant's **Rebuttal Testimony** Due: **3/28/2018**; and Other Parties of Record **Surrebuttal Testimony** Due: **4/3/2018**. All prefiled testimony deadlines are subject to the information as posted on www.psc.sc.gov under ***Docket No. 2018-2-E.***

Please be advised that failure to comply with the instructions contained herein could result in your proposed witnesses' testimony and exhibits being excluded in the subject proceeding. Additionally, please note that failure to comply with the above on or before the dates indicated may result in the DISMISSAL of your pleading.

Persons seeking information about the Commission's procedures should contact the Commission at (803) 896-5100 or visit its website at www.psc.sc.gov.

10/4/17

The Public Service Commission State of South Carolina

COMMISSIONERS
Swain E. Whitfield, Fifth District
Chairman
Comer H. "Randy" Randall, Third District
Vice Chairman
John E. "Butch" Howard, First District
Elliott F. Elam, Jr., Second District
Elizabeth B. "Lib" Fleming, Fourth District
Nikiya "Nikki" Hall, Sixth District
G. O'Neal Hamilton, Seventh District

Jocelyn Boyd
Chief Clerk/Administrator
Phone: (803) 896-5133
Fax: (803) 896-5246

Clerk's Office
Phone: (803) 896-5100
Fax: (803) 896-5199

October 4, 2017

IN RE: DOCKET NO. 2018-2-E - South Carolina Electric & Gas Company – Annual Review of Base Rates for Fuel Costs

TO: ALL PARTIES OF RECORD
Pursuant to 10 S.C. Code Ann. Regs. 103-845:

1. **SCE&G** must prefile with the Commission 1 copy of the direct testimony and exhibits of the witnesses it intends to present and serve the testimony and exhibits of the witnesses on all Parties of Record on or before **February 23, 2018** (must be post-marked on or before this date).

2. **All Other Parties of Record and the Office of Regulatory Staff (ORS)** must prefile with the Commission 1 copy of direct testimony and exhibits of the witnesses they intend to present and serve the testimony and exhibits of the witnesses on all Parties of Record on or before **March 22, 2018** (must be post-marked on or before this date).

3. **SCE&G** filing **Rebuttal Testimony** must prefile with the Commission 1 copy of the testimony and exhibits of the witnesses it intends to present and serve the testimony and exhibits of the witnesses on all Parties of Record on or before **March 28, 2018** (Rebuttal testimony and exhibits must be in the offices of the Commission and in the hands of the parties on this date).

4. **All Other Parties of Record and the ORS** filing **Surrebuttal Testimony** must prefile with the Commission 1 copy of the testimony and exhibits of the witnesses they intend to present and serve the testimony and exhibits of the witnesses on all Parties of Record on or before **April 3, 2018** (Surrebuttal testimony and exhibits must be in the offices of the Commission and in the hands of the parties on this date).

Please be advised that failure to comply with the instructions contained herein could result in your proposed witnesses' testimony and exhibits being excluded in the subject proceeding. Additionally, please note that failure to comply with the above on or before the dates indicated may result in the DISMISSAL of your pleading.

Sincerely,

Clerk's Office

ELECTRONICALLY FILED - 2017 October 5 1:10 PM - SCPSC - Docket # 2018-2-E - Page 1 of 2

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))	**NOTICE OF APPEARANCE OF COUNSEL**

YOU WILL PLEASE TAKE NOTICE that Andrew M. Bateman and Jenny R. Pittman give notice of appearance as counsel for the Office of Regulatory Staff in the above-captioned matter. Pursuant to S.C. Code Ann. Section 58-4-10 (2016), the Office of Regulatory Staff is a party of record in all filings, applications, and proceedings before the Public Service Commission of South Carolina. Any further information or correspondence filed with the Public Service Commission of South Carolina should also be served on the undersigned as counsel for the Office of Regulatory Staff.

Andrew M. Bateman, Esquire
Jenny R. Pittman, Esquire
OFFICE OF REGULATORY STAFF
1401 Main Street, Suite 900
Columbia, South Carolina 29201
Phone: (803) 737-8440/0794
Fax: (803) 737-0801
E-mail:abateman@regstaff.sc.gov
E-mail:jpittman@regstaff.sc.gov

October 5, 2017
Columbia, South Carolina

Austin & Rogers, P.A.

ATTORNEYS AND COUNSELORS AT LAW

WILLIAM FREDERICK AUSTIN
(1930-2016)

TIMOTHY F. ROGERS
RAYMON E. LARK, JR.
RICHARD L. WHITT
EDWARD L. EUBANKS
W. MICHAEL DUNCAN*

* ALSO ADMITTED IN N.C.

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OF COUNSEL:
JEFFERSON D. GRIFFITH, III

January 22, 2018

VIA, ELECTRONIC FILING
The Honorable Jocelyn Boyd
Chief Clerk and Administrator
The Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

Re:
- **Docket Number 2018-2-E**
- **Petition to Intervene**

Dear Ms. Boyd:

Enclosed for filing, please find the South Carolina Solar Business Alliance, Inc.'s Petition to Intervene, Docket Cover Sheet and Certificate of Service.

All parties of record have been served. Please notify the undersigned if you there is anything else you may need.

Respectfully Submitted,

/s/_____
Richard L. Whitt,
Timothy F. Rogers.

RLW/cas

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BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))))))	**PETITION TO INTERVENE**

This Commission established Commission Docket 2018-2-E, on October 4, 2017, for this Commission's annual review of base rates for fuel costs for South Carolina Electric & Gas Company, ("SCE&G", or "Company"), pursuant to S.C. Code Ann. Section 58-27-865, *et. seq.*, (Supp. 2016) and coincident with this proceeding and pursuant to S.C. Code Ann. § 58-39-140, (Supp. 2016), this Commission will also determine whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the Distributed Energy Resource program previously approved by this Commission.

Petitioner herein is South Carolina Solar Business Alliance, Inc., ("SCSBA" or "Petitioner"). This Petition to Intervene is filed pursuant to R. 103-825, of this Commission's Rules and Regulations and other applicable Rules and Regulations of this Commission, and Petitioner seeks permission to intervene and be made a party of record in the above-referenced Docket, with full rights of participation.

1. SCSBA is a Public Benefit Non-Profit Corporation, by a conversion filing on May 17, 2017, with the South Carolina Secretary of State's office, originally organized on October 21, 2009, pursuant to Chapter 44 of Title 33 of the South Carolina Code of Laws and, since that date, remaining in good standing with the South Carolina Secretary of State.

2. SCSBA's principal place of business is currently co-located with that of Southern Current LLC at 1519 King Street Extension, Charleston, SC 29405 and SCSBA's mailing address is currently co-located with that of the Hannah Solar Government Services, LLC at 1090 Jack Primus Road, Charleston, South Carolina, 29492.

3. SCSBA is organized for the purpose of promoting and advocating public policy positions supportive of solar power generation in South Carolina.

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4. SCSBA is a Public Benefit Non-Profit Corporation, whose Board Members are the following individuals, all of whom conduct solar energy-related business in South Carolina under the company names indicated:

a. Bret Sowers (Southern Current LLC);
b. Jarrett Branham (SolBright Renewable Energy, LLC);
c. Dave McNeil (Hannah Solar Government Services, LLC);
d. Andy Israelson (E.ON Climate and Renewables);
e. Steffanie Dohn (Southern Current LLC);
f. Mark Walter (Tradewind Energy) and
g. Tyler Norris (Cypress Creek Renewables).

5. SCSBA's more than sixty (60) Trade Members includes solar energy developers, engineering procurement and construction (EPC) contractors, professional service firms, equipment distributors and equipment manufacturers engaged in the business of solar energy generation in South Carolina and across the nation. All of SCSBA's Board Members' companies maintain offices in South Carolina.

6. Therefore, SCSBA is financially impacted by this Commission's Review of SCE&G's filing, as is outlined in more detail hereinbelow.

7. Specifically, Petitioner, SCSBA's Trade Members conduct business with SCE&G and Petitioner, SCSBA has material interest in the subject matter of this Docket.

8. This Commission is conducting a review of SCE&G's fuel purchasing practices and policies pursuant to S.C. Code Ann. § 58-27-865, (Supp. 2016).

9. Coincident with this proceeding and pursuant to S.C. Code Ann. § 58-39-140, (Supp. 2016), this Commission will also determine whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the Distributed Energy Resource program previously approved by this Commission.

10. This Commission's annual review of SCE&G's fuel purchasing practices and policies will determine if any adjustment in the fuel cost recovery mechanism is necessary and reasonable.

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11. As outlined hereinabove, Petitioner, SCSBA has substantial business interests in SCE&G's assigned territory in South Carolina.

12. Petitioner's position is that Petitioner, SCSBA and its Trade Members have a direct and substantial interest in the review to be made by this Commission in this Docket and Petitioner's interests cannot be adequately addressed by any other party. Petitioner's further position is that Petitioner, SCSBA will be impacted by this Commission's decision upon its Review, outlined hereinabove. Therefore, the decision of this Commission is important to the Petitioner and its Trade Members from a financial standpoint. Petitioner's further position is that Intervention is contemplated by S.C. Code Ann. Section 58-27-865, *et. seq.* (Supp. 2016), and Petitioner's Intervention will aid this Commission, by assisting in the development of a full and fair record to address the important Review to be conducted in this Docket. As shown above, Petitioner has a direct and material interest in this Commission's Review and Petitioner's interests are not adequately represented by the current parties in this Docket.

13. Petitioner should be allowed to intervene in this Docket, with full rights of cross-examination, discovery and participation in any Hearing to be scheduled in this Docket.

14. The granting of SCSBA's Petition to Intervene is (**i**) contemplated by S.C. Code Ann. Section 58-27-865, *et. seq.* (Supp. 2016), (**ii**) in the public interest and (**iii**) consistent with the policies of this Commission in encouraging maximum public participation in issues before it and intervention should be allowed so that a full and complete record addressing its views and concerns can be developed..

15. This Petition to Intervene is timely filed with this Commission.

16. Petitioner, SCSBA has previously received approval for intervention from this Commission on numerous occasions, including in recent Commission Docket No. 2015-362-E, Docket No. 2015-8-E, Docket No. 2016-2-E, Docket No. 2016-1-E, Docket 2016-3-E, Docket 2016-9-E, Docket 2016-8-E, Docket 2016-10-E, Docket 2017-2-E, Docket 2017-1-E, Docket 2017-3-E and Docket 2017-305-E.

17. Furthermore, Petitioner's Intervention is consistent with this Commission's long standing policy, "...in encouraging maximum public participation in issues before this Commission, and [Intervention] should be allowed so that a full and complete record... can be developed." (Order No.: 2005-725, in Docket No.: 2005-270-G, dated December 16, 2005).

18. SCSBA is represented by counsel in this proceeding:

Richard L. Whitt,
Timothy F. Rogers,
AUSTIN & ROGERS, P.A.
508 Hampton Street, Suite 300
Columbia, South Carolina 29201
Telephone: (803) 256-4000
Facsimile: (803) 252-3679
RLWhitt@AustinRogersPA.com

WHEREFORE, Petitioner prays for the following relief:

(a) That this Petition to Intervene be accepted and that Petitioner be made a party of record;

(b) That Petitioner be allowed to participate fully in this proceeding and take such positions as it deems advisable; and

(c) For such other and further relief as is just and proper.

Respectfully Submitted,
/s/

Richard L. Whitt,
Timothy F. Rogers,
AUSTIN & ROGERS, P.A.
508 Hampton Street, Suite 300
Columbia South Carolina, 29201
(803) 256-4000
Counsel for Petitioner, SCSBA

January 22, 2018
Columbia, South Carolina

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STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2018-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	**PETITION TO INTERVENE**

The South Carolina Coastal Conservation League ("CCL") and Southern Alliance for Clean Energy ("SACE") (collectively, the "Conservation Groups") respectfully petition the Public Service Commission of South Carolina ("Commission") to intervene in the above-captioned docket pursuant to R.103-825 of the Commission's rules of practice and procedure. In support of this petition, Petitioners state as follows:

1. The Commission opened this proceeding pursuant to S.C. Code Ann. Section 58-27-865, which establishes the procedure for annual hearings for the Commission and all interested parties to review the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("the Company") and for the Commission and the Company to make adjustments as necessary.

2. S.C. Code Ann. Section 58-27-865 provides the procedure for review and recovery of fuel costs and of "incremental and avoided costs of distributed energy resource programs and net metering as authorized and approved under Chapters 39 and 40, Title 58[, which] shall be allocated and recovered from customers under a separate distributed energy component of the overall fuel factor that shall be allocated and recovered based on the same method that is used by the utility to allocate and recover variable environmental costs."

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3. S.C. Code Section 58-39-140 of the South Carolina Distributed Energy Resource Act and Commission Order 2015-194 allow the Company to recover certain reasonable and prudent costs incurred to implement approved distributed energy resource ("DER") programs, including certain costs related to net energy metering ("NEM"). Recoverable costs are capped in Section 58-39-150 "[f]or the protection of consumers and to ensure that the cost of DER programs do not exceed a reasonable threshold."

4. Pursuant to the South Carolina Distributed Energy Resource Act and the Settlement Agreement approved by the Commission in Order No. 2015-194, Docket No. 2014-246-E, the Company will also compute and update annually the "costs and benefits of net metering and the required amount of the DER NEM Incentive" coincident in time with the Utility's filing under the fuel clause.

5. This Petition to Intervene is timely filed, as the Commission has established an intervention deadline of January 25, 2018 for this proceeding.

6. The South Carolina Coastal Conservation League ("CCL") is a nonprofit organization whose mission is to protect the natural environment of the South Carolina coastal plain and to enhance the quality of life in their communities by working with individuals, businesses and government to ensure balanced solutions. CCL supports the development of energy policy that is in the public interest of South Carolinians. CCL has members from across the State, including members who receive electricity service from the South Carolina Electric & Gas Co. and will be impacted by the decisions made in this proceeding regarding renewable energy and the recovery of fuel costs and incremental and avoided costs of distributed energy resource programs and net metering. The address of CCL's main office is 328 East Bay Street, Charleston, SC 29402.

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7. Southern Alliance for Clean Energy ("SACE") is a nonprofit organization whose mission is to promote responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities throughout the Southeast. SACE and its members are interested in promoting greater reliance on clean energy resources to meet the South's energy needs. Like CCL, SACE has members from across the State, including members who receive electricity service from the Company and will be impacted by the decisions made in this proceeding regarding renewable energy and the recovery of fuel costs and incremental and avoided costs of distributed energy resource programs and net metering. The principal address of SACE is P.O. Box 1842, Knoxville, Tennessee 37901. SACE also has offices in Florida, Georgia, North Carolina and South Carolina.

8. The Conservation Groups have participated as intervenors in multiple Commission proceedings relating to the implementation of the South Carolina Distributed Energy Resource Act, including Docket Nos. 2014-246-E, 2015-53-E, 2015-54-E, 2015-55-E, 2015-203-E, 2015-204-E, 2015-205-E, and 2015-362-E.

9. The Conservation Groups and their members have direct and substantial interests that will be impacted by the decisions made in this proceeding regarding renewable energy, avoided cost calculations and tariff offerings, and the recovery of fuel costs and incremental and avoided costs of distributed energy resource programs and net metering, and their interests cannot be adequately addressed by any other party. The Conservation Groups' position in this proceeding is to advocate for a full and proper valuation of NEM generation and appropriate cost recovery consistent with the Settlement Agreement approved in Docket 2014-246-E that will accurately reflect and support an effective and diversified portfolio of distributed energy resources and lead to cleaner, safer, and healthier communities for all South Carolinians. The

Conservation Groups also seek accurate and fair valuation of avoided costs and the related tariffs proposed through this proceeding. The Conservation Groups' support for these policies and involvement in this proceeding will promote their members' interests as well as the broader public interest. Petitioning to intervene in this proceeding is also consistent with the Commission's policies encouraging maximum public participation in the issues before it.

10. Pursuant to R. 103-804(T) of the Commission's Rules of Practice and Procedure, the Conservation Groups are represented by counsel in this proceeding:

James Blanding Holman IV
Southern Environmental Law Center
463 King St., Suite B
Charleston, SC 29403
Telephone: (843) 720-5270
Fax: (843) 720-5240
Email: bholman@selcsc.org

WHEREFORE, Petitioners pray that they be allowed to intervene as a party of record and participate fully in this proceeding by contributing testimony and presenting evidence at the hearing.

Respectfully submitted this 25th day of January, 2018.

s/ J. Blanding Holman, IV

J. Blanding Holman, IV
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Attorney for Petitioners South Carolina Coastal Conservation League and Southern Alliance for Clean Energy

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BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2017-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**PETITION FOR AN ORDER REQUIRING SOUTH CAROLINA ELECTRIC AND GAS COMPANY TO COMPLY WITH COMMISSION ORDER NO. 2018-55**

Introduction

Pursuant to 26 S.C. Code Ann. Regs. 103-825, Intervenors South Carolina Coastal Conservation League and Southern Alliance for Clean Energy respectfully submit this Petition requesting that the Public Service Commission ("Commission") order South Carolina Electric & Gas ("SCE&G") to comply with Commission Order No. 2018-55, dated January 24, 2018.

Background and Support for Petition

In last year's fuel cost docket, Docket No. 2017-2-E, the Commission granted SCE&G's request to update avoided cost rates every six months, finding that "this process reflects a reasonable and appropriate balance between the need to update rates to reflect updated information in the Company's future capacity needs while also providing rate stability and continuity." Order No. 2017-246 at 22 (April 27, 2017).

On December 22, 2017, SCE&G requested a waiver of its obligation to file a six-month update to avoided cost rates, citing uncertainty due to recent events such as the abandonment of new nuclear units at V.C. Summer Station. SCE&G also expressed its intent to implement changes to its avoided cost calculation related to how the Company

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calculates capacity value, which the Company stated would be more appropriately considered in the annual fuel proceeding.

In Intervenors' January 16, 2018 response objecting to SCE&G's waiver request, Intervenors expressed concern that there would be significant proposed changes to the methodology that would be inconsistent with federal law, and in violation of the settlement reached by various parties after the passage of Act 236. The primary relief sought by Intervenors was for the Commission to order SCE&G to "file its six-month update to the PR-2 rate within the next two weeks, containing updated energy and capacity values that comply with the methodology laid out by this Commission in past orders." In the alternative, if the Commission were to grant SCE&G's request for a waiver, Intervenors asked for the following relief: "at the very least the utility must file its six month update on February 23, 2018, the date by which it is required to file its testimony in the 2018 fuel cost docket." Intervenors went on to ask that the filing "be based on the prior approved methodology, without any unapproved and unilateral changes made by the Company."

On January 24, 2018, this Commission issued Order No. 2018-55 in Docket 2017-2-E, granting SCE&G's request for a waiver. The Commission agreed that uncertainty driven by recent events, as well as judicial economy, warranted addressing the issues raised in the context of the annual fuel proceeding. The Commission also noted that any proposed changes to avoided cost calculations should be considered in the next annual proceeding.

In that Order, the Commission also adopted the alternative relief made by Intervenors in their objection to SCE&G's waiver. The Commission's Order stated: "One

point the Coastal Conservation League made in its response was a request to require SCE&G to put that proposed rate in its prefiled testimony in the fuel proceeding, and I agree that we ought to require SCE&G to do that."

Based on a plain reading of the Commission's Order, then, on February 23, 2018, SCE&G was obligated to file not only its 2018 rates (which the Commission anticipated would include underlying changes to inputs), but also "that proposed rate" at issue in the waiver request: SCE&G's updated six-month PR-2 rate, which would not reflect any changes to methodology but rather would be based on methods approved by the Commission in prior orders.

Contrary to the Commission's Order, it does not appear that SCE&G filed this PR-2 updated rate in either Docket 2017-2-E or Docket 2018-2-E. Rather, it appears that the methodology utilized by SCE&G to calculate avoided cost values in its testimony filed on February 23, 2018 has been significantly altered from the methodology that was approved by this Commission last year in Docket 2017-2-E. Docket No. 2017-2-E, Order No. 2017-246 at 21-23, 28-29, 34, 52-53, 55, Apr. 27, 2017. Specifically, last year SCE&G used a capacity valuation methodology where it first calculated the capacity value over a 15-year planning period using a difference in revenue requirement methodology. Then it allocated that capacity value based on the frequency with which load was within 95% of seasonal peak. This year, the Company took the position that QF capacity has no value at all because it does not provide peak contribution in the winter. This is a completely different methodology that has profound impacts on the capacity value of qualifying facilities.

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This change is but one illustration of the myriad ways that SCE&G has altered not only the updated inputs to its methodology for calculating avoided cost values, as one would expect, but has fundamentally altered the actual methodology itself.

Further, it appears that all of the avoided cost numbers filed on that date incorporate similar changes to the underlying methodology. To date, and by necessity of due process, no new avoided cost methodology has been approved by the Commission. Absent approval of a new methodology, the currently-approved avoided cost methodology must be applied exactly, without change to any parameters except for updated data. SCE&G, having been directed by Order 2017-246 to follow this methodology, and having been directed by Order 2018-55 to file its tariff update on February 23, 2018, has failed to follow the Commission's orders.

South Carolina law mandates that "[e]ach electrical utility . . . must obey and comply with all requirements of every order, decision, direction, rule or regulation made or prescribed by the Public Service Commission or every direction, rule, or regulation made or prescribed by the Office of Regulatory Staff pursuant to this chapter or in relation to any other matter relating to or affecting the business of the electrical utility . . . and must do everything necessary or proper to comply with and observe every order, decision, direction, rule, or regulation by all of its officers, agents and employees." Section 58-27-40.

Conclusion

WHEREFORE, Intervenors respectfully request that the Commission issue an order requiring SCE&G to comply with its January 24 Order by filing an updated PR-2 rate based on approved methodology within seven days; that the Commission grant

parties in Docket 2018-2-E the right to file supplemental testimony related to SCE&G's filing once it has been made; that the Commission expedite its consideration of this petition in light of its impact on issues currently being considered in Docket 2018-2-E, which is set for hearing on April 10, 2018; and that the Commission order any other appropriate action the Commission may deem necessary.

Respectfully submitted this 21st day of March, 2018.

s/ J. Blanding Holman, IV

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BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**MOTION TO BIFURCATE ISSUES (Exigent Relief Requested)**

INTRODUCTION

On December 22, 2017, South Carolina Electric & Gas Company ("SCE&G, or "Company") filed a Request for a Waiver of this Commission's requirement that (i) SCE&G update its PR-2 Rate Schedule in December, 2017 (ii) SCE&G also indicated that SCE&G would change its avoided costs methodology and (iii) SCE&G also requested that both of these issues be incorporated into SCE&G's annual fuel case Docket (hereinafter as, "Waiver Request"). The South Carolina Solar Business Alliance ("SCSBA"), filed Opposition to SCE&G's Waiver Request, as did other parties. This Commission issued its Directive Order on January 24, 2018, Order No. 2018-55, allowing the relief sought in SCE&G's Waiver Request. The Commission's decision allowed SCE&G to combine the two important issues listed above, along with the issues in a regular fuel case Hearing.

MOTION TO BIFURCATE ISSUES

SCSBA attempted to properly respond to the Company's voluminous filing of Testimony and Exhibits and attempted to provide responsive Testimony on the issues of (i) SCE&G's PR-2 Rate Update (ii) SCE&G's change in its avoided costs methodology and (iii) the issues inherent in SCE&G's annual fuel case, (hereinafter, "Three Issues").

SCSBA retained an Expert Witness and made a good-faith attempt to respond to the Three Issues. SCSBA had roughly thirty days to (i) hire an Expert Witness (ii) prepare a discovery request (iii) receive and review a discovery response from the Company (iv) receive and review the Company's voluminous Testimony and Exhibits and (v) prepare responsive Testimony on the Three Issues. The grounds for SCSBA's Motion follows.

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Due Process Issue.

Based on the foregoing, if SCSBA and other parties are forced to adhere to the pre-filing deadlines in place in this Docket, SCSBA and other parties will be deprived of their due process rights to be heard on the Three Issues. This argument is not a criticism of this Commission, and the lack of due process affecting SCSBA and other parties is not a result of any explicit intention by this Commission. Rather the lack of due process is implicit in the Commission's accommodation to SCE&G's Waiver Request. SCSBA will file the Testimony that it was able to complete, with a Reservation of Rights related to this Motion and the Petition of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy, filed March 21, 2018, in Docket 2017-2-E.

SCSBA's Expert Witness.

Dr. Ben Johnson, SCSBA's retained Expert Witness, has candidly admitted to representatives of SCSBA, that he was unable to provide comprehensive, responsive Testimony on the Three Issues in the time allowed for his Testimony preparation.

CONCLUSION

Based on the foregoing, this Commission should bifurcate the issues of SCE&G's PR-2 Rate update and SCE&G's request to change the avoided costs methodology, from this fuel case Docket. This Commission should issue its Order bifurcating the two issues described hereinabove from the fuel case and allow parties to file supplemental Testimony responsive to the issues of SCE&G's annual fuel case. This Docket may continue as envisioned by this Commission's scheduling SCE&G's annual fuel case, inputs can be made and a fuel factor can be determined, the planned Hearing on April 10, 2018, may be held and the new fuel factor may go into effect in the first billing cycle of May, 2018, as is customary. SCSBA reserves the right to file a Memorandum in this matter. SCSBA respectfully request that this matter be heard on an expedited basis.

[Signature Page Follows]

Respectfully Submitted,
/s/

Richard L. Whitt,
Timothy F. Rogers,
AUSTIN & ROGERS, P.A.
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Columbia South Carolina, 29201
(803) 256-4000
Counsel for the South Carolina Solar Business Alliance.

March 23, 2018
Columbia, South Carolina

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Austin & Rogers, P.A.

ATTORNEYS AND COUNSELORS AT LAW

WILLIAM FREDERICK AUSTIN
(1930-2016)

TIMOTHY F. ROGERS
RAYMON E. LARK, JR.
RICHARD L. WHITT
EDWARD L. EUBANKS
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OF COUNSEL:
JEFFERSON D. GRIFFITH, III

March 27, 2018

VIA, ELECTRONIC FILING
The Honorable Jocelyn Boyd
Chief Clerk and Administrator
The Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

Re:
- **Docket Number 2017-2-E**
- **SCSBA's Support for South Carolina Coastal Conservation League and Southern Alliance for Clean Energy's Petition**

Dear Ms. Boyd:

Please accept this correspondence as notice of South Carolina Solar Business Alliance, Inc.'s ("SCSBA") support for the relief sought in the South Carolina Coastal Conservation League ("SCCCL") and Southern Alliance for Clean Energy's ("SACE") Petition filed on March 21, 2018, in Docket 2017-2-E. Please advise if you require anything else in this matter.

All parties of record have been served. Please notify the undersigned if you there is anything else you may need.

Respectfully Submitted,

/s/_____
Richard L. Whitt.

RLW/cas

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BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**RESPONSE IN SUPPORT OF SOLAR BUSINESS ALLIANCE'S MOTION TO BIFURCATE ISSUES**

Introduction

Pursuant to 26 S.C. Code Ann. Reg. 103-829, Intervenors South Carolina Coastal Conservation League (CCL) and Southern Alliance for Clean Energy (SACE) respectfully submit this response in support of Solar Business Alliance's (SBA) *Motion to Bifurcate Issues* in the above-referenced proceeding.

Support for Motion

Bifurcating the issues of SCE&G's PR-2 update and avoided cost methodology changes would provide needed time and opportunity for intervenors to fully evaluate and respond to SCE&G's avoided cost proposals and complete discovery, while allowing other aspects of the fuel cost recovery docket to proceed on schedule and to be implemented by May 1.

As an initial matter, CCL and SACE's *Petition for an Order Requiring South Carolina Electric and Gas Company to Comply with Commission Order No. 2018-55* is still pending. If the Commission grants the relief sought in that petition, SCE&G will need to supplement its 2018-2-E testimony with PR-2 rates that are compliant with the avoided cost methodology previously approved by the Commission. This filing will provide the Commission and intervenors a transparent comparison between avoided cost calculations based on the previously

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approved methodology on the one hand, and avoided cost calculations based the newly proposed methodology on the other hand. The newly proposed methodology, among other things, completely eliminates a capacity payment for solar resources. Granting SBA's motion to bifurcate these issues will allow additional time for the Commission to rule on the pending CCL and SACE petition and allow time for consideration of SCE&G's updated filings. While the bifurcated issues are being evaluated on a separate timetable, the other fuel cost recovery issues – those historically part of the fuel cost recovery proceeding – may continue along the established testimony and hearing schedule.

Intervening parties in this docket need additional time to vet SCE&G's latest avoided cost proposals. Intervenors have repeatedly reported to the Hearing Officer and Commission the difficulties of effectively analyzing and responding to SCE&G's avoided cost and PR-2 proposals on the aggressive timeline of the fuel cost recovery proceeding. *See, e.g.*, SBA, *Request for March 22, 2018 Testimony Deadline to be Extended Ninety Days* (filed March 7, 2018), CCL and SACE, *Reply* (filed March 9, 2018), and CCL and SACE's *Petition for an Order Requiring South Carolina Electric and Gas Company to Comply with Commission Order No. 2018-55* (filed in 2017-2-E on March 21, 2018).

Intervenors have made good faith efforts to adhere to the fuel cost recovery timelines in this proceeding (and in prior years), but it has been challenging. *See* CCL and SACE, *Reply* (filed March 9, 2018) (describing the practical difficulties of meeting the timeline in this proceeding and in prior fuel cost proceedings). Even today, March 28, 2018, CCL and SACE have just received discovery responses from SCE&G in this proceeding. CCL and SACE's expert has not yet been able to review these new responses.

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It is not just CCL/SACE and SBA's experts that have had difficulty properly evaluating SCE&G's significant avoided cost changes in this docket. ORS's expert also reports having similar difficulties in his testimony filed March 23, 2018. ORS, *Direct Testimony of Brian Horii*. Witness Horii notes that: "Because of the time constraints and the lack of an avoided capacity cost calculation by SCE&G in this Docket, I was unable to produce an independent estimate of avoided capacity costs for a 100 MW change in supply." *Id.* at page 22, lines 4-5. He further recommends that "ORS and other parties should be allowed to review and provide comment to the Commission based on SCE&G's estimate and calculation." *Id.* at lines 8-9. He testifies to the difficulties he experienced gathering the necessary information from SCE&G to evaluate its proposals. "SCE&G has not provided a straightforward update to its avoided capacity cost estimates in this Docket. . . . I have concerns that parties have not had adequate opportunity to evaluate the accuracy of [SCE&G's proposals]." *Id.* at page 9, lines 22-23, page 10, lines 2-3. More time and discovery is needed to properly assess the proposals that SCE&G has put forward.

Finally, it is worth noting that Act 236 contemplated avoided cost <u>*recovery*</u> being an issue in the fuel cost recovery proceeding, but it is silent on the avoided cost *methodology* or related changes being considered in this proceeding. *See* S.C. Code Ann. § 58-27-865. Additionally, there is language in Act 236 indicating that avoided cost issues may be considered "coincident" with the fuel cost recovery proceeding, but not necessarily in the exact same proceeding. *See* S.C. Code Ann. § 58-39-140(C) ("Upon request by the Office of Regulatory Staff or the electrical utility, a public hearing must be held by the commission coincident with the fuel cost recovery proceeding required under Section 58-27-865 to determine whether an increase or decrease in the fuel cost component designed to recover incremental or avoided costs should be

granted."). The Commission has flexibility to bifurcate these issues of PR-2 updates and avoided cost methodology into a separate timetable at a minimum, and even a separate proceeding if necessary.

Conclusion

WHEREFORE, Intervenors respectfully request that the Commission grant the relief requested in SBA's *Motion to Bifurcate Issues*; grant parties in Docket 2018-2-E additional time for discovery and the right to file supplemental testimony related to SCE&G's PR-2 rate and avoided cost methodology changes; and order any other appropriate action the Commission may deem necessary.

Respectfully submitted this 28th day of March, 2018.

s/ J. Blanding Holman, IV

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BEFORE

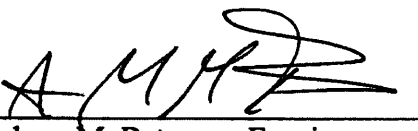
THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2017-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)))))	**ORS ANSWER TO SACE AND CCL PETITION FOR ORDER REQUIRING SCE&G TO COMPLY WITH COMMISSION ORDER NO. 2018-55**

The South Carolina Office of Regulatory Staff ("ORS") respectfully submits this Answer pursuant to S.C. Code Ann. Regs. 103-826 (2012) to the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy (collectively referred to as "Petitioners") Petition for an Order requiring South Carolina Electric & Gas Company to Comply with Commission Order No. 2018-55, issued on January 24, 2018. ORS supports the relief sought by the Petitioners.



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BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE:	Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)))))	**ORS ANSWER TO THE SOUTH CAROLINA SOLAR BUSINESS ALLIANCE MOTION TO BIFURCATE ISSUES**

The South Carolina Office of Regulatory Staff ("ORS") respectfully submits this Answer pursuant to S.C. Code Ann. Regs. 103-826 (2012) to the South Carolina Solar Business Alliance ("SBA") Motion to Bifurcate the issues of South Carolina Electric & Gas Company's ("SCE&G" or the "Company") PR-2 Rate update and SCE&G's request to change the avoided cost methodology, filed on March 23, 2018. ORS respectfully requests this Public Service Commission of South Carolina ("Commission") deny SBA's Motion in part and grant it in part.

The Commission should deny SBA's Motion to bifurcate the Company's PR-2 Rate update from this fuel proceeding. Through its testimony, and as further explained by ORS witness Horii, ORS recommends that the Commission adopt a PR-2 capacity value set at 19.5% of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity in Commission Docket No. 2018-2-E. In adopting the position put forth by ORS, the Commission should deny SBA's request to bifurcate the PR-2 Rate update from this fuel proceeding.

The Public Service Commission of South Carolina ("Commission") should grant SBA's Motion to bifurcate SCE&G's request to change its avoided cost methodology from this fuel proceeding. As indicated in ORS witness Horii's direct testimony, SCE&G proposed a substantial

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change in the methodology, thereby producing what may be an artificially low avoided capacity valuation.[1] This change directly impacts the avoided cost valuation. A greater duration of time in which to discuss and study this complex issue would allow the parties the opportunity to analyze the issues and develop the most prudent way forward. Therefore, ORS recommends the Commission grant SBA's request that SCE&G's request to change the avoided cost methodology be bifurcated from the fuel proceeding.

For the above reasons, ORS respectfully requests that this Commission deny SBA's Motion in part and grant it in part.

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[1] *See* Direct Testimony of Brian Horii, filed with the Commission on March 23, 2018, in Docket No. 2018-2-E, p. 21, ll. 3-12.

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2017-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	**SCE&G'S MOTION TO DISMISS AND RESPONSE IN OPPOSITION TO PETITION OF CCL AND SACE**

Pursuant to 10 S.C. Code Ann. Reg. § 103-829(A) (2012) and other applicable law, and in compliance with the Standing Hearing Officer Directive dated March 28, 2018, South Carolina Electric & Gas Company ("SCE&G" or the "Company") submits this Motion to Dismiss and Response in Opposition ("Motion to Dismiss") to the Petition for an Order Requiring SCE&G to Comply with Commission Order No. 2018-55 ("Petition") filed by the South Carolina Coastal Conservation League ("CCL") and the Southern Alliance for Clean Energy ("SACE"). For the reasons set forth herein, the Petition should be dismissed or denied. In support thereof, SCE&G would respectfully show as follows:

Background and Argument

In connection with the Company's 2016 annual fuel proceeding, Docket No. 2016-2-E, to which CCL and SACE were parties, SCE&G sought approval of Rate PR-2 that reflects SCE&G's long-run avoided cost rates to be used in conjunction with negotiating long-term contracts with qualifying cogeneration facilities. In that

proceeding, CCL and SACE, through the testimony of its witness Thomas Vitolo, recommended that the Company should update the rate schedule on an annual or semi-annual basis instead of twice a year or more often as recommended by SCE&G. Order No. 2016-297, dated April 29, 2016, issued in Docket No. 2016-2-E at 25. In approving the proposed Rate PR-2, however, the Commission agreed with the Company and determined it was reasonable for the Company to update "Rate PR-2 twice a year or more often as may be necessary." Order No. 2016-297 at 26.

On December 20, 2016, SCE&G filed its first update to the Rate PR-2 in accordance with Order No. 2016-297. By letter dated January 6, 2017, CCL and SACE opposed the update, asserting that the proposed rate "[did] not accurately reflect SCE&G's avoided costs." In resolving this matter, the parties agreed to hold in abeyance or stay the request to update the Rate PR-2 and that the Company would file a revised Rate PR-2 as part of the prefiled direct testimony of its witnesses in the Company's 2017 fuel proceeding, Docket No. 2017-2-E. The parties also agreed to maintain the then-current rate until the Commission issued its order on the subsequent updates to the Rate PR-2 as part of that matter.

In the 2017 fuel proceeding, CCL and SACE, through witness Vitolo, again recommended that the Company should update the rate schedule on an annual or biennial basis. Order No. 2017-246 at 24. Once more, the Commission agreed with the Company, however, and found that "SCE&G's proposal to update its proposed PR-2 Rate Schedule twice a year or more often as may be necessary is reasonable and consistent with Commission Order No. 2016-297." *Id.* at 25.

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Following the approval of the updated Rate PR-2 in Order No. 2017-246, SCE&G encountered several issues that impacted its resource plan. Among other things, the Company added or contracted to add additional solar facilities, announced the abandonment of the two new nuclear units at V.C. Summer Station, and announced its intent to purchase a 540-MW combined-cycle, natural gas-fired power plant. *See* Order No. 2018-55, dated January 24, 2018. As a result of these developments, on December 22, 2017, SCE&G advised the Commission that it was in the process of evaluating its resource plan going forward and did not believe that it would be prudent to update its Rate PR-2 at that time. *Id.* SCE&G further informed the Commission of its plan to implement changes to certain aspects of its avoided cost calculation including the use of an intermittent, non-dispatchable source of capacity, i.e., 100 MW of solar generation, to perform its difference in revenue requirement analysis to determine the appropriate avoided capacity costs for its Rate PR-2 tariff. *Id.*

CCL and SACE opposed the request, asserting that SCE&G should be required to file its update "within ... two weeks" of CCL and SACE's opposition. CCL and SACE's Response to SCE&G's Request for a Waiver of Commission Order 2017-247, dated January 16, 2018, at 5. In the alternative, however, CCL and SACE requested that "should the Commission deem SCE&G's waiver request to be reasonable, then at the very least the utility must file its six month update on February 23, 2018, the date by which it is required to file its testimony in the 2018 fuel cost docket." *Id.* Furthermore, they stated that "[t]his filing should be based on

the prior approved methodology" and that it "should be treated the same as the six month update, and should go into effect *as soon as possible* and prior to the resolution of the 2018 proceeding, so that rate payers have the immediate benefit of updated rates based on an approved methodology." *Id.* (Emphasis in original).

In other words, CCL and SACE asked the Commission to require SCE&G to file its updated Rate PR-2 no later than January 30, 2018 – two weeks after the filing date of their opposition. Alternatively, CCL and SACE requested that the updated Rate PR-2 be filed no later than February 23, 2018, and that the rates then be made immediately effective.

On January 24, 2018, the Commission ruled on SCE&G's request finding that "[c]urrent uncertainties with SCE&G make it appropriate to address [the Rate PR-2] **in the context of the fuel case in April.**" Order No. 2018-55 (emphasis added). The Commission also recognized that the Company "is planning to implement changes to certain aspects of its avoided cost calculation" and concluded that SCE&G should be required "to put **that proposed rate** in its prefiled testimony." *Id.* (Emphasis added). Notably, however, the Commission did not grant CCL and SACE's request that SCE&G be required to update its Rate PR-2 based on the prior approved methodology or that it go into effect as soon as possible. Rather, Order No. 2018-55 makes plain the Commission's decision that issues regarding updates to Rate PR-2 should be addressed and decided "in the fuel case" on the basis that it would "promote[] judicial economy and allow[] the issue to be addressed expeditiously." *Id.*

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On February 23, 2018, SCE&G prefiled direct testimony of its witnesses in Docket No. 2018-2-E including the direct testimony of Joseph M. Lynch. Among other things, Dr. Lynch's testimony set forth Rate PR-2 proposed by SCE&G, which reflected the changes identified in the Company's December 22, 2017 filing.

Accordingly, SCE&G fully complied with the Commission's directives set forth in Order No. 2018-55. For the reasons identified in its December 22, 2017 filing and its prefiled direct testimony, the Company believed the Rate PR-2 based upon the previously approved methodology did not properly reflect SCE&G's avoided costs and therefore did not propose that rate in Docket No. 2018-2-E. Instead, the Company set forth its proposed Rate PR-2 and the underlying changes giving rise to the updated rate in prefiled direct testimony, all in compliance with Order No. 2018-55. Furthermore, the Company did not identify a Rate PR-2 based upon the prior methodology because Order No. 2018-55 did not require it to do so.

CCL and SACE's Petition therefore is without any merit and is legally insufficient and so deficiently drawn that it fails to support CCL and SACE's request. Order No. 2018-55 required SCE&G to simply include its "proposed" Rate PR-2 in its testimony, which it did. Nowhere in the Order does it require the Company to include the rate that CCL and SACE wish that the Company would propose or to identify what the rate would have been under the prior methodology.[1]

[1] The Company further notes that CCL and SACE availed themselves of the right to seek this information in discovery. Specifically, CCL and SACE requested in their first data request to SCE&G in Docket No. 2018-2-E that the Company provide the four avoided energy costs for PR-2 under the methodology approved in Docket No. 2017-2-E and other information related to SCE&G's calculated avoided capacity costs. The Company produced

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If that is the relief CCL and SACE demanded, they could have petitioned the Commission to reconsider its decision in Order No. 2018-55. They failed to do so and, as such, are now collaterally estopped from seeking in its Petition the same relief which the Commission previously declined to grant. *See* S.C. Code Ann. § 58-27-2310 ("No right of appeal accrues to vacate or set aside, either in whole or in part, an order of the commission, except an order on a rehearing, unless a petition to the commission for a rehearing is filed and refused or considered refused because of the commission's failure to act within twenty days."); *Bennett v. South Carolina Dep't of Corrections*, 305 S.C. 310, 312, 408 S.E.2d 230, 231 (1991) ("This Court has repeatedly held that under the doctrines of *res judicata* and collateral estoppel, the decision of an administrative tribunal precludes the relitigation of the issues addressed by that tribunal in a collateral action.").

Moreover, the Petition and corresponding relief sought by CCL and SACE is nonsensical. Through its December 22, 2017 request, SCE&G sought a waiver of its obligation to file a six-month update to Rate PR-2. The Commission granted that request in Order No. 2018-55 and required SCE&G to file its "proposed rate" as part of the Company's prefiled direct testimony in Docket 2018-2-E, thus "allowing this issue to be addressed in the fuel case." Order No. 2018-55. Even so, CCL and SACE

the requested information on March 16, 2018. Accordingly, CCL and SACE had the information and the ability to propose alternative rates in their direct testimony, which they prefiled in Docket No. 2018-2-E on March 23, 2018. They chose not to do so. Instead, they merely complain that SCE&G did not file a rate under the previously approved methodology. For the reasons set forth in the prefiled direct testimony of Dr. Lynch, however, SCE&G did not "propose" these avoided cost rates because the Company believes that the previously approved methodology is no longer appropriate and that changes to the methodology are warranted and needed.

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now argue that SCE&G was required "to file its tariff update on February 23, 2018." Petition at 4. CCL and SACE therefore suggest that, even though the Commission specifically granted SCE&G's request for a waiver of the requirement that it file a six-month update to Rate PR-2 and that it be allowed to update the rate in the next fuel case, the Company remained obligated to update Rate PR-2 and have it become effective on February 23, 2018. It simply is illogical to interpret Order No. 2018-55 as approving the requested waiver but also requiring the Company to perform an act for which the waiver was explicitly granted. Consequently, the relief sought by CCL and SACE would render the Commission's Order meaningless and, consequently, should be denied.

For these reasons, the Petition should be dismissed for failing to state a claim upon which relief can be granted because CCL and SACE cannot prevail on any legal theory. A defendant may move for dismissal when the plaintiff does not allege facts sufficient to constitute a cause of action. *Baird v. Charleston County*, 333 S.C. 519, 511 S.E.2d 69 (1999). If the plaintiff is not entitled to relief, then it is proper to dismiss the case. *Spence v. Spence*, 368 S.C. 106, 122, 628 S.E.2d 869, 877 (2006). At bottom, CCL and SACE have not presented any facts sufficient to advance a claim that SCE&G failed to comply with the requirements of Order No. 2018-55. To the contrary, the Company presented its proposed Rate PR-2 in its prefiled direct testimony and identified the basis for the changes in the previously approved methodology, all as contemplated by Order No. 2018-55. CCL and SACE's Petition

therefore should be dismissed as the requested relief is neither warranted by the facts alleged nor required by a prior Commission order or otherwise.

Conclusion

For the foregoing reasons, SCE&G respectfully requests that the Petition be denied or dismissed as it fails to state a claim upon which relief may be granted, and for such other and further relief as is just and proper.

Respectfully submitted,

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**SCE&G'S RESPONSE IN OPPOSITION TO THE SOUTH CAROLINA SOLAR BUSINESS ALLIANCE'S MOTION TO BIFURCATE ISSUES**

Pursuant to 10 S.C. Code Ann. Reg. § 103-829(A) (2012), South Carolina Electric & Gas Company ("SCE&G" or the "Company") herein responds in opposition to the Motion to Bifurcate Issues ("Motion") filed by the South Carolina Solar Business Alliance ("SCSBA"). For the reasons discussed below, the Motion should be denied. In the alternative and if the Motion is granted, SCE&G requests that the Commission instruct the Company not to execute any additional purchase power agreements with solar developers until the Commission issues an order setting SCE&G's avoided costs at an appropriate level, in order to maintain the status quo and prevent the Company's customers from having to bear the cost of paying excessive avoided costs while these matters are litigated.

Background

In connection with its 2016 annual fuel proceeding, to which SCSBA was a party, SCE&G sought approval of Rate PR-2 that reflects SCE&G's long-run avoided cost rates to be used in conjunction with negotiating long-term contracts

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with qualifying cogeneration facilities. The Commission approved the proposed rate and determined that it was reasonable for the Company to update "Rate PR-2 twice a year or more often as may be necessary." Order No. 2016-297, dated April 29, 2016, issued in Docket No. 2016-2-E at 26; *see also* Order No. 2017-246, dated April 27, 2017, issued in Docket No. 2017-2-E at 22.

On December 22, 2017, SCE&G notified the Commission that the Company was evaluating its resource plan and intended to implement changes to its avoided cost calculation to determine the appropriate avoided capacity costs for its Rate PR-2 tariff. SCE&G therefore informed the Commission that it did not believe it would be prudent to update its Rate PR-2 at that time and requested a waiver of the requirement to update its Rate PR-2 twice a year. SCSBA opposed this request;[1] however, the Commission agreed with the Company finding that addressing these issues in the fuel case would promote judicial economy and allow them to be addressed expeditiously. *See* Order No. 2018-55, dated January 24, 2018, issued in Docket No. 2017-2-E. The Commission also required the Company to put its proposed Rate PR-2 in prefiled testimony as part of its 2018 fuel proceeding. SCSBA did not petition for reconsideration or rehearing or otherwise challenge this Order.

[1] It is noteworthy that, on December 20, 2016, SCE&G filed with the Commission its proposed update to Rate PR-2 in accordance with Order No. 2016-297. SCSBA responded by filing a complaint, which was docketed in Docket No. 2017-29-E, contesting the approval of the updated Rate PR-2 because the proposed rate reduced avoided cost capacity payments. It therefore is apparent that SCSBA's challenges to SCE&G's Rate PR-2 updates—including both the update in 2016 and 2017—are solely based upon its interest in keeping the rates as high as possible for as long as possible, even though this means SCE&G's customers will unreasonably bear the burden of the excessive costs that will result.

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In compliance with Order No. 2018-55, SCE&G included its proposed changes to Rate PR-2 in its 2018 fuel proceeding prefiled direct testimony. On March 7, 2018, SCSBA requested that the testimony deadlines and hearing date be extended because the Company filed testimony "addressing not only the fuel case, but including the issues of PR-2 rate update and avoided costs."[2] *See* Exhibit A, Docket No. 2018-2-E, Document No. 274972, SCSBA Email Communications dated March 7 and 8, 2018. SCE&G and SCSBA thereafter resolved these issues with the Company agreeing to an accelerated deadline to respond to SCSBA's discovery demands and to a one-day extension to all remaining testimony deadlines, and with SCSBA withdrawing its extension request ("Agreement"). *See* Exhibit B, Email Correspondence Between Parties. The Commission approved the parties' Agreement and granted the one-day extension of time for prefiled testimony. Order No. 2018-178, dated March 14, 2018, issued in Docket No. 2018-2-E.

Despite its agreement to maintain the current hearing schedule and to proceed with prefiling direct testimony in this matter, SCSBA filed the instant Motion on March 22, 2018. Therein, SCSBA asserts that, if it is "forced to adhere to the pre-filing deadlines in place in this Docket, [it] will be deprived of [its] due process rights to be heard on" the proposed update to Rate PR-2, the proposed

[2] *But see* S.C. Code Ann. § 58-27-865(A)(2)(c) (2015). ("'fuel costs related to purchased power' ... **shall include** ... **avoided costs** under ... PURPA.") (emphasis added); Order No. 2016-297 at 25 ("The Commission agrees with SCE&G that, in accordance with Act No. 236 of 2014, any adjustments to the PR-1 or PR-2 tariffs **should be considered as part the Company's annual fuel proceeding**.") (emphasis added).

changes in the avoided cost methodology, and other annual fuel case issues. Motion at 1.

Discussion

SCSBA's request is without merit and the Motion should be denied for several reasons.

First, by entering into the Agreement, SCSBA has waived any right to seek the relief requested in the motion. As reflected on page 1 of Exhibit A, counsel for SCSBA averred on March 8, 2018, that "the Company's inclusion of the PR-2 Rate update and the Company's changes to its avoided cost methodology, along with the normal fuel case issues, make the thirty day response time [for SCSBA's prefiled testimony] unworkable, unfair and **constitutes a lack of due process.**" (Emphasis added). While SCE&G disputes these contentions, SCSBA voluntarily negotiated an agreement with SCE&G and all parties to resolve these issues. Specifically, SCSBA agreed that, if SCE&G expedited its response to SCSBA's discovery requests, a one-day extension in the deadline to prefile its direct testimony would be adequate to meet its needs. SCSBA cannot now renege on its agreement, which was approved by the Commission, and claim that the process to which it specifically agreed somehow now results in a violation of its due process rights. *Cf. Arnold v. Yarborough*, 281 S.C. 570, 572, 316 S.E.2d 416, 417 (Ct. App. 1984) ("Acts of an attorney are directly attributable to and binding upon the client. Absent fraud or mistake, where attorneys of record for a party agree to settle a case, the party cannot later repudiate the agreement.") (internal citations omitted);

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Zaman v. S.C. State Bd. of Med. Exam'rs, 305 S.C. 281, 285, 408 S.E.2d 213, 215 (1991) (holding a party cannot complain of a violation of due process if the party has recourse to a constitutionally sufficient administrative procedure, but merely fails to take advantage of it).

SCSBA also failed to challenge the Commission's prior decision that the Company's proposed changes to the avoided cost methodology and updates to Rate PR-2 should be considered in the 2018 fuel docket. *See* Order No. 2018-55. Pursuant to S.C. Code Ann. § 58-27-2310, "[n]o right of appeal accrues to vacate or set aside, either in whole or in part, an order of the commission, except an order on a rehearing, unless a petition to the commission for a rehearing is filed and refused or considered refused because of the commission's failure to act within twenty days." Because SCSBA did not petition the Commission to reconsider its decision authorizing SCE&G to revise its avoided cost methodology and Rate PR-2 in the 2018 fuel docket, it is collaterally estopped from seeking in its Motion the same relief previously denied in Order No. 2018-55. *See Bennett v. S.C. Dep't of Corrections*, 305 S.C. 310, 312, 408 S.E.2d 230, 231 (1991) ("This Court has repeatedly held that under the doctrines of *res judicata* and collateral estoppel, the decision of an administrative tribunal precludes the relitigation of the issues addressed by that tribunal in a collateral action.").

Furthermore, SCSBA's protestations that it has not had adequate time to consider the issues in this matter are disingenuous. SCSBA has been a participant in a number of prior fuel dockets and related proceedings and therefore was fully

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aware of the issues that would be addressed in this fuel proceeding.[3] Moreover, the Commission initiated Docket No. 2018-2-E on October 4, 2017, and in doing so, issued a Notice of Hearing and Prefile Testimony Deadlines ("Notice of Hearing"). By December 15, 2017, SCE&G had timely provided the Commission's Notice of Hearing to all its electric customers and had also caused the Notice of Hearing to be published in newspapers throughout SCE&G's electric service territory. The Notice of Hearing explicitly states that the avoided costs incurred by the Company will be addressed in the fuel proceeding. SCSBA has known for years that SCE&G's avoided costs are set forth in its Rate PR-2 and that SCE&G updates its PR-2 Rate each year during the fuel proceeding. *See* Dockets No. 2016-2-E and 2017-2-E. Those prior dockets demonstrate that "the pre-filing deadlines in place in this Docket" are more than adequate to provide parties with the right to be heard on "[t]he issues of (i) SCE&G's PR-2 Rate Update (ii) SCE&G's change in its avoided costs methodology and (iii) the issues inherent in SCE&G's annual fuel case." Motion at 1-2.[4] Accordingly, SCSBA's claim that the Commission's "accommodation"

[3] As required by S.C. Code Ann. § 58-27-865 (2015), the Commission conducts an annual review of SCE&G's fuel purchasing practices and policies and determines whether any adjustment in the fuel cost recovery factors is necessary and reasonable. Upon information and belief, for at least the last 20 years, the Commission has scheduled prefiled testimony deadlines and the hearings for the Company's annual reviews in April of each year so that the new fuel cost recovery factors can become effective with SCE&G's first billing cycle for May of that year. Accordingly, the schedule for the Company's annual review of its fuel costs is well established and known to all parties that routinely participate in these proceedings, including SCSBA.

[4] SCE&G also notes that, on March 22, 2018, SCSBA prefiled direct testimony of its witness Dr. Ben Johnson, which consisted of 129 pages of testimony and 12 pages of exhibits. *Compare* Exhibit A at 1 (complaining that the prefiled direct testimony and exhibits of the Company's **seven** witnesses was 172 pages in length). In his direct

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of SCE&G's December 22, 2017 request for a waiver will deprive it of its due process rights to be heard on these issues is inaccurate and misleading.

In addition, the inclusion of avoided costs and Rate PR-2 updates in this docket is not the result of SCE&G requesting a waiver to update its avoided costs. Rather, it is South Carolina law and specifically, Act 236 of 2014, which requires that avoided costs be addressed in SCE&G's fuel proceeding, and Commission Order No. 2016-297, in which the Commission agreed with SCE&G that, "in accordance with Act No. 236 of 2014, any adjustments to the PR-1 or PR-2 tariffs **should be considered as part the Company's annual fuel proceeding**.") (emphasis added). *See also* S.C. Code Ann. § 58-27-865(A)(2)(c) (2015). ("'fuel costs related to purchased power' ... **shall include** ... **avoided costs** under ... PURPA.") (emphasis added). Accordingly, SCSBA has known since June 2014, that avoided costs will be addressed in SCE&G's annual fuel proceeding and has known since April 2016 that updates to the PR-2 tariff would be included as part of the Company's annual fuel proceeding.

Setting the statute and Order No. 2016-297 aside, however, on January 5, 2018, and as discussed previously, SCSBA opposed SCE&G's December 22, 2017 request for a waiver to update its avoided cost. On January 24, 2018, the Commission directly addressed SCE&G's request and SCSBA's opposition in Order No. 2018-55 ruling that "[c]urrent uncertainties with SCE&G make it appropriate

testimony, Dr. Johnson addresses the Company's avoided cost methodology, the updated Rate PR-2, and other issues related to fuel costs. Accordingly, SCSBA appears to have had no difficulty abiding by the deadlines imposed by the Commission.

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to address [SCE&G's update of Rate PR-2] in the context of the fuel case in April." Moreover, SCSBA ignores the fact that the Commission agreed with the suggestion of the South Carolina Coastal Conservation League, who also opposed SCE&G's waiver request, that SCE&G be required to address its proposed avoided costs in its prefiled testimony in the fuel proceeding.

SCSBA also had more than sufficient time to conduct discovery regarding these issues about which it now complains. The Commission informed the public through the Notice of Hearing that any person who wishes to participate in this docket had until January 25, 2018, to file a Petition to Intervene. SCSBA filed its Petition to Intervene on January 23, 2018, demonstrating that it had read and understood the Notice of Hearing. And, again, SCSBA knew by way of Order No. 2018-55 that SCE&G would include its updated avoided cost rate in its prefiled testimony. Despite its right to engage in discovery on these matters, however, SCSBA delayed in submitting any discovery requests to the Company until March 2, 2018. To now claim that its witness has been "unable to provide comprehensive, responsive Testimony on the [issues] in the time allowed for his Testimony preparation," Motion at 2, is untenable and demonstrates that its request is nothing more than an attempt to cure its poor planning in this matter. *See also* fn.4, *supra.*

Finally, granting SCSBA's request would effectively delay the implementation of SCE&G's updated fuel rates well beyond the date proposed by the Company and historically allowed by the Commission. For years, SCE&G has implemented new fuel rates beginning with its first billing cycle in May. As

discussed above and required by statute and Commission orders, these fuel rates include the Company's avoided costs and updates to the Company's Rate PR-2. Thus, "bifurcating" these issues into two separate proceedings effectively would delay implementing the necessary updates to Rate PR-2 and would require SCE&G to continue entering into power purchase agreements, based on stale avoided costs until the conclusion of the "bifurcated" proceeding. As a past participant in the Company's prior fuel dockets, SCSBA therefore knows its request will be disruptive and has not set forth any basis, much less a sufficient one, for such relief, other than its unilateral failure to meaningfully participate in this matter in a timely matter.

Although SCE&G believes SCSBA's request is without merit and should be denied for the reasons discussed above, if the Commission decides to grant the Motion and bifurcate the proceeding, the Company alternatively requests that Commission immediately suspend the existing Rate PR-2 and instruct the Company not to execute any additional purchase power agreements with solar developers until the Commission issues an order setting SCE&G's avoided costs at an appropriate level. Such an order would maintain the status quo and therefore prevent SCE&G's customers from having to bear the cost of paying excessive avoided costs to SCSBA members while these matters are litigated.

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Conclusion

For the reasons stated above, SCE&G respectfully requests that the Commission deny SCSBA's Motion to Bifurcate. Alternatively and in the event the Commission grants the Motion, SCE&G requests that the Commission issue an order immediately suspending the Company's Rate PR-2 and instructing the Company not to execute any additional purchase power agreements with solar developers until the Commission issues an order setting SCE&G's avoided costs at an appropriate level. SCE&G also requests that the Commission grant such other and further relief as is just and proper.

[SIGNATURE PAGE FOLLOWS]

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Respectfully submitted,

s/Benjamin P. Mustian
K. Chad Burgess, Esquire
Matthew Gissendanner, Esquire
Mail Code C222
220 Operation Way
Cayce, SC 29033-3701
Telephone: (803) 217-8141
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Attorneys for
South Carolina Electric & Gas Company

Columbia, South Carolina
April 2, 2018

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274972

Easterling, Deborah

POSTED 3-8-18dc
SAV

From: Butler, David
Sent: Thursday, March 08, 2018 4:01 PM
To: Easterling, Deborah
Cc: Schmieding, Janice
Subject: FW: Docket 2018-2-E - Extension of Time to File Responsive Testimony

Deb: Please put this memo in Docket File. Janice, this is a memo relating to the agenda item under Docket No. 2018-2-E.
Thanks,
David B.

RECEIVED
MAR 08 2018
PSC SC
MAIL / DMS

From: Carrie Schurg [mailto:caschurg@AustinRogersPA.com]
Sent: Thursday, March 08, 2018 3:41 PM
To: Butler, David <David.Butler@psc.sc.gov>
Cc: Benjamin Mustian <bmustian@willoughbyhoefer.com>; Bateman, Andrew <abateman@regstaff.sc.gov>; Pittman, Jenny <jpittman@regstaff.sc.gov>; alex@shissiaslawfirm.com; Scott Elliott <selliott@elliottlaw.us>; Bholman@selcsc.org; Tim Rogers <tfrogers@AustinRogersPA.com>; Matthew Gissendanner <matthew.gissendanner@scana.com>; ejones@selcsc.org; Richard Whitt <rlwhitt@austinrogerspa.com>; K. Chad Burgess <chad.burgess@scana.com>
Subject: Docket 2018-2-E - Extension of Time to File Responsive Testimony

This email was dictated by Richard Whitt:

David:

This Reply addresses the Company's response to SCSBA's and Southern Current's request for modification of filing timelines in Docket 2018-2-E. SCSBA and Southern Current's reply follows, *seriatim:*

Procedural Posture of Case Relates to the Company's Waiver Request.

A prior Order of this Commission required the Company to update its PR-2 Rate during the month of December, 2017. The Company filed a Waiver Request of that filing on December 22, 2017.

The Company is well aware that its last December PR-2 Rate update filing (December, 2016), lead to intervention and the Company's ultimate abandonment of the Company's proposed December, 2016 PR-2 Rate update. Obviously, had the Company made its December, 2017 PR-2 Rate update filing, as required by a previous Order of this Commission, there would have been intervention and scrutiny of its PR-2 Rate. By the Company moving the PR-2 Rate update into its Fuel case, the Company avoided stand-alone intervention in the PR-2 Rate update filing, as occurred in the Company's December, 2016 PR-2 Rate update.

As is set forth below, the Company's inclusion of the PR-2 Rate update and the Company's changes to its avoided costs methodology, along with the normal fuel case issues, make the thirty day response time for Intervenors unworkable, unfair and constitutes a lack of due process.

Facts Concerning Intervenors' Time to Respond.

- The Company's filing of Direct Testimony and Exhibits included the **Testimony and Exhibits of seven Witnesses running 172 pages in length**.

- The Company did not file and serve its Direct Testimony and Exhibits on Intervenors, which was due to be filed with this Commission on February 23, 2018, **until after 5 p.m.,** on that Friday. [Therefore Intervenors were not in receipt of the Company's Direct Testimony and Exhibits until after the close of business on February 23, 2018. With the weekend days following the after business hours filing by the Company on Friday, as a practical matter, **Intervenors did not have access to the 172 pages of Company's Direct Testimony and Exhibits until, sometime**

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on Monday, February 26, 2018. The filing of the Company's Direct Testimony and Exhibits after the close of business on Friday, precluded Intervenors from having time to review the Company's Direct Testimony and Exhibits on Friday and over the weekend, **thereby depriving the intervenors of three days of response time.**

- With the Intervenors not having access to the Company's Direct Testimony and Exhibits, until Monday, February 26, 2018, Intervenors would have had to draft and serve their Discovery by the close of business on Friday, **March 2, 2018, which is four days after the date of the Intervenors receipt of the Company's Direct Testimony and Exhibits**.

- In four days' time after the Intervenors date of receipt of the Company's Direct Testimony and Exhibits, the Intervenors could not reasonably receive and review 172 pages of Direct Testimony and Exhibits and secure the services of an Expert Witness to review the lengthy Direct Testimony and Exhibits of the Company. My client's retained an Expert on March 7, 2018. The short period of time allowed Intervenors for review and response to (i) the Company's voluminous rate case filing (ii) the Company's "...changes to certain aspects of [the Company's] avoided cost calculation." and (iii) the Company's delayed PR-2 Rate update, is insufficient for due process and an Intervenors' reasonable response.

The Company's Reference to Suspending its PR-2 Rate.

The Company's reference to suspension of the PR-2 Rate would negatively affect solar development in South Carolina and is clearly a punitive suggestion because the Company wishes to have this Commission to decide (i) the Company's fuel case (ii) changes to the Company's avoided costs methodology and (iii) the company's required PR-2 Rate update from December, 2017, without adequate time for Intervenors review and response to the same.

Our Request for Relief.

In the spirit of cooperation, we modify our request for an extension of time to respond to the Company's Direct Testimony and Exhibits, of thirty days extension to the original response date of March 22, 2018, or in the alternative, we request leave to file supplemental Testimony, after we receive responses to our First Request for Production, which will be e-filed and served in the morning.

Regards,
Richard Whitt.

From: Richard Whitt
Sent: Thursday, March 08, 2018 7:32 AM
To: BURGESS, KENNETH CHAD <chad.burgess@scana.com>
Cc: F. David Butler (david.butler@psc.sc.gov) <david.butler@psc.sc.gov>; bmustian@willoughbyhoefer.com; abateman@regstaff.sc.gov; jpittman@regstaff.sc.gov; alex@shissiaslawfirm.com; selliott@elliottlaw.us; Bholman@selcsc.org; Tim Rogers <tfrogers@AustinRogersPA.com>; Carrie Schurg <caschurg@AustinRogersPA.com>; GISSENDANNER, MATTHEW W <MATTHEW.GISSENDANNER@scana.com>
Subject: Re: Docket 2018-2-E - Extension of Time to File Responsive Testimony

David:

We plan to respond by COB today.

Regards,
Richard Whitt.

Sent from my iPhone - Richard L. Whitt

On Mar 7, 2018, at 5:34 PM, BURGESS, KENNETH CHAD <chad.burgess@scana.com> wrote:

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Dear David –

SCE&G is in receipt of the South Carolina Solar Business Alliance, Inc. and Southern Current LLC's (together "Solar Entities") request for a 90 day extension of time to submit its pre-filed direct testimony in the above-referenced docket. For the reasons below, this request should be denied.

As the Commission is aware, the Solar Entities have been past participants in prior fuel dockets, and as past participants they are fully aware of the issues to be addressed in a fuel proceeding. To claim that SCE&G's request for a waiver to adjust its avoided costs in December 2017, is the mechanism by which the Company is injecting "additional issues" in this proceeding is inaccurate. The Commission initiated Docket No. 2018-2-E on October 4, 2017, and in doing so, issued a Notice of Hearing and Prefile Testimony Deadlines ("Notice of Hearing"). By December 15, 2017, SCE&G had timely provided the Commission's Notice of Hearing to all its electric customers and had also caused the Notice of Hearing to be published in newspapers throughout SCE&G's electric service territory. The Notice of Hearing explicitly states that the avoided costs incurred by the Company will be addressed in the fuel proceeding, and the Solar Entities have known for years that SCE&G's avoided costs are set forth in its "Rate Schedule PR-2." And, they have likewise known that SCE&G updates its PR-2 Rate each year during the fuel proceeding. See Dockets No. 2016-2-E and 2017-2-E. Those prior dockets demonstrate that "[t]he issues of the fuel case, plus the PR-2 rate update and avoided costs" are <u>not</u> "too complicated for the existing time frame."

Contrary to the Solar Entities' belief otherwise, the inclusion of avoided costs in this docket is not the result of SCE&G requesting a waiver to update its avoided costs; it is South Carolina law and specifically, Act 236, which requires that avoided costs be addressed in SCE&G's fuel proceeding. The Solar Entities have known since June 2014, that avoided costs will be addressed in SCE&G's annual fuel proceeding. Setting the statute aside, on January 5, 2018, the South Carolina Solar Business Alliance, Inc. opposed SCE&G's December 2017 request for a waiver to update its avoided cost, and on January 24, 2018, the Commission directly addressed SCE&G's request, and the Solar Entities' opposition in Order No. 2018-55. In that order, the Commission ruled that "[c]urrent uncertainties with SCE&G make it appropriate to address [SCE&G's request for a waiver] in the context of the fuel case in April." Moreover, the Solar Entities ignore the fact that the Commission agreed with the suggestion of the Coastal Conservation League, who also opposed SCE&G's waiver request, that SCE&G be required to address its proposed avoided costs in its prefiled testimony in the fuel proceeding. Ironically, the Coastal Conservation League, who strongly supports the Solar Entities' request for more time, appear to have forgotten that the Commission agreed with their suggestion.

With regard to the Solar Entities' claim that they need time to conduct discovery, this argument should be rejected. The Commission informed the public that any person who wishes to participate in this docket had until January 25, 2018, to file a Petition to Intervene. Southern Current, LLC filed its Petition to Intervene on January 22, 2018, and the South Carolina Business Alliance, Inc. filed its Petition to Intervene on January 23, 2018; they obviously had read and understood the Notice of Hearing. Moreover, the South Carolina Solar Business

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Alliance (whose membership includes Southern Current) knew by way of Commission Order No. 2018-55 issued on January 25, 2018, that SCE&G would include its updated avoided cost rate in its prefiled testimony. Since that time, the Solar Entities have made no attempt whatsoever to conduct any discovery in this docket. It is their absolute right to not be active in this docket, but to wait until March 7, 2018, and then claim that they need time for discovery when they have made no attempt to conduct discovery is untenable. The Coastal Conservation League's "strong[ ] support" for the Solar Entities' request appears to be nothing more than their attempt to cure their poor planning in the service of discovery. More specifically, the Coastal Conservation League waited until March 6, 2018, to serve discovery upon SCE&G. By regulation, SCE&G's responses are due March 26, 2018, which is 4 days after the other parties' direct testimony is due. That the Solar Entities and the Coastal Conservation League have either not yet filed discovery or waited until this late date to file discovery is no fault of SCE&G and is not a sufficient basis to support a request for an extension of time.

Lastly, an extension of 90 days would push this proceeding well beyond the date by which SCE&G seeks to have its fuel rates implemented. For years, SCE&G has implemented it new fuel rates beginning with its first billing cycle in May. Again, as past participants, the Solar Entities know that their request is disruptive, and they have not provided an adequate basis for their disruption. Based on the foregoing, SCE&G objects to the Solar Entities' request. But in the event that the Solar Entities' request is granted, then SCE&G respectfully requests that the Commission immediately suspend its existing PR-2 rate and instruct SCE&G to not execute any additional purchase power agreements with solar developers until the Commission issues an order setting SCE&G's avoided costs at an appropriate level.

If you have any questions, please advise.

Chad

From: Carrie Schurg [mailto:caschurg@AustinRogersPA.com]
Sent: Wednesday, March 7, 2018 1:37 PM
To: F. David Butler (david.butler@psc.sc.gov) <david.butler@psc.sc.gov>
Cc: BURGESS, KENNETH CHAD <chad.burgess@scana.com>; bmustian@willoughbyhoefer.com; abateman@regstaff.sc.gov; jpittman@regstaff.sc.gov; alex@shissiaslawfirm.com; Richard Whitt <rlwhitt@AustinRogersPA.com>; selliott@elliottlaw.us; Bholman@selcsc.org; Tim Rogers <tfrogers@AustinRogersPA.com>
Subject: Docket 2018-2-E - Extension of Time to File Responsive Testimony

***This is an EXTERNAL email from Carrie Schurg (caschurg@austinrogerspa.com). Please do not click on a link or open any attachments unless you are confident it is from a trusted source.

This email was dictated by Richard Whitt:

David:

1. We represent the South Carolina Solar Business Alliance, Inc., and Southern Current LLC, in Docket 2018-2-E. I am addressing this request to you, because you have previously issued a Standing Hearing Officer Directive in this Docket.

2. As you know, SCE&G filed its Testimony on February 23, 2018, in Docket 2018-2-E, addressing not only the fuel case, but including the issues of PR-2 rate update and avoided costs. **The inclusion of these two additional issues** were as a result of SCE&G's request for a waiver, filed with this Commission on December 22, 2017.

3. Because these two additional, important issues were included in the Testimony, we are requesting that our March 22, 2018 Testimony deadline to be extended 90 days, or in the alternative, be held in abeyance until the parties have ample time to complete discovery requests and report back to you.

4. The issues of the fuel case, plus the PR-2 rate update and avoided costs, are too complicated for the existing time frame. Also, we need time for discovery requests to the Company, before we file Testimony.

5. All parties are copied hereon. Please advise, and this request is,

Respectfully Submitted,
Richard Whitt,
Timothy F. Rogers,
As Counsel for South Carolina Solar Business Alliance, Inc., and
Southern Current LLC.

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From: Richard Whitt <rlwhitt@AustinRogersPA.com>
Sent: Monday, March 12, 2018 3:07 PM
To: BURGESS, KENNETH CHAD <chad.burgess@scana.com>
Cc: Blan Holman <bholman@selcsc.org>; Carrie Schurg <caschurg@AustinRogersPA.com>
Subject: Re: Expert Witness///Re: Docket 2018-2-E - Extension of Time to File Responsive Testimony

***This is an EXTERNAL email from Richard Whitt (rlwhitt@austinrogerspa.com). Please do not click on a link or open any attachments unless you are confident it is from a trusted source.

Chad:

Please let David know that we have resolved our issues. Thank you.

Regards,
Richard Whitt.

Sent from my iPhone - Richard L. Whitt

On Mar 12, 2018, at 9:52 AM, BURGESS, KENNETH CHAD <chad.burgess@scana.com> wrote:

Richard and Blan –

I have made inquiry of SCE&G, and the Company is unable to move the hearing date scheduled for April 10, 2018, to any of the dates that you requested.

Turning to discovery, SCE&G will provide each of you with additional compact discs that will contain SCE&G's remaining responses to ORS's Audit Information Requests as well as follow-up questions and answers. As you might expect, some of SCE&G's responses are confidential. In order to provide you with access to the Company's confidential information, SCE&G requires that you execute a confidentiality agreement. If you are willing to enter into such an agreement, then please let me know, and I'll provide a draft agreement to you for review and consideration. As for your remaining discovery demands, SCE&G is continuing to work quickly to meet the agreed upon March 16, 2018 deadline.

Lastly, we owe David Butler an update today, and I would like to state that we have resolved our issues with SCE&G agreeing to an accelerated deadline to respond to your client's discovery demands and that SCE&G is agreeable to extending all testimony deadlines by one day. Please let me know if you are in agreement with this statement.

If you have any questions or wish to discuss this matter further, please let me know.

Chad

ELECTRONICALLY FILED - 2018 April 2 4:51 PM - SCPSC - Docket # 2018-2-E - Page 18 of 24

From: Richard Whitt [mailto:rlwhitt@AustinRogersPA.com]
Sent: Friday, March 9, 2018 6:55 PM
To: Blan Holman <bholman@selcsc.org>
Cc: BURGESS, KENNETH CHAD <chad.burgess@scana.com>; Carrie Schurg <caschurg@AustinRogersPA.com>
Subject: Expert Witness///Re: Docket 2018-2-E - Extension of Time to File Responsive Testimony

***This is an EXTERNAL email from Richard Whitt (rlwhitt@austinrogerspa.com). Please do not click on a link or open any attachments unless you are confident it is from a trusted source.

Blan and Chad:

As stated... our expert , Dr. Ben Johnson, is booked for April 10. We would have to check his schedule for any other date.

Regards,
Richard Whitt.

Sent from my iPhone - Richard L. Whitt

On Mar 9, 2018, at 4:24 PM, Blan Holman <bholman@selcsc.org> wrote:

Thanks for this Chad and your earlier email.

If you would send that in, I'd appreciate it. We also represent Southern Alliance for Clean Energy, so please add that.

I've got queries into expert to verify that March 16/23 will work. I am hopeful that it will.

Blan Holman
Southern Environmental Law Center
463 King St. - Suite B
Charleston, SC 29403

p. 843 720 5270
www.southernenvironment.org

From: BURGESS, KENNETH CHAD [chad.burgess@scana.com]
Sent: Friday, March 09, 2018 4:20 PM
To: Richard Whitt; Blan Holman
Subject: FW: Docket 2018-2-E - Extension of Time to File Responsive Testimony

Richard and Blan –

We owe David Butler a response. I suggest the following:

Dear David –

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Counsel for SCE&G, the Solar Business Alliance and the Coastal Conservation League have been engaged in discussions in an attempt to resolve their issues. Our conversations are on-going, and we anticipate being able to provide you with more information on Monday.

If you have any questions, please advise.

Please let me know if you are okay with me sending this to David, or if you prefer to send it under your signature, that would be acceptable to me.

Chad

From: Butler, David [mailto:David.Butler@psc.sc.gov]
Sent: Thursday, March 8, 2018 4:54 PM
To: Carrie Schurg <caschurg@AustinRogersPA.com>
Cc: Benjamin Mustian <bmustian@willoughbyhoefer.com>; Bateman, Andrew <abateman@regstaff.sc.gov>; Pittman, Jenny <jpittman@regstaff.sc.gov>; alex@shissiaslawfirm.com; Scott Elliott <selliott@elliottlaw.us>; Bholman@selcsc.org; Tim Rogers <tfrogers@AustinRogersPA.com>; GISSENDANNER, MATTHEW W <MATTHEW.GISSENDANNER@scana.com>; ejones@selcsc.org; Richard Whitt <rlwhitt@austinrogerspa.com>; BURGESS, KENNETH CHAD <chad.burgess@scana.com>; Melchers, Joseph <Joseph.Melchers@psc.sc.gov>; Spearman, James <James.Spearman@psc.sc.gov>
Subject: RE: Docket 2018-2-E - Extension of Time to File Responsive Testimony

***This is an EXTERNAL email from "Butler, David" (David.Butler@psc.sc.gov). Please do not click on a link or open any attachments unless you are confident it is from a trusted source.

In light of SCSBA's and Southern Current's modification of their extension request, it would be helpful if they could discuss the issue with SCE&G, and other parties to seek a possible resolution of the question. Please inform me tomorrow of any progress in this regard, if possible. If no resolution is reached, the Commission will rule on Wednesday.
Thanks,
David Butler

From: Carrie Schurg [mailto:caschurg@AustinRogersPA.com]
Sent: Thursday, March 08, 2018 3:41 PM
To: Butler, David <David.Butler@psc.sc.gov>
Cc: Benjamin Mustian <bmustian@willoughbyhoefer.com>; Bateman, Andrew <abateman@regstaff.sc.gov>; Pittman, Jenny <jpittman@regstaff.sc.gov>; alex@shissiaslawfirm.com; Scott Elliott <selliott@elliottlaw.us>; Bholman@selcsc.org; Tim Rogers <tfrogers@AustinRogersPA.com>; Matthew Gissendanner <matthew.gissendanner@scana.com>; ejones@selcsc.org; Richard Whitt <rlwhitt@austinrogerspa.com>; K. Chad Burgess <chad.burgess@scana.com>
Subject: Docket 2018-2-E - Extension of Time to File Responsive Testimony

This email was dictated by Richard Whitt:

ELECTRONICALLY FILED - 2018 April 2 4:51 PM - SCPSC - Docket # 2018-2-E - Page 20 of 24

David:

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As is set forth below, the Company's inclusion of the PR-2 Rate update and the Company's changes to its avoided costs methodology, along with the normal fuel case issues, make the thirty day response time for Intervenors unworkable, unfair and constitutes a lack of due process.

Facts Concerning Intervenors' Time to Respond.

- The Company's filing of Direct Testimony and Exhibits included the **Testimony and Exhibits of seven Witnesses running 172 pages in length**.

- The Company did not file and serve its Direct Testimony and Exhibits on Intervenors, which was due to be filed with this Commission on February 23, 2018, **until after 5 p.m.,** on that Friday. [Therefore Intervenors were not in receipt of the Company's Direct Testimony and Exhibits until after the close of business on February 23, 2018. With the weekend days following the after business hours filing by the Company on Friday, as a practical matter, **Intervenors did not have access to the 172 pages of Company's Direct Testimony and Exhibits until, sometime on Monday, February 26, 2018**. The filing of the Company's Direct Testimony and Exhibits after the close of business on Friday, precluded Intervenors from having time to review the Company's Direct Testimony and Exhibits on Friday and over the weekend, **thereby depriving the intervenors of three days of response time.**

- With the Intervenors not having access to the Company's Direct Testimony and Exhibits, until Monday, February 26, 2018, Intervenors would have had to draft and serve their Discovery by the close of business on Friday, **March 2, 2018, which is four days after the date of the Intervenors receipt of the Company's Direct Testimony and Exhibits**.

- In four days' time after the Intervenors date of receipt of the Company's Direct Testimony and Exhibits, the Intervenors could not reasonably receive and review 172 pages of Direct Testimony and Exhibits and secure the services of an Expert Witness to review the lengthy Direct Testimony and Exhibits of the Company. My client's retained an Expert on March 7, 2018. The

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short period of time allowed Intervenors for review and response to (i) the Company's voluminous rate case filing (ii) the Company's "...changes to certain aspects of [the Company's] avoided cost calculation." and (iii) the Company's delayed PR-2 Rate update, is insufficient for due process and an Intervenors' reasonable response.

The Company's Reference to Suspending its PR-2 Rate.

The Company's reference to suspension of the PR-2 Rate would negatively affect solar development in South Carolina and is clearly a punitive suggestion because the Company wishes to have this Commission to decide (i) the Company's fuel case (ii) changes to the Company's avoided costs methodology and (iii) the company's required PR-2 Rate update from December, 2017, without adequate time for Intervenors review and response to the same.

Our Request for Relief.

In the spirit of cooperation, we modify our request for an extension of time to respond to the Company's Direct Testimony and Exhibits, of thirty days extension to the original response date of March 22, 2018, or in the alternative, we request leave to file supplemental Testimony, after we receive responses to our First Request for Production, which will be e-filed and served in the morning.

Regards,
Richard Whitt.

From: Richard Whitt
Sent: Thursday, March 08, 2018 7:32 AM
To: BURGESS, KENNETH CHAD <chad.burgess@scana.com>
Cc: F. David Butler (david.butler@psc.sc.gov) <david.butler@psc.sc.gov>; bmustian@willoughbyhoefer.com; abateman@regstaff.sc.gov; jpittman@regstaff.sc.gov; alex@shissiaslawfirm.com; selliott@elliottlaw.us; Bholman@selcsc.org; Tim Rogers <tfrogers@AustinRogersPA.com>; Carrie Schurg <caschurg@AustinRogersPA.com>; GISSENDANNER, MATTHEW W <MATTHEW.GISSENDANNER@scana.com>
Subject: Re: Docket 2018-2-E - Extension of Time to File Responsive Testimony

David:

We plan to respond by COB today.

Regards,
Richard Whitt.

Sent from my iPhone - Richard L. Whitt

On Mar 7, 2018, at 5:34 PM, BURGESS, KENNETH CHAD <chad.burgess@scana.com> wrote:

Dear David –

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SCE&G is in receipt of the South Carolina Solar Business Alliance, Inc. and Southern Current LLC's (together "Solar Entities") request for a 90 day extension of time to submit its pre-filed direct testimony in the above-referenced docket. For the reasons below, this request should be denied.

As the Commission is aware, the Solar Entities have been past participants in prior fuel dockets, and as past participants they are fully aware of the issues to be addressed in a fuel proceeding. To claim that SCE&G's request for a waiver to adjust its avoided costs in December 2017, is the mechanism by which the Company is injecting "additional issues" in this proceeding is inaccurate. The Commission initiated Docket No. 2018-2-E on October 4, 2017, and in doing so, issued a Notice of Hearing and Prefile Testimony Deadlines ("Notice of Hearing"). By December 15, 2017, SCE&G had timely provided the Commission's Notice of Hearing to all its electric customers and had also caused the Notice of Hearing to be published in newspapers throughout SCE&G's electric service territory. The Notice of Hearing explicitly states that the avoided costs incurred by the Company will be addressed in the fuel proceeding, and the Solar Entities have known for years that SCE&G's avoided costs are set forth in its "Rate Schedule PR-2." And, they have likewise known that SCE&G updates its PR-2 Rate each year during the fuel proceeding. See Dockets No. 2016-2-E and 2017-2-E. Those prior dockets demonstrate that "[t]he issues of the fuel case, plus the PR-2 rate update and avoided costs" are <u>not</u> "too complicated for the existing time frame."

Contrary to the Solar Entities' belief otherwise, the inclusion of avoided costs in this docket is not the result of SCE&G requesting a waiver to update its avoided costs; it is South Carolina law and specifically, Act 236, which requires that avoided costs be addressed in SCE&G's fuel proceeding. The Solar Entities have known since June 2014, that avoided costs will be addressed in SCE&G's annual fuel proceeding. Setting the statute aside, on January 5, 2018, the South Carolina Solar Business Alliance, Inc. opposed SCE&G's December 2017 request for a waiver to update its avoided cost, and on January 24, 2018, the Commission directly addressed SCE&G's request, and the Solar Entities' opposition in Order No. 2018-55. In that order, the Commission ruled that "[c]urrent uncertainties with SCE&G make it appropriate to address [SCE&G's request for a waiver] in the context of the fuel case in April." Moreover, the Solar Entities ignore the fact that the Commission agreed with the suggestion of the Coastal Conservation League, who also opposed SCE&G's waiver request, that SCE&G be required to address its proposed avoided costs in its prefiled testimony in the fuel proceeding. Ironically, the Coastal Conservation League, who strongly supports the Solar Entities' request for more time, appear to have forgotten that the Commission agreed with their suggestion.

With regard to the Solar Entities' claim that they need time to conduct discovery, this argument should be rejected. The Commission informed the public

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that any person who wishes to participate in this docket had until January 25, 2018, to file a Petition to Intervene. Southern Current, LLC filed its Petition to Intervene on January 22, 2018, and the South Carolina Business Alliance, Inc. filed its Petition to Intervene on January 23, 2018; they obviously had read and understood the Notice of Hearing. Moreover, the South Carolina Solar Business Alliance (whose membership includes Southern Current) knew by way of Commission Order No. 2018-55 issued on January 25, 2018, that SCE&G would include its updated avoided cost rate in its prefiled testimony. Since that time, the Solar Entities have made no attempt whatsoever to conduct any discovery in this docket. It is their absolute right to not be active in this docket, but to wait until March 7, 2018, and then claim that they need time for discovery when they have made no attempt to conduct discovery is untenable. The Coastal Conservation League's "strong[ ] support" for the Solar Entities' request appears to be nothing more than their attempt to cure their poor planning in the service of discovery. More specifically, the Coastal Conservation League waited until March 6, 2018, to serve discovery upon SCE&G. By regulation, SCE&G's responses are due March 26, 2018, which is 4 days after the other parties' direct testimony is due. That the Solar Entities and the Coastal Conservation League have either not yet filed discovery or waited until this late date to file discovery is no fault of SCE&G and is not a sufficient basis to support a request for an extension of time.

Lastly, an extension of 90 days would push this proceeding well beyond the date by which SCE&G seeks to have its fuel rates implemented. For years, SCE&G has implemented it new fuel rates beginning with its first billing cycle in May. Again, as past participants, the Solar Entities know that their request is disruptive, and they have not provided an adequate basis for their disruption. Based on the foregoing, SCE&G objects to the Solar Entities' request. But in the event that the Solar Entities' request is granted, then SCE&G respectfully requests that the Commission immediately suspend its existing PR-2 rate and instruct SCE&G to not execute any additional purchase power agreements with solar developers until the Commission issues an order setting SCE&G's avoided costs at an appropriate level.

If you have any questions, please advise.

Chad

From: Carrie Schurg [mailto:caschurg@AustinRogersPA.com]
Sent: Wednesday, March 7, 2018 1:37 PM
To: F. David Butler (david.butler@psc.sc.gov) <david.butler@psc.sc.gov>
Cc: BURGESS, KENNETH CHAD <chad.burgess@scana.com>; bmustian@willoughbyhoefer.com; abateman@regstaff.sc.gov; jpittman@regstaff.sc.gov; alex@shissiaslawfirm.com; Richard Whitt <rlwhitt@AustinRogersPA.com>; selliott@elliottlaw.us; Bholman@selcsc.org; Tim Rogers

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<tfrogers@AustinRogersPA.com>
Subject: Docket 2018-2-E - Extension of Time to File Responsive Testimony

***This is an EXTERNAL email from Carrie Schurg (caschurg@austinrogerspa.com). Please do not click on a link or open any attachments unless you are confident it is from a trusted source.

This email was dictated by Richard Whitt:

David:

1. We represent the South Carolina Solar Business Alliance, Inc., and Southern Current LLC, in Docket 2018-2-E. I am addressing this request to you, because you have previously issued a Standing Hearing Officer Directive in this Docket.

2. As you know, SCE&G filed its Testimony on February 23, 2018, in Docket 2018-2-E, addressing not only the fuel case, but including the issues of PR-2 rate update and avoided costs. **The inclusion of these two additional issues** were as a result of SCE&G's request for a waiver, filed with this Commission on December 22, 2017.

3. Because these two additional, important issues were included in the Testimony, we are requesting that our March 22, 2018 Testimony deadline to be extended 90 days, or in the alternative, be held in abeyance until the parties have ample time to complete discovery requests and report back to you.

4. The issues of the fuel case, plus the PR-2 rate update and avoided costs, are too complicated for the existing time frame. Also, we need time for discovery requests to the Company, before we file Testimony.

5. All parties are copied hereon. Please advise, and this request is,

Respectfully Submitted,
Richard Whitt,
Timothy F. Rogers,
As Counsel for South Carolina Solar Business Alliance, Inc., and
Southern Current LLC.

ELECTRONICALLY FILED - 2018 April 6 1:32 PM - SCPSC - Docket # 2018-2-E - Page 1 of 3

BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))))))	**PETITION FOR REHEARING AND/OR RECONSIDERATION**

The South Carolina Solar Business Alliance, Inc., ("SCSBA"), pursuant to S.C. Code Ann. § 58-5-330 (as amended) and 26 S.C. Ann. Regs. 103-825 (Supp. 2010), respectfully requests that the Public Service Commission of South Carolina ("Commission") grant rehearing and/or reconsideration of this Commission's **decision** in the above-referenced Docket, issued on April 4, 2018, received by SCSBA on April 5, 2018, and memorialized in a Directive Order dated April 4, 2018. See, S.C. Code Ann. § 58-5-330, "Within twenty days after an order or **decision** is made by the commission, any party to the action or proceeding may apply for a rehearing as to any matter determined in the action...." (Emphasis supplied). SCSBA's Petition for Rehearing and/or Reconsideration follows.

1. In its decision, this Commission stated, "Given all the circumstances, I move that we deny the [SCSBA's] motion."

2. During this Commission's Agenda session on April 4, 2018, the Docket reader apparently failed to publish to the nonmoving Commissioners and to place on the Record, that SCSBA's Motion to Bifurcate Issues was supported, as to that part of SCSBA's Motion to Bifurcate related to, "a change in avoided cost methodology", by counsel for the Office of Regulatory Staff ("ORS"). ORS' e-filed support stated, *inter alia*, "Therefore, ORS recommends the Commission grant SBA's request that SCE&G's request to change the avoided cost methodology be bifurcated from the fuel proceeding.", (e-filed with the Commission on April 2, 2018.)

3. Also during this Commission's Agenda session on April 4, 2018, the Docket reader also apparently failed to publish to the nonmoving Commissioners and to place on the Record, that SCSBA's Motion to Bifurcate Issues was supported by counsel for both the Southern Alliance for Clean Energy and the South Carolina Coastal Conservation League, by their e-filing with the Commission on March 28, 2018.

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4. This Commission made reference in its decision that SCSBA was on notice as to South Carolina Electric & Gas Company's ("SCE&G") intentions, by reference to this Commission's establishment of this Docket on October 4, 2017 and a reference to a December 17, 2017 date. Obviously, both dates **predated** SCE&G's notice to this Commission and others that SCE&G was requesting to **change their avoided cost methodology, which Notice did not occur until December 22, 2017**.

5. Also on the issue of notice referenced by this Commission in its decision, please consider the following. **Factually, SCE&G did not provide the substance and extent of SCE&G's proposed "change" in avoided cost methodology until SCE&G actually filed its Direct Testimony on February 23, 2018**.

6. SCSBA respectfully believes that this Commission's decision shows that this Commission was conflating the Commission's requirement to annually consider changes in inputs/values of avoided costs, with the actual facts of this matter and SCE&G's more drastic request for, "**a change in methodology**". Obviously, **SCSBA's Motion did not ask** this Commission to bifurcate its consideration of SCE&G's avoided costs, which is entirely proper. Instead, SCSBA's Motion on its face, only requested the bifurcation of the issue of, "**a change in avoided cost methodology**". For example, the fourth paragraph of this Commission's decision states that the Commission is "required" to include avoided costs in a fuel case, as support for the Commission's decision. SCSBA understands the requirement for this Commission's annual review of, "avoided costs", but this Commission is not required to consider "a change in avoided cost methodology", in SCE&G's fuel case.

7. Finally, this Commission's decision states that the previous decision allowing changes in avoided costs methodology, was not challenged. SCSBA believes that the previous Commission decision would have been interlocutory, as to any attempt at an appeal, and would prevent the same, (which would obviously be SCE&G's and the Commission's position on such an appeal). It would only have been appealable, under South Carolina law, if the Commission's decision affected the mode and manner of trial or finally settled some right. Clearly that was not the case, namely the inclusion of a single issue, in a future hearing. Also, in an appeal from this Commission there would be no automatic stay of the issue under appeal. The filing of an appeal may not have been decided until one or more years in the future, after the matter was long decided, and would have been an exercise in futility.

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CONCLUSION

Based on the foregoing, and in the interest in providing due process to the Petitioner, this Commission should rehear and/or reconsider this matter and issue its decision bifurcating the single issue of SCE&G's request to **change** its avoided cost methodology, from this fuel Docket. As stated in SCSBA's Motion, this Docket may continue as envisioned by this Commission's scheduling SCE&G's annual fuel case, inputs can be made and a fuel factor can be determined, the planned Hearing on April 10, 2018, may be held as scheduled and the new fuel factor may go into effect in the first billing cycle of May, 2018, as is customary. This Commission should also grant such other and further relief as it deems appropriate.

Respectfully Submitted,
/s/

Richard L. Whitt,
Timothy F. Rogers,
AUSTIN & ROGERS, P.A.
508 Hampton Street, Suite 300
Columbia South Carolina, 29201
(803) 256-4000
Counsel for the South Carolina Solar Business Alliance.

April 6, 2018
Columbia, South Carolina

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SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 843-720-5270 | 463 KING STREET, SUITE B CHARLESTON, SC 29403-7204 | Facsimile 843-414-7039

April 6, 2018

Via Electronic Filing

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, SC 29210

RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company, **Docket Number 2018-2-E**

Dear Ms. Boyd:

Please accept this correspondence as notice of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy's support for the relief sought by the South Carolina Solar Business Alliance, Inc. in its Petition for Rehearing and/or Reconsideration, filed on April 6, 2018 in the above-referenced docket.

Please contact me if you have any questions concerning this filing or require anything else on this matter.

Sincerely,

s/ J. Blanding Holman, IV

J. Blanding Holman, IV
SC Bar No. 72260
Southern Environmental Law Center
463 King St., Suite B
Charleston, SC 29403
Telephone: (843) 720-5270
Fax: (843) 720-5240

Attorney for South Carolina Coastal Conservation League and Southern Alliance for Clean Energy

ELECTRONICALLY FILED - 2018 April 6 2:56 PM - SCPSC - Docket # 2018-2-E - Page 1 of 5

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NOS. 2017-2-E and 2018-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**CCL AND SACE'S PETITION TO RECONSIDER**

Pursuant to S.C. Code Ann. § 58-5-330 and S.C. Code Ann. Regs. 103-825 and 854, Intervenors South Carolina Coastal Conservation League and Southern Alliance for Clean Energy respectfully petition the Commission to reconsider the directive issued on April 5, 2018 related to CCL and SACE's Petition for an Order Requiring South Carolina Electric and Gas Company to Comply with Commission Order No. 2018-55 ("original petition").

CCL and SACE filed the original petition on March 21, 2018. Solar Business Alliance, Inc. filed a letter of support on March 27, 2018, and Office of Regulatory Staff filed an answer supporting the petition on April 2, 2018. SCE&G filed an Answer and Motion to Dismiss on April 2. Hearing Officer Butler issued a directive granting SCE&G's Motion to Dismiss on April 5, 2018.

CCL and SACE appreciate the Commission and Hearing Officer's expedited consideration of the original petition and submit this petition to reconsider in order to clarify the relief sought in the original petition and to respectfully request reconsideration.

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In its Motion to Dismiss, SCE&G portrayed CCL and SACE's original petition as requesting that the semi-annual PR-2 update be filed in 2018-2-E *in lieu of* SCE&G's newly proposed rates reflecting methodology changes. What CCL and SACE actually sought was for SCE&G to file the semi-annual PR-2 updates (without changing the underlying methodology) *in addition to* SCE&G's newly proposed rates with its proposed methodology changes. The reason for this request was to provide much-needed transparency and a comparison between the avoided cost rates with and without SCE&G's newly proposed methodology changes.

In both the original petition and in CCL and SACE's January 16 Response to SCE&G's Request for a Waiver of Commission Order 2017-246, CCL and SACE made this request: that SCE&G file its semi-annual updated PR-2 rates *in addition* to its newly proposed rates with methodology changes. The Commission specifically referenced CCL and SACE's Response in Order 2018-55: "One point the Coastal Conservation League made in its response was a request to require SCE&G to put *that* proposed rate in its prefiled testimony in the fuel proceeding, and I agree that we ought to require SCE&G to do that." (Emphasis added). CCL and SACE's understanding of this directive is that it required SCE&G to file not just the newly proposed rates with methodology changes, but also the semi-annual PR-2 update (without changing the underlying methodology), since this is what CCL and SACE referenced and requested as relief in their Response.

CCL and SACE respectfully submit that the alternative interpretation put forward by SCE&G renders pointless the Commission's directive in Order 2018-55.

According to SCE&G, the Commission directed it to file updated PR-2 rates reflecting any underlying methodology changes in its 2018-2-E testimony. But SCE&G

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would have done that without additional directive from the Commission, and SCE&G stated that plan in its waiver request to the Commission. What was not clear from SCE&G's waiver request was whether the Company would *also* testify to its semi-annual PR-2 updated rates *without* making changes to the underlying methodology. *This* is the requirement imposed by Commission Order 2018-55 as CCL and SACE understood it. It is likely that the PR-2 semi-annual updated rates *without* methodology changes would reflect solar power avoiding greater energy and capacity costs than SCE&G's newly proposed rates *with* methodology changes. The PSC's directive would allow it to see the difference between those two values. As a practical matter the difference could drive whether competitively developed renewable energy is deployed versus utility-built fossil fuel plants going forward. The parties in Docket No. 2018-2-E and the Commission should be provided with these contrasting rates to help inform the decision of whether to approve the newly proposed rates with methodology changes in 2018-2-E.[1]

WHEREFORE, Intervenors respectfully request that the Commission reconsider its Petition for an Order Requiring South Carolina Electric and Gas Company to Comply with Commission Order No. 2018-55 and SCE&G's Motion to Dismiss. CCL and SACE request that the Commission issue an order requiring SCE&G to comply with Order 2018-55 by filing an updated PR-2 rate based on the previously approved methodology (for comparison to the newly proposed rates); that the Commission grant parties in Docket 2018-2-E the right to file supplemental testimony related to SCE&G's filing once it has been made; that the Commission expedite its consideration of this petition in light

[1] In its Motion to Dismiss, SCE&G pointed to a data response in which it provided the semi-annual update to avoided energy costs. Yet the motion is silent on updated avoided *capacity* costs, which SCE&G proposes to *eliminate* going forward. Moreover, the Commission's directive in Order 2018-55 was to file the semi-annual update in testimony, not to provide it only through discovery.

of its impact on issues currently being considered in Docket 2018-2-E, which is set for hearing on April 10, 2018; and that the Commission order any other appropriate action the Commission may deem necessary.

Respectfully submitted this 6th day of April, 2018.

s/ J. Blanding Holman, IV

J. Blanding Holman, IV
SC Bar No. 72260
Southern Environmental Law Center
463 King St., Suite B
Charleston, SC 29403
Telephone: (843) 720-5270
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Email: bholman@selcsc.org

Attorney for Petitioners South Carolina Coastal Conservation League and Southern Alliance for Clean Energy

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K. Chad Burgess
Director & Deputy General Counsel

chad.burgess@scana.com

April 9, 2018

VIA ELECTRONIC MAIL AND ELECTRONIC FILING

David Butler, Esquire
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company
Docket No. 2018-2-E

Dear David:

Please accept this letter as South Carolina Electric & Gas Company's response to the Petition for Rehearing and/or Reconsideration ("Petition") filed by the South Carolina Solar Business Alliance ("SBA") in the above-referenced docket. As an initial matter, the SBA's Petition is premature because the Public Service Commission of South Carolina ("Commission") has not yet issued a final order regarding the Petition. *See* Directive dated April 4, 2018, issued in Docket No. 2018-2-E. To date, the Commission has issued a directive only and at some point in the future, SCE&G anticipates that consistent with prior Commission practice, the Commission will memorialize its directive into a final order. Until that time, SBA's Petition is premature and should be dismissed for this reason.

Setting aside the procedural defect, the SBA's Petition claims that the "Docket reader" should have informed the Commission that the SBA's Motion to Bifurcate ("Motion") was supported by the South Carolina Office of Regulatory Staff, the South Carolina Coastal Conservation League, and the Southern Alliance for Clean Energy. Simply because the SBA's Motion was supported by other parties of record does not somehow automatically bolster the SBA's Motion and render the Commission's Directive deficient. Instead, it simply shows that these parties' interests align and nothing more. SCE&G is unaware of any statute, regulation, rule, order, case law or other applicable law that requires the "Docket reader" to reference every document filed in a docket before the Commission takes action on a matter and the SBA's cites nothing in support of its position. This argument also fails because according the Commission's "Utilities Agenda" posted on March 30, 2018, for the week of April 2, 2018, the Commission was advised of the letters of support filed by

(Continued . . .)

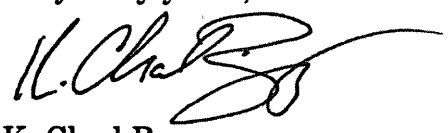
the South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy. *See* Item No. 63 "*Advise the Commission of Receipt of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy's Response in Support of Solar Business Alliance's Motion to Bifurcate Issues*" and Item No. 69 "*Advise the Commission of Receipt of E-Mail Correspondence between Parties of Record Regarding the Filing of Responses to Motion and Petition, Filed by David Butler, Esquire.*" Moreover, according to the Commission's "Utilities Agenda" posted on April 6, 2018, for the week of April 9, 2018, the Commission was advised of the South Carolina Office of Regulatory Staff's response to the SBA's Motion. *See* Item No. 5 "*Advise the Commission of Receipt of the Office of Regulatory Staff's Answer to the South Carolina Solar Business Alliance's Motion to Bifurcate Issues.*" It is without doubt that the Commission was aware of the support lent by certain other parties of record to the SBA.

Lastly, the SBA continues to assert the narrative that SCE&G has "change[d] their avoided cost methodology." Contrary to the SBA's belief otherwise, SCE&G has not changed its avoided cost methodology. It continues to employ the difference in revenue requirements methodology as approved by the Commission. The Company cannot be clearer on this point.

For the reasons above, SCE&G respectfully requests that the Commission deny SBA's Petition.

If you have any questions, please advise.

Very truly yours,



K. Chad Burgess

KCB/kms

cc: Andrew Bateman, Esquire
Jenny Pittman, Esquire
Richard Whitt, Esquire
Scott Elliott, Esquire
Katherine Ottenweller, Esquire
J. Blanding Holman IV, Esquire
(all via electronic mail and U.S. First Class Mail)

ELECTRONICALLY FILED - 2018 April 9 10:35 AM - SCPSC - Docket # 2018-2-E - Page 1 of 1

K. Chad Burgess
Director & Deputy General Counsel

chad.burgess@scana.com

April 9, 2018

VIA ELECTRONIC MAIL AND ELECTRONIC FILING

David Butler, Esquire
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company
Docket No. 2018-2-E

Dear David:

Please accept this letter as South Carolina Electric & Gas Company's response to the Petition to Reconsider ("Petition") filed by the South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy ("Petitioners") in the above-referenced docket. The Petitioners have not raised any issues that would require the Hearing Officer to reconsider his ruling in Order No. 2018-42-H dated April 5, 2018. Instead, the Petitioners re-argue the same issues it argued in its original pleading. For this reason, SCE&G incorporates herein the arguments set forth in its Motion to Dismiss and Response in Opposition as if repeated verbatim and respectfully requests that the Hearing Officer deny reconsideration of this matter.

If you have any questions, please advise.

Very truly yours,

K. Chad Burgess

KCB/kms
cc: Andrew Bateman, Esquire
Jenny Pittman, Esquire
Richard Whitt, Esquire
Scott Elliott, Esquire
Katherine Ottenweller, Esquire
J. Blanding Holman IV, Esquire
(all via electronic mail and U.S. First Class Mail)

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E

April 19, 2018

IN RE:

Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	**SOUTH CAROLINA OFFICE OF REGULATORY STAFF PROPOSED ORDER APPROVING FUEL COSTS AND REJECTING SOUTH CAROLINA ELECTRIC & GAS COMPANY'S POSITION ON AVOIDED COSTS**

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") and for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2017, through December 31, 2017 ("Review Period").

A. Notice and Interventions

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By letter dated October 4, 2017, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies by January 5, 2018. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 5, 2018. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 5, 2017, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office October 4, 2017 letter. On December 15, 2017, the Company filed with the Commission an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("SCCCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SCSBA"), Southern Current, LLC ("Southern Current"), CMC Steel South Carolina ("CMC Steel"), Wal-Mart Stores, East, LP and Sam's East, Incorporated ("Wal-Mart"), and Solbright Energy Solutions ("Solbright"). The petitions to intervene of SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, Wal-Mart, and Solbright were not opposed by SCE&G and no other parties sought to intervene in this proceeding. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015). Wal-Mart and Solbright subsequently withdrew from the proceeding.

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

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S.C. Code Ann. § 58-27-865(B) (2015) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

III. HEARING

Pursuant to S.C. Code § 58-27-865 (2015), the Commission convened a hearing on this matter on April 10, 2018, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire; Matthew W. Gissendanner, Esquire; and Benjamin Mustian, Esquire. SCEUC was represented by Scott Elliott, Esquire. SCCCL and SACE were represented by Katie Ottenweller, Esquire. SCSBA was represented by Richard L. Whitt, Esquire and Benjamin L. Snowden, Esquire. Southern Current was represented by Richard L. Whitt, Esquire. CMC Steel and its counsel of record were excused from attending and did not appear at the hearing. Andrew M. Bateman, Esquire and Jenny Pittman, Esquire represented ORS. In this Order, ORS, SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

At the outset of the hearing, the Commission voted on and denied SBA's Petition for Reconsideration of its Motion to Bifurcate Issues. SBA requested that the issues of SCE&G's update to the PR-2 Rate and to the methodology used to determine Avoided Capacity Costs be handled separately, at a later date. The Commission held that this proceeding was an appropriate venue for these issues.

Through their personal appearances, SCE&G presented the direct testimonies and exhibits of George A. Lippard, III; Henry E. Delk, Jr.; Michael D. Shinn; J. Darrin Kahl; Allen W. Rooks;

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John H. Raftery; and Joseph M. Lynch. Through their personal appearances, ORS presented the direct testimonies and exhibits of Sarah W. Johnson, Brian Horii, Gaby Smith, and Michael Seaman-Huynh.[1] Through their personal appearances, SCCCL and SACE presented the direct testimony and exhibits of Devi Glick, and SCSBA presented the direct testimony and exhibits of Ben Johnson. Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

In response to the direct testimony of ORS Witness Seaman-Huynh, SCE&G presented the rebuttal testimony of Witness Rooks. In response to the direct testimonies of ORS Witness Horii, SACE and CCL Witness Glick, and SCSBA Witness Johnson, SCE&G filed rebuttal testimony and exhibits of Witness Lynch. ORS Witness Horii, SACE and CCL Witness Glick, and SCSBA Witness Johnson filed surrebuttal and exhibits testimony in response to Witness Lynch's rebuttal.

A. Avoided Costs, Rate Schedule PR-2, and Rate Schedule PR-1

SCE&G Testimony

Witness Lynch testified regarding the Company's calculations of avoided costs for power purchases under PURPA. Following the methodology approved by the Commission in Order No. 2016-297, Witness Lynch testified SCE&G uses a difference in revenue requirements ("DRR") methodology to calculate its avoided energy and avoided capacity costs. This approach involves calculating the revenue requirements between a base case and a change case. The base case is defined by SCE&G's existing fleet of generators and the hourly load profile to be supplied by these generators. The change case is the same as the base case except that the hourly loads are

[1] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Shinn and Kahl were presented in the second panel; and Witnesses Rooks, Raftery and Lynch were presented in the third panel. ORS Witnesses Johnson and Horii were taken out of order to accommodate Witness Horii's travel arrangements, and ORS Witnesses Smith and Seaman-Huynh were presented as the final panel.

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reduced by 100 megawatts ("MW") in each hour which is the maximum reduction required by regulation under the Public Utility Regulatory Policy Act of 1978 ("PURPA"). The avoided costs are then calculated by taking the difference in revenue requirements between the two cases.

Witness Lynch testified that short-run avoided energy costs in the PR-1 Rate are calculated for the period May 2018 through April 2019 and long-run avoided costs in the PR-2 Rate are calculated for calendar years 2018-2032, the time period appropriate for SCE&G's 2018 Integrated Resource Plan ("IRP") planning horizon pursuant to S.C. Code Ann. § 58-37-40. These 15 years are divided into three groups of 5 years each: 2018 to 2022, 2023 to 2027, and 2028 to 2032. Witness Lynch testified that under SCE&G's current reserve margin policy,[2] it needs resource reserves of at least 14% of the summer peak demand to serve reliably during peak times and at least 12% during the remaining periods, with summer being May through October. For winter, November through April, Witness Lynch testified that SCE&G needs a minimum of 21% of its projected winter peak demand to serve reliably during winter peak periods and at least 14% during remaining periods. SCE&G proposed separate rates for solar and non-solar QFs in its PR-1 Rate and proposed to limit the availability of its PR-2 Rate only to solar Qualifying Facilities ("QFs"). Additionally, SCE&G proposed to update its PR-2 Rate going forward only on an "as needed" basis instead of twice a year as SCE&G feels it is more appropriate to update when the Company's long run avoided costs change significantly.

Witness Lynch testified that these changes are needed in order to pay each type of QF the correct avoided costs. SCE&G performed a study titled "Avoided Energy Cost Methods Study for

[2] Witness Lynch testified that it is SCE&G's intention to file the current resource plan with the Company's 2018 IRP, however he stressed that the resource plan is only a plan and as such is subject to change. See Lynch Direct Page 7, Line 3.

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Solar QFs[3]" ("Method Study") which demonstrates that if SCE&G does not distinguish its pricing between solar and non-solar QFs, then the amount SCE&G and its customers would be paying for solar energy would be more than the Company's actual avoided costs, contrary to PURPA's intent.

The Method Study compared the traditional round-the-clock methodology and the solar methodology using the PROSYM model to estimate the difference in revenue requirements between the base case and three different change cases: using the round-the-clock 100 MW purchase; using a power purchase from a 100 MW South Carolina solar profile; and using a North Carolina solar profile to help determine the impact on avoided costs based on a different solar profile. Under the traditional round-the-clock methodology, the change case is derived from the base case by subtracting 100 MWs from every hour of the base case load profile. Avoided energy costs are then collected into four time periods composed of two seasons – peak season and off-peak season – and two daily periods – peak hours and off-peak hours. June through September is the peak season. The peak hours for the peak season are 10:00 a.m. through 10:00 p.m. The peak hours for the off-peak season are 6:00 a.m. through 10:00 a.m. and 5:00 p.m. through 10:00 p.m., except during the months of May and October when they revert to the peak hours defined for the peak season. This method yields four avoided energy costs, one for each time period. With the solar methodology, the change case is derived from the base case by subtracting a 100 MW solar profile from the base case. Since the solar distribution of energy is captured in the solar profile, avoided energy costs are not collected into separate time periods but simply added over all hours. The results from the Method Study show that using the round-the-clock profile to develop the change case results in over-estimating the avoided energy costs by $4.85 per MWH. Witness

[3] Witness Lynch referenced this Method Study in his direct testimony as Exhibit JML-3, Hearing Exhibit 5.

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Lynch testified that as more solar is added to the system, the value of each additional increment of solar is reduced. Witness Lynch provided the following table, identified as Table 4 on Page 13 in his direct testimony, to reflect SCE&G's avoided energy costs for the PR-2 Rate:

Solar QF Avoided Energy Costs ($/kWh)

Time Period	Annual
2018-2022	$0.02853
2023-2027	$0.02994
2028-2032	$0.03414

Witness Lynch testified that SCE&G takes a similar approach in developing avoided capacity costs related to the PR-2 Rate as it does with avoided energy costs. Using the methodology detailed above, Witness Lynch testified that SCE&G's avoided capacity costs of solar reflected in the PR-2 Rate is zero. Given the amount of solar generation that is currently projected to interconnect to SCE&G's system, according to Witness Lynch, adding additional blocks of 100 MW solar generation does not affect SCE&G's future capacity needs. SCE&G performed a study, "On Calculating the Capacity Benefit of Solar QFs" ("Solar Capacity Benefit Study") which was attached to Witness Lynch's direct testimony as Exhibit JML-4. The Solar Capacity Benefit Study shows that on more than 80% of the days during the winter months, October through March, solar has no effect on SCE&G's daily peak demand. Since SCE&G's Reserve Margin Study shows that SCE&G needs as much capacity in the winter as it does in the summer, a resource has to provide capacity in the winter as well as the summer in order to avoid the need for capacity and have capacity value. Witness Lynch testified that because solar does not provide capacity during the winter, SCE&G is unable to avoid any of its projected future capacity needs therefore the avoided

capacity cost of solar for the winter months is zero. Witness Lynch testified that SCE&G plans to negotiate contracts with any non-solar QFs that do not fall under the PR-1 rate.

With the PR-1 Rate, Witness Lynch testified that SCE&G proposes to have separate rates for solar QFs and non-solar QFs in order to pay each type of QF the correct avoided costs, as discussed above and in the Methods Study. Avoided energy costs are computed the same for solar QFs on PR-1 as on PR-2, just over a different time period. SCE&G previously defined "critical peak hour" periods and used the number of hours in these periods to convert the annual capacity cost from $ per kW-year to $ per kWh, however Witness Lynch testified that going forward SCE&G proposes to eliminate the critical peak hours as a way to credit QFs for their capacity value. Witness Lynch gave three reasons to support this change: it is more appropriate to add an avoided capacity credit to the avoided energy cost to deliver the capacity value to a solar QF; the addition of so much solar on SCE&G's system shifts the previously experienced effective peak hour; and as reflected in the Reserve Margin Study, SCE&G determined that during the summer months, May through October, the resource reserves needed during peak demand times is at least 14%, with at least 12% needed during the remaining periods and during the winter months, November through April, SCE&G needs at least 21% of its projected winter peak demand during the peak times and at least 14% during the remaining period. Witness Lynch testified that SCE&G's need for capacity spans the entire year, so it is necessary to spread avoided capacity costs throughout the year. The resulting avoided energy costs for the PR-1 Rate are shown in the table below:

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PR-1 Rate: Avoided Energy Cost

Non-Solar QFs ($/kilowatt-hour ("kWh"))

Time Period	PSPH	PSOH	OSPH	OSOH
May-April	$0.03233	$0.02886	$0.03445	$0.03298

Solar QFs ($/kilowatt-hour ("kWh"))

TIME PERIOD	Year Round
May – April	$0.03256

Witness Lynch testified that the avoided capacity cost for solar QFs subject to the PR-1 Rate is zero. As explained with the PR-2 Rate, Witness Lynch testified that incremental solar QFs do not affect the resource plan and therefore avoid no future cost.

ORS Testimony

Witness Horii testified that ORS reviewed SCE&G's avoided cost calculations in order to verify the Company is using the avoided cost methodology approved by the Commission, to confirm the methodology meets PURPA requirements, and to verify the avoided cost rates requested by SCE&G in this docket are a reasonable result of the approved avoided cost methodology. Witness Horii testified that the Company's updates in avoided energy costs are a reasonable and consistent result of the methodology used by SCE&G and that the method used is appropriate. The DRR methodology that SCE&G uses supports various input models, including SCE&G's previous method of calculating avoided energy costs by modeling a QF with a constant 100 MW generation profile for the change case, and SCE&G's proposed method of modeling a QF with a solar profile for the change case. Witness Horii testified that the switch to the solar

profile is appropriate, and actually an improvement as SCE&G asserted that the vast majority of recent and future QF resources are solar. Witness Horii testified that in addition to the change in methodology addressed above, the change in SCE&G's supply side resources had a slight change to the avoided energy cost calculation. Witness Horii testified that the cancellation of the construction of the new nuclear units had a slight effect on SCE&G's avoided energy cost calculation; the units were included in SCE&G's 2017 IRP with supply purchases from the new units starting in 2020 and 2021. SCE&G's 2018 IRP the capacity shortfall created by these cancelled units was made up by increased solar and baseload combined-cycle gas plants. Witness Horii testified that he reviewed the fuel price forecasts used to calculate the avoided energy cost for both 2017 and 2018, and he found them to be consistent and similar.

Regarding avoided capacity costs, Witness Horii testified that SCE&G made a dramatic change in approach by not providing any avoided capacity cost calculations in this proceeding. SCE&G provided no information to allow calculation of a non-solar PR-2 capacity. Witness Horii disagreed with SCE&G's position that new solar projects would provide no capacity value. Witness Horii testified that SCE&G has not demonstrated that winter capacity needs are the same or greater than summer capacity needs. Witness Horii testified that SCE&G previously stated in its 2017 IRP that its capacity needs are driven by the summer season, which would mean that incremental solar would continue to provide capacity benefits, therefore incremental solar should continue to receive avoided capacity cost compensation in the PR-1 and PR-2 rate. Witness Horii testified that SCE&G has not provided a straightforward update to its avoided capacity cost estimates, but rather introduced a new concept of 100% winter capacity constraints. Witness Horii expressed concern that the Parties did not have an adequate opportunity to evaluate the accuracy of the winter capacity constraint. SCE&G asserts the position that there are no avoided capacity

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costs for fifteen (15) years if there are no winter capacity reductions, to which Witness Horii testified that this position requires that the winter capacity constraint be almost indisputable – however, SCE&G has not proven that position therefore it should not be adopted.

Witness Horii testified that the Reserve Margin Study is flawed, which resulted in SCE&G overestimating the amount of excess capacity needed in the winter. Witness Horii testified that the approach SCE&G used in the Reserve Margin Study is not an industry standard approach[4], and overstates the winter season peak demand variation, thus overstating the need for reserve margin in the winter. Witness Horii testified that he used SCE&G's data to calculate the reserve margin calculations and reached the conclusion that the amount of extra capacity required in the winter compared to the summer is only 211 MW and not 328 MW as SCE&G asserted. This change, Witness Horii explained, reduced the gap between the winter and summer reserve margins from 7% to 5%. Witness Horii testified that with this lower winter reserve margin used in SCE&G's IRP, summer capacity needs will exceed winter capacity needs in some years, therefore resulting in avoided capacity value for solar, which is a summer-focused resource. Witness Horii testified that the load forecasts in the load and resource table[5] appear to be higher than any reasonable expectation of average peak and deviate more in the winter than the summer, which introduces a bias toward making winter the constrained capacity season. Witness Horii testified that when the load forecasts are corrected, summer becomes the constraining season in nine (9) of the fifteen (15) forecast years, a 50% increase from what SCE&G asserted. Witness Horii testified that other changes may be necessary, beyond what he has suggested, and the the difference in summer versus

[4] As compared to the Loss of Load Probability method that Witness Horii testified SCE&G used in its 2012 Reserve Margin Study.
[5] See Witness Lynch Direct Testimony Exhibit JML-1, Hearing Exhibit 5.

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winter capacity needs has not been sufficiently analyzed. Witness Horii testified that the use of a zero avoided capacity cost for solar projects is not appropriate, and is a substantial change from the methodology previously used by SCE&G to calculate PR-1 and PR-2 Rates. Witness Horii testified that due to this large change and uncertainty over the accuracy of this change, SCE&G's position of zero avoided capacity costs should be rejected. As such, Witness Horii recommended that either the PR-2 capacity value be set at 19.5%[6] of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity; or that SCE&G be ordered to provide an estimate of the long-run avoided capacity cost and the calculation for the long-run avoided capacity costs, as they failed to do so in this Docket; or that the current capacity value be maintained for both PR-1 and PR-2 until a justified capacity value can be provided in the next rate update.

SCCCL, SACE, & SBA Testimony

Witness Glick testified on behalf of SACE and CCL. In accordance with ORS's position, Witness Glick testified that SCE&G failed to follow Commission-approved methodology for calculating the avoided capacity cost for solar QFs, which resulted in eliminating the avoided capacity payment. Witness Glick testified that the winter reserve margin SCE&G used was very high, which resulted in unreasonably low avoided cost payment rates in the PR-1 and PR-2 Rates. Witness Glick further testified that the errors SCE&G made in calculating avoided costs for QFs under PURPA, appear to be in conflict with PURPA. In accordance with ORS Witness Horii's recommendations, Witness Glick testified that SCE&G should be ordered to recalculate the avoided capacity cost, and file revised PR-1 and PR-2 tariffs. Witness Glick also recommended

[6] Witness Horii's recommendation of using 19.5% of the avoided capacity value is based on SCE&G's solar analysis that found that a 100 MW increment of new solar would reduce summer peak demand by about 19.5 MW.

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that SCE&G be required to complete a reserve margin study prior to the publication of the 2019 IRP, while recalculating the avoided cost of solar QFs based on a resource plan completed with 2017's 14% reserve margin.

Testifying on behalf of SBA, Dr. Johnson recommended that SCE&G's arguments for paying solar generators less than non-solar generators should be rejected, and that all QFs should be paid the full amount of avoided energy and capacity costs. Dr. Johnson testified that the differences in payments to different generators should be based upon the hours when they operate, paying less for hours when demand is low and more when demand is high. Dr. Johnson testified that limiting the availability of the PR-2 Rate only to solar QFs and offering separate rates for solar and non-solar QFs in the PR-1 Rate is inappropriate and will yield several negative effects. Such effects include creating barriers in competition between the two categories of generation, regulatory uncertainty, and discouraging significant investments in non-solar technologies that would fall under the PR-2 Rate. In accordance with ORS recommendations, Dr. Johnson testified that the Commission should reject the zero value for avoided capacity cost and eliminate standard offer rates for non-solar QFs that should qualify for PR-2.[7] Dr. Johnson testified SCE&G should work with ORS and other interested parties to develop higher, more accurate QF rates.

SCE&G Rebuttal Testimony

Witness Lynch testified in rebuttal that SCE&G is not implementing a change in its methodology, that there is just a change in the result – the zero avoided capacity cost. Witness Lynch testified that this result is to be expected due to the Law of Diminishing Marginal Returns – the more and more a product is added, the more the value of subsequent additions decreases.

[7] Witness Johnson also recommended that the Commission reject SCE&G's proposal to reduce energy rates, remove time-related price signals, and base rates on a sub-optimal "Base" expansion plan.

Witness Lynch testified that due to the MW of solar currently under contract, solar has reached this zero point for capacity. Witness Lynch testified that SCE&G has adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs, which is based on the summer and peak demand forecast offset by existing demand side management ("DSM"), existing signed Power Purchase Agreements ("PPAs") with solar QFs, and existing generating capacity. Witness Lynch testified that there are no flaws or inconsistencies in the Reserve Margin Study and that Witness Horii had the necessary data to complete his analysis. Witness Lynch testified that there is no bias towards a greater winter peak forecast and that can be verified by comparing growth projections for each season and customers' energy consumption. The growth rate for summer peak projections for 2018 through 2032 is 1.14% and the winter growth rate is 0.83%. Customers have been more conservative with their energy usage, which affects the summer peak demand but due to the energy consumed by heating strips largely driving the winter peak, the winter peak will not be greatly affected by conservation.

In response to Witness Horii's testimony that SCE&G did not use an industry standard approach, Witness Lynch testified that SCE&G has never used a Loss of Load Probability method to determine an appropriate reserve margin. SCE&G believes that the Loss of Load Probability method does not adequately address the summer and winter peak demand risk, but the Company previously used a component methodology for at least 20 years. Witness Lynch further testified that in recent IRP's, SCE&G has reported the results of its Loss of Load Probability solely for the purpose of providing additional support to its 14% summer reserve margin. Witness Lynch testified that SCE&G did not overly estimate the winter variability due to the use of heat strips and space heaters which supports an upward curving load in the winter. Witness Lynch further testified that Witness Horii miscalculated the maximum possible winter peak demand by using a January

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peak as opposed to a February peak, history shows that maximum winter demand can occur in January and in February. By utilizing the February peak, the result is a higher maximum load, which is higher than the January load therefore it is more appropriate to use a February peak to calculate the winter demand. Witness Lynch testified that by using February instead of January, as Witness Horii did, the result is a total deviation of 470 MWs.

As to avoided capacity cost, Witness Lynch testified that SCE&G did provide a capacity cost – and that cost is zero. Witness Lynch reiterated that incremental solar QF purchases do not change the resource plan, therefore the capacity cost is zero. Witness Lynch testified that adding a capacity payment to PR-1 and PR-2 when there are no associated avoided capacity costs would cause customers to ultimately pay more for purchased power than PURPA intends. Witness Lynch testified that there is no need for a published tariff for non-solar QFs greater than 100 kW as there are no non-solar QFs currently seeking a PPA. Should a non-solar QF seek to entire into a PPA, SCE&G will negotiate a contract with that party. Witness Lynch testified that in the future, if a substantial number of non-solar QFs seek to interconnect, then SCE&G would consider creating and publishing a tariff.

ORS Surrebuttal Testimony

Witness Horii testified in response to Witness Lynch regarding SCE&G's forecast need for winter capacity and a flaw with the Reserve Margin Study. Witness Horii testified that he was unable to verify Witness Lynch's analysis in his rebuttal testimony due to not receiving the data until the day before his Surrebuttal Testimony was due to be filed, which was insufficient time to conduct a review. Witness Horii reiterated that SCE&G has failed to provide specific evidence to the claim that SCE&G has reached the "zero point for capacity" regarding solar. SCE&G has not established that solar provides no capacity value. Regarding the flawed Reserve Margin Study,

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Witness Horii testified that the temperature variables used in the regression equations differ from those used in the corresponding graph,[8] and it is not possible to recreate the graph using the data provided by SCE&G in Witness Lynch's Exhibit JML-2[9]. SCE&G's data in this exhibit appears to be the Heating Degree Hour temperature metric, or hdh, but it actually is a transformed variable that is related to hdh but is not heating degree hours. Due to this variation, Witness Horii testified that he was unable to accurately evaluate SCE&G's Reserve Margin Study.

Witness Horii testified that he disagreed with SCE&G's claim that comparing summer and winter growth rates is a way to show that there is no bias towards a larger winter peak forecast due to the fact that the first year (2018) in SCE&G's forecast is biased to reduce the gap between summer and winter peak demand, and any growth rates applied to the incorrect first year values would continue the bias throughout the forecast. Witness Horii testified that SCE&G's assertions regarding heat pumps and space heaters does not change his view on the winter peak demand but reinforces it. There are two types of heating response relationships that affect winter peak data, on moderate days heat pumps operate in the efficient range but on colder days, the heat strips and additional heating sources are used, so the rise in peak demand with colder temperatures is greater. Witness Horii testified that this strengthened his argument that all winter days should not be used in the regression modeling. Witness Horii testified that the difference in the winter reserve margin due to this correction, when paired with other corrections to SCE&G's approach, rejects SCE&G's position that solar provides no capacity value.

[8] See Witness Lynch's Direct Testimony Exhibit JML-2, Hearing Exhibit 5.
[9] Witness Horii learned of the data inconsistency via telephone conversation with SCE&G two days prior to the deadline for filing ORS testimony.

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Witness Horii testified that the use of February as the peak month instead of January does not actually affect his estimate of winter demand side risk. As to whether SCE&G's calculation of the average peak using a mix of months as opposed to using the same month for calculating all peak values, Witness Horii testified that more information and time to conduct an analysis is needed to determine whether SCE&G's adjustment to Witness Horii's demand side risk is correct. Witness Horii testified that SCE&G's position that his winter deviation should have been higher does not change his position, it would only change the number of years during which summer would be a binding capacity constraint but not the fact that there will be some years where summer capacity would be the driver of capacity need. Witness Horii pointed out that this is a complex issue that deserves more scrutiny.

Witness Horii testified that Witness Lynch's rebuttal testimony that SCE&G's peak demand forecasting is reasonable based on a comparison to historical forecasts and actual peaks raises even more doubt over the forecasts SCE&G has used in its 2018 IRP. Over the past four (4) years, SCE&G forecast average winter growth of 36.25 MW per year, the highest growth during that time was 106 MW between 2014 and 2015. However, in the 2018 IRP, SCE&G forecasts a gross territorial peak of 5024 MW for winter 2018 – which is 388 MW higher than the forecast for winter 2017 and 256 MW higher than the actual 2017 winter peak. Witness Horii testified that Witness Lynch's testimony that PJM has a 16% summer reserve margin and a 27% winter reserve margin is misleading because it implies that it is appropriate for SCE&G to have a higher winter planning reserve margin than summer. However, PJM does not have a higher planning reserve margin in the winter, Witness Horii testified that SCE&G failed to point out that these numbers are not comparable to reserve margin, despite their descriptions. The 27% is actually a Winter Weekly Reserve Target and it is used to determine when units can go down for

maintenance outages in the winter. The 16% is the summer Installed Reserve Margin, which is equivalent to the planning reserve margins at issue in this Docket. Witness Horii testified that PJM is currently evaluating winter IRM, but the study has not yet been completed.

Regarding SCE&G's methodology to determine reserve margin, Witness Horii reiterated that Loss of Load Probability, or related Expected Unserved Energy, are commonly accepted methodologies. Witness Horii testified that he was unfamiliar with the component method being used elsewhere. A large change in the treatment for valuing PR-2 capacity should not be based on the component method, but should only be considered after the seasonal capacity question is evaluated using industry standard methods.

Witness Horii testified that Witness Lynch's testimony that winter capacity need is greater than summer capacity need in all years of the planning horizon consistent with the 2018 IRP load and resources forecast provided in Exhibit JML-1 is incorrect. In Witness Lynch's rebuttal testimony SCE&G used estimates of winter DSM reductions after 2020 that are 100 MW lower than the values presented in SCE&G's 2018 IRP, but provided no reason for this inconsistency. Witness Horii testified that even if there were a reason for the inconsistency, it would only strengthen his concerns over the zero capacity for PR-2. Witness Horii testified that in his IRP-based reconstructions, even more years would be designated as summer peaking, in contrast to SCE&G's assertion that the winter capacity need is greater in all of the years of the planning horizon.

Witness Horii testified that his recommendations remained the same after reviewing Witness Lynch's rebuttal. Witness Horii recommends that SCE&G's position that avoided capacity cost should be set at $0.00 should be rejected; that the PR-2 capacity value be set at 19.5% of the avoided cost per kW from a 100 MW change to SCE&G's base resource plan that excludes

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any non-committed future resources and reflects any planned plant retirements of firm capacity; SCE&G be required to provide an estimate of long-run avoided capacity cost and the calculation for the long-run avoided capacity costs; or in the alternative, require the current capacity value be maintained for both PR-1 and PR-2 until a better capacity value can be provided in the next rate update.

Intervenor Surrebuttal Testimony

In response to SCE&G Witness Lynch's rebuttal, Witness Glick testified that SCE&G's choice and adequacy of its reserve margin methodology has not been supported by the Company and reiterated that SCE&G should hire an independent firm to analyze and determine an appropriate reserve margin for both winter and summer. Witness Glick testified that it is not reasonable for SCE&G to develop its future resource plan based on the premise that it now has a winter peaking system. While the SCE&G system was winter peaking in 2017, it is not reasonable to say that will be the case going forward. Witness Glick testified to reduce the inefficient heating appliances that Witness Lynch asserts cause the high demand side risk, SCE&G should utilize targeted demand-side thermal efficiency measures to reduce the risk. In response to Witness Lynch's rebuttal testimony that adding a capacity payment when there are no associated avoided costs would raise customer costs, Witness Glick testified that while that statement is correct, SCE&G has failed to adequately demonstrate that there are no avoided capacity costs associated with solar QFs over the long-run.

Dr. Johnson testified on behalf of SBA in response to Witness Lynch's rebuttal. Dr. Johnson testified in agreement with Witness Horii, that despite the volume of material exchanged in preparation for the hearing there was not an adequate opportunity to fully review and analyze the issues in this Docket. In response to Witness Lynch asserting that Dr. Johnson's testimony

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was merely a repeat from the 2017 proceeding, Dr. Johnson testified that some of his arguments were made in the 2017 docket, but SCE&G's circumstances this year, such as the cancelation of the nuclear construction and the proposed changes to the tariffs, are such that some similar arguments need to be addressed again[10].

Based upon the evidence of record, and after reviewing the testimonies of the parties of record, the Commission finds and concludes that SCE&G properly calculated its avoided energy under PURPA using the methodology approved by the Commission in Order No. 2016-297. The Commission finds and concludes that the use of the DRR methodology is reasonable and appropriate. The Commission also finds and concludes that SCE&G's use of a solar profile for determining avoided energy costs for solar QFs is reasonable and appropriate. The Commission finds and concludes that SCE&G failed to establish its avoided capacity costs using the methodology approved by the Commission in Order No. 2016-297. The Commission finds and concludes that breaking the PR-1 Rate into solar and non-solar is reasonable as to avoided energy costs, but the Commission finds that the PR-1 Rate is not reasonable regarding avoided capacity costs. The Commission finds and concludes that the PR-2 Rate as applied to solar is reasonable as to avoided energy costs, but the Commission finds that the PR-2 Rate is not reasonable regarding avoided capacity costs. Additionally, the Commission finds that the lack of a PR-2 Rate for non-solar QFs and utilizing negotiated contracts as needed instead is not appropriate. The Commission finds and concludes that there are errors in SCE&G's Reserve Margin calculations, as outlined in ORS Witness Horii's Direct and Surrebuttal Testimonies.

[10] Witness Glick responded in similar fashion to Witness Lynch's rebuttal regarding her repetitive testimony.

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Therefore, the Commission rejects SCE&G's position that avoided capacity cost should be set at $0.00 and orders that SCE&G maintain the 2017 avoided capacity cost. The Commission also orders SCE&G to provide an estimate of long-run avoided capacity costs and the calculation for the long-run avoided capacity costs by May 31, 2018. The Commission further orders that SCE&G provide updates to the PR-1 and PR-2 Rates using the updated capacity costs.

NEM Distributed Energy Resources Methodology

1. SCE&G Testimony

Witness Lynch testified that, by way of its Order No. 2015-194 issued in Docket No. 2014-246-E, the Commission approved the following eleven (11) components of value for NEM Distributed Energy Resources:

Net Energy Metering Methodology
1. +/- Avoided Energy
2. +/-Energy Losses/Line Losses
3. +/- Avoided Capacity
4. +/- Ancillary Services
5. +/- T&D Capacity
6. +/- Avoided Criteria Pollutants
7. +/- Avoided CO_2 Emission Cost
8. +/- Fuel Hedge
9. +/-Utility Integration & Interconnection Costs
10. +/- Utility Administration Costs
11. +/- Environmental Costs

= Total Value of NEM Distributed Energy Resources

Witness Lynch testified regarding SCE&G's updates to these components as evidence by the table below[11]:

[11] See Table 10 on Page 27 of Witness Lynch's Corrected Direct Testimony

	Current Period	IRP Planning Horizon (15-Year Levelized)	Components
1	$0.03070	$0.03010	Avoided Energy Costs
2	$0	$0.00	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00008	$0.00008	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03078	$0.03018	Subtotal
12	$0.00251	$0.00246	Line Losses @ 0.9245
13	$0.03329	$0.03264	**Total Value of NEM Distributed Energy Resources**

He also testified that, in Docket No. 2017-2-E, the Company calculated the value for these components and, in Order No. 2017-246, the Commission determined that those values complied with the NEM Methodology approved by the Commission in Order No. 2015- 194. Witness Lynch testified that the Company updated these components of value by calculating the current value and one for the value over the IRP planning horizon. Witness Lynch further provided information on SCE&G's evaluation of each component and its estimate of the associated value. Witness Rooks also sponsored the Company's proposed "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet which updates the total value of NEM Distributed

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Energy Resources to reflect the components of value for NEM Distributed Energy Resources enumerated by Witness Lynch.[12]

2. ORS Testimony

Witness Horii testified that the significant changes to SCE&G's total value of NEM Distributed Energy Resources were in the Avoided Energy Costs and Avoided Capacity Costs line items. Witness Horii testified that the PURPA avoided energy cost decreased from last year, which lead to a reduction in the NEM Distributed Energy Resources avoided energy cost. Witness Horii testified that due to SCE&G claiming a zero value for PURPA avoided capacity cost, SCE&G provided a zero value for the corresponding NEM Distributed Energy Resources avoided capacity cost. As for the other components with zero values, Witness Horii testified that SCE&G's justification was reasonable and SCE&G is following the methodology approved by the Commission in Order No. 2015-194. Aside from the Avoided Capacity Cost component, Witness Horii found that SCE&G's Value of NEM Distributed Energy Resources components are conservative but appropriate. As discussed previously, Witness Horii testified that the Avoided Capacity Cost values are inappropriate, therefore the Total Value of NEM Distributed Energy Resources would be impacted due to the recommended rejection of the zero value.

SCCCL, SACE, and SBA Testimony

As with ORS Witness Horii, Witness Glick testified that the errors regarding avoided costs also carry over to the NEM methodology and application that SCE&G used, which resulted in errors in the component valuations. Witness Glick specifically highlights SCE&G's avoided energy and avoided capacity costs, avoided transmission and distribution capacity value, avoided

[12] See Witness Rooks Direct Testimony at 16-17; See also Exhibit AWR-14, Hearing Exhibit No. 5

environmental costs and line losses.[13] Witness Glick recommended that SCE&G apply the recalculated avoided capacity cost as discussed above to the NEM components[14].

Based upon the evidence of record, and after reviewing the testimony of the parties of record, the Commission finds that SCE&G properly evaluated the components of value, with one exception, for NEM Distributed Energy Resources. Therefore, the Commission orders that SCE&G provide an updated table to reflect the correction to the Avoided Capacity Costs as detailed herein.

C. DER Programs and Costs

SCE&G Testimony

Witness Raftery discussed the performance of the Company's DER programs during the Review Period, and the costs associated with offering these DER programs during the Review Period. These programs include offering utility-scale DER programs, customer-scale NEM incentives, Performance Based Incentives, BCA program, and the Company's Community Solar program. Witness Raftery also discussed the Company's DER cost projections for the forecast period January 1, 2018, through April 30, 2019.

As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled an over-recovery of $1,504,690 in avoided costs and an under-recovery of $798,039 in incremental costs. For the period January 1, 2018, through April 30, 2019, the Company projects that DER program costs will include $9,304,269 in avoided costs and $25,313,951 in incremental costs. Witness Rooks provided actual data on the Company's DER avoided and incremental costs

[13] Witness Glick's testimony supports ORS's position regarding avoided capacity costs, however Witness Horii testified that transmission and distribution capacity cannot be adequately addressed at this time and SCE&G's valuations for the remaining NEM components were proper.
[14] Additionally, Witness Glick testified that SCE&G should correct its methodologies and calculations for avoided energy, avoided T&D capacity, avoided line losses, and avoided environmental cost value.

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for the historical Review Period and the projected DER costs for the period January 1, 2018, through April 30, 2019. Witness Rooks also sponsored the Company's proposed "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff.

Witness Raftery testified regarding the updates to SCE&G's Community Solar Program. By Order No. 2016-707, this Commission approved the Credit Rate Agreement between SCE&G and Clean Energy Collective, LLC (CEC). Per this agreement CEC is authorized to develop, build, and market up to 16 MW of community solar renewable generating facilities; the individual solar panels in these facilities are available for purchase or subscription by SCE&G customers. Witness Raftery testified that currently CEC is constructing three facilities: Springfield Solar, a 6 MW facility in Orangeburg County; Nimitz Solar, an 8 MW facility in Jasper County; and Curie Solar, a 2 MW facility in Hampton County. Witness Raftery testified that as of February 15, 2018, a total of 15.536 MW of solar from these three facilities has either been purchased or subscribed to, with the remaining 0.474 MW of capacity reserved for low-income customers.

Witness Raftery further testified that SCE&G met the 1% utility-scale goals as of December 31, 2017, with the construction and interconnection of nine (9) solar farms totaling 48.16 MW to SCE&G's distribution system as part of the Company's DER program. He stated that, as of December 31, 2017, SCE&G had 6,161 customers (6,021 residential and 140 non-residential) participating in its customer-scale DER programs. This customer participation represented approximately 56.81 MW of solar generating capacity on SCE&G's system. Witness Raftery testified that SCE&G has met the 1% goal for customer-scale facilities under Act 236.

Witness Raftery testified that SCE&G is planning to move forward with the additional utility-scale investment, pursuant to S.C. Code Ann. § 58-39-130(D)(2015). As of February 18,

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2018, SCE&G has 718 MW in signed PPAs in utility-scale DER and PURPA QFs. Witness Raftery testified that due to this high penetration, SCE&G plans to issue RFPs for solar photovoltaic systems coupled with battery energy storage. Additionally, Witness Raftery testified that SCE&G is working on plans for a solar farm at the Lake Murray Training Center at the Saluda Hydro Generating Station.

Witness Raftery also testified that, based on overall NEM adoption levels experienced since July 1, 2016, SCE&G forecasts that it will meet Act 236's net metering limit or cap of 2% in April or May of 2019. As of December 31, 2017, the total cumulative NEM generating capacity provided by the 6,308 net metering customer-generator facilities on SCE&G's system was approximately 48.03 MW, or approximately 1.14% of the Company's 6 previous five-year average peak demand of 4,225 MW.

ORS Testimony

ORS Witness Johnson testified that the Company's calculations regarding the DERP charges are in compliance with Act No. 236 of 2014 and Commission Orders, and that the Company's calculations support SCE&G's proposed DER program charges. Witness Johnson testified that ORS found SCE&G's DERP avoided and incremental costs to be reasonably and prudently incurred, and that SCE&G has met the Customer Scale and Utility Scale goals of Act 236. She further testified that the Company's calculation of the NEM Incentive is consistent with the Settlement Agreement in Docket No. 2014-246-E and the methodology approved in Commission Order No. 2015-194.

The Commission finds that the evidence presented by SCE&G establishes that, during the Review Period, SCE&G offered DER programs and took appropriate steps to fulfill its DER goals approved by the Commission in Order No. 2015-194. The Commission further finds that the

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Company's DER programs and the associated costs are reasonable and prudent and are designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130.

E. Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

SCE&G Testimony

SCE&G witnesses testified on issues related to the prudency of SCE&G's fuel purchasing practices, plant operations, and fuel inventory management, and explained the regulatory atmosphere governing environmental compliance for SCE&G. Witness Lippard discussed the operating performance of the V.C. Summer Nuclear Station. Witness Delk reviewed the operating performance of the Company's fossil/hydro units and of South Carolina Generating Company's Williams Electric Generating Station. Witness Shinn discussed the Company's procurement and delivery activities for coal and No. 2 fuel oil for electric generation, the changes that have occurred in coal markets since the last annual fuel adjustment hearing, and how these changes affected coal procurement during the Review Period and are anticipated to affect future procurement. Witness Shinn also discussed the procurement and delivery of limestone for the wet scrubbers at Wateree and Williams Stations, the nuclear fuel purchasing processes for SCE&G generation, uranium prices, and the near-term outlook of coal and uranium prices. Witness Kahl provided testimony about the natural gas purchasing processes for SCE&G generation and discussed natural gas prices as well as the near-term outlook. Witness Rooks provided actual fuel cost data for the Review Period, and projected fuel costs for the period January 1, 2018, through April 30, 2019; and recommended fuel rates for the period of May 2018 through April 2019.

ORS Testimony

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Witness Smith's direct testimony presented the results of the ORS Audit Department's examination of the Company's books and records pertaining to the Fuel Adjustment Clause operation for the Review Period, and the Company's estimated calculations for the months of January 2018 through April 2018. Based on the ORS Audit Department's examination of the Company's books and records, and the Company's operation of the fuel cost recovery mechanism, Witness Smith verified that the Company's books and records accurately reflect the fuel costs incurred by the Company in accordance with previous Commission orders and with S.C. Code Ann. § 58-27-865 (2015). Witness Smith testified that SCE&G made an over-recovery adjustment of $113,739,272 to offset base fuel costs with a gain form interest rate swaps.[15] Witness Seaman-Huynh's direct testimony presented the ORS's findings resulting from its review of the Company's fuel expenses and power plant operations used in the generation of electricity during the Review Period. Based on ORS's review of the Company's operation of its generating facilities during the Review Period, Witness Seaman-Huynh verified that the Company made reasonable efforts to maximize unit availability and minimize fuel costs during the Review Period. Witness Seaman-Huynh also testified that ORS did not find that SCE&G made any adjustments to its Environmental Capacity Components during the Actual Period attributed to the IRS Section 174 deduction claims[16].

As reflected in the evidence of record, no party challenged the reasonableness or prudency of SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period. Based upon the evidence and testimony of the

[15] See Witness Smith's Direct Testimony Exhibit GS-5, Hearing Exhibit 14
[16] Witness Rooks testified in rebuttal that SCE&G that any adjustment for IRS Section 174 will be addressed in the Joint Petition filed by SCE&G and Dominion Energy on January 12, 2018.

witnesses the Commission therefore finds and concludes that SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period are reasonable and prudent.

F. Proposed Base Fuel Component

SCE&G Testimony

Witness Rooks testified that the actual base fuel under-collected balance was $2,355,695 at December 31, 2017, and the projected over-collected balance to be $50,536,981 at the end of April 2018. Witness Rooks also testified that a Base Fuel Component of 2.457 cents per kWh is projected to recover all base fuel costs in the forecast period in addition to eliminating the projected over-collected balance by the end of April 2019. Witness Rooks testified that there were not any Commission authorized adjustments to base fuel costs during the actual period, but pursuant to SCE&G's February 22, 2018 letter in Docket No. 2013-382-E, and in compliance with Commission Order No. 2013-776, SCE&G plans to apply gains from recently settled interest rate swaps in the amount of $113,739,272 to reduce its base fuel cost under-collection balance.[17]

ORS Testimony

Witness Seaman-Huynh's testified that ORS did not make any adjustments to the fuel factors proposed by SCE&G. Witness Seaman-Huynh testified that ORS reviewed SCE&G's proposal to apply gains from recently settled interest rate swaps to reduce its Base Fuel Component. SCE&G's proposal is in compliance with Commission Order No. 2013-776, therefore Witness Seaman-Huynh testified that ORS supports SCE&G's proposal. Witness Seaman-Huynh testified that if SCE&G's proposed changes are approved, the net effect on the average monthly

[17] This amount is reflected in Line 29 of Witness Rooks' Direct Testimony Exhibit AWR-1, Hearing Exhibit 4.

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bill for a residential customer on Rate 8 using 1,000 kWh would be approximately $0.72%, or 0.49%.

As reflected in the evidence of record, no party challenged SCE&G's proposed Base Fuel Component. Based upon the evidence and testimony of the witnesses the Commission therefore finds and concludes that SCE&G's proposed Base Fuel Component is reasonable and prudent and is consistent with S.C. Code Ann. § 58-27-865 (2015).

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The methodologies used by SCE&G to calculate its avoided energy costs under PURPA as described in the testimony of SCE&G Witness Lynch are reasonable and prudent and consistent with the methodology approved by the Commission in Order No. 2016-297. However, SCE&G failed to establish the reasonableness and prudency of the methodologies used in calculating its avoided capacity costs.

SCE&G's proposal to break out the PR-1 Rate into solar and non-solar is reasonable as to avoided energy costs, but the PR-1 Rate is not reasonable regarding avoided capacity costs. SCE&G's proposal regarding PR-2 Rate as applied to solar is reasonable as to avoided energy costs, but the PR-2 Rate is not reasonable regarding avoided capacity costs. Additionally, SCE&G's lack of a PR-2 Rate for non-solar QFs is not appropriate.

SCE&G's calculation and method of accounting for DERP avoided and incremental costs to be reasonably and prudently incurred in implementing the Company's DERP, were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

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SCE&G properly evaluated all of the components of value for NEM Distributed Energy Resources *except* for Avoided Capacity Costs. Therefore, the Commission orders that SCE&G provide an updated table to reflect the correction to the Avoided Capacity Costs as detailed below.

During the Review Period, SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194, which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

As a result of SCE&G's efforts to provide the DER programs, the over-collected balance of the DER program costs as of December 31, 2017, totaled $1,504,690 in avoided costs and an under-collected balance of $798,039 in incremental costs, which costs are reasonable and prudent.

SCE&G's proposed DER Avoided Cost Components by class are reasonable and prudent. SCE&G's proposed monthly per account DER Incremental Cost Component by class properly allocates SCE&G's DER program incremental costs and are reasonable and prudent.

SCE&G's fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) were reasonable and prudent.

IT IS THEREFORE ORDERED THAT:

1. The fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G are reasonable and prudent for the period January 1, 2017, through December 31, 2017.

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2. The methodologies used by SCE&G to calculate its avoided energy costs under PURPA are reasonable and prudent and consistent with the methodology approved by the Commission in Order No. 2016-297.

3. SCE&G has failed to meet its burden to establish that the methodologies used to calculate its avoided capacity costs under PURPA are consistent with the methodology approved by the Commission in Order No. 2016-297, therefore SCE&G's position that avoided capacity cost should be set at $0.00 is rejected.

4. SCE&G shall provide an estimate of long-run avoided capacity costs and the calculation for the long-run avoided capacity costs by **May 31, 2018**.

5. Rate Schedules PR-1 and PR-2 shall not be implemented for billing in May 2018 until updated avoided capacity costs are provided.

6. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period of January 1, 2017 to December 31, 2017 were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

7. Witness Lynch's Table 10 on Page 27 of his corrected direct testimony needs to be updated when the new avoided capacity cost is available on May 31, 2018. Additionally, the NEM Rider must not be updated until the updated value of NEM is available.

8. SCE&G's DER programs offered during the Review Period of January 1, 2017 to December 31, 2017 were reasonable and prudent, complied with Commission Order Nos. 2015-

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194 and 2015-512, and achieved SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

9. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 1.00
Small & Medium Gen. Svc.	$ 5.37
Large General Service	$ 100.00

10. The cumulative balances of SCE&G's DER program costs as of December 31, 2017, totaled an over-collected balance of $1,504,690 in avoided costs and an under-collected balance of $798,039 in incremental costs, which are reasonable and prudent.

11. SCE&G reasonably projected its DER program costs for the Period January 1, 2018 through April 30, 2019, which are currently reflected in Exhibit AWR-7 and Exhibit AWR-9 attached to the direct testimony of Allen Rooks.[18]

12. SCE&G's historical fuel costs recovery for the period ending December 2017 are consistent with S.C. Code Ann. § 58-27-865 (2015), only the DER forecasts will be impacted by the recalculation of the avoided capacity costs and will be reviewed in the next fuel proceeding.

13. SCE&G shall set its Base Fuel Component, Environmental Fuel & Avoided Capacity Components, DERP Avoided Cost Components, and Total Fuel Cost Factors consistent

[18] See also Hearing Exhibit 4.

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with the amounts set forth in the table below effective for bills rendered on and after the first billing cycle for May 2018.

Class	Base Fuel Component (¢/kWh)	Environmental Fuel & Avoided Capacity Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Total Fuel Costs Factor (¢/kWh)
Residential	2.451	0.083	0.042	2.576
Small General Service	2.451	0.075	0.038	2.564
Medium General Service	2.451	0.063	0.032	2.546
Large General Service	2.451	0.039	0.019	2.509
Lighting	2.451	0.000	0.000	2.451

14. The only tariff approved at this time is the Fuel and Variable Environmental Costs tariff.

15. SCE&G shall provide updated tariffs for the PR-1 and PR-2 Rates, and the NEM Rider to the Commission on May 31, 2018, including the new Value of NEM table.

16. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865(B) (2015).

17. SCE&G shall continue to submit monthly reports of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater to the Commission and ORS as previously required. Other Parties shall also be provided a copy of the monthly reports upon written request.

18. SCE&G shall account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by

booking the difference to revenues with a corresponding deferred debit or credit. ORS shall monitor the cumulative recovery amount.

19. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

_____, Commissioner

(SEAL)

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STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2018-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**CCL AND SACE'S PROPOSED ORDER**

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The Company further seeks approval for its (1) proposed avoided cost rates and methodology under the Public Utility Regulatory Policies Act of 1978[1] ("PURPA"), (2) proposed PR-1 and PR-2 avoided cost tariff updates, and (3) proposed 2018 update to calculations under

[1] Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended in scattered sections of 15, 16, 42, and 43 U.S.C.A.) (PURPA).

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the NEM Methodology approved in Commission Order No. 2015-194. The period under review in this Docket is January 1, 2017, through December 31, 2017 ("Review Period").

A. Notice and Intervention

By letter dated October 4, 2017, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation by January 5, 2018. The letter also instructed the Company to furnish the notice to its affected customers by U.S. mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 5, 2018. The Notice indicated the nature of the proceeding and advised all parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 5, 2017, the Company filed affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the October 4, 2017 letter. On December 15, 2017, the Company filed an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to Intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("CCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SBA"), Southern Current, LLC ("Southern Current"), and CMC Steel South Carolina ("CMC Steel"). The Petitions to Intervene of SCEUC, CCL, SACE, SBA, Southern Current, and CMC Steel were not opposed by SCE&G and no other parties sought to intervene in this proceeding. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015).

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II. STATUTORY STANDARDS

S.C. Code Ann. § 58-3-140(A) vests the Commission with the "power and jurisdiction to supervise and regulate the rates and service of every public utility in this State . . ." Every rate "made, demanded or received by any electrical utility ... shall be just and reasonable . . ." S.C. Code Ann. § 58-27-810 (Supp. 2015).

A. Fuel Cost Recovery under S.C. Code Ann. § 58-27-865

The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865. S.C. Code Ann. § 58-27-865(B) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designated to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

B. Recovery of Incremental and Avoided Costs of DER Programs under S.C. Code Ann. § 58-27-865

In addition to fuel costs, S.C. Code Ann. § 58-27-865 further provides for review and recovery of "incremental and avoided costs of distributed energy resource programs and net metering as authorized and approved under Chapters 39 and 40, Title 58[, which] shall be allocated and recovered from customers under a separate distributed energy component of the overall fuel factor that shall be allocated and recovered based on the same method that is used by the utility to allocate and recover variable environmental costs." S.C. Code Ann. § 58-27-865(A)(1) (Supp. 2015). Incremental DER program costs are "all reasonable and prudent costs incurred by an electrical utility to implement a distributed energy resource program pursuant to Section 58-39-130 of Chapter 39, the

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S.C. Distributed Energy Resource Act." Recoverable incremental costs are capped in S.C. Code Ann. § 58-39-150 "[f]or the protection of consumers and to ensure that the cost of DER programs do not exceed a reasonable threshold."

The DER incremental program costs include reasonable and prudent costs related to net energy metering ("NEM") and the Methodology for valuing distributed generation NEM resources approved in Commission Order 2015-194. Pursuant to the NEM Settlement Agreement approved previously by this Commission in Order No. 2015-194, Docket No. 2014-246-E, the Company must compute and update annually the "costs and benefits of net metering and the required amount of the DER NEM Incentive" coincident in time with the utility's filing under the fuel clause. Order 2015-194 at p. 22, para. (g).

The NEM Methodology approved in Order No. 2015-194 included the following eleven components:

+/- Avoided Energy
+/- Energy Losses/Line Losses
+/- Avoided Capacity
+/- Ancillary Services
+/- T&D Capacity
+/- Avoided Criteria Pollutants
+/- Avoided CO_2 Emissions Cost
+/- Fuel Hedge
+/- Utility Integration & Interconnection Costs
+/- Utility Administration Costs
+/- Environmental Costs
= Total Value of NEM Distributed Energy Resource

Each component in the methodology is accompanied by a description and guidelines for calculating the component. For example, "avoided capacity" is defined as the increase or reduction in fixed costs to the utility "of building and maintaining new conventional generation resources associated with the adoption of NEM." Some components may be used as placeholders "where there is currently a lack of capability to

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accurately quantify a particular category and/or a lack of cost or benefit to the Utility system." Order 2015-194 at p. 20, para. (e), Ex. 1 at p. 4, para. 8. Placeholder categories are to be "updated and included in the calculation of costs and benefits of net metering if and when capabilities to reasonably quantify those values and quantifiable costs or benefits to the Utility system in such categories become available." *Id.*

C. Recovery of PURPA Section 210 Avoided Costs under S.C. Code Ann. § 58-27-865

S.C. Code Ann. § 58-27-865 was amended by Act 236 to clarify that "'fuel costs related to purchased power', as used in subsection (A)(1) shall include . . . avoided costs under the Public Utility Regulatory Policy Act of 1978, also known as PURPA." S.C. Code Ann. § 58-27-865(A)(2) (Supp. 2015). Historically, SCE&G's PURPA avoided cost rates have been filed in Commission Docket No. 1995-1192-E; however, subsequent to Act 236 and the fuel clause revisions, SCE&G is seeking approval in the fuel cost proceeding for its avoided cost rates and methodology under Section 210 of the Public Utility Regulatory Policies Act of 1978, 16 U.S.C.A. § 824a-3. Section 210 of PURPA and relevant regulations promulgated by the Federal Energy Regulatory Commission ("FERC")[2] prescribe the responsibilities of FERC and of state regulatory authorities, such as this Commission, relating to the development of cogeneration and small power production. Section 210 of PURPA requires FERC to prescribe such rules as it determines necessary to encourage cogeneration and small power production, including rules requiring electric utilities to purchase electric power from, and to sell electric power to, cogeneration and small power production facilities. Under Section 210 of PURPA, cogeneration facilities and small power production facilities that meet certain standards

[2] FERC Stats. & Regs. 30,128 (1980) in Docket No. RM79-55 (Order No. 69), *see also* 45 Fed. Reg. 12,214 (1980).

can become "qualifying facilities" ("QFs"), and thus become eligible for the rates and exemptions established in accordance with Section 210 of PURPA.

Each electric utility is required under Section 210 of PURPA to offer to purchase available electric energy from cogeneration and small power production facilities that obtain QF status under Section 210 of PURPA. For such purchases, electric utilities are required to pay rates that are just and reasonable to the ratepayers of the utility, are in the public interest, and do not discriminate against cogenerators or small power producers. FERC regulations require that the rates electric utilities pay to purchase electric energy and capacity from qualifying cogenerators and small power producers reflect the cost that the purchasing utility can avoid as a result of obtaining energy and capacity from these resources, rather than generating an equivalent amount of energy itself or purchasing the energy or capacity from other suppliers.

FERC has addressed how utilities using the DRR method should incorporate their future capacity plans. FERC Order 69 states that the evaluation of the difference between a plan with and without the QF must be done based on "the utility's optimal capacity expansion plan," and "[a]n optimal capacity expansion plan is the schedule for the addition of new generating and transmission facilities which, based on an examination of capital, fuel, operating, and maintenance costs, will meet a utility's projected load requirements at the lowest total cost." Federal Register, Vol. 45 No. 38, p. 12,216 n.6.

FERC delegated the implementation of these rules to the State regulatory authorities. State commissions may implement these rules by the issuance of regulations, on a case-by-case basis, or by any other means reasonably designed to give effect to FERC's rules.

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III. HEARING

The Commission convened a hearing on this matter on April 10 through 11, 2018, with the Honorable Swain E. Whitfield, Chairman, presiding. SCE&G was represented by K. Chad Burgess, Esquire, Matthew W. Gissendanner, Esquire, and Benjamin P. Mustian, Esquire. SCEUC was represented by Scott Elliott, Esquire. SBA was represented by Richard L. Whitt, Esquire, and Benjamin L. Snowden, Esquire. Southern Current, LLC was represented by Richard L. Whitt, Esquire. CCL and SACE were represented by Katie C. Ottenweller, Esquire. CMC Steel and its counsel of record did not appear at the hearing. Andrew Bateman, Esquire and Jenny R. Pittman, Esquire represented ORS. In this Order, ORS, SCEUC, SBA, Southern Current, LLC, CCL, SACE, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

Through their personal appearances, SCE&G presented the direct testimonies and exhibits of George Lippard III, Henry E. Delk, Jr., Michael D. Shinn, J. Darrin Kahl, John H. Raftery, Joseph M. Lynch, Ph.D., and Allen W. Rooks, and ORS presented the direct testimonies and exhibits of Michael Seaman-Huynh, Gaby Smith, Sarah Johnson, and Brian Horii.[3] Through their personal appearances, SBA presented the direct testimony and exhibits of Ben Johnson, Ph.D, and CCL and SACE presented the direct testimony and exhibits of Devi Glick.[4] Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

[3] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Shinn and Kahl were presented in the second panel; and Witnesses Raftery, Lynch, and Rooks were presented in the third panel. ORS Witnesses Seaman-Huynh and Smith were presented in the first panel; Witnesses Johnson and Horii were presented in the second panel.

[4] The Parties stipulated into the record the testimony and exhibits of CCL and SACE Witness Glick.

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In response to the direct testimony of ORS Witness Seaman-Huynh, SCE&G presented the rebuttal testimony and exhibits of Witness Rooks. In response to the direct testimony of ORS Witness Horii, SBA Witness Johnson, and CCL and SACE Witness Glick, SCE&G presented the rebuttal testimony and exhibits of Witness Lynch. ORS filed surrebuttal testimony and an exhibit of Witness Horii, SBA filed surrebuttal testimony of Witness Johnson, and CCL and SACE filed surrebuttal testimony and exhibits of Witness Glick.

IV. REVIEW OF EVIDENCE AND EVIDENTIARY CONCLUSIONS

The parties presented evidence on the following contested topics: calculation of avoided costs and the 2018 distributed energy resource valuation update.

A. AVOIDED COSTS

SCE&G Witness Joseph M. Lynch testified to the Company's methodology for calculating the long-run avoided costs for power purchases under PURPA, the results of which are set out in revisions to PR-2 as proposed by the Company. Witness Lynch also described the Company's update to its short-run avoided costs, set out in revised PR-1 as proposed by the Company. Witness Lynch testified on cross examination that the majority of qualifying facilities under PURPA in the Company's territory for the near future are expected to be solar photovoltaic projects. The parties presented evidence on the following topics related to avoided cost: SCE&G's avoided capacity methodology; SCE&G's 2018 Integrated Resource Plan ("IRP") and its associated load forecast, reserve margin, and resource plan; and SCE&G's avoided energy methodology.

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a. Avoided Capacity Methodology

i. SCE&G Testimony

Witness Lynch explained that the Company uses a Difference in Revenue Requirements ("DRR") method to determine the long-run avoided costs of the Company over its 15-year IRP. The DRR method involves comparing the Company's revenue requirements between a base case and a change case. The base case is defined by SCE&G's "existing fleet of generators and the hourly load profile to be supplied by these generators." Lynch Direct Testimony at 4. "The change case is the same as the base case except that the hourly loads are reduced by a 100 MW profile. . . ." Lynch Direct Testimony at 4.

Witness Lynch explained the Company's approach to calculating avoided costs. The Company calculates the change in production costs between the base case and the change case using PROSYM, a computer program that models the "commitment and dispatch of generating units to serve load hour-by-hour . . ." Lynch Direct Testimony at 5. The avoided capacity cost is the "difference between the incremental capacity costs in both its base resource plan and the change plan." *Id.* The Company's long-run avoided costs are calculated over the 15-year planning horizon from 2018 to 2032. *Id.* The Company's short-run avoided costs are calculated for the period between May 2018 and April 2019.

Witness Lynch further explained the Company's approach to calculating avoided capacity costs under its DRR method. The Company uses the resource plan from its latest IRP or an updated resource plan to calculate "the incremental capital investment related revenue required to support the existing resource plan." Lynch Direct Testimony

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at 14. The Company then "derives a change case in its resource plan by considering the impact of a QF purchase from a 100 MW solar facility." *Id.*

Witness Lynch testified that SCE&G performed a new Reserve Margin Study in 2017. Based on the results in that Study, SCE&G has set a 14% summer peak reserve margin and a 21% winter peak reserve margin. Lynch Direct Testimony at 6. In addition, Witness Lynch testified that SCE&G performed a study "On Calculating the Capacity Benefit of Solar QFs," which shows that "on more than 80% of the days during the winter months of October through March, solar has no effect on SCE&G's daily peak demand." *Id.* at 14-15. Witness Lynch asserted that resources have capacity value only if they are available in both the summer and winter. *Id.* at 15. Furthermore, he stated that because solar does not provide capacity during the winter period and because it has only a "small impact in summer," the Company is "unable to avoid any of its projected future capacity needs." *Id.* at 15-18. SCE&G therefore proposes to set the avoided capacity costs of solar for the PR-2 and PR-1 rates to zero. At the same time, Witness Lynch also testified that the 2018 IRP reports a firm capacity value of solar power at 35% for summer peaks. Hearing Tr. at E-186–189.

As described by Witness Lynch, the Company's long-run avoided capacity cost rates dropped from $21.34 per kW-year in 2016, to $6.35 per kW-year in 2017, to $0 per kW-year this year.

Finally, Witness Lynch testified that SCE&G "does not believe there will ever be enough capacity from [] small non-solar QFs to affect its resource plan and, therefore, the avoided capacity costs for PR-1 are zero." Lynch Direct Testimony at 22. SCE&G also

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proposes to eliminate credits to non-solar QFs for their contribution to "critical peak hours." *Id.*

ii. SBA Testimony

SBA Witness Ben Johnson, Ph.D. testified that SCE&G is proposing unreasonably low avoided cost rates for QFs, which will not advance the interests of ratepayers or the public interest. He recommended that the Commission reject the Company's proposed avoided cost rates, because they will not adequately compensate QFs, they will not encourage small power production within SCE&G's service area, and they will not achieve the goals of PURPA. Instead, he recommended the Commission require the Company to collaboratively work with ORS and other interested parties to develop higher, more accurate QF rates.

Witness Johnson's extensive pre-filed testimony with the Commission addressed a number of issues in detail, including: rate comparisons between the Company's proposed avoided cost rates and those previously approved by the Commission for SCE&G and for Duke Energy; a discussion of PURPA requirements; and methodologies for estimating avoided costs. His testimony also includes independently developed estimates of the Company's long run avoided capacity costs and energy costs; and comparisons between the Company's proposed rates and the independently developed estimates.

Witness Johnson made recommendations for Commission action in the proceeding. Specifically related to the avoided capacity rate, he recommended that the Commission reject the Company's proposals to reduce the capacity rate of the PR-2 tariff to zero.

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iii. CCL and SACE Testimony

CCL and SACE Witness Devi Glick testified regarding shortcomings in SCE&G's avoided cost calculations offered to qualifying facilities or QFs under PURPA. According to Witness Glick, the Company's calculations fail to capture the actual avoided cost value of solar photovoltaic facilities, which are forecast to make up the vast majority of QFs for the foreseeable future.

For avoided capacity calculations, Witness Glick testified that SCE&G is using a "proposed new methodology." In prior years the Company has used a three step methodology where it: 1) calculated the avoided capacity value over a 15-year planning horizon comparing the difference in revenue requirements between the base case and the change case; 2) identified the set of critical peak hours where energy would have a capacity value on the system and spread the avoided capacity cost across those hours, assigning 80% of the annual capacity cost to the summer; and 3) calculated a single avoided cost value based on the production of a typical solar PV system. Glick Direct Testimony at 6. In contrast, in this year's docket, the Company assigns zero capacity value to solar, asserting that a resource must provide capacity in the winter and summer in order to provide any capacity value. According to Witness Glick, SCE&G artificially limited the future generation capacity projects or contracts that could be deferred or avoided by QFs; failed to include opportunity costs in its revenue requirements calculations; and failed to include a performance adjustment factor of 1.20. These problems yield an avoided capacity value that is too low.

Witness Glick testified that the Company has not, but should, account for opportunity costs in its revenue requirements calculations, which would reflect the value

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the Company could collect in additional revenue by selling marginal surplus generation capacity contracts as enabled by additional renewable energy resources on the system. Based on known market transactions in the SCE&G territory, the Company should use a capacity value of $68.62 per kW-yr in 2017, $70.92 per kW-yr in 2018, $72.38 per kW-yr in 2019, and the 2019 value adjusted for inflation for the year 2020 and beyond. Glick Direct Testimony at 20. Failing to account for these opportunity costs artificially depresses the value of avoided capacity according to Witness Glick.

Finally, Witness Glick recommended that the Company include a performance adjustment factor ("PAF") of 1.20, which correlates to availability of the QF resources of approximately 83.3 percent. *Id.* According to Witness Glick, the PAF ensures that a QF resource is treated in a nondiscriminatory manner when compared to utility-owned resources. Utility-owned resources are considered "used and useful" despite their occasional downtime or failure to deliver energy or capacity when called upon.

iv. ORS Testimony

Witness Brian Horii testified on behalf of ORS related to the Company's avoided cost calculations. ORS retained Witness Horii from E3 Consulting to review the following:

1) Verify the Company is using the avoided cost methodology approved by the Commission;
2) Confirm the methodology meets the Public Utility Regulatory Policies Act of 1978 ("PURPA") Requirements; and
3) Verify the avoided cost rates requested by SCE&G in this Docket are a reasonable result of the approved avoided cost methodology.

Witness Horii provided an overview of PURPA and a description of the Company's DRR approach to calculating avoided costs.

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Witness Horii testified that the Company has made a "dramatic change" in its approach by not providing any calculations of avoided capacity costs. Horii Direct Testimony at 8; *see also id.* at 10 ("Rather than simply updating inputs used to estimate the avoided capacity cost, SCE&G introduced a new concept of 100% winter capacity constraints as the basis for not calculating any avoided capacity cost."); *id.* at 21 ("SCE&G bases its assertion of zero avoided capacity cost for solar projects on SCE&G being constrained by winter capacity needs, and unaided by summer capacity reductions. This is a substantial change from the methodology and inputs used by SCE&G to calculate prior PR-1 and PR-2 rates[.]"). Witness Horii testified that the Company asserts that new solar projects will not provide any capacity reductions so the Company does not provide any calculations for such projects, and he further testified that the Company failed to provide any calculation of avoided capacity costs for non-solar projects despite a request from ORS. Horii Direct Testimony at 9.

Witness Horii recommended that SCE&G's position of zero avoided capacity costs be rejected at this time because SCE&G has "not adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs." *Id.* at 9. As detailed below, Witness Horii believes that SCE&G is relying on questionable "assumptions and studies conducted in the 2018 IRP." *Id.* at 22. For the time being, he recommends that the PR-2 capacity value be set at "19.5% of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity." *Id.* Applying the 19.5% factor would have resulted in an avoided capacity cost for solar

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of $4.16/kW-yr. He recommended that SCE&G be required to provide an estimate of long-run avoided capacity cost and the calculation for the long-run avoided capacity costs. Finally, he recommended that SCE&G continue to provide a standard published PR-2 rate for non-solar resources.

b. Integrated Resource Plan Reliance; SCE&G's Load Forecasting, Reserve Margin Study, and Resource Planning.

i. SCE&G Testimony

Witness Lynch testified that SCE&G's avoided capacity results are influenced by inputs from the Company's 2018 IRP and underlying studies, including a new Reserve Margin Study in 2017 that sets a 21% winter peak reserve margin. Lynch Direct Testimony at 6. Witness Lynch acknowledged in cross-examination that this new reserve margin policy will increase costs for SCE&G's customers. Hearing Tr. at E-241. SCE&G's Reserve Margin Study utilizes the "component method." The Component method adds together estimated peak variation from weather with variation in supply capacity to determine the total reserve MWs. Totals are calculated separately for the summer and winter seasons and divided by the summer and winter peak loads to arrive at reserve margin percentages.

The decrease in the avoided capacity rates paid to qualifying facilities is partly attributable to decreases in the amount of avoidable capacity in the Company's 2018 resource plan. Witness Lynch described several changes in the 2018 IRP that have impacted the Company's "base" resource plan and reduced the Company's proposed avoided capacity rates: the 2018 IRP shows the Company planning to acquire a 504 MW natural gas combined unit in 2018 and a 540 MW natural gas combined unit in 2023. Witness Lynch testified that the IRP is subject to change. Direct Testimony at 7, Hearing

Tr. at E-25. Witness Lynch also testified that the 2018 IRP relied upon by the Company for its DRR calculations of avoided costs was not submitted to the Commission for review and public comment until after the proposed Avoided Cost rates were submitted in this proceeding, and has not been approved by the Commission.

The Company also concedes that it uses a simple spreadsheet model to compare generation resources in its IRP. Hearing Transcript at pp. E-211-212, p. E-212 at ln. 24-25. The Company does not use any optimization software or sophisticated modeling that could integrate various resources and select the optimal, least cost generation resources to meet future needs. *Id.*

The Company's spreadsheet only actually analyzes two resource options for meeting capacity needs in 2023: a peaking turbine and a combined cycle plant. Hearing Tr. at p. E- 215-216. In response to a cross examination question about the Company's spreadsheet model, Witness Lynch states that "I think the heart of your point is, are you really moving around just combustion turbines and combined-cycles, and I'd say yes." *Id.* at E-215 ln. 24 – E-216 ln. 1. The Company did not compare the cost effectiveness of these gas resources to market purchases of power, solar, energy efficiency, or battery storage. For some of these resources, the Company "baked in" a certain, pre-set amount (such as for winter DSM), but does not allow these resources to compete on cost against its selected 540 MW combined cycle. *Id.* The Company would also likely seek recovery of not only capacity costs related to these self-built generation additions, but also a guaranteed return on equity. *Id.* at p. E-217, ln. 8.

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ii. SBA Testimony

Witness Johnson recommended rejecting the Company's proposal to base rates on a sub-optimal "Base" expansion plan that does not minimize revenue requirements. Johnson Direct Testimony at 40, 69-70; Surrebuttal Testimony at 8. In particular, he pointed out that SCE&G has not included additional Demand Side Management or power purchases that are specifically targeted at unusually cold winter mornings: "Because the 'Base' expansion plan excludes or ignores these types of opportunities (as with the modeling that was done in this proceeding), the avoided costs that are calculated using the DRR method will be underestimated." Johnson Surrebuttal Testimony at 12.

iii. SACE and CCL Testimony

Witness Glick testified that the Company's proposed winter reserve margin is substantially higher than peers Duke Energy Carolinas, Duke Progress, Southern Company, and Santee Cooper, each of which use a winter reserve margin between 12 and 17 percent. Glick Direct Testimony at 9. The Company looked solely on the relationship between load and weather to calculate the winter reserve margin. *Id.* at 10. By contrast, peer utilities utilize a more comprehensive methodology that balances physical reliability and customer costs. *Id.* at 11. Witness Glick recommends that the Commission require SCE&G to hire an independent firm to conduct an analysis to determine an appropriate reserve margin for both winter and summer. This study should utilize a methodology that balances physical reliability with minimizing economic costs to the customers. While that study is performed, the Commission should reject the Company's use of a 21% reserve margin and require SCE&G to use its historic 14 percent reserve margin.

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Similar to Witness Johnson, Witness Glick criticized the Company's incorporation of a proposed 540 MW combined cycle plant in 2023 into its avoided cost calculations. She testified that this is particularly inappropriate because the Company has not tested a range of scenarios; has not modeled the cost of its resource plan; and has not allowed DERs to compete with or displace the CC or other higher cost resources. Glick Direct Testimony at 13. Instead, SCE&G has developed a future resource plan that is premised on an inflated reserve margin and on the assumption that the utility's system will continue to be winter peaking. If SCE&G's reserve margin were 17%—a conservative margin compared to that of peer utilities—new large capacity additions could be delayed at least a year and a half. Overall costs to ratepayers under this scenario, Witness Glick testifies, "should be lower than under SCE&G's proposed avoided cost rates." Glick Surrebuttal Testimony at 9.

Witness Glick recommended that the Commission require SCE&G to complete a proper reserve margin study, to be finished in time for the 2019 IRP. The Commission should also require that SCE&G complete a new capacity expansion plan using last year's reserve margin of 14 percent. Glick Direct Testimony at 13-14.

iv. ORS Testimony

Witness Horii took issue with SCE&G's reliance on an unreviewed, unvetted, and unapproved 2018 IRP. Horii Direct Testimony at 21. He expressed particular concerns about SCE&G's utilization of the "component method" to inform its Reserve Margin Study, implementation of that method, and inconsistent load forecast.

Witness Horii stated that the component method is "not an industry standard approach." Horii Direct Testimony at 12. Witness Horii testified that, while the

component method has been used by the Company historically and may have produced consistent results when the reserve margin methodology was not used to determine the difference in reserve margin requirements between the summer and winter season, "it is unclear if the component methodology is appropriate" for this purpose. Horii Surrebuttal Testimony at 9. He stated that the Loss of Load Expectation, Loss of Load Probability, and Expected Unserved Energy methods are commonly accepted in the industry. *Id.* at 10.

Witness Horii went on to discuss why, setting aside whether the component method is appropriate, SCE&G's implementation of the method overstates winter peak demand variation (also termed "demand side risk") and therefore also raises questions about the Company's zero avoided capacity claim. In particular, Witness Horii testified to his belief that: 1) the regression equations SCE&G used to estimate peak demand today given historical peak days are incorrect and produce results that are contrary to engineering-based expectations, Horii Direct Testimony at 12-18; 2) the reserve margin threshold should be applied to forecasts of average annual peaks rather than maximum annual peaks because the risk of higher peaks is already embedded in the threshold percentage (since it is the difference between the average annual peak and the maximum annual peak), Horii Direct Testimony at 19-21; Horii Surrebuttal Testimony at 15; and 3) there are likely "other changes that should also be applied[,]" Horii Direct Testimony at 21. While these errors "appear to be relatively small in isolation," they add up when combined together and call SCE&G's winter capacity constraint assertions into doubt. Horii Surrebuttal Testimony at 5. Witness Horii testified that "there will be some number

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of years over the next fifteen years where summer will be the driver of capacity need." *Id.* at 6-7.

Finally, Witness Horii noted that SCE&G's winter load forecast and peak values appear inconsistent and inexplicably high. Witness Horii stated that SCE&G's gross peak demand forecasts "are higher than what normal loads should be given typical 1% per year growth rates since 2016." Horii Direct Testimony at 10; *see also* Direct at 10 - 11 ("I also believe the Company is forecasting summer and winter peak demands for future years in an inconsistent manner that creates a potentially false indication of higher capacity need for the winter season.") He noted that the Company's estimated gross territorial peak of 5,024 MW for winter 2018 is 388 MW higher than the winter 2017 forecast and 256 MW higher than the actual 2017 winter peak, despite the fact that average growth over last four years has been 36.25 MW per year and the highest growth between years was 106 MW between 2014 and 2015. Horii Surrebuttal Testimony at 8.

c. Avoided Energy

i. SCE&G Testimony

The avoided energy cost is the "difference between the base case costs and the change case costs." Lynch Direct Testimony at 5. The avoided energy costs are then "accumulated into four time-of-use periods" for on-peak and off-peak seasons and on- and off-peak hours. *Id.* at 5. The PROSYM results are adjusted for line losses, working capital impacts, gross receipts taxes, and generation taxes. *Id.* at 23.

SCE&G is proposing to limit its PR-2 Rate to solar QFs only and to update its PR-2 Rate going forward only on an "as needed" basis rather than twice a year. *Id.* at 7. This change is based on a study entitled "Avoided Energy Cost Methods Study for Solar

QFs," which Witness Lynch claimed indicates that the benefits of each additional solar generation facility diminish as more solar generation facilities are interconnected. For this reason, SCE&G is no longer using a "round-the-clock" methodology to subtract 100 MWs every hour of the base case load profile and then use four time-of-use periods with peak and off peak seasons and peak and off-peak hours within each season to derive four avoided energy costs. *Id.* at 8-9. Instead, the Company is proposing to use a "solar methodology" to subtract a 100 MW solar profile from the base case. As a result of this change, the Company proposes to reduce avoided energy costs by $4.85 per MWh. *Id.* at 10-13.

SCE&G also proposes to offer separate rates for solar and non-solar QFs in its PR-1 Rate. *Id.* at 7, 21. For non-solar QFs, the change case will be derived from the base case by subtracting a 100 MW round-the-clock power purchase profile. *Id.* at 21. Each QF will be paid based on how much energy it produces in each of four time-of-use periods.

ii. SBA Testimony

Witness Johnson asked that the Commission reject the Company's proposals to reduce energy rates despite circumstances where heat rates have increased; remove time-related price signals; and eliminate standard offer rates for non-solar generators larger than 100 kW. He testified that the Company's proposal to base rates on a single generic solar profile is inadequate because it does not "precisely match QF rates to avoided costs" or "ensure greater fairness to different types of generators." Johnson Direct Testimony at 93; *see also* 92-94.

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iii. CCL and SACE Testimony

For avoided energy calculations, Witness Glick reiterated her position that the Company's reserve margin is too high and that this has "allowed the company to plan away any generation shortfalls that could be more cost-effectively met with PV or other lower cost resources without explanation." Glick Direct Testimony at 13. She recommended that the Commission require SCE&G to complete a new reserve margin study and new capacity expansion plan. *Id.* at 13-14.

iv. ORS Testimony

Witness Horii determined that the method used by SCE&G to calculate avoided energy costs is consistent with the methodology approved by the Commission. He stated that SCE&G's shift to a solar profile for the change case is an improvement over the prior method. There were not significant changes made to SCE&G's avoided energy model inputs between 2017 and 2018. He determined that the avoided energy costs presented by the Company were a reasonable and consistent result of the methodology used by SCE&G.

d. The Commission's Conclusions Regarding Avoided Costs

The Company's avoided costs proposed in this docket are not just and reasonable, and must be revised prior to approval. The Company has used a DRR method to calculate its avoided cost available to QFs through its PR-1 and PR-2 rates. The value of avoided energy and capacity calculated through the DRR method is largely dependent on the Company's latest Integrated Resource Plan or updated resource plan; the 2018 IRP is currently under consideration by the Commission. The estimated revenue requirement

associated with the Company's IRP partly depends, in turn, on the Company's latest Reserve Margin Study.

ORS Witness Horii and CCL and SACE Witness Glick particularly point to a number of errors and omissions related to the avoided capacity component of the Company's proposed avoided costs. Both Witnesses testify that the Company has dramatically changed its approach to calculating avoided capacity by refusing to provide a capacity payment based on the assertion that its system is winter capacity constrained and that a resource must provide capacity in the winter and summer in order to avoid the Company's capacity costs. The Commission finds that the testimonies of witnesses Horii and Glick are credible on these points and are a key reason that the Company's proposed avoided cost calculations should be revised.

The Commission agrees with Witnesses Glick and Horii that the Company has not met its burden to demonstrate that a capacity payment of zero is justified at this time. The Commission agrees with Witness Horii that the Company should recalculate capacity costs, using 19.5% of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity.

The Commission also agrees with Witness Glick that the Company has failed to account for opportunity costs and failed to include a performance adjustment factor.

With respect to the Company's 2018 IRP, the Commission agrees with Witnesses Glick and Horii that the Company's reliance on the generation additions in its 2018 IRP as a foundation for its avoided cost rates is unreasonable, without further evidence that these resource additions have been deemed least cost and constitute actual commitments.

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The Commission finds that avoided cost rates should not include as unavoidable capacity any speculative future capacity additions. Further, the Commission finds that PURPA requires the Company to optimize its "base case" capacity expansion plan that it uses to develop avoided cost rates, giving fair and reasonable consideration to alternative means of meeting capacity needs besides adding Company-owned generation. *See* Federal Register, Vol. 45 No. 38, p. 12,216 n.6.

With respect to the Company's Reserve Margin Study, the Commission agrees with Witnesses Glick and Horii that the Company has not met its burden to demonstrate that its winter peak load forecast and 21% winter reserve margin are reasonable and justified. As recommended by other parties, the Company's reserve margin study should use an updated winter peak load forecast and should be redone using a more widely adopted tool, one that balances risk and ratepayer costs, which can be used to inform avoided cost rates in the 2019 fuel cost filing. In the interim, it is reasonable for the Company to retain its 2017 reserve margin of 14 percent.

Concerning PR-2 rates for non-solar QFs, the Commission agrees with SBA Witness Johnson that the Company has not demonstrated that it is appropriate to eliminate its technology-agnostic PR-2 rate. Further, the PR-2 rate, as proposed, does not incentivize energy storage technologies that could increase solar resources' value to the Company's system.

B. 2018 UPDATE TO NEM METHODOLOGY CALCULATIONS

a. SCE&G Testimony

SCE&G Witness Joseph Lynch, Ph.D. provided in his direct and rebuttal testimony proposed values for the Company's 2018 update to the Net Energy Metering or

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NEM Methodology for valuing the costs and benefits of Distributed Energy Resources ("DERs"). For the DER value for the current period and the IRP Planning Horizon (15-year levelized), Witness Lynch provided non-zero values for the following four categories (out of eleven within the NEM Methodology): avoided energy costs, avoided criteria pollutants, avoided environmental costs, and an adjustment for line losses.[5] See Lynch Direct Testimony at pp. 26-27, Rebuttal Testimony pp. 32-33. The avoided energy value was lowered for 2018 and the avoided capacity value was zeroed out, reflecting the Company's proposal to reduce its PURPA avoided energy payments and eliminate avoided capacity payments in 2018.

Beyond avoided capacity, the Company proposed zero values for several additional categories in its 2018 update. For ancillary services, Witness Lynch asserted that there would be some increased costs to providing ancillary services as larger amounts of solar energy come online, but that for now the relatively small amount of NEM DERs do not warrant a non-zero value for this category. For avoided transmission and distribution capacity, Witness Lynch asserted that NEM DERs do not avoid transmission or distribution capacity because solar is an intermittent resource and therefore the value of this component should be zero. For avoided CO_2 pollutants, Witness Lynch sets the value at zero until state or federal laws or regulations result in an avoidable cost on utility systems for these emissions. For fuel hedge, Witness Lynch states that the Company does not hedge fuels for electric generation so this value is zero. Witness Lynch explains that utility integration and interconnection costs as well as administrative costs are currently being collected by the Company through a DER rider,

[5] The Company separated out avoided criteria pollutants and avoided environmental costs from the avoided energy costs.

so these values are zero for purposes of the NEM Methodology. For environmental costs, Witness Lynch asserts that there are no environmental costs not already included in other specific components of the Methodology. In rebuttal testimony, Witness Lynch states that SCE&G pulled out the environmental costs for lime and ammonia and the net profit resulting from SCE&G's sale of coal ash to comply with Commission Order 2017-246 at 39 to "address the cost-effectiveness of separately accounting for environmental costs." Witness Lynch concludes that "the time and resources necessary to separately account for these environmental costs do not result in any additional benefit to the NEM methodology." Lynch Rebuttal at 32-33.

SCE&G Witness Allen W. Rooks asks in his direct testimony that the Commission approve the Company's proposed updates to its NEM Rider.

b. CCL and SACE Testimony

CCL and SACE Witness Devi Glick provided input through testimony on the Company's 2018 Net Energy Metering ("NEM") Methodology for valuing the costs and benefits of DERs. She specifically recommended that the Company make further progress in filling out and applying the NEM Methodology previously approved by the Commission, and she disagreed that some of the values should be zero as proposed by the Company.

Witness Glick noted that the recommendations made for the Company's avoided cost calculations under PURPA influenced the Company's avoided energy and capacity rates in the NEM Methodology and should be corrected accordingly to fully account for the value of solar photovoltaic resources, which are expected to make up the vast majority of DERs in South Carolina for the near future.

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Witness Glick testified that avoided transmission and distribution ("T&D") value of DERs is one example of a category in the NEM Methodology that is readily quantifiable and calculated in other proceedings. The avoided T&D component refers to DERs' contribution to deferring or avoiding the addition of transmission and/or distribution capacity resources needed to serve load. Witness Glick testified that the Company can and should include a non-zero value for avoided T&D in this year's annual update to the NEM Methodology application. Her testimony emphasized that in the aggregate and over time, DERs reduce the need for T&D capacity investments. "If the DERs alleviate some of the strain on the system during transmission or distribution system peaks, then those resources do, in fact, reduce pressure on the system and therefore help to defer or avoid future upgrades to that system." Glick Direct at 23. For comparison, Witness Glick provided numerical examples of avoided T&D values that were the result of a survey of avoided costs of T&D for use in energy efficiency program screening and pointed to other jurisdictions that have value of solar studies including avoided T&D values. She noted that most of the avoided T&D values are between $25 and $75 per kW-year. Witness Glick also provided in testimony descriptions of different approaches to calculating avoided T&D values from other jurisdictions. Witness Glick notes that these examples show that avoided T&D is a category within the NEM Methodology that is "quantifiable" at this time, and should thus be included in the Company's NEM Methodology application.

Witness Glick also testified that she disagreed with the Company's conclusion that "at present, there are no environmental costs that are not already included in other specific components of the methodology." Glick Direct Testimony at 31. Witness Glick

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provided the example of compliance with federal rules regulating coal combustion residuals. Witness Glick asserted that DERs can help to avoid those costs and that those costs are "financial, quantifiable, and a direct result of DER generation" and such savings should be reflected in the NEM Methodology Application.

Finally, Witness Glick testified that there are a number of corrections the Company should make to its avoided line loss calculations. Witness Glick made the following specific recommendations:

1. SCE&G should use not use straight average annual line losses, but instead use average annual T&D losses weighed to a PV profile to account for solar PV output's correlation with higher load, and therefore higher losses.
2. SCE&G should recognize that marginal transmission line losses, like marginal distribution line losses, are double the average line loss.
3. SCE&G should gross up avoided generation and transmission capacity calculations assigned to distribution-level DERs and QFs to reflect the avoided generation and transmission capacity otherwise needed to overcome line losses.
4. SCE&G should recognize that, in addition to the avoided generation and transmission capacity associated with overcoming line losses, the associated 21 percent reserve margin assigned to the generation capacity is also avoided. As such, that too should be reflected in avoided generation capacity calculations assigned to distribution-level DER and QF resources.

Glick Direct Testimony at 31.

c. ORS Testimony

ORS Witness Sara W. Johnson testified about the Company's DERP costs related to the Company's NEM Methodology update. Witness Johnson testified that SCE&G's calculation of the NEM incentive is consistent with Docket No. 2014-246-E. However, she noted that when updating the value of DER, the Company reduced the avoided capacity to zero. ORS Witness Horii testified that the Company made "significant" changes to the avoided energy cost and avoided capacity cost component line items. Horii Direct at 23. As noted above, Witness Horii recommended that the Commission

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reject the Company's proposed PURPA avoided capacity cost values in favor of higher values. This would increase the NEM DER avoided energy and avoided capacity cost values since they are based on PURPA avoided capacity cost values.

Witness Horii also testified that, while SCE&G's use of a zero value for seven of the other components of the NEM DER is "reasonable" and consistent with the methodology approved by the Commission in Order No. 2015-194, SCE&G's approach is "conservative" in certain respects. Horii Direct at 23. For example, Witness Horii observed that other jurisdictions do recognize the value NEM resources can provide in deferring T&D investments and in avoiding CO_2 emissions. On cross examination, Witness Horii discussed a quantification of both T&D value and ancillary services value that he conducted for California's investor-owned utilities in 2016.

d. The Commission's Conclusions Regarding 2018 Update to DER Valuation

The Commission finds that the Company's 2018 NEM Methodology values are both incorrect and incomplete. The avoided energy and avoided capacity values are incorrect because they are impacted by the Company's calculations of avoided energy and avoided capacity calculations pursuant to PURPA. The Company must correct its avoided energy and avoided capacity calculations as described in the ordering paragraphs below and in Section IV.A.d above. The Company also must correct its avoided capacity calculation in order to comply with the Value of Solar methodology agreed to by parties in the settlement in Docket No. 2014-246-E, which defines "avoided capacity" as the increase or reduction in fixed costs to the utility "of building and maintaining new conventional generation resources associated with the adoption of NEM." Order 2015-194 at p. 8. The Company's error of assigning net-metered DERs a zero capacity value is

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inconsistent with a plain reading of the settlement because it means that these resources have no ability to avoid new capacity.

The Company's 2018 NEM Methodology values are also incomplete. The NEM Settlement Agreement approved previously by this Commission in Order No. 2015-194, Docket No. 2014-246-E, states that the Company shall compute and update annually the "costs and benefits of net metering and the required amount of the DER NEM Incentive" coincident in time with the Utility's filing under the fuel clause. Order 2015-194 at p. 22, para. (g). The NEM Methodology includes eleven components, including but not limited to "T&D Capacity" and "Environmental Costs." The Company is authorized to use placeholders for some categories "where there is currently a lack of capability to accurately quantify a particular category and/or a lack of cost or benefit to the Utility system." Order 2015-194 at p. 20, para. (e), Ex. 1 at p. 4, para. 8. Placeholder categories are to be "updated and included in the calculation of costs and benefits of net metering if and when capabilities to reasonably quantify those values and quantifiable costs or benefits to the Utility system in such categories become available." *Id.*

The Company asserts that avoided T&D is not capable of quantification at this time. However, Witness Glick provided in her testimony nearly 40 examples of avoided T&D values that have been used in other contexts and jurisdictions. Witness Horii affirmed that T&D values have been calculated in other jurisdictions. Based on the examples from other jurisdictions and other contexts, the Commission finds that avoided T&D capacity can and should be calculated at this time. The Company should commission an independent study to quantify T&D values and should include non-zero values in the Company's 2019 NEM Methodology application update.

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To the extent that avoided environmental costs are quantifiable and are not already included in the Company's calculations—for example, the avoidance of managing additional coal combustion residual as noted by Witness Glick—those should be included. The Company should continue to separate and report on any value that is otherwise incorporated into the avoided energy rates.

Finally, the Commission determines that Witness Glick's recommendations for improving the Company's avoided line loss calculations should also be taken into account and incorporated by the Company.

V. FINDINGS OF FACT

1. The Company's proposals related to Avoided Cost Tariffs PR-1 and PR-2 and the calculations used to determine the avoided cost rates were disputed in this proceeding.
2. The majority of projects potentially affected by the PR-1 and PR-2 rates in this proceeding will be solar photovoltaic projects ("solar projects").
3. Solar projects generate electricity during the day and do not generate electricity at night.
4. Solar projects generate electricity on a daily time profile that generally increases to a midday peak, and then decreases as the sun goes down. The output of solar projects with different technical characteristics and locations, however, will vary. A single project based on a single technology is, therefore, inadequate to characterize the combined grid impact of QFs generally.

5. For its Avoided Energy Calculations, the Company uses a Differential Revenue Requirement ("DRR") methodology to calculate the revenue requirements associated with a base case without a QF, and a change case with a QF with a solar profile. This modeling approach is a change from the approach SCE&G took in Docket Nos. 2016-2-E and 2017-2-E, where the Company modeled a QF with a 100 MW generation profile for all hours (rather than a solar profile) for the change case.

6. For long-run avoided energy cost calculations, SCE&G uses the production cost model PROSYM to simulate the commitment of generating units to serve hourly load over a 15-year timeline. The base case is constructed using load forecasts and supply side resources described in the Company's 2018 IRP. The change case modifies the base case load forecast by subtracting zero-cost energy following the profile of a 100 MW solar photovoltaic generator.

7. The Company's 2018 IRP indicates that its summer reserve margin is 14% of summer peak demand, and that its winter reserve margin is 21% of winter peak demand. Hearing Exhibit 9, SCE&G 2018 IRP at 40. This is the first time that the Company has proposed a winter reserve margin. Lynch Rebuttal Testimony at 19.

8. The Company's 2018 IRP shows the Company is planning to acquire a 504 MW natural gas combined cycle unit in 2018 and a 540 MW natural gas combined cycle unit in 2023, and shows a sharp increase in winter gross peak demand.

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9. The Company's 2018 IRP has not been reviewed or approved, and the Company has not committed to the resource acquisitions in the plan.
10. SCE&G proposes to eliminate its PR-2 rate for non-solar resources.
11. For its Avoided Capacity calculations, the Company substantially changed its methodology and inputs from the 2017 fuel cost proceeding. The Company now asserts that resources have capacity value only if they are available in both the summer and winter, that solar does not provide capacity in the winter period, and that the avoided capacity payment for PR-2 rates is therefore zero. Other analyses show that SCE&G's winter capacity needs are not the same or greater than summer capacity needs and that incremental solar will continue to provide capacity benefits.
12. The Company assigns a 35% firm summer capacity value to solar photovoltaic resources in its 2018 IRP.
13. For its Avoided Capacity calculations, the Company failed to include a performance adjustment factor of 1.20.
14. For its Avoided Capacity calculations, the Company failed to account in its revenue requirement for the additional revenue the Company could collect by selling surplus capacity made possible by new QFs such as solar projects.
15. The Company's proposals related to its 2018 NEM Methodology calculation update and NEM Rider to Retail Rates were disputed in this proceeding.
16. The Company's calculation of NEM Methodology values for avoided energy and avoided capacity are impacted by its calculations of avoided energy and

avoided capacity calculations pursuant to PURPA and its PR-1 and PR-2 tariffs.

17. The NEM Methodology category of avoided transmission and distribution capacity is capable of quantification at this time.

18. The NEM Methodology category of avoided environmental costs is capable of further quantification at this time.

19. For Avoided Line Losses calculations, it is possible and appropriate for the Company to use marginal line losses weighted to a solar photovoltaic profile.

20. For Avoided Line Losses calculations, it is possible and appropriate for the Company to calculate marginal transmission line losses as double the average line loss, as with distribution line losses.

21. For Avoided Line Losses calculations, it is possible and appropriate for the Company to gross up avoided generation and transmission capacity calculations assigned to distribution-level DERs, including QFs, to reflect the avoided generation and transmission capacity otherwise needed to overcome line losses.

22. For Avoided Line Losses calculations, it is possible and appropriate for the Company to account for avoidance of the reserve margin percentage assigned to generation capacity in calculating avoided line losses.

VI. CONCLUSIONS OF LAW

After hearing the evidence and testimony of the witnesses, the Commission finds and concludes that SCE&G's requests pursuant to S.C. Code Ann. § 58-27-865 and PURPA Section 210 regarding its avoided cost rates offered in PR-1 and PR-2 and its

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2018 NEM Methodology calculation update are not reasonable or prudent as proposed, given the evidence introduced by CCL and SACE in the expert testimony of Devi Glick, evidence introduced by SBA witness Ben Johnson, Ph.D, and evidence introduced by ORS witness Brian Horii. SCE&G's fuel cost recovery and DERP cost recovery may be approved as reasonable and prudent if subject to certain conditions specifically relating to the Company's calculations of avoided costs under PURPA and its application of the NEM Methodology approved in Commission Order No. 2015-194.

IT IS THEREFORE ORDERED THAT:

1. The following are approved:
    a. The Company's fuel purchasing practices and cost recovery for the Review Period;
    b. The Company's DERP expenses for the Review Period;
    c. The Company's Tariff sheet entitled "Adjustment for Fuel and Variable Environmental Costs".
2. The following are not approved as proposed by the Company, and are subject to conditions in Ordering paragraphs 3-4 below:
    a. The Company's Avoided Cost Tariffs PR-1 and PR-2; and
    b. The Company's 2018 NEM Rider to Retail Rates.
3. The Company shall make the following revisions to its Avoided Cost methodology and calculations pursuant to state law and PURPA, and shall file within 90 days of this order revised PR-1 and PR-2 tariffs with rates reflecting such changes. Any fuel clause adjustments needed to account for such changes will be made in the 2019 fuel clause proceeding.

a. For its Avoided Capacity Calculations, the Company shall:

   i. Recalculate capacity costs consistent with the recommendation of ORS Witness Horii, using 19.5% of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity;

   ii. Include a performance adjustment factor of 1.20; and

   iii. Include the additional revenue the Company would collect by selling marginal surplus generation capacity contracts made possible by the new qualifying facilities in the revenue requirement calculation.

b. With respect to the Company's 2018 IRP and reserve margin study, the Company shall:

   i. Not include as unavoidable capacity any speculative future capacity additions in its calculation of avoided costs;

   ii. Demonstrate that it has optimized its "base case" capacity expansion plan that it uses to develop avoided cost rates, giving reasonable consideration to alternative means of meeting capacity needs besides adding Company-owned generation;

   iii. Conduct a new reserve margin study using an updated winter peak load forecast and should be redone using a more widely adopted tool, one that balances risk and ratepayer costs, and which will be used to inform avoided cost rates in the 2019 fuel cost filing. In the

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interim, the Company shall retain its 2017 reserve margin of 14 percent and shall not adopt a 21 percent winter reserve margin.

c. With respect to its PR-2 rate, the Company shall:

i. File a generic, technology-agnostic PR-2 rate for approval by the Commission in the current docket; and

ii. Include a solar + storage rate that reflects hour-by-hour, day-by-day avoided cost rates in its next annual fuel cost filing.

4. The Company shall make the following revisions to its 2018 NEM Methodology Calculation update, and shall file within 90 days of this order a revised 2018 NEM tariff reflecting such changes. Any fuel clause or DERP cost recovery adjustments needed to account for such changes will be made in the 2019 fuel clause proceeding.

a. The Company shall incorporate into its 2018 NEM Methodology Application the changes required to its PURPA Avoided Cost Calculations for avoided energy and avoided capacity as established above in Ordering Paragraph 3.

b. For its Avoided Line Losses calculations, the Company shall:

i. Use average annual transmission and distribution line losses weighed to a solar photovoltaic profile;

ii. Calculate marginal transmission line losses as double the average line loss, as with distribution line losses;

iii. Gross up avoided generation and transmission capacity calculations assigned to distribution-level DERs, including QFs, to

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reflect the avoided generation and transmission capacity otherwise needed to overcome line losses; and

iv. Account for avoidance of 14 percent reserve margin assigned to generation capacity in calculating avoided line losses.

c. The Company shall commission an independent study of the transmission and distribution benefits of solar QFs and file it prior to its next avoided cost filing so that it can include in its 2019 NEM Methodology application a non-zero value for the Avoided Transmission and Distribution cost component of the NEM Methodology approved in Commission Order 2015-194.

d. The Company shall evaluate and include in its 2019 NEM Methodology application a non-zero value or estimate for the Avoided Environmental cost component, including any avoided costs related to complying with the federal coal combustion residuals rule, of the NEM Methodology approved in Commission Order 2015-194.

5. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

Comer H. Randall, Vice Chairman

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BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	POST HEARING BRIEF

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BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-2-E

In re: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**POST HEARING BRIEF**

PURSUANT TO South Carolina Public Service Commission ("Commission") Rule 103-851, intervenors South Carolina Coastal Conservation League ("CCL") and Southern Alliance for Clean Energy ("SACE") (collectively, "the Conservation Groups"), through counsel, file this brief on certain issues in the current fuel cost proceeding of South Carolina Electric & Gas Company ("SCE&G" or "Company").

I. INTRODUCTION

For many years, this annual proceeding was limited to issues of fuel cost recovery. Now, this scope has broadened to include proposed changes to current avoided cost rates, methodology, and related tariffs under the Public Utility Regulatory Policies Act of 1978[1] ("PURPA") and updates to calculations under the solar valuation methodology approved in Commission Order No. 2015-194. In this year's proceeding, the Company's requests for traditional fuel cost recovery are uncontested. In stark contrast, the Company's avoided cost proposals—particularly its proposal to completely

[1] Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended in scattered sections of 15, 16, 42, and 43 U.S.C.A.) (PURPA).

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eliminate capacity payments for solar power qualifying facilities ("QFs")—are challenged by nearly every other party in the proceeding.

The Company's proposals in this proceeding will directly impact the ability of low-cost solar power to compete with utility-owned generation resources to lower customer bills.

The heart of the matter is whether SCE&G is accurately compensating solar facilities, a prerequisite for allowing those solar providers to compete fairly against SCE&G-owned resources to reduce ratepayer costs, as PURPA intended. If solar power is assigned an arbitrarily low "avoided cost" value, as SCE&G has proposed, much less solar generation will emerge to compete in SCE&G's territory, blocking the use of a cost-competitive resource that will drive down customer bills. Said another way, setting avoided cost rates too low means system costs will ultimately be too high, since the artificially low avoided cost rates serve as a barrier to entry that insulates inefficient (and overpriced) resources from actually having to compete. That is why federal and state law charge this Commission with ensuring that renewable facilities are given accurate and full valuation. And that is why SCE&G's proposed avoided cost rates must be rejected.

SCE&G's claim that including an avoided capacity value in its PR-2 rates would increase costs for ratepayers is demonstrably false, and embodies a non-competitive bias that PURPA was enacted to counteract. If the Company accurately calculates the full costs that are avoided by solar resources, it can rely more heavily on cost-competitive solar purchases rather than more expensive, rate-based power plants whose costs will be passed on to customers. If avoided costs are accurately calculated, customers will be at worst held harmless by QF purchases, while enjoying other benefits of clean energy (such

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as decreased air pollution, protection from cost overruns of Company-built generation, and insulation from future fuel volatility) that are very real but are not quantified in avoided cost rates. This Commission should see the Company's proposals for what they are: an attempt to undermine competition. We ask that the Commission reject SCE&G's proposed methodology, and require changes that ensure full avoided cost rates in compliance with the law.

Ultimately, the Company's avoided cost proposals are unfounded, unjust, unreasonable, and discriminatory, in violation of both state law and PURPA. The errors associated with the Company's avoided cost proposals also bleed into its annual net energy metering ("NEM") methodology update, which fails to comply with the settlement agreement and Commission Order in Docket 2014-246-E. The Commission should reject the Company's avoided cost and NEM methodology proposals, particularly its proposal to eliminate avoided capacity payments for solar QFs.

As discussed below, we ask the Commission to disapprove the Company's Avoided Cost Tariffs PR-1 and PR-2 and the Company's 2018 NEM Rider to Retail Rates, requiring the Company to make revisions that shall be filed within 90 days, subject to the conditions below:

- With respect to its Avoided Capacity Calculations:
    - Recalculate capacity costs consistent with the recommendation of ORS Witness Horii, using 19.5% of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity;

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- Include a performance adjustment factor of 1.20; and
- Include the additional revenue the Company would collect by selling marginal surplus generation capacity contracts made possible by the new qualifying facilities in the revenue requirement calculation.

- With respect to the Company's 2018 IRP and reserve margin study, the Company shall:
  - Not include as unavoidable capacity any speculative future capacity additions in its calculation of avoided costs;
  - Demonstrate that it has optimized its "base case" capacity expansion plan that it uses to develop avoided cost rates, giving reasonable consideration to alternative means of meeting capacity needs besides adding Company-owned generation; and
  - Conduct a new reserve margin study using an updated winter peak load forecast and a more widely used tool, one that balances risk and ratepayer costs, and which will be used to inform avoided cost rates in the 2019 fuel cost filing. In the interim, the Company shall retain its 2017 reserve margin of 14% and shall not adopt a 21% winter reserve margin.
- With respect to its PR-2 rate, the Company shall:
  - File a generic, technology-agnostic PR-2 rate for approval by the Commission in the current docket; and
  - In its next annual fuel cost filing, include a solar + storage rate that reflects hour-by-hour, day-by-day avoided cost rates.
- With respect to the Company's 2018 NEM Methodology Calculation update:

- The Company shall incorporate into its 2018 NEM Methodology Application the changes required to its PURPA Avoided Cost Calculations for avoided energy and avoided capacity as established above and in Ordering Paragraph 3.
- For its Avoided Line Losses calculations, the Company shall:
  - Use average annual transmission and distribution line losses weighed to a solar photovoltaic profile;
  - Calculate marginal transmission line losses as double the average line loss, as with distribution line losses;
  - Gross up avoided generation and transmission capacity calculations assigned to distribution-level DERs, including QFs, to reflect the avoided generation and transmission capacity otherwise needed to overcome line losses; and
  - Account for avoidance of 14% reserve margin assigned to generation capacity in calculating avoided line losses.
- The Company shall commission an independent study of the transmission and distribution benefits of solar QFs and file it prior to its next avoided cost filing so that it can include in its 2019 NEM Methodology application a non-zero value for the Avoided Transmission and Distribution cost component of the NEM Methodology approved in Commission Order No. 2015-194.
- The Company shall evaluate and include in its 2019 NEM Methodology application a non-zero value or estimate for the Avoided Environmental

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cost component, including any avoided costs related to complying with the federal coal combustion residuals rule, of the NEM Methodology approved in Commission Order No. 2015-194.

II. LEGAL FRAMEWORK FOR DETERMING AVOIDED COSTS

A. The Commission Has Authority to Set Avoided Cost Rates Under PURPA Section 210 and Implementing Regulations.

Section 210 of the Public Utility Regulatory Policies Act of 1978 ("PURPA") requires large electric utilities to purchase available energy and capacity from small power producers, known as "qualifying facilities" or QFs. *See generally* 16 U.S.C. § 2601 *et seq.* The United States Supreme Court has declared that "Section 210 of PURPA was designed to encourage the development of cogeneration and small power production facilities." *American Paper Inst. v. Am. Elec. Power Serv. Corp.*, 461 U.S. 402, 405 (1983). As the Court explained in *FERC v. Mississippi*, "Congress believed that increased use of these sources of energy would reduce the demand for traditional fossil fuels," and it recognized that electric utilities had traditionally been "reluctant to purchase power from, and to sell power to, the nontraditional facilities." 456 U.S. 742, 750 (1982) (footnote omitted).

Under PURPA and the Federal Energy Regulatory Commission ("FERC") regulations implementing PURPA, FERC has delegated to state commissions the responsibility to set rates for purchases from qualifying cogenerators and small power producers by electric utilities under their ratemaking authority. 16 U.S.C. § 824a-3(f); *see also* Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of PURPA (Order No. 69), 45 Fed. Reg. 12214, 12215 (Feb. 25, 1980).

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States exercising that authority, however, must do so within the bounds of federal law. Specifically, PURPA requires that rates for the purchase of energy from QFs by electric utilities: 1) shall be just and reasonable to the consumers of the electric utility and in the public interest, and 2) shall not discriminate against qualifying cogenerators or qualifying small power producers. 16 U.S.C. § 824a-3(b); 18 C.F.R. § 292.304(a)(1). PURPA rates are set at the utility's avoided cost of producing the next incremental unit of electricity with "incremental cost," defined as "the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source." 16 U.S.C. § 824a-3(d). FERC's PURPA implementing regulations reiterate that electric utilities are not required under PURPA to pay more for purchases than their avoided cost, 18 C.F.R. § 292.304(a)(2), defined as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source." 18 C.F.R. § 292.101(b)(6).

The PURPA regulations require electric utilities to establish standard rates for purchases from QFs with capacity of 100 kilowatts ("kW") or less, and also give state commissions the authority to develop standard rates for larger QFs. 18 C.F.R. § 292.304(c)(1), (2). These standard rates "[m]ay differentiate among qualifying facilities using various technologies on the basis of the supply characteristics of the different technologies." *Id.* at (c)(3)(ii).

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Further, the PURPA regulations lay out several factors that "shall, to the extent practicable, be taken into account" when state commissions are determining avoided costs. *Id.* at (e). These include:

- Energy and capacity cost data provided pursuant to FERC regulations, including state review of any such data;
- Availability of capacity or energy from QFs during system daily and seasonal peak periods;
- Dispatchability and reliability;
- Duration and terms of contract;
- Usefulness of energy and capacity during system emergencies;
- Individual and aggregate value of energy and capacity;
- Smaller capacity increments and shorter lead times for additional capacity from QFs;
- Relationship of availability of energy and capacity from the QF to the ability of the utility to avoid costs, including deferral of capacity additions and reduction in fossil fuel use; and
- Costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a QF.

18 C.F.R. § 292.304(e)(1)-(4).

Finally, state commissions may account for the environmental costs "of all fuel sources" in determining avoided cost rates, as long as they are "real costs that would be incurred by utilities." 71 FERC 61,269, 62,080 (June 2, 1995) (citing 70 FERC 61,290, 61,676), *reconsideration denied*, 71 FERC 61,232 (1995).

B. State Law Requires Rates to Be Just and Reasonable and Requires Commission Approval of Avoided Cost Rates and the Net Energy Metering Methodology Computation.

In addition to meeting the requirements of PURPA, this Commission also holds these annual proceedings to determine utilities' avoided costs pursuant to South Carolina law. S.C. Code Ann. § 58-27-865 delegates to the Commission the responsibility to establish the "avoided costs under the Public Utility Regulatory Policy Act of 1978[.]"

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S.C. Code Ann. § 58-27-865(A)(2); [2] *id.* § 58-3-140(A) (vesting the Commission with the "power and jurisdiction to supervise and regulate the rates and service of every public utility in this State . . ."). Avoided cost rates, like all rates "made, demanded or received by any electrical utility . . . shall be just and reasonable." S.C. Code Ann. § 58-27-810.

Pursuant to the Net Energy Metering ("NEM") Settlement Agreement approved previously by this Commission in Order No. 2015-194, Docket No. 2014-246-E, the Commission also approves each year the Company's calculation of the "costs and benefits of net metering and the required amount of the DER NEM Incentive" coincident in time with the Utility's filing under the fuel clause. Order No. 2015-194 at p. 22, para. (g). The DER NEM incentive is computed based on an eleven-component NEM Methodology that includes "all categories of potential costs or benefits to the Utility system that are capable of quantification or possible quantification in the future." Order 2015-194 at p. 20, para. (e).

Substantial evidence must support the Commission's avoided cost and NEM incentive decisions and the Commission must support its conclusions with factual findings that are sufficiently detailed so as to enable court review. *See Porter v. S.C. Public Service Comm'n*, 333 S.C. 12, 20 (1998); *Seabrook v S.C. Public Service Comm'n*, 401 S.E.2d 672, 674 (1991), 303 S.C. 493, 497; S.C. Code Ann. § 58-27-2100. The Commission must fully document its findings of fact and base its decision on reliable, probative, and substantial evidence on the whole record. *Porter*, 333 S.C. at 21. Further, "previously adopted policy may not furnish the sole basis for the Commission's

[2] Historically, SCE&G's PURPA avoided cost rates have been filed in Commission Docket No. 1995-1192-E; however, subsequent to Act 236 and the fuel clause revisions, SCE&G has sought approval in the fuel cost proceeding for its avoided cost rates, calculations, and methodology under Section 210 of the Public Utility Regulatory Policies Act of 1978, 16 U.S.C.A. § 824a-3.

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action." *Hamm v. S.C. Public Service Comm'n*, 422 S.E. 2d 110, 114, 309 S.C. 282, 289. Rather, the policy must be applied to the substantial factual evidence of record. *Id.* Decisions of the Commission can be ruled arbitrary when it simply adheres to its past practice without attempting to explain that decision, and it cannot rely on factual findings that are simply incorrect. *Porter*, 333 S.C. at 26-27.

C. The Company's Historic Use of the Difference in Revenue Requirement Methodology.

PURPA leaves the specific methodology to be used in determining avoided cost to the states' discretion. *See California Public Utilities Comm'n*, Order Denying Rehearing, 134 FERC 61,044, 61,160 (2011) (granting state commissions the authority to decide what particular capacity is being avoided in setting avoided cost rates). This Commission has historically approved SCE&G's request to calculate its long-run avoided costs for power purchases by using a particular Difference in Revenue Requirements ("DRR") methodology. The Company's historic DRR method compared the Company's revenue requirements between a base case and a change case, over the Company's 15-year Integrated Resource Plan ("IRP") planning horizon. The base case was defined by SCE&G's "existing fleet of generators and the hourly load profile to be supplied by these generators." Docket 2017-2-E, Lynch Direct Testimony at 4, ln. 20-21. "The change case was the same as the base case except that the hourly loads were reduced by 100 megawatts ("MW") in each hour . . . ." Docket 2017-2-E, Lynch Direct Testimony at 4-5, ln. 21-22.

Other parties have contested SCE&G's use of this DRR method in prior dockets, highlighting its problematic reliance on an unapproved IRP as the basis for the proposed avoided cost rates, as well as its overly complex and opaque nature, which makes review

very difficult in the limited timeframe of the fuel cost docket. *See, e.g.*, Docket 2017-2-E, SACE and CCL Petition for Rehearing or Reconsideration at p. 16-18. Parties have repeatedly suggested that SCE&G use the "peaker method" to calculate avoided cost—the method that both Duke Energy Carolinas and Duke Energy Progress already use. Nonetheless, this Commission has in previous years approved SCE&G's historic DRR method. *See* Order No. 2016-297 at p. 11-12, 20-21 (approving DRR methodology wherein SCE&G divided its calculated avoided capacity cost between summer and winter, with 80% being associated with the summer season and 20% being associated with the winter season).

In this year's fuel cost docket, the Company has proposed significant changes to the way that it implements the DRR method, which are discussed below at length. These changes do not comport with federal and state requirements.

III. ARGUMENT

A. The Company's proposal to eliminate capacity payments for QFs is unsupported, unjust, unreasonable, discriminatory, and not in the public interest.

The Company's proposal to completely eliminate avoided capacity payments for solar QFs violates state and federal law. Both South Carolina law and federal law require avoided cost rates to be just and reasonable. Avoided cost rates must also be non-discriminatory and in the public interest. Moreover, this Commission's decisions to approve rates must be based on substantial evidence. The Company has failed to provide the Commission with substantial evidence on this issue, and its proposal to eliminate avoided capacity payments should be rejected as unjust, unreasonable, discriminatory, and not in the public interest.

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1. **The Company's refusal to compensate for capacity discriminates against QFs.**

Somewhat bizarrely, the Company claims that it is not proposing a change in methodology at all in this proceeding versus past ones, contending that it continues to use the same exact methodology that was approved by this Commission in past orders. Lynch Rebuttal at p. 2, lns. 9-10, p. 18, lns. 16-17; Hearing Tr. at E-9-11, E-95, E-176-178. The Company says that the extreme change in result is simply due to changed circumstances. Lynch Rebuttal at p. 20, lns. 8-12. But the record—including admissions from the Company's own witnesses and lawyers—overwhelmingly repudiates that assertion. The Company is in fact proposing a dramatic shift in its methodology for compensating solar QFs: the complete elimination of capacity payments. Every other party that submitted testimony in this docket strongly objects to this change as unsound, unfounded, and counterfactual, and asks that it be rejected.

SCE&G concedes that it is the Commission—not the Company—that gets to determine the methodology for avoided costs. Lynch Direct at p. 3, lns. 15-16. If seeking to alter this methodology, Company must inform the Commission and seek authority to do so. Hearing Tr. at p. E-183, lns. 9-17. The Company's witnesses and lawyers take great pains to argue that they are not changing the prior-approved methodology. In Company Witness Lynch's rebuttal testimony, for example, he states that "SCE&G is using the same methodology as in previous years and as approved by the Commission." p. 18, lns. 16-17. He claims that the zero capacity cost "is a change in result, not a change in methodology." *Id.* at p. 2, lns. 14-15; *see also id.* at p. 2, lns. 9-10: "SCE&G is using the same difference in revenue requirements ("DRR") methodology previously approved by the Commission." *See also* SCE&G's closing statement, Docket

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No. 2018-2-E (reiterating that the Company is using the same methodology used in prior dockets).

The Company's attempt to convince the Commission that there is "nothing to see here" is disingenuous at best, and relies on the overly simplistic position that the Commission approves the Company's use of the DRR method *carte blanche*, without concerning itself with the myriad decisions that the Company makes about *how* to implement DRR. This is simply untrue. The Commission's past orders have made it clear that its determination of appropriate methodology extends far beyond the Company's over-arching method, be it peaker, proxy or DRR. In these orders, the Commission has addressed and resolved individually litigated issues concerning **specific elements** of the DRR method, such as the calculation of the appropriate generation capacity payment split between summer and winter seasons, Order No. 2017-246 at p. 23, the use of the number of critical peak hours in 2015 to calculate avoided capacity costs, Order No. 2016-297 at p. 20, and the reasonableness of assuming that certain future capacity can be included when calculating avoided capacity costs, Order No. 2016-297 at p. 17.

The Company concedes that Commission-approved "methodology" extends to the very changes it proposes to make in this proceeding. Under cross-examination, Witness Lynch admitted that SCE&G's decision to discontinue the 80/20 summer/winter capacity split is in fact a "pricing methodology." Hearing Tr. at p. E-183, ln. 14. This is consistent with past testimony from Witness Lynch, which unequivocally states the Company's position that past practices, such as the 80/20 capacity split, constitute methodology that was previously approved by the Commission. *See, e.g.*, Docket No. 2017-2-E Hearing

Tr. at p. E-181, Lynch Direct (stating that "consistent with the methodology approved by Commission Order No. 2016-297, SCE&G divides this avoided capacity cost between summer and winter with 80% being associated with the summer season and 20% being associated with the winter season."); Docket No. 2017-2-E Hearing Tr. at p. E-205 (referring to the 80/20 split: "this methodology was approved by the Commission in Order No. 2016-297"). The Company's lawyers also noted that SCE&G's filing in this year's docket constituted a change in methodology: ". . . the Company believed the Rate PR-2 based upon the previously approved methodology did not properly reflect SCE&G's avoided costs and therefore did not propose that rate in Docket No. 2018-2-E." Company's motion to dismiss and response in opposition to CCL and SACE's petition for an order to compel compliance, Docket No. 2017-2-E at p. 5.

Every other testifying party agrees that this is a significant change in methodology, and one that the Company fails to support. ORS Witness Horii states that "SCE&G has implemented **a dramatic change in approach** by not providing any avoided capacity cost calculations in this proceeding." Horii Direct at p. 8, ln. 6-7 (emphasis added); *see also* Horii Direct at pp. 10, 21; ORS Witness Johnson Direct at p. 5; Glick Direct at p. 6; SBA Witness Johnson Surrebuttal at pp. 2-3.

Comparison of the actual methodologies used in this and past proceedings makes this point plain. In prior years the Company has used a three step methodology where it: 1) calculated the avoided capacity value over a 15-year planning horizon comparing the difference in revenue requirements between the base case and the change case; 2) identified the set of critical peak hours where energy would have a capacity value on the system and spread the avoided capacity cost across those hours, assigning 80% of the

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annual capacity cost to the summer; and 3) calculated a single avoided cost value based on the production of a typical solar PV system. Glick Direct Testimony at p. 6. In contrast, in this year's docket, the Company simply assigns zero capacity value to solar, asserting that a resource must provide capacity in the winter and summer in order to provide **any** capacity value. Company Witness Lynch admits that in a departure from last year, the Company is no longer dividing avoided capacity costs between summer and winter. Instead, solar QFs receive zero payments for capacity, regardless of their capacity contribution during times of summer capacity need. Hearing Tr. at p. E-183, lns. 6-8.

Clearly, then, it is within the Commission's purview to either approve or disallow this proposed methodological change. The Commission is well within its authority to address these key components of avoided cost methodology. As evidenced by the Company's filing in this docket, even though it continues to use the DRR method, its proposed changes to underlying DRR methodology result in extreme changes to avoided cost rates—in this case, the total elimination of capacity costs.

The Commission should review and reject the Company's proposed methodological change, since the Company's refusal to compensate solar QFs for the capacity value they provide to the system is at odds with the record, and is contradicted by the Company's own IRP and by other experts' testimony in this docket. Simply, SCE&G has not met its burden to demonstrate that a payment of zero for capacity is justified.

a. <u>The record demonstrates that solar QFs can and do reduce the Company's capacity costs.</u>

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It is undisputed that solar QFs can and do reduce the system's summer peaks. *See, e.g.*, Lynch Direct at pp. 17-18. For five entire months of the year, solar QFs impact peak demands on most days of the month and in all days during the months of June and July. Lynch Direct Exh. JML-4 ("On Calculating the Capacity Benefit of Solar QFs") at p. 5. Additionally, the Company has both a summer and winter capacity need over the 15-year planning period. *See* Lynch Direct at p. 23, lns. 9-10 (SCE&G's "need for capacity spans the entire year"); Hearing Tr. at p. E-189, ln. 6. It is uncontested that solar QFs will contribute to the Company's summer capacity need. In order to arrive at its conclusion that capacity payments to solar QFs are no longer appropriate, the Company asserts the illogical position that a single capacity resource must meet **both** winter and summer capacity in order to receive any capacity value at all. Under cross examination, however, Company Witness Lynch admits that this is a false choice: the Company **could** choose separate capacity resources to meet these seasonal capacity needs (for example, a winter peaking energy efficiency resource and a solar QF), and both capacity resources would in fact avoid costs. Hearing Tr. at p. E-189-190. On cross examination, in response to the question: "What would prohibit the company from choosing one capacity resource, such as a winter [demand side management] program, to meet its winter capacity need, and another capacity resource, like a solar qualifying facility, to meet its summer capacity needs?" Witness Lynch responded: "Well, I would suppose, nothing." *Id.*

b. <u>The Company's proposal is contradicted by its own IRP.</u>

The Company's 2018 IRP, which was released shortly after Witness Lynch filed his direct testimony, found that solar resources have a 35% capacity factor. Hearing Exh.

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9, 2018 IRP at p. 40. This means, in SCE&G's analysis, 35% of solar's nameplate capacity is deemed by the Company to be firm capacity that is expected to serve the system summer peak. And yet, in this proceeding, the Company is requesting that solar QFs receive no compensation for capacity contributions that they make—contributions that SCE&G's own IRP acknowledges. This contradiction defies common sense.

c. All other testifying parties agree that SCE&G's capacity methodology is flawed and should be rejected.

ORS Witness Horii, CCL and SACE Witness Glick, and SBA Witness Johnson universally recommend that the Commission reject SCE&G's capacity methodology. According to Witness Glick, SCE&G artificially limited the future generation capacity projects or contracts that could be deferred or avoided by QFs; failed to include opportunity costs in its revenue requirements calculations; and failed to include a performance adjustment factor of 1.20. These problems yield an avoided capacity value that is too low. Witness Horii recommends that SCE&G's position of zero avoided capacity costs be rejected because SCE&G has "not adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs." Horii Direct at p. 9. Witness Horii testifies that SCE&G is relying on questionable "assumptions and studies conducted in the 2018 IRP." *Id.* at 22. Finally, Witness Johnson critiques several aspects of the avoided capacity calculation, including the Company's reliance on a sub-optimal "Base" expansion plan that does not minimize revenue requirements. Johnson Direct at pp. 40, 69-70; Surrebuttal at p. 8. The Company's rebuttal to these objections is not persuasive, apparently betting that the Commission will simply endorse a new black box methodology that undervalues solar resources.

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2. The Avoided Cost rates are flawed because they are based on a flawed Integrated Resource Plan.

The errors noted above are linked to the Company's 2018 Integrated Resource Plan, which the Company uses as the foundation for its avoided cost rates. At the hearing in this proceeding, the Conservation Groups raised their continuing objection to the Company's reliance on its 2018 IRP to determine avoided cost rates. State law requires substantial evidence for the Commission's decisions and requires that rates be just and reasonable. The 2018 IRP cannot be relied on as substantial evidence due the significant flaws contained in that document, including that it has not been reviewed; it fails to constitute "least cost," optimized planning; and it relies on the flawed winter peak load forecast and on a winter reserve margin that is too high. These errors in the IRP directly relate to the Company's justification for zeroing out capacity payments to QFs.

a. <u>The IRP is still being reviewed</u>

One of the core problems with the Company's approach to calculating avoided costs is that it relies on a resource plan that has no independent review or oversight. Thus, the Company has the opportunity to unilaterally change components of the IRP that materially impact avoided cost calculations in ways that benefit the Company and discriminate against independent power producers.

Although the 2018 IRP forms the basis of the Company's approach to calculating avoided costs, it was not even filed until after the Company filed its direct testimony in the current proceeding. ORS Witness Horii pointed to this problem in his direct testimony: "[SCE&G] relies upon assumptions and studies conducted in the 2018 IRP that have not been fully reviewed, vetted and/or approved by the Commission." Horii Direct at p. 21. Compounding this unreasonable reliance is the fact that the Company's

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resource "decisions" that it includes in its IRP are not actually binding commitments or even final decisions. In fact, Company Witness Lynch admitted at the hearing that these resource "decisions" are not decisions at all. Hearing Tr. at p. E-199, lns. 14-17. Further, the plan does not reflect optimized or least-cost resource planning: the Company did not present any results demonstrating that its proposed resource additions would be the least-cost additions, and the Company did not use any optimization or simulation software to make its long-term capacity plan. Hearing Tr. at pp. E-202-204.

Despite this, the generation additions reflected in the IRP directly drive the Company's avoided cost rates. Hearing Tr. at p. E-200. Company Witness Lynch concedes that these non-binding IRP commitments create the foundation of costs that the Company uses as inputs to decide what actual costs a QF will avoid. *Id.* For instance, the Company has included two significant capacity additions in its IRP – a 504 MW natural gas procurement in 2018, and another 540 MW combined cycle in 2023. Lynch Direct, Exh. JML-1. However, Company Witness Lynch did not know if the Company had actually committed to the 504 MW Columbia Energy Center procurement, Hearing Tr. at p. E-200, lns. 7-8, and admitted that the Company may not build a combined cycle plant in 2023, Hearing Tr. at p. E-189-190.

Company Witness Lynch's rebuttal testimony best illustrates the flaws with the Company's approach. He states that "[i]f SCE&G **has to** build a combined-cycle unit to meet its winter peak, but which also satisfies the need for summer capacity, **then the fixed costs are incurred**. In contrast, adding solar capacity, which only has an impact on capacity in the summer, does not avoid any of those **fixed costs**." Lynch Rebuttal at p. 41, lns. 19-21, p. 42, lns. 1-2 (emphases added). The Company has not in any way

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demonstrated that it has to, or is **even planning to,** build a 540 MW combined cycle unit in 2023. In fact, Lynch concedes that there are many ways to address winter and summer capacity needs independently. For example, demand side management resources could be used to meet rare winter peaking events while solar power is used to meet summer peak loads. Any "fixed" costs associated with the Company's hypothetical combined cycle are thus speculative and because they are clearly avoidable, some or all of them could be avoided by QFs that provide capacity to meet summer peak capacity needs. Assuming this combined cycle in the Company's "base case" is unavoidable thus arbitrarily minimizes QFs' ability to receive payment for capacity needs.

The Company cannot have it both ways: it cannot "bake in" capacity additions that it has not committed to, as a way to devalue energy and capacity from QFs, unless those additions are actual commitments that QFs can no longer avoid. The Company's claim that solar QFs will have no impact on its preferred-but-speculative resource plan answers the wrong question. The proper question is how QF power can avoid costs related to the Company's current and future capacity needs. The Commission should require the Company to answer this question without allowing the Company to place its thumb on the scales by assuming the existence of Company-built resources that are avoidable and that **should** be avoided to lower system costs.

b. <u>The Company has not optimized its plan</u>

Acknowledging the importance of these issues, FERC has addressed this very question of how utilities using the DRR method should incorporate their future capacity plans. FERC Order 69 clearly states that the evaluation of the difference between a plan with and without the QF must be done based on "the utility's optimal capacity expansion plan," and "[a]n optimal capacity expansion plan is the schedule for the addition of new

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generating and transmission facilities which, based on an examination of capital, fuel, operating, and maintenance costs, will meet a utility's projected load requirements at the lowest total cost." Federal Register, Vol. 45 No. 38, p. 12,216 n.6; *see also* Hearing Transcript at pp. E-211-212, p. E-212 at ln. 24-25 (Witness Lynch conceding that the Company did not use optimization software).

Company Witness Lynch agrees that the IRP should consider a range of resources. Hearing Transcript at p. E-213. He also notes that the Company makes additional showings of cost-effectiveness when it requests a certificate of convenience and public need (CPCN) from the Commission. Hearing Tr. at p. E- 199, lns. 20-24. However, as the IRP stands today, the Company concedes that it uses a simple spreadsheet model to compare generation resources – one that cannot be described as demonstrating an optimal, least cost generation plan. *Id.* at p. E-212. The Company does not use any optimization software or sophisticated modeling that could integrate various resources and select the optimal, least cost generation resources to meet future needs. *Id.* Lynch also concedes that he is not familiar with any other utility that uses an excel spreadsheet to determine its IRP capacity plan, as opposed to an optimization model such as Strategist, PROMOD, Midas, System Optimizer or AURURA. Multiple witnesses testify that SCE&G's aberrant approach is at odds with accepted industry practice, including the practice of other South Carolina utilities. *Id.* at p. E-209.

The Company admits that its spreadsheet actually analyzes only two resource options for meeting capacity needs in 2023: a peaking turbine and a combined cycle plant. Hearing Tr. at pp. E- 215-216. In response to a cross examination question about the Company's spreadsheet model, Witness Lynch states that "I think the heart of your

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point is, are you really moving around just combustion turbines and combined-cycles, and I'd say yes." *Id.* at pp. E-215 ln. 24 – E-216 ln. 1. The Company did not compare the cost effectiveness of these gas resources to market purchases of power, solar, energy efficiency, or battery storage. For some of these resources, the Company "baked in" a certain, pre-set amount (such as for winter demand-side management ("DSM")), but does not actually allow these resources to compete on cost against its selected 540 MW combined cycle. *Id.* The Company would also likely seek recovery of not only capacity costs related to these self-built generation additions, but also a guaranteed return on equity. *Id.* at p. E-217, ln. 8._Simply put, the Company has not demonstrated its resource plan to be "least cost," so under FERC Order 69, the resource additions in the 2018 IRP are not appropriate for the base case scenario that the Company uses to implement the DRR method.

c. Winter peak load forecast

The Company uses the DRR method to calculate avoided costs. This method compares results from a base case and a change case. The "base case" depends significantly on the Company's peak load forecasts and generation resources that will meet those peak load needs, both of which are taken from the 2018 IRP. As described by the Conservation Group's Witness Glick, "SCE&G's near term energy forecasts have a significant impact on avoided energy and capacity costs by driving the need for generation capacity in its resource plans." Glick Direct at p. 13. Witness Glick testifies that "SCE&G's year-on-year increase in the near term forecasted peak load [in the 2018 IRP] reflects a dramatic increase in demand, as compared to prior years' forecasts. I am concerned that this near-term jump is driving long-term planning decisions at a

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significant cost to ratepayers without justification." Glick Direct at p. 13. The Company further points to its winter load forecast in an effort to justify its proposal to completely eliminate avoided capacity payments for solar power. This reliance is misplaced because the Company's winter peak load forecast is flawed.

ORS Witness Horii testifies to the flaws in the Company's winter peak load forecast, specifically regarding its overstated winter season peak demand variation. "[T]he implementation of [the Company's] method is flawed because SCE&G's determination of the winter season peak demand variation is overstated." Horii Direct at p. 12. Horii goes on to explain that "SCE&G uses regression equations to estimate what peak demand would be on SCE&G's system today given the weather that occurred on historical peak days since 1991. ... The winter shape [from this regression equation] has an upward curve, which is counter to engineering-based expectations. This upward curve also exacerbates the variation in peak demand, compared to the downward curve of summer predictions." Horii Direct at p. 14. As described by Witness Horii, the Company's approach goes against engineering-based expectations because the load cannot increase indefinitely with no leveling off. Eventually, "as weather becomes more extreme, "cooling [or heating, depending on the season,] equipment because more heavily used, but eventually [will] top out and cannot increase electricity usage any further." Horii Direct at p. 14. "As individual units top out, one sees diminishing increases in load as temperatures worsen." *Id.* The Company has not accounted for this leveling off of equipment usage and load in its winter season load variation analysis. The result is "an overly large estimate of winter variability for the winter season compared to the summer season." *Id.*

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d. Winter reserve margin

The Company's errors in its peak load variability calculations are compounded by the extremely high reserve margin of 21% that it now proposes to use for its winter season. The Company's flawed overestimate in winter peak load forecast and variability results in the Company seeking an overly aggressive winter reserve margin, to minimize the overstated risk of being unable to meet future winter peak loads. The reserve margin is much higher than comparable utilities in the Southeast, and it was calculated using the questionable component method that is not the industry standard. *See* ORS Witness Horii Direct Testimony at 12. The Company has the capability of using a more sophisticated, industry standard approach, but it declined to do so. In so doing, the Company has not only artificially limited avoided cost payments for QFs, but also seeks to add unneeded winter capacity generation that will increase costs for customers. Hearing Tr. at p. E-241.

A comparison of other winter reserve margins in the Southeast demonstrates that the Company's proposed reserve margin is unreasonable. Witness Glick testifies that "[r]egional peer utilities such as Duke and Southern Company use a different, more comprehensive methodology that balances physical reliability and customer costs." Glick Direct at p. 10. In contrast to the Company's proposed 21% reserve margin, Southern Company and Duke have 17% reserve margins, with the aim of "balanc[ing] reliability and cost minimization." Glick Direct at p. 11. Company Witness Lynch attempts to point to other regional examples of high winter reserve margins from PJM and a Florida utility. But ORS Witness Horii rebuts Lynch's efforts in surrebuttal, in particular pointing out that Lynch's statement is "misleading" and that the PJM figure cited by Lynch is not at all analogous to a reserve margin. Horii Surrebuttal at pp. 8-9.

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SCE&G is capable of using a more sophisticated approach to determining its winter reserve margin. Indeed, the Company used a Loss of Load Probability Method in 2012. The Company even described the LOLP method as the "traditional and industry standard technique" in its 2013 IRP. Hearing Tr. at pp. E-240-241. Yet the Company unreasonably declined to use the LOLP method to inform its new reserve margin study.

Company Witness Lynch admits that its proposed winter reserve margin is largely responsible for the Company's proposal to completely eliminate avoided capacity payments to QFs. Hearing Tr. at p. E- 201. Given the flaws in this winter reserve margin study, the Company has not met its burden of demonstrating that a 21% winter reserve margin is appropriate, and this study should not be allowed to inform avoided cost rates.

3. **SCE&G's zero capacity payment violates PURPA.**

FERC's regulations implementing PURPA are very clear: they state that "[e]ach electric utility **shall purchase**, in accordance with §292.304 . . . **any** energy and **capacity** which is made available from a qualifying facility." 18 C.F.R. § 292.303(a) (emphasis added). These rates must reflect the cost that the purchasing utility **can avoid** as a result of obtaining energy and capacity from these sources. 18 C.F.R. § 292.101(b)(6).

Order 69 acknowledges that different types of QFs may provide different capacity values, and it describes aggregating capacity for certain renewable QFs. While FERC indicated that a single intermittent QF might not permit the purchasing utility to avoid constructing or reserving capacity, "the aggregate capacity value of such facilities must be considered in the calculation of rates for purchases, and the payment distributed to the class providing the capacity." Order No. 69, *Small Power Production and Cogeneration*

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Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978, 45 FR 12214, 12225 (1980). FERC continued,

> Some technologies, such as photovoltaic cells, although subject to some uncertainty in power output, have the general advantage of providing their maximum power coincident with the system peak when used on a summer peaking system. The value of such power is greater to the utility than power delivered during off-peak periods. Since the need for capacity is based, in part, on system peaks, the qualifying facility's coincidence with the system peak should be reflected in the allowance of some capacity value and an energy component that reflects the avoided energy costs at the time of the peak.
> *Id.*

FERC has stated in past orders that an avoided cost rate need not include capacity costs where a QF does not "permit the purchasing utility to avoid the need to construct a generating unit, to build a smaller, less expensive plant, or to reduce firm power purchases from another utility." *City of Ketchikan, Alaska Copper Valley Elec. Ass'n, Inc.; City of Petersburg, Alaska; & City of Wrangell, Alaska*, 94 FERC ¶ 61293 (Mar. 15, 2001), *quoting* Order No. 69, FERC Stats. & Regs., Regs. Preambles 1977-1981 ¶ 30,128 at 30,865.

The Company has not demonstrated that it has met any of these preconditions for waiving its obligation to pay QFs for capacity. In fact, based on the record, the opposite is true: the Company concedes that it may **not** in fact build a combined cycle plant in 2023; that it **could** opt to invest in winter-peaking demand response programs that would alleviate winter peaks, allowing it to meet remaining summer capacity needs with solar QFs. Hearing Tr. at pp. E-189-190. The Company appears to be attempting to rig its avoided cost methodology to reach its intended result: zeroing out capacity payments to its competitors, and justifying additional, and unnecessary, self-built capacity in future years. *See* Lynch Rebuttal p. 41, lns 19-21, p. 42, lns 1-2. Its changes to its winter

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reserve margin, winter peak load, capacity methodology, and QF pricing methodology all appear intended to meet this self-serving result. Clearly, SCE&G has not met its burden to demonstrate that solar QFs' capacity **cannot** be used to meet its "total system load." Order No. 69, FERC Stats. & Regs., Regs. Preambles 1977-1981 ¶ 30,128 at 30,870. Since a summer capacity need exists over the next 15 years, and because SCE&G has not **actually demonstrated** that QFs will not permit the utility to avoid building or buying future capacity, it has an obligation under PURPA to pay QFs fairly for the capacity that they provide. See also *Hydrodynamics Inc.*, 146 FERC ¶ 61193 (2014) (rejecting a utility's attempt to eliminate capacity payments for certain QFs where the utility failed to establish "any clear relationship to . . . actual demand for capacity").

B. Rates for Non-Solar QFs

The Company has further erred in its limitation of PR-2 rates to only solar facilities. Under SCE&G's proposal, QFs not eligible for the new tariff—for example, wind, biomass, or cogeneration QFs, or solar QFs with storage batteries—would not have access to standard rates and would be required to negotiate avoided cost rates and a power purchase agreement with the Commission. Lynch Direct at pp. 7-8, 19. Company Witness Lynch rationalizes that it must set out a solar-specific rate given the additional 865 MW of solar QFs under contract to deliver power to the Company, and given that it has successfully negotiated contracts with non-solar facilities in the past without a rate in place. *Id.* However, at the hearing, Company Lynch acknowledged that the proposed PR-2 rate is not appropriate for and does not incentivize the addition of non-solar QFs. Hearing Tr. at p. E-55. Furthermore, he acknowledged that in the 35 years during which

the Company negotiated contracts with such facilities when there was no tariff set, just one QF obtained a contract with the Company. Hearing Tr. at p. E-56, lns. 6-7.

Both ORS Witness Horii and SBA Witness Johnson criticized the Company's failure to offer a technology agnostic PR-2 rate for non-solar facilities. Horii Direct at p. 9; Johnson Surrebuttal at p. 32. Witness Horii critiqued the Company's failure to produce calculations of long-run avoided costs for non-solar QF resources in part because this failure made it impossible to understand what capacity values would have been.

The Company has not demonstrated that it is appropriate to eliminate its technology-agnostic PR-2 rate. Negotiated rates are not an appropriate alternative to well-designed, technology-agnostic standard offer tariffs. Johnson Surrebuttal at p. 34. This is especially true because SCE&G has demonstrated its willingness to eliminate capacity payments for QFs. For example, Witness Lynch testifies that SCE&G "does not believe there will ever be enough capacity from [] small non-solar QFs to affect its resource plan and, therefore, the avoided capacity costs for PR-1 are zero." Lynch Direct Testimony at 22. The Commission and parties in this docket have reason to suspect that the Company would push for such values in its private negotiations, in violation of PURPA and its requirements that "[e]ach electric utility shall purchase, in accordance with §292.304...any energy and capacity which is made available from a qualifying facility." 18 C.F.R. § 292.303(a). These rates must reflect the cost that the purchasing utility can avoid as a result of obtaining energy and capacity from these sources. 18 C.F.R. § 292.101(b)(6).

The Commission has previously held that it is reasonable to offer standard PR-2 rates to all QFs, regardless of their output characteristics. Order No. 2017-246 at pp. 17-

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18. The Commission should continue to require SCE&G to offer technology agnostic rates, and should also incentivize energy storage technologies that could increase solar resources' value to the Company's system.

C. The Company's 2018 NEM Methodology update fails to comply with the 2014 settlement agreement approved by this Commission.

By failing to include non-zero values for several components that are reasonably quantifiable, the Company is in violation of the 2014 settlement agreement approved by this Commission. The NEM Settlement approved previously by this Commission in Order No. 2015-194, Docket No. 2014-246-E, requires an annual update to the calculation of "costs and benefits of net metering." Order 2015-194 at p. 22, para. (g). The NEM Methodology includes eleven components and the settlement directs that the values for such components will be filled in as capabilities to reasonably quantify those components become available. Order 2015-194 at p. 20, para. (e). Regarding avoided capacity specifically, the settlement defines avoided capacity as the increase or reduction in fixed costs to the utility "of building and maintaining new conventional generation resources associated with the adoption of NEM." Order 2015-194 at p. 8.

For several years now, the Conservation Groups have raised the concern that there are components within the NEM Methodology that are capable of quantification but that have not been included in the Company's annual update. This is still the case in 2018. In particular, Witness Glick testifies for the Conservation Groups that the avoided transmission and distribution ("T&D") capacity component and avoided environmental cost component are capable of reasonable quantification at this time, and she testifies that the avoided line loss values should be updated. *See* Glick Direct at pp. 22-32. The

problem with including zero values for the annual update is more pronounced this year as the Company has now also proposed to include a zero value for avoided capacity benefits. The Commission should require the Company to include a non-zero avoided capacity value in the NEM Methodology update consistent with requiring this value to be calculated for the PURPA avoided costs.

On avoided T&D costs, Witness Glick provides an exhibit with nearly 40 specific T&D values from other states that demonstrate the ability to reasonably calculate this component. ORS Witness Horii similarly acknowledges that other jurisdictions recognize avoided T&D capacity benefits of distributed energy resources. Horii Direct at 24. As admitted on cross examination, Witness Horii even co-authored a report, *Avoided Cost 2016 Interim Update*, for California utilities that quantified T&D costs that were avoided by distributed energy resources.[3] The Company argues that any deferral of avoided T&D capacity is basically "noise" on the system. Lynch Direct at p. 28, Rebuttal at p. 25, ln. 16. However, even if this value is small, that should not excuse the Company from calculating and including it in its annual updates.

Witness Glick testifies to several recommendations for improving the Company's avoided line loss calculations. Her recommendations include 1) using an average annual T&D losses weighed to a PV profile, 2) doubling the average line loss for transmission line losses, 3) grossing up avoided generation and transmission capacity calculations assigned to distribution-level distributed energy resources to reflect the avoided generation and transmission capacity otherwise needed to overcome line losses, and 4) reflecting the avoidance of the reserve margin in line loss calculations. Glick Direct at

[3] Notably, this report also quantified ancillary services costs avoided by distributed energy resources. Ancillary services is another NEM Methodology component that the Company has failed to provide a value for in the annual updates.

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31. In rebuttal, the Company largely argues that the Commission has previously approved its approach to line losses in Order 2017-246. Lynch Rebuttal at 25-34. However, this previous ruling is not binding on the Commission, and indeed it must not make a determination based solely on its previous decisions. *Hamm v. S.C. Public Service Comm'n*, 422 S.E. 2d 110, 114, 309 S.C. 282, 289 (1992); *Porter v. S.C. Public Service Comm'n*, 333 S.C. 12, 26-27 (1998).

On avoided environmental costs, Witness Glick testifies that there are environmental costs beyond those included in the Company's avoided energy costs that should be accounted for. She specifically points to costs of complying with the Environmental Protection Agency's final rule on coal combustion residuals ("CCR"). As explained in Glick's testimony, "NEM resources will result in the reduced dispatch of SCE&G's coal units," implicating less CCR generation and the ability to delay or avoid construction of new ash ponds or other CCR facilities. Glick Direct at 32. In his surrebuttal testimony and at the hearing, Witness Lynch modified the 2018 NEM update to separate out avoided environmental costs from the avoided energy component of its annual update. However, Witness Lynch did not account for the CCR costs that Witness Glick raised in her testimony.

The Company's annual update this year poses an additional problem in that it has proposed a zero value for avoided capacity. The plain language of the settlement agreement says that avoided capacity component is the *increase or reduction in fixed costs to the utility of building and maintaining new conventional generation resources* associated with the adoption of NEM. Order 2015-194 at p. 8 (emphasis added). The Company's error of assigning net-metered DERs a zero capacity value is inconsistent

with a plain reading of the settlement because it means that these NEM resources have no ability to avoid new capacity.

Requested Relief

In light of the significant errors made by the Company in its filing, we ask the Commission to disapprove the Company's Avoided Cost Tariffs PR-1 and PR-2 and the Company's 2018 NEM Rider to Retail Rates, requiring the Company to make revisions that shall be filed within 90 days, subject to the conditions below:

- With respect to its Avoided Capacity Calculations:
    - Recalculate capacity costs consistent with the recommendation of ORS Witness Horii, using 19.5% of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity;
    - Include a performance adjustment factor of 1.20; and
    - Include the additional revenue the Company would collect by selling marginal surplus generation capacity contracts made possible by the new qualifying facilities in the revenue requirement calculation.
- With respect to the Company's 2018 IRP and reserve margin study, the Company shall:
    - Not include as unavoidable capacity any speculative future capacity additions in its calculation of avoided costs;

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- Demonstrate that it has optimized its "base case" capacity expansion plan that it uses to develop avoided cost rates, giving reasonable consideration to alternative means of meeting capacity needs besides adding Company-owned generation; and
- Conduct a new reserve margin study using an updated winter peak load forecast and a more widely used tool, one that balances risk and ratepayer costs, and which will be used to inform avoided cost rates in the 2019 fuel cost filing. In the interim, the Company shall retain its 2017 reserve margin of 14% and shall not adopt a 21% winter reserve margin.

- With respect to its PR-2 rate, the Company shall:
  - File a generic, technology-agnostic PR-2 rate for approval by the Commission in the current docket; and
  - In its next annual fuel cost filing, include a solar + storage rate that reflects hour-by-hour, day-by-day avoided cost rates.
- With respect to the Company's 2018 NEM Methodology Calculation update:
  - The Company shall incorporate into its 2018 NEM Methodology Application the changes required to its PURPA Avoided Cost Calculations for avoided energy and avoided capacity as established above in Ordering Paragraph 3.
  - For its Avoided Line Losses calculations, the Company shall:
    - Use average annual transmission and distribution line losses weighed to a solar photovoltaic profile;

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- Calculate marginal transmission line losses as double the average line loss, as with distribution line losses;
- Gross up avoided generation and transmission capacity calculations assigned to distribution-level DERs, including QFs, to reflect the avoided generation and transmission capacity otherwise needed to overcome line losses; and
- Account for avoidance of 14% reserve margin assigned to generation capacity in calculating avoided line losses.

- The Company shall commission an independent study of the transmission and distribution benefits of solar QFs and file it prior to its next avoided cost filing so that it can include in its 2019 NEM Methodology application a non-zero value for the Avoided Transmission and Distribution cost component of the NEM Methodology approved in Commission Order 2015-194.
- The Company shall evaluate and include in its 2019 NEM Methodology application a non-zero value or estimate for the Avoided Environmental cost component, including any avoided costs related to complying with the federal coal combustion residuals rule, of the NEM Methodology approved in Commission Order 2015-194.

Respectfully submitted this 19th day of April, 2018.

s/ J. Blanding Holman, IV

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E

April __, 2018

IN RE: **Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company**	**SCE&G's PROPOSED ORDER APPROVING FUEL COSTS**

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") and for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2017, through December 31, 2017 ("Review Period").

A. Notice and Interventions

By letter dated October 4, 2017, the Clerk's Office of the Commission instructed the Company to publish, by January 5, 2018, a Notice of Hearing and Prefile Testimony Deadlines

("Notice") in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 5, 2018. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 5, 2017, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office October 4, 2017 letter. On December 15, 2017, the Company filed with the Commission an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("SCCCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SCSBA"), Southern Current, LLC ("Southern Current"), CMC Steel South Carolina ("CMC Steel"), Wal-Mart Stores, East, LP ("Wal-Mart"), Sam's East, Inc. ("Sam's"), and Solbright Energy Solutions, LLC ("Solbright"). SCE&G did not oppose the petitions to intervene and no other parties sought to intervene in this proceeding. By letters dated March 2, 2018, and March 5, 2018, Solbright, Wal-Mart, and Sam's requested to withdraw their petitions to intervene, which requests were granted by Order Nos. 2018-175 and 2018-176, both dated March 14, 2018. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015).

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II. STATUTORY STANDARDS AND REQUIRED FINDINGS

S.C. Code Ann. § 58-27-865(B) (2015) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

III. HEARING

In order to consider the merits of this case, the Commission convened a hearing on this matter on April 10-11, 2018, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire; Matthew W. Gissendanner, Esquire; and Benjamin P. Mustian, Esquire. SCEUC was represented by Scott Elliott, Esquire. SCCCL and SACE were represented by Katherine C. Ottenweller, Esquire. SCSBA was represented by Richard L. Whitt, Esquire, and Benjamin L. Snowden, Esquire. Southern Current was represented by Richard L. Whitt, Esquire. CMC Steel and its counsel of record were excused from attending and did not appear at the hearing. Andrew M. Bateman, Esquire, and Jenny R. Pittman, Esquire, represented ORS. In this Order, ORS, SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

SCE&G presented the direct testimonies and exhibits of George A. Lippard, III; Henry E. Delk, Jr.; J. Darrin Kahl; Michael D. Shinn; Allen W. Rooks; John H. Raftery; and Joseph M. Lynch. ORS presented the direct testimonies and exhibits of Gaby Smith, Michael Seaman-Huynh,

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Sarah W. Johnson, and Brian Horii.[1] SCCCL and SACE presented the direct testimony and exhibits of Devi Glick. SCSBA presented the direct testimony of Dr. Ben Johnson. Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

In response to the direct testimony of SCCCL and SACE Witness Glick, SCSBA Witness Ben Johnson, and ORS witnesses Seaman-Huynh and Horii, SCE&G presented the rebuttal testimony of Witnesses Rooks and Lynch. SCCCL and SACE filed surrebuttal testimony of Witness Glick, SCSBA filed surrebuttal of Witness Ben Johnson, and ORS filed surrebuttal of Witness Horii in response to SCE&G's rebuttal testimony.

IV. REVIEW OF THE EVIDENCE AND EVIDENTIARY CONCLUSIONS

After hearing the evidence and testimony of the witnesses, the Commission reaches the following factual and legal conclusions:

A. Avoided Costs, PR-1, and PR-2

1. SCE&G Testimony

SCE&G Witness Lynch explained the Company's calculations of avoided costs for power purchases under the Public Utilities Regulatory Policies Act of 1978 ("PURPA"). Following the methodology approved by the Commission in Order No. 2016-297, SCE&G uses a difference in revenue requirements ("DRR") methodology to calculate its avoided energy and capacity costs. This approach involves calculating the revenue requirements between a base case and a change case. The base case is defined by SCE&G's existing fleet of generators and the hourly load profile to be supplied by these generators. The change case is the same as the base case except that the

[1] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Kahl and Shinn were presented in the second panel; and Witnesses Rooks, Raftery and Lynch were presented in the third panel. ORS Witnesses Seaman-Huynh and Smith were presented in the first panel for ORS, and Witnesses Sarah Johnson and Horii were presented in the second panel.

hourly loads are reduced by a 100-megawatt ("MW") profile which is the maximum reduction required by regulation under PURPA. The avoided costs are then calculated by taking the difference in revenue requirements between the two plans.

For avoided energy costs, Witness Lynch testified that the Company calculates the change in production costs between a base case and a change case using a very carefully constructed computer program called PROSYM. To determine long-run avoided energy costs, this program models the commitment of generating units to serve load hour-by-hour over the course of the 15-year Integrated Resource Plan ("IRP") planning horizon. Short-run avoided energy costs are calculated for the period May 2018 through April 2019. Using PROSYM to simulate the dispatch of its generation fleet over these time periods, SCE&G estimates the production costs that result from serving the base case load and the change case load.

Witness Lynch explained that SCE&G traditionally derived the change case from the base case by subtracting 100 MWs from every hour of the base case load profile. The Company then collected avoided energy costs into four time periods composed of two seasons—peak season and off-peak season—and two daily periods—peak hours and off-peak hours. Using these four time-of-use periods results in four avoided energy costs, one for each time period. Witness Lynch testified that, in this proceeding, the Company proposed to calculate its PR-2 rate for solar QFs by deriving the change case from the base case by subtracting a 100 MW solar profile from the base case. Because the solar distribution of energy is captured in the solar profile, avoided energy costs are not collected into separate time periods but simply added over all hours.

Witness Lynch testified that, in this proceeding, SCE&G is proposing to limit its PR-2 Rate to solar qualifying facilities ("QFs") and that the Company must separate solar QFs from non-solar QFs in order to pay each type of QF the correct avoided costs. Witness Lynch explained that, as

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more and more solar generation facilities interconnect with SCE&G's system, the benefit of each additional solar generation facility to the Company's system is diminished. Witness Lynch testified that, in order to measure this effect, the Company performed a study titled "Avoided Energy Cost Methods Study for Solar QFs" ("Methods Study"), which he sponsored as Hearing Exhibit No. 5 (JML-3).

Witness Lynch also testified that SCE&G has determined that during the months of May through October, or "Summer," the Company needs resource reserves of at least 14% of the projected summer peak demand to serve reliably during peak times and at least 12% during the remaining periods. Witness Lynch also testified for the months of November through April, or "Winter," SCE&G needs a minimum of 21% of its projected winter peak demand to serve reliably during winter peak periods and at least 14% during the remaining periods. In support of this determination, Witness Lynch sponsored the Company's Reserve Margin Study, identified as Hearing Exhibit No. 5 (JML-2).

Witness Lynch testified that the Methods Study compared the difference in revenue requirements between the base case and three different change cases using a traditional 100 MW round-the-clock profile, a 100 MW South Carolina solar profile, and a 100 MW North Carolina solar profile. After levelizing the avoided energy costs and averaging them over 10 random seed runs, Witness Lynch testified that the results show that using the round-the-clock profile to develop the change case results in over-estimating the avoided energy costs by $4.85 per MWH. Witness Lynch explained that, as more and more solar is added to the system, the value of each additional increment of solar is reduced. Specifically, Witness Lynch stated that SCE&G's system first experiences a morning peak demand with little contribution from solar facilities. As the day progresses and solar facilities begin generating energy, SCE&G's residual system load profile

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experiences a steep ramping down of load to a bottom level of load followed by a steep ramping up in load to an afternoon or evening peak demand. In sum, Witness Lynch testified that the additional energy from solar generation causes the system to experience decreasing minimum loads between the morning and evening peak. Witness Lynch also testified that, while solar energy coming onto the system certainly has value, it also causes operational issues that result in positive variable integration costs that lower the avoided cost. Based on this analysis, Witness Lynch testified that the Company's Avoided Energy Costs for the PR-2 rate are as follows:

Solar QF Avoided Energy Costs ($/kWh)

Time Period	Annual
2018-2022	$0.02853
2023-2027	$0.02994
2028-2032	$0.03414

To develop avoided capacity costs, Witness Lynch testified that the Company takes a similar approach. Using the difference in revenue requirements methodology approved by the Commission in Order No. 2016-297, SCE&G calculates the difference in the revenue requirements between the base case and the change case. Using the resource plan in its latest IRP or an updated resource plan if appropriate, SCE&G calculates the incremental capital investment related revenue required to support the existing resource plan. As with its calculation of avoided energy costs for solar, SCE&G derives a change case in its resource plan by considering the impact of a QF purchase from a 100 MW solar facility.

Witness Lynch testified that SCE&G currently has 865 MWs of solar capacity under Power Purchase Agreements ("PPAs") and the addition of another 100 MWs of solar has no effect on the resource plan. Witness Lynch further explained that, given the amount of solar generation that is

currently projected to be interconnected to SCE&G's system, adding additional blocks of 100 MW of solar generation does not affect the Company's future capacity needs.

In order to study this issue, Witness Lynch testified that the Company performed a study titled "On Calculating the Capacity Benefit of Solar QFs ("Solar Capacity Benefit Study") to analyze the impact of solar on its daily peak demands. This study shows that, on more than 80% of the days during the winter months of October through March, solar has no effect on SCE&G's daily peak demand because the winter peak occurs either early in the morning before solar begins to generate energy or in the evening after solar is no longer generating. Since SCE&G's Reserve Margin Study shows that SCE&G needs as much capacity in the winter as it does in the summer, Witness Lynch testified that a generating resource has to provide capacity in the winter as well as the summer in order to avoid the need for capacity and thereby have capacity value. Because solar does not provide capacity during the winter period, Witness Lynch testified that the Company is unable to avoid any of its projected future capacity needs and, therefore, the avoided capacity cost of solar for these winter months is zero.

SCE&G also analyzed the impact of solar on summer days and determined that, 800 MWs of solar can be expected to reduce the daily peak demand on average over non-peak days approximately 21% with only 9.6% for the last 100 MWs. Witness Lynch testified that, because only the incremental values are relevant for avoided cost calculations, the last 100 MWs of solar will reduce the summer peak by about 19.5 MWs on peak days and 9.6 MWs on the rest of the days, which translates into a peak effect of approximately 9.9 MWs and a base effect of approximately 9.6 MWs. Witness Lynch stated that, considering this small impact in summer and no impact in winter, SCE&G is not able to reduce capacity additions in its resource plan and therefore there are no avoided capacity costs.

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Witness Lynch also testified that the Company plans to negotiate contracts with any non-solar QF for which the PR-1 rate is not appropriate. He explained that, in the past and prior to the development of the PR-2 rate, SCE&G for many years offered a PR-1 rate as well as an offer to negotiate a contract with any QF that did not qualify for the PR-1 rate. This response to PURPA worked satisfactorily for many years and SCE&G proposes to return to that arrangement for non-solar QFs of greater than 100 kilowatts ("kW") and up to 80 MW.

Regarding the Company's PR-1 Rate, Witness Lynch explained that, for the same reasons discussed regarding the PR-2 Rate, SCE&G must separate solar QFs from non-solar QFs in order to pay each type of QF the correct avoided costs. He testified that, if SCE&G does not distinguish its pricing between solar and non-solar QFs, then the amount SCE&G and its customers would be paying for solar energy would be more than the Company's actual avoided costs, which is contrary to the explicit intent of PURPA.

For solar QFs on PR-1, SCE&G used the same methodology to estimate avoided energy costs as it did for solar QFs on PR-2. The only difference is the time period over which the avoided energy costs are estimated. The short-run avoided energy costs in the PR-1 rate are calculated for the period May 2018 through April 2019. Witness Lynch also testified that the avoided capacity cost for solar QFs subject to the PR-1 rate is zero because, as with the PR-2 rate, incremental solar QFs do not affect the resource plan and therefore avoid no future resources or their cost.

For non-solar QFs on PR-1, Witness Lynch testified that SCE&G used PROSYM to estimate the change in production costs that result from serving the base case load and the change case by subtracting a 100 MW round-the-clock power purchase profile. He stated that the avoided costs are accumulated into the four time-of-use periods described previously and a non-solar QF would be paid based on how much energy it produces in each of these four time-of-use periods.

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For avoided capacity, Witness Lynch explained that, because the PR-1 rate is designed for small QFs with a capacity rating of up to 100 kWs, SCE&G does not believe there will ever be enough capacity from these small non-solar QFs to affect its resource plan and, therefore, the avoided capacity costs for PR-1 are zero. Witness Lynch also stated that SCE&G proposes to change the PR-1 Rate for non-solar QFs by eliminating the critical peak hours as a way to credit QFs for their capacity value. He stated that it is more appropriate to simply add an avoided capacity credit to the avoided energy cost to deliver the capacity value to a solar QF. He also stated that the addition of so much solar on SCE&G's system shifts the Company's previously experienced effective peak hour and that it is inappropriate to look only to certain hours selected from past experience in which to pay out a capacity credit. Finally, he stated that since SCE&G's need for capacity spans the entire year, it is necessary to spread avoided capacity costs throughout the year to reflect the Company's reliability risk as explained in the Reserve Margin Study.

Based on these recommendations, Witness Lynch testified that the PR-1 Rates are as follows:

PR-1 RATE: AVOIDED ENERGY COST
Non-Solar QFs ($/kWh)

Time Period	Peak Season Peak Hours	Peak Season Off-Peak Hours	Off-Peak Season Peak Hours	Off-Peak Season Off-Peak Hours
May-April	$0.03233	$0.02886	$0.03445	$0.03298

Solar QFs ($/kWh)

Time Period	Year Round
May-April	$0.03256

He stated that the avoided capacity costs for solar and non-solar are zero.

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2. ORS, SCCCL, SACE, and SCSBA Testimony

Regarding the Company's methodology used to calculate its avoided energy and capacity costs, ORS, SCCCL, SACE, and SCSBA made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Horii testified that ORS reviewed SCE&G's avoided cost calculations in order to verify the Company is using the avoided cost methodology approved by the Commission, to confirm the methodology meets PURPA requirements, and to verify the avoided cost rates requested by SCE&G in this docket are a reasonable result of the approved avoided cost methodology. Witness Horii stated that the method used by SCE&G to calculate avoided energy costs is consistent with the methodology approved by the Commission in Order No. 2016-297. He further testified that, the use of a 100 MW solar profile is a valid application of the DRR methodology for the specific case of a solar generator and that, given SCE&G's assertion that the vast majority of recent and future QF resources are solar, it is an improvement to use an avoided energy cost which more closely tracks the avoided energy for solar generation. He also testified that SCE&G's fuel price forecasts which SCE&G used in calculating the avoided energy cost for both the 2017 and 2018 fuel adjustment proceedings are consistent and similar and that there appear to be no major changes in network configurations or import/export assumptions used by SCE&G. In sum, Witness Horii testified that the updates in SCE&G's avoided energy costs are a reasonable and consistent result of the methodology used by SCE&G and that the method used by SCE&G to calculate avoided energy costs for solar generators is appropriate.

The Commission finds that SCE&G's avoided energy costs are reasonable and that the use of a 100 MW solar profile to calculate avoided energy costs is appropriate. As discussed by

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Witness Lynch, as more and more solar is added to SCE&G's system, the value of each additional increment of solar is reduced. Therefore, it is appropriate for the Company to use an avoided energy cost which more closely track the avoided energy for solar generation.

b. Regarding avoided capacity costs, Witness Horii disagreed with the Company's position that new solar projects will have no value and that SCE&G has not adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs. Although Witness Horii stated SCE&G may be correct that there are no winter capacity reductions from additional solar, he expressed concern that parties have not had adequate opportunity to evaluate the accuracy of the winter capacity constraint. Witness Horii further testified as to his belief that SCE&G is overestimating the amount of reserve capacity the utility needs in the winter because of purported flaws in the Reserve Margin Study and that the Company's forecast of future summer and winter peak demands is inconsistent. As a result of these concerns and the uncertainty of this new position, Witness Horii recommended that SCE&G's position of zero avoided capacity costs be rejected at this time. He further recommended that, because he was unable to produce an independent estimate of avoided capacity costs for a 100 MW change in supply, the current capacity value should be maintained for both PR-1 and PR-2 until a better capacity value can be provided in the next rate update.

Witness Glick also testified that SCE&G has historically used a 14% winter reserve margin and that it has increased its winter reserve margin to 21%, reflecting a 50% increase over the winter reserve margin used by the Company last year. She also stated that the Company's proposed winter reserve margin is substantially higher than that of Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Southern Company, and Santee Cooper. Witness Glick testified that, while a robust reserve margin is necessary to protect system reliability, this increase in SCE&G's winter reserve

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margin has a profound impact on system costs for ratepayers by requiring substantially more winter capacity than last year's plan.

In response, Witness Lynch testified that the Company has experienced a significant increase in new solar capacity with signed PPAs, reflecting 865 MW of capacity currently under contract and 17% of SCE&G's 2018 forecasted system peak demand of 5,077 MW. Witness Lynch explained that, as more and more solar is added, the usefulness or value of each successive addition decreases and that solar has reached the zero point for capacity because of the amount of solar under contract. He also disagreed that SCE&G's capacity needs are greater in the summer than in the winter, explaining that the seasonal peak demand forecasts and the seasonal reserve margins show that SCE&G's incremental capacity need is 112 MWs in the summer and 449 MWs in the winter.

Witness Lynch also testified that Witness Horii's suggested winter reserve margin results from an error in Witness Horii's calculations but, even so, the Company's 2019 winter need for capacity is 185 MW greater than the summer need. He also testified that SCE&G's estimate of the peak demand falls within the 95% confidence interval derived from Witness Horii's calculations. As a result, Witness Lynch testified that SCE&G's calculations are not statistically different from Witness Horii's and therefore should be considered a reasonable estimate of its forecasted winter capacity needs. Witness Lynch also disagreed with Witness Horii's recommendation to maintain the current avoided capacity costs values for both PR-1 and PR-2, explaining that, while these payments represent a pass through of costs and would be recoverable through SCE&G's fuel clause, SCE&G's customers ultimately would pay more for this purchased power than PURPA intends.

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Witness Lynch also testified that, previously, SCE&G has not had a winter reserve margin, but only a summer reserve margin. He further disagreed with Witness Glick's suggestion that SCE&G's winter reserve margin was unreasonable when compared to those of other utilities. Specifically, Witness Lynch stated that PJM has a 16% summer reserve margin and a 27% winter reserve margin, both of which are greater than SCE&G's. He also testified that Florida electric utilities plan to a 20% reserve margin, which likely refers to a summer reserve margin, but that SCE&G's demand side risk is greater in winter than in summer. He also testified that, as his methodology and that of Witness Horii reflect, SCE&G's winter peak can increase approximately 500 MW due to abnormal winter weather, reflecting the need for at least a 6% increase in reserve margin, winter over summer. Accordingly, Witness Lynch testified that SCE&G's 21% reserve margin is very reasonable.

The Commission finds that SCE&G's proposal to set avoided capacity costs for its PR-1 and PR-2 rates at zero is reasonable. Since last year's fuel proceeding, SCE&G has had a dramatic change in circumstances with 865 MW of solar capacity now under contract.[2] The Company's analysis shows that the addition of another 100 MW of solar has no effect on its resource plan and, therefore, does not affect SCE&G's future capacity needs. The Commission also finds that SCE&G's determination that it needs as much capacity in the winter as it does in the summer is appropriate. A generating resource has to provide capacity in the winter as well as in the summer in order to avoid the need for capacity and thereby have capacity value. The Commission therefore concludes that, because additional solar does not provide capacity during the winter period, the Company is unable to avoid any of its projected future capacity needs from additional solar. The

[2] The Commission recognizes that this 865 MW of solar capacity under contract falls under the PR-2 rates established in Order Nos. 2016-297 and 2017-246, which provides a capacity payment for solar generation.

Commission further recognizes that no other party presented an alternative estimate of SCE&G's avoided capacity costs. The Commission also disagrees with Witness Horii's suggestion that the Company's current avoided capacity costs be maintained until the next rate update. There is no evidence to demonstrate that maintaining such rates would be appropriate or that it would not result in SCE&G's customers having to pay for excessive avoided capacity costs. Accordingly, the Commission finds that SCE&G's proposed avoided capacity cost for solar of zero is reasonable and appropriate.

The Commission also finds that SCE&G's winter reserve margin of 21% is reasonable. While the reserve margins calculated by Witness Horii and Witness Lynch differ to a degree, the differences are not significantly different. Furthermore, both Witness Horii and Witness Lynch recognize that SCE&G has a higher demand-side risk in the winter than in the summer. Accordingly, the Commission finds that it is appropriate for SCE&G to use a 14% reserve margin for the summer and a 21% reserve margin in the winter.

c. Witness Horii also disagreed with SCE&G's proposal to no longer provide a standard rate offer for non-solar resources. He testified that the lack of a published rate would increase the uncertainty and engagement costs for new resources.

In response, Witness Lynch testified that since there are no non-solar QFs currently seeking a PPA, there is no need for such a published tariff. Should a non-solar QF desire to enter into a PPA, Witness Lynch testified that SCE&G will negotiate a contract with that party. Witness Lynch stated that this approach has worked satisfactorily for SCE&G since PURPA was passed and only when the number of solar PPA applications significantly increased did the Company believe it would be more efficient to have a separate published rate for these QFs.

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The Commission agrees with SCE&G. The record contains no evidence that a non-solar QF has recently sought to enter into a PPA agreement with the Company and, therefore, there is no need for a published non-solar QF tariff. Accordingly, the Commission finds that the Company should negotiate contracts with any non-solar QFs that are not eligible for the Company's non-solar PR-1 Rate as it did for many years prior to the establishment of the PR-2 Rate.

d. Witness Glick testified that, in this proceeding, SCE&G has proposed a substantial change to the avoided cost methodology approved by the Commission in prior dockets and that solar QFs are denied the benefits of deferring the addition of any new capacity that the Company proposes building. She also testifies that the Company did not use the methodology approved in Docket 2017-2-E to calculate the avoided generation capacity value.

In response and as discussed previously, Witness Lynch explained that SCE&G has not changed the methodology; rather there has been a change in the result caused by the significant increase in new solar capacity with PPAs since the Company's last fuel proceeding. Witness Lynch also testified that as more and more solar is added, the usefulness or value of each successive addition decreases and that solar has reached the zero point for capacity because of the amount of solar under contract.

For the same reasons stated previously, the Commission agrees with the Company. In Order No. 2016-297, the Commission approved SCE&G's difference in revenue requirements methodology to calculate both the energy component and the capacity component of its avoided costs. This approach involves calculating the revenue requirements between a base case and a change case. In calculating its avoided costs, SCE&G used the methodology approved in prior proceedings. In this proceeding, however, the Company proposes to calculate the change case using a 100 MW solar profile instead of a 100 MW round-the-clock profile as it has done in the

past. The Commission finds that this does not reflect a change in methodology; rather, this is a change in the analysis that is warranted by the substantial amount of solar currently under contract with the Company. Even so, because the vast majority of recent and future QF resources are solar, it is appropriate for SCE&G to use an avoided cost which more closely tracks the avoided costs for solar generation. The Commission further notes that, in the Company's last two fuel proceedings, SCCCL, SACE, and SCSBA all requested that the Company be required to use a solar profile so that it could more accurately estimate the avoided costs to be paid to solar QFs.

e. Witness Glick testified that the Company erred by failing to include in its revenue requirement calculations opportunity costs, which are the loss of potential gain from other alternatives when one alternative is chosen. Specifically, Witness Glick argued that additional solar would allow SCE&G to sell capacity in the market thereby increasing the value of additional solar.

In response, Witness Lynch testified that in order to sell capacity to a neighboring utility, it must be firm and dependable capacity. However, Witness Lynch noted that a solar QF does not have firm capacity as it is an intermittent resource and, therefore SCE&G could not sell solar capacity. He further testified that when SCE&G purchases firm capacity to serve its customers, it passes those costs onto its customers. Similarly, when SCE&G sells firm capacity, he testified that the benefits of such a sale should accrue to SCE&G's customers, not to the QF as proposed by Witness Glick. Finally, he testified that if there were a lucrative market for solar capacity, the solar facility would not be selling its energy to SCE&G at the Company's avoided cost rates but instead would sell its capacity directly to interested purchasers at higher prices.

In Order No. 2017-246, the Commission previously found that it is reasonable and appropriate for the Company not to consider opportunity costs in its revenue requirements

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calculation in that a solar QF does not have firm capacity as it is an intermittent resource and does not add to the Company's opportunity to sell firm capacity. No evidence was presented warranting a deviation from this previous finding and the Commission therefore declines to adopt the position recommended by SCCCL and SACE.

f. Witness Glick also recommended that SCE&G should pay QFs a performance adjustment factor in order to treat the QF capacity equally with a utility's generating unit.

Witness Lynch disagreed with this suggestion, stating that it is not reasonable or meaningful to compare the intermittent capacity of a solar QF, which only provides energy as weather permits, with the firm capacity of a more dependable generating unit such as a combustion turbine. Based on data reflecting the maximum hourly output of a large solar generator on SCE&G's system, Witness Lynch testified that solar facilities provide little, if any, firm dependable capacity to SCE&G's system that the Company can reliably call upon to serve its customers.

The Commission agrees with the Company. As it found in Order No. 2017-246, the Commission again concludes that it is unreasonable to employ a performance adjustment factor to the capacity payment because there is no guarantee of performance with regard to capacity from solar facilities.

g. Witness Ben Johnson testified that QF rates should be set equal to the cost of having the utility build and operate its own generating units. Witness Johnson also testified that the public interest is best achieved by establishing rates that leave ratepayers indifferent as to whether energy and capacity is obtained from QFs or from the utility itself under traditional rate base regulation. Witness Johnson stated that retail customers are better served by regulatory

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decisions that set avoided cost rates at a point that is closer to the long-run incremental costs that are incurred by utilities when they build and operate their own generating plants.

Witness Lynch testified that avoided cost rates should not be set to the utility's cost to build but, instead, should be set equal to the utility's actual avoided cost. Under any other circumstances, Witness Lynch testified that ratepayers would not be indifferent to purchases from a QF. He also noted that the rates in the Company's PR-2 tariff reflect SCE&G's long-term avoided costs.

The Commission agrees with SCE&G. The methodology approved by the Commission in Order No. 2016-297 and used by the Company in this proceeding sets forth the proper manner in which to determine the Company's actual avoided cost. As SCE&G has properly complied with and followed this method, the Commission concludes that SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities is unreasonable and inappropriate.

h. Witness Ben Johnson next testified that SCE&G analyzed different generation expansion plans and the associated energy costs, but did not develop a comprehensive, detailed analysis of its revenue requirement and does not show the corresponding revenue requirement for these expansion plans or that this approach is consistent with minimizing revenue requirements. Witness Johnson also testified that the PROSYM model used by SCE&G to calculate its avoided costs has certain disadvantages.

In response, Witness Lynch testified that, for the PR-2 Rate, incremental solar beyond 865 MWs of solar capacity already under contract does not alter its resource plan and, therefore, the difference in capital-related revenue requirement is zero. He further testified that a comprehensive, detailed revenue requirement is not needed for the calculation of avoided costs which are based on incremental effects.

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The Commission agrees with the Company. The Company properly calculated its avoided costs in compliance with the methodology approved by the Commission in Order No. 2016-297. As it did in Order No. 2017-246, the Commission also finds that it is appropriate for SCE&G to use PROSYM, which is a standard production costing model used in the industry. Accordingly, the Commission finds that Witness Johnson's recommendations are unreasonable and unnecessary.

i. Witness Ben Johnson testified that he developed estimates of the Company's avoided capacity costs using the Proxy Unit method based on a hypothetical nuclear plant, combined-cycle plant, and combustion turbine. He stated that these calculations suggest SCE&G's proposed rates are below the capacity-related cost of building and operating these three types of generating units over their entire economic life. For this reason, Witness Johnson stated that it is appropriate for the Commission to increase the avoided cost rates to be closer to those of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. He also testified that higher avoided cost rates would be more consistent with the long-run incremental cost of new capacity and would better encourage QF development within SCE&G's service area.

Witness Lynch disagreed, stating that Witness Johnson failed to explain how the cost to construct these proxy plants relate to the costs SCE&G would avoid through a QF purchase, *i.e.*, the avoided cost rates that leave ratepayers indifferent. He further noted that ratepayers would not be indifferent to the choice of paying the different capacity costs of a nuclear plant, a combined-cycle plant, or a combustion turbine. Rather, given the choice, Witness Lynch testified that ratepayers would choose to pay the capacity cost of the least expensive generating facility—a combustion turbine.

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The Commission finds that Witness Johnson's recommendation is unreasonable. SCE&G properly calculated its avoided costs using the methodology approved by the Commission in Order No. 2016-297. As stated previously, SCSBA's recommendation to calculate avoided costs based on the utility's cost to build its own generating facilities is unreasonable and inappropriate. The Commission further restates its findings in Order No. 2017-246 that using the proxy method as recommended by Witness Johnson would not add further accuracy to the estimate of SCE&G's avoided costs and, therefore, declines to modify the approved methodology in the manner suggested by Witness Johnson.

j. Witness Ben Johnson next addressed the Company's variable energy costs, noting that natural gas prices have fluctuated over both short and medium time frames, although stating that they have exhibited a tendency to trend higher over the long term. Witness Johnson testified that the instability of natural gas prices and difficulties associated with predicting these prices is one of the principal disadvantages or risks associated with using this fuel source. Witness Johnson further testified that, in developing his long-run avoided cost estimates, he evaluated multiple scenarios using a number of different assumptions based upon historical natural gas prices.

In response, Witness Lynch agreed that future natural gas prices are uncertain but stated that a simple trend line based on historical natural gas prices cannot be used with confidence to project future prices as a result of the recent advancements in fracking technology. Instead, Witness Lynch testified that SCE&G uses the price of futures contracts traded on the NYMEX over the next three years and then applies a growth rate to project prices over the longer term. Witness Lynch stated that NYMEX prices have been used in SCE&G's fuel hearings for many years

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because they represent publicly available information and also are good indicators of gas prices in the short term.

The Commission finds that SCE&G's methodology to estimate future natural gas prices is reasonable and consistent with the methodology approved in Order No. 2016-297. Again, as noted by the Commission in Order No. 2017-246, the Company has used this methodology for a number of years to estimate future natural gas prices. The Commission therefore concludes that Witness Johnson's recommended changes to this methodology is unreasonable and unnecessary and would not result in more accurate estimates of future natural gas prices.

k. Witness Ben Johnson addressed the Company's decision to abandon the new nuclear units and suggests that the Company did not consider the benefits of a balanced generating portfolio in developing its proposed QF rates.

Witness Lynch disagreed with Witness Johnson and testified that SCE&G is aware of the resource mix. He further testified that the Company believes that the addition of 865 MW of solar capacity helps to have a more balanced generating portfolio. However, Witness Lynch stated that SCE&G, like most utilities, believes that gas-fired generation is the most economical choice of dispatchable generation for the next few years.

The Commission finds that the Company has experienced a substantial growth in solar generation on its system which undoubtedly will provide a more balanced generation portfolio. The Commission therefore disagrees with Witness Johnson's suggestion.

l. Regarding the Company's proposed changes to the avoided capacity rates for solar and to Rate PR-1 and PR-2, Witness Ben Johnson testified that not compensating QFs for their reliability benefits is intensely and unlawfully discriminatory. He also objected to limiting Rate PR-2 to solar projects and asserts that this would establish an arbitrary distinction between

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solar and non-solar technologies. Witness Johnson also objected to SCE&G's proposal to update Rate PR-2 on an as-needed basis. Finally, Witness Johnson testified that solar and non-solar generators should not be paid different prices.

In response, Witness Lynch testified that, in the context of avoided costs, the issue is not what benefits or value QFs will receive. Rather, Witness Lynch stated that the issue is what capacity costs are being avoided and, simply put, if no capacity costs are avoided, then the avoided cost is zero. Witness Lynch also testified that the Company's proposal to distinguish between solar and non-solar projects is not arbitrary since SCE&G only has solar projects requesting avoided cost rates and the determination of avoided cost depends strongly on the type of project under consideration. When a non-solar project seeks to enter into a PPA with SCE&G and requests its avoided costs, Witness Lynch stated that some specification has to be made as to what the project's power producing characteristics will be. Regarding battery storage projects, Witness Raftery testified that SCE&G will issue an RFP to collect information on solar plus battery projects with the intention of having a project or two placed online and that SCE&G then will be better able to analyze the impacts of these types of projects on its system. Finally, Witness Lynch testified that SCE&G believes it is sufficient to have a scheduled update of the PR-2 rate once a year at the fuel hearing with the option, but not the requirement, to update it more frequently on an as needed basis. Witness Lynch also testified that QFs should be paid their avoided cost. He stated that solar QFs all have similar characteristics and avoid costs at approximately the same rate and that, for this reason, providing a standard rate for solar QFs, such as PR-2 and PR-1, is efficient and reasonable. Witness Lynch also testified that because non-solar QFs may have significantly different characteristics; these projects should be considered on an individual basis and separate, specific PPAs should be negotiated for each such project. And, even though it is not possible to

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accurately estimate the impact small non-solar QFs (under 100 kW) have on the system individually, Witness Lynch stated that the impact they do have is so small that establishing a separate rate for these facilities would be meaningless. Rather, Witness Lynch testified it is more appropriate to have a standard rate for these types of projects such as the Company's Rate PR-1.

The Commission finds that the Company's proposed changes to Rate PR-1 and PR-2 are reasonable. Avoided capacity costs should be calculated based on how much future capacity can be avoided and, if no such capacity can be avoided, the avoided capacity cost should be zero. In order for SCE&G to pay the appropriate amount of avoided costs and therefore prevent customers from having to pay for avoided costs that are too high, it also is appropriate for SCE&G to distinguish between solar and non-solar QFs in its Rate PR-1 and PR-2 and to pay different avoided costs based on their different characteristics. The Commission also agrees with SCE&G's proposal to update Rate PR-2 once a year, and that it should be permitted, but not required, to update it more frequently on an as-needed basis. This procedure strikes a reasonable balance between responsiveness and stability. The Commission also recognizes that, in previous proceedings, SCCCL, SACE, and SCSBA recommended that Rate PR-2 be updated on an annual or biennial basis and that biannual updates create uncertainty for QF developers.

m. Witness Ben Johnson also testified that the Commission should be moving in the direction of requiring stronger, more precise price signals to help guide competitive investment decisions and that the elimination of the capacity rate makes the solar rate structure even less granular than it is now.

Witness Lynch responded by stating that PURPA requires SCE&G to purchase the power produced by any and all QFs that desire to sell power at the Company's avoided cost. He further

testified that SCE&G is prohibited by law from turning away less efficient QFs, so the use of avoided costs is not a good vehicle to enhance competitive markets.

The Commission agrees with the Company. Given the requirements of PURPA, it is not appropriate to use avoided costs to encourage competitive investment decisions.

n. Witness Ben Johnson testified that electrical energy is a joint product when viewed across time and that capacity used to generate electricity during the peak daytime hours is also available for use during other hours. He further testified that a reasonable share of the annual fixed costs of capacity should also be recovered during many other hours of the year, including the early morning hours of December through February, when extreme peaks also sometimes occur. Witness Johnson therefore suggested that avoided costs should include a markup to provide a mechanism for joint and common costs.

Witness Lynch disagreed and testified that a markup suggests that SCE&G should pay more than its avoided cost which is contrary to the intent of PURPA. If SCE&G avoids any joint and common costs through the purchase of power from a QF, Witness Lynch testified that those costs should be reflected in its avoided cost rate but without a markup. In response to Witness Johnson's suggestion that a combined-cycle generating facility that provides capacity in the winter will also provide capacity in the summer, Witness Lynch stated that if SCE&G has to build a combined-cycle unit to meet its winter peak, but which also satisfies the need for summer capacity, then the fixed costs are incurred. In contrast, Witness Lynch noted that adding solar capacity, which only has an impact on capacity in the summer, does not avoid any of those fixed costs.

The Commission agrees with SCE&G. The Company properly calculated its avoided costs using the methodology approved by the Commission in Order No. 2016-297 and the Commission

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finds it would be inappropriate to markup avoided costs to provide a mechanism for joint and common costs.

3. The Commission's Overall Conclusions Regarding Avoided Costs, PR-1, and PR-2

Based upon the evidence of record, and after reviewing the testimony of the parties of record, the Commission finds and concludes that SCE&G properly calculated its avoided energy and capacity costs under PURPA using the difference in revenue requirements methodology approved by the Commission in Order No. 2016-297. The Commission further concludes that the difference in revenue requirements methodology remains reasonable, prudent, and appropriate, and that SCE&G's proposal to use a 100 MW solar profile to calculate avoided costs is warranted and appropriate. The Commission also finds and concludes that SCE&G's proposed PR-1 and PR-2 Rate Schedules set forth rates, credits, and charges, that are lawful, just, and reasonable and are based on reasonable methodologies.

B. NEM Distributed Energy Resources Methodology

1. SCE&G Testimony

Company Witness Lynch testified that, by way of its Order No. 2015-194 issued in Docket No. 2014-246-E, the Commission approved the following 11 components of value for NEM Distributed Energy Resources:

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Net Energy Metering Methodology

1. +/- Avoided Energy
2. +/-Energy Losses/Line Losses
3. +/- Avoided Capacity
4. +/- Ancillary Services
5. +/- T&D Capacity
6. +/- Avoided Criteria Pollutants
7. +/- Avoided CO_2 Emission Cost
8. +/- Fuel Hedge
9. +/-Utility Integration & Interconnection Costs
10. +/- Utility Administration Costs
11. +/- Environmental Costs

= Total Value of NEM Distributed Energy Resources

He also testified that, in Docket No. 2017-2-E, the Company calculated the value for these components and, in Order No. 2017-246, the Commission determined that those values complied with the NEM Methodology approved by the Commission in Order No. 2015-194. As set forth in Table 10 to his direct testimony, Witness Lynch stated that the Company updated these components of value by calculating the current value and one for the value over the IRP planning horizon. Witness Lynch further provided information on SCE&G's evaluation of each component and its estimate of the associated value. Witness Rooks also sponsored the Company's proposed "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet which updates the total value of NEM Distributed Energy Resource to reflect the components of value for NEM Distributed Energy Resources enumerated by Witness Lynch.

2. ORS Testimony

Witness Sarah Johnson testified that the Company's calculation of the NEM Incentive is consistent with the methodology approved in Commission Order No. 2015-194 and that the value of the customers' distributed generation was calculated using the amount from the NEM tariff approved in Commission Order No. 2017-246. Witness Horii similarly testified that SCE&G is following the methodology approved by the Commission in Order No. 2015-194 in evaluating the

value of each component of the NEM DERs Total Value stack. Witness Horii testified that SCE&G bases its NEM DERs avoided energy and capacity costs on the PURPA avoided cost values and that the PURPA avoided energy cost decreased from last year, leading to a reduction in the NEM DERs avoided energy cost. With respect to the component of value for avoided capacity, Witness Horii stated that this value is based on the PURPA avoided capacity cost values and that, should the Commission reject the Company's proposed avoided capacity cost value, the Total Value of NEM Distributed Energy Resources would be impacted. Regarding the value for T&D Capacity, Witness Horii noted that SCE&G's practice of designing transmission and distribution circuits to assume DER is not generating due to weather factors or because DER resources are off line follows the Commission-approved methodology but it is a conservative approach.

3. SCCCL and SACE Testimony, Responsive Testimony, and the Commission Conclusions

Regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology, Witness Glick made a number of recommendations. Each of these recommendations, SCE&G's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Glick testified that SCE&G's description of avoided line losses associated with DERs is inadequate and that the Company erred in calculating line losses. Specifically, Witness Glick stated that the Company used annual average system losses as the basis for calculating marginal losses rather than losses associated with the temporal solar profile and failed to calculate transmission losses as marginal. She also testified that avoided marginal transmission and distribution line losses have capacity implications. Witness Glick further stated that QFs connected at the distribution level should be reimbursed for transmission level savings

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and that small QFs and NEM DERs should be reimbursed for both transmission level and distribution-level savings.

In response, Witness Lynch first noted that the recommendations advanced by Witness Glick had been previously raised in Docket No. 2017-2-E and that the Commission had found in Order No. 2017-246 that "the Company's calculation of line losses is appropriate and that average transmission losses are the best estimate to use for marginal losses." Nevertheless, Witness Lynch also testified that the PR-1 and PR-2 rates and the 11-point NEM methodology all involve the adjustment of QF energy supplied over many hours of the year. Therefore, Witness Lynch testified that the use of an annual average system loss factor is appropriate. He also stated that SCE&G has calculated system line losses for many years and believes that the estimation of losses for each hour of the year or for many incremental levels would be a burdensome enterprise that would yield little or no value. Witness Lynch further testified that to estimate marginal line losses on the distribution system, SCE&G doubled the average line losses as agreed to by Witness Glick. On the transmission system, however, Witness Lynch stated the Company believes that marginal losses should be approximated by average losses and that marginal line losses in a network will be less than those on the distribution system.

He further testified that to estimate marginal losses, SCE&G's analysis considered lowering the loads at each substation to effect a 100 MW decrease across the system, and then eliminating a source of energy from the Company's Hagood Unit to balance the system. Under these circumstances, the analysis showed that power had to flow a greater distance to serve the load and losses increased, meaning that average losses were greater than marginal losses. After performing several similar analyses, the Company concluded that average transmission losses are the best estimate to use for marginal losses.

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Regarding the capacity implications associated with avoided marginal transmission and distribution line losses, Witness Lynch testified that SCE&G applies line losses for both energy and capacity as appropriate. Responding to Witness Glick's testimony regarding the reimbursement of transmission and distribution level savings, Witness Lynch testified payments or credits to small QFs and NEMs are subsidized by SCE&G's DER program and that, therefore, reimbursement is not at issue. He further stated that the PR-1 rate for small QFs and the NEM avoided cost methodology have loss factor adjustments and that larger QFs likely will flow power back onto the transmission system and will incur, not avoid, transmission level losses.

The Commission finds that the Company's calculation of line losses is appropriate, that average transmission losses are the best estimate to use for marginal losses, and that the Company properly applied line losses for both energy and capacity in a manner consistent with the methodology approved in Order No. 2015-194. The Commission further finds that no evidence was presented to warrant findings different from those previously made by the Commission in Order No. 2017-246.

b. Regarding transmission and distribution ("T&D") capacity, Witness Glick stated DERs, in aggregate and on average over time, reduces the need for T&D capacity investments. She testified that if the DER alleviates some of the strain on the system during transmission or distribution system peaks, then that resource reduces pressure on that system and helps to defer or avoid future upgrades to that system. She also stated that energy efficiency resources are regularly credited with avoided or deferring T&D investments.

Witness Lynch responded by stating that, with the NEM solar capacity distributed throughout the system, the current impact on any single transmission line is less than 1,500 kW. SCE&G's transmission planning engineers consider this level of load, which is 0.1% of the total

load, to be no more than noise on the system and it does not have any expected impact on the need for future transmission lines. Witness Lynch further testified that it is not clear whether the solar generators increase the strain on distribution lines or decrease it. However, he noted that Company data shows that solar output is likely to increase the strain on the distribution system. Regardless, he testified that SCE&G's distribution engineers must plan the distribution line assuming the solar output is zero because solar is an intermittent resource. Witness Lynch also testified that other energy resources, such as energy efficiency, may be credited with avoiding transmission and distribution costs. However, he opined that in considering a program such as energy efficiency, the effects of which are dispersed around a system, an analysis of the localized impact will demonstrate the impact to be too small to affect the transmission system. He also stated that with respect to the distribution system, energy efficiency is not an intermittent resource like a solar generator so there may be justification for an avoided cost credit.

As it did in Order No. 2017-246, the Commission again agrees with the position of SCE&G. The Company must design its transmission and distribution system so as to provide safe and reliable electric service, even when intermittent generation sources such as solar facilities and other small QFs are not producing power.

c. Witness Glick also recommended that an adjustment should be made to reflect an impact on SCE&G's reserve margin, stating that DER resources have capacity value, and that capacity value also translates into a reduced reserve margin requirement. She further stated that the avoided T&D line losses of 8% to 9% are reliable and this portion of avoided generation capacity should be counted towards reducing the level of peak load for which SCE&G should plan.

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In response, Witness Lynch testified that the Commission previously found it is appropriate for SCE&G to maintain a reserve margin to back up DERs which are intermittent supply resources and that, accordingly, DER resources do not result in a reserve margin benefit for the Company.

The Commission agrees with SCE&G. As it previously found in Order No. 2017-246, the Commission finds that it is appropriate for the Company to maintain a reserve margin to back up DERs, which are intermittent supply sources. Accordingly, DER resources do not result in a reserve margin benefit for the Company.

d. Witness Glick next testified that to the extent distributed energy generators help to alleviate costs associated with environmental compliance at SCE&G's other facilities, those savings should be reflected in the NEM calculation. She stated that avoided environmental costs, such as costs associated with coal combustion residuals, are financial, quantifiable, and a direct result of DER generation.

Witness Lynch again noted that the Commission previously found that the Company's methodology properly accounts for avoided environmental costs and that there are no other environmental costs that are not already included in the other specific components of this methodology. Witness Lynch also noted that the Settlement Agreement entered into by the parties of record to Docket No. 2014-246-E, including SCCCL and SACE, affirmatively states that "[t]he environmental compliance and/or Utility system costs might be accounted for in the Avoided Energy component, but, if not, should be accounted for separately. The Avoided Energy component must specify if these are included." Witness Lynch testified that there are no environmental costs that are not already included in the other specific components of the methodology and, for this reason, SCE&G appropriately assigned a zero avoided cost value to this component.

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Consistent with the Commission's prior findings in Order No. 2017-246, the Commission finds that the Company properly accounted for avoided environmental costs and that there are no other environmental costs that are not already included in the other specific components of the methodology. The Commission also finds that, while it may be possible to separately account for environmental costs, there is no net change to the Total Value of NEM Distributed Energy Resources. Thus, requiring the Company to undertake this exercise would require it to devote additional time and energy and incur additional costs related to the fuel proceeding with no corresponding or substantial benefit.

4. SCSBA Testimony

SCSBA did not present any testimony regarding the Company's updated components of value for the NEM Distributed Energy Resources methodology.

5. The Commission's Overall Conclusions Regarding NEM Distributed Energy Resources Methodology

Based upon the evidence of record, and after reviewing the testimony of the parties of record and the Settlement Agreement entered into by the parties of record to Docket No. 2014-146-E, the Commission finds that SCE&G properly evaluated the components of value for NEM Distributed Energy Resources as shown in Table 10 of Witness Lynch's testimony, as corrected, in accordance with the NEM methodology approved by the Commission in Order No. 2015-194.

C. DER Programs and Costs

1. SCE&G Testimony

Company Witness Raftery discussed the performance of the Company's DER programs during the Review Period, and the costs associated with offering these DER programs during the Review Period. These programs include offering utility-scale DER programs and customer-scale

NEM incentives, Performance Based Incentives, Bill Credit Agreements ("BCA") programs, and developing the Company's Community Solar program. Witness Raftery also discussed the Company's DER cost projections for the forecast period January 1, 2018, through April 30, 2019. As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled ($1,504,690) in avoided costs and $798,039 in incremental costs. For the period January 1, 2018, through April 30, 2019, the Company projects that DER program costs will include $9,304,269 in avoided costs and $25,313,951 in incremental costs.

Witness Rooks provided actual data on the Company's DER avoided and incremental costs for the historical Review Period and the projected DER costs for the period January 1, 2018, through April 30, 2019. As reflected in Hearing Exhibit No. 4 (AWR-7), Witness Rooks testified that the Company's forecasted DERP Avoided Cost Components for the period May 2018 through April 2019 should be as follows: 0.042 cents per kWh for the Residential rate class; 0.038 cents per kWh for the Small General Service rate class; 0.032 cents per kWh for the Medium General Service rate class; and 0.019 cents per kWh for the Large General Service rate class. He also testified that, as reflected in Hearing Exhibit No. 4 (AWR-9), the Company's DERP Incremental Costs by class should be: $1.00 per account per month for the Residential rate class; $5.37 per account per month for the Small/Medium General Service rate class; and $100.00 per account per month for the Large General Service rate class. Witness Rooks also sponsored the Company's proposed "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff.

Witness Raftery further testified that, as of December 31, 2017, nine solar farms totaling 48.16 MW have been constructed and interconnected to SCE&G's distribution system. As such, Witness Raftery testified SCE&G has achieved the 1% goal for Utility-scale facilities set forth in

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Act 236. Witness Raftery also stated that, as of December 31, 2017, SCE&G had 6,161 customers participating in its customer-scale DER goals representing approximately 56.81 MW of solar generating capacity on SCE&G's system and, therefore, has achieved the 1% goal for Customer-scale facilities set forth in Act 236.

Witness Raftery also testified that, based on overall NEM adoption levels experienced since July 1, 2016, SCE&G forecasts that it will meet Act 236's net metering limit or cap of 2% in April or May 2019. Regarding the Company's Community Solar program, Witness Raftery stated that, pursuant to the Credit Rate Agreement between SCE&G and the Clean Energy Collective, LLC ("CEC") which was approved by the Commission in Order No. 2016-707, CEC is actively constructing three community solar facilities totaling 16 MW. Witness Raftery also testified that, as of February 15, 2018, 95 Low-Income customers have purchased or subscribed to a total of 0.526 MW of community solar, 903 residential customers have purchased or subscribed to a total of 5.55 MW of community solar, and 22 churches, schools, and municipalities have purchased or subscribed to a total of 9.45 MW of community solar. Witness Raftery testified that the remaining 0.474 MW of capacity is reserved for Low-Income customers and continues to be marketed through SCE&G, CEC, and 8 customer assistance agencies. Witness Raftery also advised the Commission that SCE&G is exploring moving forward with the additional 1% Utility-scale investment contemplated in S.C. Code Ann. § 58-39-130(D) and that, if SCE&G identifies competitive projects that provide system benefits, the Company anticipates applying to the Commission for approval to move forward with the contracts and deployment.

2. ORS Testimony

Witness Sarah Johnson testified that the Company's calculations are in compliance with Act No. 236 of 2014 and Commission Orders, and that the Company's calculations support the

following annual proposed DERP Charges: Residential $12.00, Small and Medium General Service $64.39, and Large General Service $1,200.00.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the DER programs offered by the Company during the Review Period or the associated costs.

4. The Commission's Overall Conclusions Regarding DER Programs and Cost

The Commission finds that the evidence presented by SCE&G establishes that, during the Review Period, SCE&G offered DER programs and took appropriate steps to fulfill its DER goals approved by the Commission in Order No. 2015-194. The Commission further finds that the Company's DER programs and the associated costs are reasonable and prudent and are designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130.

D. Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

1. SCE&G Testimony

SCE&G witnesses testified on issues related to the prudency of SCE&G's fuel purchasing practices, plant operations, and fuel inventory management, and explained the regulatory atmosphere governing environmental compliance for SCE&G. SCE&G Witness Lippard discussed the operating performance of the V.C. Summer Nuclear Station. SCE&G Witness Delk reviewed the operating performance of the Company's fossil/hydro units and of South Carolina Generating Company's Williams Electric Generating Station. Company Witness Shinn discussed the Company's procurement and delivery activities for coal and No. 2 fuel oil for electric generation, the changes that have occurred in coal markets since the last annual fuel adjustment hearing, and how these changes affected coal procurement during the Review Period and are

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anticipated to affect future procurement. Witness Shinn also discussed the procurement and delivery of limestone for the wet scrubbers at Wateree and Williams Stations, the nuclear fuel purchasing processes for SCE&G generation, uranium prices, and the near-term outlook of coal and uranium prices. SCE&G Witness Kahl provided testimony about the natural gas purchasing processes for SCE&G generation and discussed natural gas prices as well as the near-term outlook.

SCE&G Witness Rooks provided actual fuel cost data for the historical Review Period, and projected fuel costs for the period January 1, 2017, through April 30, 2018; and recommended fuel rates for the period of May 2018 through April 2019. Hearing Exhibit No. 4 (AWR-5) shows the Company's forecasted variable environmental & avoided capacity costs and the allocation of those costs to retail customer classes for the period of May 2018 through April 2019. This exhibit also details forecasted sales data by class, over/under recovery computations, and calculates the projected Variable Environmental & Avoided Capacity Cost Components per kWh for the same period. The Variable Environmental & Avoided Capacity Components produced by these calculations are projected to recover all costs and are as follows: 0.083 cents per kWh for the Residential rate class; 0.075 cents per kWh for the Small General Service rate class; 0.063 cents per kWh for the Medium General Service rate class; and 0.039 cents per kWh for the Large General Service rate class.

2. ORS Testimony

Witness Smith testified and presented the results of the ORS Audit Department's examination of the Company's books and records pertaining to the Fuel Adjustment Clause operation for the Actual Period, and the Company's estimated calculations for the months of January 2018 through April 2018. Based on the ORS Audit Department's examination of the Company's books and records, and the Company's operation of the fuel cost recovery mechanism,

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Witness Smith testified that the Company's books and records accurately reflect the fuel costs incurred by the Company in accordance with previous Commission orders and with S.C. Code Ann. § 58-27-865 (2015). Witness Seaman-Huynh testified to the ORS's findings resulting from its review of the Company's fuel expenses and power plant operations used in the generation of electricity during the Review Period. Based on ORS's review of the Company's operation of its generating facilities during the Review Period, Witness Seaman-Huynh testified that the Company made reasonable efforts to maximize unit availability and minimize fuel costs during the Review Period. Witness Seaman-Huynh also testified that, in Order No. 2017-246, the Commission approved SCE&G's proposal to use the Internal Revenue Service ("IRS") Section 174 deduction claims to lower its Environmental Components based on its Accumulated Deferred Income Taxes ("ADIT") liability balances as of September 30, 2017. In reviewing the Company's books and records, Witness Seaman-Huynh testified that ORS did not find the Company made any adjustments to its Environmental Capacity Components during the Actual Period attributed to the IRS Section 174 deduction claims.

In response, Witness Rooks testified that, in Order No. 2017-246 the Commission approved SCE&G's proposal to use Section 174 research and experimentation tax benefits related to the construction of V.C. Summer Units 2 and 3 to reduce the Environmental Component of its total fuel cost factor in an amount based on its ADIT liability balances as of September 30, 2017, and "to make the reduction concurrent with the implementation of the Company's 2017 BLRA revised rates request." *See* Commission Order No. 2017-246 at p. 54. However, Witness Rooks testified that SCE&G did not seek a 2017 BLRA revised rates update and, instead, filed and later withdrew an abandonment petition. Witness Rooks testified that, among other things, the abandonment petition sought recovery of the costs of the abandoned plant without an increase in rates and

proposed using Section 174 tax benefits, as well as additional tax benefits arising from abandonment, as a means to reduce capital cost recovery. Witness Rooks further testified that, on January 12, 2018, SCE&G along with Dominion Energy, Inc. filed a joint petition ("Joint Petition") which reflected a proposed rate decrease and also provided for the use of all tax benefits related to the abandoned nuclear construction project, both Section 174 and the tax abandonment deduction, for the benefit of customers. Witness Rooks testified that, for these reasons, SCE&G did not make an adjustment to its Environmental Component in 2017 attributed to the IRS Section 174 deduction claims, and that the deduction will be considered in the Joint Petition.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's fuel purchasing practices, environmental costs, plant operations, fuel inventory management, or the operations of the power plants during the Review Period.

4. Commission Conclusions Regarding Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

As reflected in the evidence of record, no party challenged the reasonableness or prudency of SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period. With respect to the Section 174 deductions approved by the Commission in Order No. 2017-246, the Commission finds that SCE&G's proposal to consider these deductions in the Joint Petition docket is reasonable. Based upon the evidence and testimony of the witnesses, the Commission therefore finds and concludes that SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period are reasonable and prudent.

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E. Proposed Base Fuel Component

1. SCE&G Testimony

Witness Rooks testified that the actual base fuel under-collected balance was $2,355,695 at December 31, 2017, and the projected over-collected balance to be $50,536,981 at the end of April 2018. Witness Rooks also testified that a Base Fuel Component of 2.457 cents per kWh is projected to recover all base fuel costs in the forecast period in addition to eliminating the projected over-collected balance by the end of April 2019. Witness Rooks further testified that, in compliance with Commission Order No. 2013-776 and pursuant to the Company's February 22, 2018 letter in Docket No. 2013-382-E, the Company plans to apply gains from recently settled interest rate swaps in the amount of $113,739,272 to reduce its base fuel cost under-collection balance. Witness Rooks also testified that, although the fuel cost statute permits utilities to recover their prudently incurred fuel costs as precisely and promptly as possible, for this proceeding and to mitigate rate impacts to its retail electric customers, the Company is proposing to maintain its Base Fuel component at 2.451 cents per kWh. Witness Rooks further testified that the Company is proposing that the Variable Environmental & Avoided Capacity Cost components be increased for the May 2018-April 2019 time period and to increase its DER Incremental Cost Components per account per month to $1.00 for Residential customers and $5.37 for Small/Medium General Service customers. The per account per month fee for Large General Service customers will remain unchanged at $100.00 to comply with the DERP Act caps. When combining the Company's 2018 proposals for Fuel and DSM cost recovery, Witness Rooks testified that the average monthly bill for residential customers using 1,000 kWh per month would increase from $147.53 to $147.70. This $0.17 per month impact would become effective with the first billing cycle of May 2018.

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2. ORS Testimony

Witness Seaman-Huynh testified that as of December 2017, the Company had a base fuel cumulative under-recovery balance of $2,355,695, a variable environmental and avoided capacity over-recovery balance of ($2,272,425), and DERP avoided costs over-recovery balance of ($1,504,687). As shown on Hearing Exhibit No. 14 (GS-5), page 2 of 2, ORS projects the Company to have a base fuel cumulative over-recovery balance of ($50,536,981), a variable environmental and avoided capacity over-recovery balance of ($1,051,097), and DERP avoided costs over recovery balance of ($479,920) as of April 30, 2018. Witness Seaman-Huynh also testified that ORS recommends the Commission approve the Company's current Base Fuel Component remain in effect for bills rendered on and after the first billing cycle for May 2018 and continue through the last billing cycle for April 2019. He also testified that ORS recommends that the Commission approve the Company's proposed Environmental and Avoided Capacity Components and DERP Avoided Cost Components for the period of May 2018 through April 2019. Witness Seaman-Huynh further testified that ORS reviewed the Company's proposal to apply gains from recently settled interest rate swaps to reduce its Base Fuel Component. The Company's proposal is in compliance with Commission Order No. 2013-776 and ORS supports the Company's proposal.

3. SCCCL, SACE, and SCSBA Testimony

SCCCL, SACE, and SCSBA did not present any testimony regarding the Company's proposed base fuel component.

4. Commission Conclusions Regarding the Proposed Base Fuel Cost Component

As reflected in the evidence of record, no party challenged SCE&G's proposed Base Fuel Cost Component. Based upon the evidence and testimony of the witnesses, the Commission

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therefore finds and concludes that SCE&G's proposed Base Fuel Component is reasonable and prudent and is consistent with S.C. Code Ann. § 58-27-865 (2015).

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The methodologies used by SCE&G to calculate its avoided energy and capacity costs under PURPA as described in the testimony of SCE&G Witness Lynch are reasonable and prudent.

SCE&G's proposed Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of service, are lawful, just, and reasonable.

SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

The updated components of value for NEM Distributed Energy Resources as shown in Table 10 on page 27 of the direct testimony of SCE&G Witness Lynch are reasonable and prudent, comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system, and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet, including the rates, terms, and conditions, are lawful, just, and reasonable.

SCE&G's calculation of and method of accounting for avoided costs and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with

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methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

During the Review Period, SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194, which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

As a result of SCE&G's efforts to provide the DER programs, the balance of the DER program costs as of December 31, 2017, totaled ($1,504,690) in avoided costs and $798,039 in incremental costs, which costs are reasonable and prudent.

SCE&G's proposed DER Avoided Cost Components by class are reasonable and prudent. SCE&G's proposed monthly per account DER Incremental Cost Components by class properly allocates SCE&G's DER program incremental costs and are reasonable and prudent.

SCE&G's proposed "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheet, including the rates, terms, and conditions, is lawful, just, and reasonable.

SCE&G's fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) are reasonable and prudent.

IT IS THEREFORE ORDERED THAT:

1. The fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G are reasonable and prudent for the period January 1, 2017, through December 31, 2017.

2. The methodologies used by SCE&G to calculate its avoided energy and avoided capacity costs under PURPA are reasonable and prudent.

3. Rate Schedules PR-1 and PR-2, including the rates, credits, charges, and underlying methodologies, and the terms and conditions of services, are lawful, just, and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2018.

4. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

5. The updated components of value for NEM Distributed Energy Resources listed in the table below comply with the NEM methodology approved by the Commission in Order No. 2015-194, properly evaluate and/or quantify all categories of potential costs or benefits to SCE&G's system and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.* (2015).

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	Current Period ($/kWh)	IRP Planning Horizon (15-Year Levelized) ($/kWh)	Components
1	$0.03070	$0.03010	Avoided Energy Costs
2	$0	$0	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00008	$0.00008	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03078	$0.03018	Subtotal
12	$0.00251	$0.00246	Line Losses @ 0.9245
13	$0.03329	$0.03264	**Total Value of NEM Distributed Energy Resources**

6. SCE&G's proposed revisions to its "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" and "Adjustment for Fuel, Variable Environmental, & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff sheets are lawful, just and reasonable and are hereby approved for use on, during, and after the first billing cycle in May 2018.

7. SCE&G's DER programs offered during the Review Period were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

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8. SCE&G's proposed monthly per account DER Avoided Cost Components by class, as set forth below, properly allocate SCE&G's DER program avoided costs, are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	DER Avoided Cost Component (cents/kWh)
Residential	0.042
Small General Svc.	0.038
Medium General Svc.	0.032
Large General Svc.	0.019

9. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 1.00
Small & Medium Gen. Svc.	$ 5.37
Large General Service	$ 100.00

10. SCE&G shall set its Base Fuel Cost Component, Variable Environmental & Avoided Capacity Cost Components and Total Fuel Cost Factors consistent with the amounts set forth in the table below effective for bills rendered on and after the first billing cycle of May 2018.

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Class	Base Fuel Cost Component (cents/kWh)	DERP Avoided Cost Component	Variable Environmental & Avoided Capacity Cost Component (cents/kWh)	Total Fuel Costs Factor (cents/kWh)
Residential	2.451	0.042	0.083	2.576
Small General Service	2. 451	0.038	0.075	2.564
Medium General Service	2. 451	0.032	0.063	2.546
Large General Service	2. 451	0.019	0.039	2.509
Lighting	2. 451	0.000	0.000	2.451

11. SCE&G shall file with the Commission the tariff sheets and rate schedules approved by this Order and all other retail tariff sheets within ten (10) days of receipt of this Order, and also serve copies on the Parties. The fuel rates reflected in any such tariff sheets shall be consistent with the components and factors set forth herein.

12. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865(B) (2015).

13. SCE&G shall continue to file the monthly reports as previously required.

14. SCE&G shall account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit. ORS shall monitor the cumulative recovery amount.

15. SCE&G shall submit monthly reports of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater to the Commission and ORS.

16. This Order shall remain in full force and effect until further Order of the Commission.

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BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

Comer H. Randall, Vice Chairman

(SEAL)

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BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))))))	**SOUTH CAROLINA SOLAR BUSINESS ALLIANCE, INC.'S PROPOSED ORDER**

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the "Commission"), on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company, ("SCE&G" or the "Company"), for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. Section 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. Section 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2017 through December 31, 2017 ("Review Period").

II. NOTICE AND INTERVENTIONS

By letter dated October 4, 2017 the Clerk's office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies by January 5, 2018. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail, by January 25, 2018. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings.

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On December 5, 2017, the Company filed with the Commission Affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office, October 4, 2017 letter. On December 15, 2017, the Company filed with the Commission an Affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to Intervene were received from CMC Steel South Carolina, South Carolina Coastal Conservation League ("CCL"), South Carolina Energy Users Committee, South Carolina Solar Business Alliance, LLC ("SBA"), Southern Alliance for Clean Energy ("SBA"), and Southern Current, LLC. The Petitions to Intervene were not opposed by SCE&G and no other parties sought to intervene in this proceeding. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party, pursuant to S.C. Code Ann. Section 58-4-10(B) (2015).

III. HEARING

In order to consider the merits of this case, the Commission convened a Hearing on this matter on April 10, 2018, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire, Matthew W. Gissendanner, Esquire and Benjamin P. Mustian, Esquire. The SBA was represented by Richard L. Whitt, Esquire and Benjamin L. Snowden, Esquire. Additional counsel of record for SBA, Timothy F. Rogers, Esquire, was excused from appearing by the Chairman. Southern Current, LLC was represented by Richard L. Whitt, Esquire. South Carolina Energy Users Committee was represented by Scott Elliott, Esquire. CMC Steel South Carolina and its counsel of record were excused from attending and did not appear at the Hearing. CCL and SACE were represented by Katie C. Ottenweller, Esquire. ORS was represented by Andrew M. Bateman, Esquire and Jenny Pittman, Esquire.

IV. REVIEW OF THE EVIDENCE

In support of the revised PR-2 tariff submitted for Commission approval by the Company, SCE&G Witness Joseph M. Lynch testified to the Company's methodology for calculating the avoided energy and avoided capacity costs for solar QFs under the Public Utilities Regulatory Policy Act, 16 U.S.C. §§ 824a-3, *et seq.* ("PURPA").. The parties presented evidence on the following topics related to avoided cost and the PR-2 tariff: SCE&G's proposed revision of the PR-2 tariff to include only rates for solar qualifying facilities ("QFs"); SCE&G's use of a solar-

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specific generation profile to calculate avoided energy and capacity costs; SCE&G's calculation of avoided energy costs; and SCE&G's calculation of avoided capacity costs, including in particular its reliance on a new 21% winter reserve margin policy, and its reliance on the proposed resource plan included in Dr. Lynch's direct testimony.

A. Limitation of PR-2 Rates to Only Solar Facilities

1. SCE&G Testimony

In his direct testimony, SCE&G Witness Lynch describes the Company's proposal to limit the availability of the proposed PR-2 rate to solar QFs only, and to calculate avoided costs for energy and capacity under PR-2 using a solar-specific generation profile. QFs not eligible for the new tariff (e.g. wind, biomass, or cogeneration facilities) would not be eligible for standard rates and would be required to negotiate avoided cost rates and a power purchase agreement ("PPA") with the Commission. The Company cites, as a rationale for this change to the approved tariff, the fact that an additional 865 megawatts ("MW") of solar QF capacity have come under contract to deliver power to the Company since the last fuel hearing.

Witness Lynch acknowledged at the hearing that the proposed PR-2 rate would not be appropriate for many kinds of QFs, including solar + storage, wind, biomass, or cogeneration. Dr. Lynch also agreed that the proposed PR-2 tariff would provide no incentive for the addition of storage to QF solar facilities, even though storage provides system benefits and avoids additional costs. Hearing Tr. at E-94:16-E-95:2. Such QFs could still obtain contracts with negotiated rates equal to avoided cost. Witness Lynch testified that the Company had offered contracts with negotiated rates to QFs for 35 years prior to the advent of the PR-1 and PR-2 tariff. Dr. Lynch acknowledged, however, that in that time only one QF ever obtained a contract with the Company.

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2. Intervenor Testimony

In direct testimony, Witness Horii stated his view that it is reasonable for the Company to offer a PR-2 rate specific for solar facilities. However, Witness Horii expressed concern about the Company's failure to produce calculations of long-run avoided costs for non-solar QF resources. Hearing Tr. at __ (examination of Mr. Horii) (transcript unavailable). In part, this was because the Company's failure to do so makes it impossible to understand what capacity values would have been. This is important because of the significant change in capacity rates that would be expected as a result of the failure of construction of the additional units at the V.C. Summer project.

At the hearing, Witness Horii agreed with Dr. Lynch's assessment that the proposed PR-2 rate would not be appropriate for many kinds of QFs, including solar + storage, wind, biomass, or cogeneration.

SBA Witness Dr. Johnson testified that the Company's proposal to offer a technology-specific avoided cost rate is problematic. Such a rate ignores the inherent variability between different facilities of the same generation type – variability that results in differences in the volume and timing of electrical output. Johnson Surrebuttal at p. 32. In addition, requiring technology-specific rates to be adopted or negotiated before a QF is allowed to experiment with a new technology will inevitably impose additional regulatory uncertainty and costs, which will discourage innovation and competitive risk taking. *Id.* at 33. In Dr. Johnson's opinion it is better to offer "technology-agnostic" rates that are more flexible and provide more accurate price signals to QFs.

In response to Dr. Lynch's suggestion that non-solar QFs can simply obtain negotiated rates, Dr. Johnson testified that negotiated rates are not a viable alternative to well-designed, technology-agnostic standard offer tariffs. Johnson Surrebuttal at p. 34. There are valuable benefits from clear market signals and competition for South Carolina rate payers, including reduced transaction costs and easier contract negotiations.

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3. The Commission's Conclusions

The Commission has previously held, with the support of the Company, that it is reasonable to offer standard PR-2 rates to all QFs, regardless of their output characteristics. See Docket No. 2017-2-E, Order No. 2017-246 at 17-18. Given the increased importance of solar generation, it would not be unreasonable to offer a solar-specific QF rate, assuming it is based on an appropriate solar profile that accurately reflects the actual characteristics of all QF's subject to the rate. However, that standard has not been met by the Company in this proceeding. And even though there are not currently a significant number of non-solar QFs seeking to contract under the PR-2 rate, it is not reasonable to do away with standard rates for such QFs. Requiring negotiated rates for non-solar or solar + storage QFs – the alternative proposed by Dr. Lynch – is not an adequate solution to these concerns, because it will create unreasonable barriers to QF investment and contract formation. Witness Horii and Dr. Johnson both testified about these problems. Horii Direct testimony at 22:16-17; Johnson Surrebuttal testimony at 33; Hearing Tr. at __ (Johnson response to Commissioner questions), (final transcript not available).

Dr. Lynch's testimony that the Company did not offer standard rates prior to the advent of the PR-1 and PR-2 tariff does not negate concerns about negotiated rates. According to Dr. Lynch, very few PPAs with QFs were successfully negotiated during this 35 year period. QF investment and contract formation increased significantly once the Company published a QF tariff with standard offer rates.

B. Avoided Energy Rates

a. SCE&G Testimony

Witness Lynch explained that the Company uses a Difference in Revenue Requirements ("DRR") method to determine the long-run avoided costs of the Company over its 15-year Integrated Resource Plan ("IRP"). The DRR method involves comparing the Company's revenue requirements between a "base case" and a "change case." The base case is defined by SCE&G's "existing fleet of generators and the hourly load profile to be supplied by these generators." Lynch Direct Testimony at 4. "The change case is the same as the base case except that the hourly loads are reduced by a 100 MW profile[.]" *Id.*

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Unlike in previous years, SCE&G is no longer using a "round-the-clock" methodology to subtract 100 MW every hour of the base case load profile and then use four time-of-use periods with peak and off peak seasons and peak and off-peak hours within each season to derive four avoided energy costs. Lynch Direct Testimony at 8-9. Instead, the Company is proposing to use a "solar methodology" to subtract a 100 MW solar profile from the base case. As a result of this change, the Company proposes to reduce avoided energy costs by $4.85 per MWh. *Id.* at 10-13.

On cross-examination, Witness Lynch acknowledged that he had previously testified, in the 2016 and 2017 dockets, that calculation of avoided costs based on a solar-only profile would not be appropriate. This was due in part to "significant" variations in the generation profile of different solar facilities, which can arise from the different operational characteristics of the facility (e.g. tracking or non-tracking, panel tilt and orientation, efficiency, and inverter properties). Hearing Ex. 7, Lynch Rebuttal Testimony in Docket No. 2017-2-E, at 3:12-16; Hearing Tr. at E-63:1-8. Dr. Lynch did not dispute his prior testimony (from just last year) that: "using a 100 MW solar profile … would not provide an accurate estimate of the Company's avoided energy costs." Hearing Ex. 7 at 3:9-11. In fact, during cross examination Dr. Lynch acknowledged that every solar farm has a different cost impact on the system. Hearing Tr. at E-66:17-18. Dr. Lynch did not claim that that the proposed solar-only rate adequately accounts for these differences, or overcomes the problems he noted in past proceedings. Nor did he testify or suggest that these differences are not significant, or would not have an impact on rates.

Witness Lynch testified at the hearing that the solar profile was generated based on data from a single solar farm, in a single year. Hearing Tr. at E-66:21-24. Dr. Lynch said that this was all the data that was available to the Company at this time.

b. Intervenor Testimony

In his direct testimony, Witness Horii opined that it was not unreasonable to calculate avoided costs based on a solar-only profile. Witness Horii testified at the hearing that his conclusion that the Company's calculation of avoided cost rates based on a solar-only profile assumed that the profile used actually matched the sources of generation that it was intended to represent. Hearing Tr. at __ (examination of Mr. Horii) (transcript unavailable). Witness Horii went on to say that in analyzing the Company's rate calculations, he was not aware of how the

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Company formulated the solar profile it used in its rate calculations, because that information was not provided in the Company's testimony, work papers, or discovery responses. *Id.*

Witness Horii testified that the industry-standard approach to devising a "solar shape" for rate calculations is either to use a publicly-available source of information like the National Renewable Energy Laboratory's PVWatts[1] simulator (which uses local weather data to simulate solar output), or to use data from the utility's system if there is "enough metered solar on the system to get specific information." *Id.* Witness Horii clarified that it would not be appropriate for a utility to generate a profile based on data only from only one location, and that data from locations throughout the service area impacted by the rates would be required in order to adequately account for geographic diversity. *Id.*

Witness Johnson asked that the Commission reject the Company's proposal to reduce energy rates despite circumstances where heat rates have increased, remove time-related price signals, and eliminate standard offer rates for non-solar generators larger than 100 kW. He testified that the Company's proposal to base rates on a single generic solar profile, is inadequate because it does not "precisely match QF rates to avoided costs" or "ensure greater fairness to different types of generators." Johnson Direct Testimony at 93; *see also* 92-94. Like Dr. Lynch, Dr. Johnson and Witness Horii testified that there can be significant variations in the generation profiles of different solar farms. Johnson Surrebuttal Testimony at p. 33. At the hearing, Witness Horii acknowledged the potential for these types of differences, and that in some cases the variations may be significant. *Id.*

Based on concerns about variation among the output of solar farms, Dr. Johnson recommended a "technology-agnostic" rate, based on the day of the year and time of day. Johnson Surrebuttal Testimony at pgs. 32-33. Witness Horii agreed that hour-by-hour rates are the ideal way to accurately calculate the avoided costs of solar as well as other generating resources. *Id.*

In 2016 and 2017, SCE&G addressed the lack of sufficient data to generate an accurate solar profile by calculating avoided energy costs by time period and season, and paying every QF for the energy they sell during each rate period, regardless of their profile. Ex. 7 at 3:16-19. Witness Horii and Dr. Johnson agreed with that previous solution (time-of-day pricing) while

[1] PVWatts is an online software tool (http://pvwatts.nrel.gov/) for estimating the energy production and cost of grid-connected photovoltaic energy systems.

noting that, ideally, pricing would be refined to reflect hour-by-hour, day-by-day differences in avoided costs. This leads to accurate calculations of avoided cost that are applicable to QF's with widely different output characteristics. Johnson Direct at 47:2-7, 93:2-94:15, 119:15-19; Johnson Surrebuttal at 9-10, 27. Mr. Horii agreed, stating: "Ideally, what we'd like to see are hourly avoided cost rates, so then the exact pattern of the actual generation can be used to come up with the compensation."

c. The Commission's Conclusions

Based on the evidence presented, the Company has not met the burden of demonstrating that its avoided energy cost calculations, based on a solar-only profile, are reasonable. In previous Orders the Commission has rejected, at the Company's urging, the use of a solar profile to develop avoided costs. Order No. 2017-246 at 18; Order No. 2016-297 at 13-14. In its 2016 and 2017 orders, the Commission specifically found that "using a 100 MW solar profile would not provide an accurate estimate of the Company's avoided energy costs," even if the rate was solar-specific. Order No. 2016-297 at 14; Order No. 2017-246 at 18. These rulings were based primarily on Dr. Lynch's prior testimony (which he acknowledged at this hearing) that it would be inappropriate to develop avoided costs, even for solar facilities, using a single solar-specific generation profile because "generation profiles can be significantly different depending upon the characteristics of the facility." Hearing Tr. at E-62:21-25. The Company has not provided any evidence to suggest it has solved the problems with a solar-only rate that were previously identified by Dr. Lynch. *Id.* at E-64:3-7.

The Commission concludes that while it is reasonable in concept to calculate avoided cost rates based on a solar-specific generation profile, costs so calculated are only reasonable if the solar profile used captures, with reasonable accuracy and allowing for the considerable variations among facilities, the actual profile of the solar projects subject to those rates. The testimony and work papers provided by the Company indicated that Dr. Lynch used a "SC solar profile" to generate avoided costs, but did not provide any details concerning this profile. Witness Lynch clarified on cross-examination that the Company used a single year's worth of generation data from a single, unidentified solar farm to generate its profile. Given the fact that the Company generated its solar profile based on data from a single project, about which nothing is known (e.g. the size, location, configuration, or panel efficiency), the only relevant evidence in the record indicates that the profile used by the Company is probably not representative of the

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actual characteristics of some solar facilities. The Commission cannot conclude that the rates calculated based on this profile are reasonable, and so the evidence in this proceeding does not support a reversal of the Commission's past findings against using a 100 MW solar profile to develop the Company's avoided energy costs.

Further consideration of avoided costs based on solar profiles should wait until the Company has more data concerning the actual operation of solar farms in South Carolina. In the meantime, instead of calculating a single hourly rate based on a solar profile, the Company shall submit for review and Commission approval standard offer PR-2 rates using time-of-day pricing that accurately reflects avoided energy costs on a technology-agnostic basis.

C. Avoided Capacity Rates

a. The Company's 21% Winter Reserve Margin and the Assignment of a Zero Capacity Value for Solar

i. SCE&G Testimony

Witness Lynch testified that as of 2018, the Company has adopted a new reserve margin policy calling for a 21% reserve capacity margin for winter peaks. This new policy is based on a Reserve Margin Study conducted by the Company in 2017. Based on the results in that Study, SCE&G has set a 14% summer peak reserve margin and a 21% winter peak reserve margin. Lynch Direct Testimony at 6. Dr. Lynch testified that the Company's 21% proposal is not outside of industry norms, as PJM maintains a 27% winter reserve margin. Dr. Lynch acknowledged on cross-examination that the higher reserve margin would result in higher costs to ratepayers. Hearing Tr. at E-241:7-22.

Witness Lynch testified that in the 2017 IRP and in the calculations supporting the existing PR-2 tariff, the Company assigned a 50% capacity ratio to solar generating resources. Hearing Tr. at E-184:5-19.[2] And in the 2018 IRP, the Company assigns a 35% capacity ratio to existing solar resources. *Id.* at E-186:5-E-187:1. Dr. Lynch explained that in its new rate calculations the company has assigned zero capacity value to new solar resources. This is because the Company has concluded that generating resources that do not provide capacity during winter peaks provide no capacity benefit to the system, and are not eligible for capacity payments. Lynch Direct Testimony at 15. The Company has further concluded that solar QFs

[2] At the hearing, Dr. Lynch expressed his preference for the term "capacity ratio", rather than "capacity factor" because the latter term has traditionally referred to a somewhat different concept.

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do not allow the Company to avoid winter capacity acquisitions, and therefore the PE-2 capacity rate should be zero. As described by Witness Lynch, the Company's long-run avoided capacity cost rates dropped from $21.34 per kW-year in 2016, to $6.35 per kW-year in 2017, to $0 per kW-year this year.

ii. Intervenor Testimony

ORS Witness Horii testified at the hearing that although the Company had "satisfied itself" that solar provides zero capacity value, the Company had not performed calculations or provided evidence to support this conclusion. Witness Horii opined that there were "significant flaws" in the Company's analysis of this issue. Hearing Tr. at __ (examination of Mr. Horii) (transcript unavailable).

Witness Horii further testified that the "Component method" used by the Company to calculate its reserve margin is no longer an industry-standard methodology, and is not an appropriate means for calculating a reserve margin. *Id.*; Horii Surrebuttal at 9:12-10:4. Witness Horii also pointed out that the current PR-2 rates incorporate an 80% summer / 20% winter capacity weighting, and that (even if the 21% winter reserve margin is appropriate) the proposed rates effectively adopt a 0% summer / 100% winter weighting, with no value assigned to summer capacity. This is a very significant change in methodology.

Regarding the 27% PJM winter reserve margin cited by Dr. Lynch, Witness Horii pointed out that the 27% figure cited by Dr. Lynch is actually a "winter weekly reserve target," a figure that is not comparable to and serves a different purpose from the winter reserve margin at issue here. Witness Horii stated that this was an "apples to oranges" comparison and did not support the Company's position. Hearing Tr. at __ (examination of Mr. Horii) (transcript unavailable); Horii Surrebuttal at 7:16-8:23.

SBA Witness Dr. Ben Johnson testified that SCE&G is "primarily a summer peaking utility" and that instead of "reducing the QF capacity rate to zero, it would more be appropriate to increase the rate at least modestly, to be more consistent with the long run incremental cost of new capacity. Johnson Direct at 113:3-4, 121:7-9; Johnson Surrebuttal at 30. He recommended that the Commission reject the Company's proposed avoided cost rates, because they will not adequately compensate QFs, they will not encourage small power production within SCE&G's service area, and they will not achieve the goals of PURPA. Instead, he recommended the Commission require the Company to collaboratively work with ORS and other interested parties

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to develop higher, more accurate QF rates. Johnson Direct at 129:6-8, Johnson Surrebuttal at 8-10.

With regard to the reserve margin issue, SACE / CCL's witness Ms. Devi Glick testified that the Company's proposed winter reserve margin is substantially higher than peers Duke Energy Carolinas, Duke Progress, Southern Company, and Santee Cooper, each of which use a winter reserve margin between 12 and 17 percent. Glick Direct at 9. Whereas the Company's methodology for determining reserve margin focused solely on the relationship between load and weather, other peer utilities utilize a more comprehensive methodology that balances physical reliability and customer costs. *Id.* at 10-11. Witness Glick recommends that the Commission require SCE&G to hire an independent firm to conduct an analysis to determine an appropriate reserve margin for both winter and summer. This study should utilize a methodology that balances physical reliability with minimizing economic costs to the customers. While that study is performed, the Commission should reject the Company's use of a 21% reserve margin and require SCE&G to use its historic 14% reserve margin.

iii. The Commission's Conclusions

The Company proposes very significant changes to its methodology for calculating avoided capacity costs in this proceeding. Specifically, the Company is assigning zero avoided capacity value to solar, based on the fact that the Company has adopted (as of this year) a new policy calling for a 21% reserve margin.

The evidence presented does not support a reversal of the Commission's past findings that it is reasonable to assign 80% of the avoided capacity costs to summer season and 20% to the winter season. Nor has the Company presented evidence sufficient to justify a change in the capacity value of solar QFs from 50% of its nameplate capacity (the ratio relied on in calculating the current rates) to 0% (which is effectively the capacity ratio assumed by the PR-2 rates), or 35% (the capacity ratio assigned in the IRP to existing solar), or any other specific number.

The Commission finds the testimony of Witnesses Horii and Glick to be persuasive concerning the winter reserve margin and the existence of avoided capacity costs in the summer. Horii Direct at 10:1-17, 21:5-12; Horii Surrebuttal at 3:10-13, 4:9-13, 5:11-14, 7:9-15, 8:1-20, 14:11-17, 15:5-9. Among other flaws, the Company has failed to consider the cost of higher reserve margins to ratepayers, and the Component methodology used by the Company to calculate its reserve margins is at odds with the rest of the industry. The 21% reserve margin

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selected by the Company is also significantly higher than peer utilities' reserve margins. And as Dr. Lynch acknowledged an increase in the reserve margin will result in increased costs to ratepayers. Hearing Tr. at E-241:7-22.

The Commission accordingly rejects the 21% winter reserve margin as a basis for calculating avoided capacity costs. The Commission also finds persuasive Witness Glick's suggestion that the Company and its ratepayers would benefit from an independent evaluation of SCE&G's summer and winter reserve margins.

b. The Company's Resource Plan as a Basis for Capacity Costs

i. SCE&G Testimony

Witness Lynch testified that the "base case" for the Company's implementation of the DRR methodology was the resource plan submitted as exhibit JML-1 to his direct testimony. Under the DRR methodology, the selection of base case and change case are primary drivers of avoided capacity costs. Consequently it is important to have an accurate base case, because having an accurate base case yields more accurate avoided cost calculations. Hearing Tr. at E-20:20-24, E-22:14-20.

Witness Lynch acknowledged on cross-examination that the resource plan includes a number of assumptions that are of questionable accuracy. For example, the base case assumes that the Company will procure the Columbia Energy Center (a 504 MW gas-fired baseload plant) in 2018, and will construct another baseload plant in 2023 and a peaker in 2031. Dr. Lynch testified that the Company is not committed to the construction of these plants in 2023 and 2031, and he provided no testimony that the Company is fully committed to the acquisition of the Columbia Energy Center. Hearing Tr. at E-25:16-24, E-26:6-27:2.

Witness Lynch also acknowledged that the Company did not consider, in formulating the resource plan in the base case and change case, any options for addressing peak demand other than construction of baseload or peaker plants. Specifically, it did not consider the purchase of additional capacity or firm purchased power (the Company is already purchasing firm capacity from merchant generating plants), expansion of its demand response programs, or any other options. Hearing Tr. at E-30:22-25, E-32:12-18. Witness Lynch further acknowledged on cross-examination that the Company's resource plan was formulated using a single Excel spreadsheet, and that the Company had not conducted any kind of analysis or simulation to optimize the long-term resource plan. Hearing Tr. at E-208:18-209:10.

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Witness Lynch testified that the assumption that the V.C. Summer nuclear plants would be part of the Company's resource portfolio likely drove capacity rates down in the last fuel case. Hearing Tr. at E-32:12-18. Ultimately those assumptions proved incorrect, and it is likely that the Company's actual avoided costs rose after the V.C. Summer nuclear plant expansion was cancelled and the planned units were removed from the utility's generation plan. *Id.* at E-40:18-41:2, E-42:3-9.

Witness Lynch confirmed that the Company produced some preliminary estimates of its capacity costs shortly after the V.C Summer units were cancelled, which indicated a significantly higher capacity cost per kW/year. Hearing Tr. at E-51:3-23. Nevertheless, the Company did not file an increased avoided cost rate at that time because management did not approve a revised resource plan. Hearing Tr. at E-52:13-53:5. Similarly, Dr. Lynch confirmed at the hearing that the Company did not produce these or any other avoided capacity cost calculations to any party in discovery. *Id.* at E-10:22-25.

ii. Intervenor Testimony

Witness Horii testified that the scope of his review of the Company's avoided cost calculations did not specifically include the resource plan that served as the base case for the company's calculations, and that he did not set out to "look behind" any of the assumptions in that plan. Hearing Tr. at __ (examination of Mr. Horii) (transcript unavailable). However, he did express significant concerns about whether that resource plan was "optimal." And Witness Horii agreed with Dr. Lynch's assessment that inaccurate assumptions in the base case yield inaccurate calculations of avoided cost.

Witness Johnson recommended rejecting the Company's QF rate proposals because they were derived from a sub-optimal "Base" expansion plan that does not minimize revenue requirements. Johnson Direct Testimony at 40, 69-70; Johnson Surrebuttal Testimony at 8. In particular, he pointed out that SCE&G has not evaluated or included additional Demand Side Management (above and beyond the limited amount included in the resource plan) or firm capacity purchases that are specifically targeted at unusually cold winter mornings: "Because the 'Base' expansion plan excludes or ignores these types of opportunities (as with the modeling that was done in this proceeding), the avoided costs that are calculated using the DRR method will be underestimated." Johnson Surrebuttal Testimony at 12.

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Witness Glick also criticized the Company's incorporation of a proposed 540 MW combined cycle plant in 2023 into its avoided cost calculations. She testified that this is particularly inappropriate because the Company has not tested a range of other scenarios; has not modeled the cost of its resource plan; and has not allowed DERs to compete with or displace the CC or other higher cost resources. Glick Direct Testimony at 13.

iii. The Commission's Conclusions

The Commission notes that although Witness Lynch presented an expansion plan as the putative basis for avoided cost calculations, the Company did not actually perform any avoided capacity cost calculations based on this expansion plan. Rather, the Company concluded that solar resources have no capacity value and ceased its inquiry there. However, because the Commission finds unreasonable the Company's conclusion that solar resources have no capacity value and is directing the Company to more accurately calculate its avoided costs, the Commission clarifies that a calculation of avoided costs based on the resource plan submitted with Witness Lynch's testimony would not be reasonable, unless the Company demonstrates that the resource plan itself has been optimized to a reasonable degree. Based on the evidence in the record, the Company has not demonstrated that the resource plan is reasonable. To the contrary, the evidence indicates that there are several flaws with the resource plan, which potentially could impact the avoided cost calculations.

In formulating its resource plan, the Company did not fully evaluate several relevant generation expansion options, including firm purchases that target specific hours or seasons, increased reliance on demand side management and a winter peak clipping program that increases in scale as demand grows. Johnson Direct at 41:9-12, 68:17 - 73:9, 118:1 - 119:12; Johnson Surrebuttal at 13-14, 29. In sum, the Company failed to "optimize" its resource plan in the base case and change cases, as the DRR methodology requires. Hearing Tr. at E-208:18-209:10, 209:16-211:21 (testimony of Witness Lynch); FERC Order No. 69 at n. 6.

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In all, the Company has failed to meet its burden of showing that the capacity component of the proposed PR-2 tariff is reasonable, and therefore it will not be approved. The Commission agrees with the recommendation of ORS Witness Horii that the Company should be required to provide an estimate of long-run avoided capacity cost and the calculation for the long-run avoided capacity costs. In addition, ORS and other parties should be allowed to review and provide comment to the Commission based on SCE&G's estimate and calculation. Horii Direct Testimony at 22:6-9.

D. Remedy

The various problems with the Company's calculation of avoided cost rates, as identified above, raise the question of what the Commission should require the company to do. After due consideration of the evidence presented, the Commission concludes that:

a. The Company must submit a revised rate schedule, following methodologies as approved in this Order, for review by the parties and approval by the Commission.

b. Even if the Company's calculation of energy costs were reasonable, it would not be appropriate to update PR-2 energy rates without also updating capacity rates. Evidence at the hearing showed that actual capacity rates probably diverge significantly from the approved capacity rates because of the failure of the additions at the V.C. Summer nuclear plant, and the resulting impact on the company's resource plan and capacity needs. Given these changed circumstances, it would not be appropriate to update the PR-2 energy rates without also updating capacity rates.

V. FINDINGS OF FACT

1. Notwithstanding the fact that the Company continues to use a form of the Difference in Revenue Requirements ("DRR") methodology for calculating avoided costs, the Company proposes to make a number of very significant changes to the implementation of the DRR methodology previously approved by the Commission. These include: (1) restricting the availability of PR-2 rates to solar QFs; (2) calculating avoided energy and capacity costs based on a solar-specific generation profile; (3) calculating capacity costs based on a 21% winter reserve margin requirement; (4) abandoning the 80% / 20% summer/winter capacity weighting approved by the Commission in docket nos. 2016-2-E and 2017-2-E, in favor of a 100% winter /

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0% summer capacity weighting; (5) assigning zero avoided capacity value to solar; and (6) changing the frequency of PR-2 rate updates from no less than twice annually to annually.

2. The methodological changes proposed by the Company are not required by any change in circumstances with regard to QF power in South Carolina, and the Company has failed to demonstrate that these changes are necessary.

3. The Company's proposal to limit the standard offer PR-2 rate to solar facilities is neither reasonable, nor prudent, nor necessary.

4. There is significant variation among the "generation profiles" of different solar energy facilities, based on such factors as the location and configuration of the facility. This variation can have a significant impact on the actual energy and capacity costs that may be avoided by solar facilities.

5. It is unreasonable for the Company to calculate avoided energy or capacity costs using a solar generation profile that does not reflect, with reasonable accuracy, the characteristics of solar QFs likely to contract under the proposed rates. The evidence in the record indicates that the solar profile used by the Company to calculate its avoided costs does not meet this standard.

6. The Company has failed to meet its burden of showing that its proposed energy rates are reasonable.

7. The proposed PR-2 rate is not appropriate for non-solar QFs, or for solar generating facilities that include energy storage.

8. Requiring non-solar (or solar + storage) QFs to pursue negotiated rates with the Company imposes undue burdens on the development of such resources and is inappropriate.

9. It is appropriate for the Company to continue offering standard rates on the PR-2 tariff to non-solar (and solar + storage) QFs. Avoided cost rates reflected in the tariff shall reflect hour-by-hour, technology-agnostic variations in avoided costs.

10. The Company has failed to meet its burden of showing that its proposed capacity rates are reasonable.

11. The Company has not demonstrated that the assignment of zero capacity value to solar QFs is reasonable.

12. The Company has not provided adequate evidence concerning the relationship between nameplate solar capacity and system peak loads, and has not demonstrated that a change to the current capacity value of 50% for solar resources is appropriate.

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13. The evidence does not show that a 21% reserve margin is reasonable, and the calculation of avoided costs based on a 21% winter reserve margin and a 14% summer reserve margin is unreasonable.

14. It would not be reasonable to calculate avoided capacity costs based on the resource plan submitted with the Company's prefiled testimony.

VI. CONCLUSIONS OF LAW

After hearing the evidence and testimony of the witnesses, the Commission finds and concludes that SCE&G's requests pursuant to S.C. Code Ann. § 58-27-865 and PURPA Section 210 regarding its avoided cost rates offered in PR-1 and PR-2 are not reasonable or prudent as proposed, given the evidence introduced by the SBA in the expert testimony of Dr. Johnson, by CCL and SACE in the expert testimony of Ms. Glick, by ORS in the expert testimony of Witness Horii, and the testimony of the Company's witness Dr. Lynch on cross-examination.

IT IS THEREFORE ORDERED THAT:

1. The Company's Avoided Cost Tariffs PR-1 and PR-2 are not approved as proposed by the Company, and are subject to conditions in Ordering paragraphs 2(a) and (b) below;
2. Within 90 days, the Company shall submit for review and Commission approval standard offer PR-2 rates that are applicable to all QFs, including solar + storage, wind, biomass, and cogeneration, in the current docket.
    a. For its Avoided Energy Calculations, the Company shall submit for review and Commission approval standard offer PR-2 rates using time-of-day pricing that accurately reflects avoided energy costs on a technology-agnostic basis.
    b. For its Avoided Capacity Calculations, the Company shall:
        i. continue to use the 80% / 20% summer / winter capacity weighting approved in previous fuel dockets; or produce evidence to demonstrate that another capacity weighting is appropriate;
        ii. continue to follow the 14% across-the-board reserve margin policy that was employed in calculating the currently-effective PR-2 rates;
        iii. continue to assign a 50% capacity factor to solar resources, or demonstrate that another capacity factor is appropriate; and

iv. calculate avoided costs using an updated resource plan that is optimized, based upon an evaluation of all relevant capacity options (and alternative combinations of these options), including increased reliance on demand response programs, firm power purchases, and the purchase or acquisition of new company-owned generating resources

3. The Company shall conduct a new reserve margin study using an updated winter peak load forecast and a more widely used tool, which balances risk and ratepayer costs, which will be used to inform avoided cost rates in the 2019 fuel cost filing. In the interim, the Company shall retain its 2017 reserve margin of 14 % and shall not adopt a 21% winter reserve margin.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

_____

_____, Commissioner

(SEAL)

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BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2018-2-E

IN RE: Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	)	**PETITION FOR REHEARING AND/OR RECONSIDERATION**

INTRODUCTION

The South Carolina Solar Business Alliance, Inc., ("SCSBA"), Intervenor in the above-referenced Docket, hereby petitions the Public Service Commission of South Carolina ("Commission") for Rehearing or Reconsideration of Order No. 2018-322, dated April 30, 2018, and Order No. 2018-322(A), dated May 2, 2018, pertaining to South Carolina Electric & Gas, Company ("SCE&G), in the above-referenced Docket. Specifically, SCSBA petitions the Commission pursuant to S.C. Code Ann. Section 58-27-2150 (1976, as amended) and S.C. Code Ann. Reg. 103-854 to reconsider its Findings and decision therein. For the reasons hereinafter set forth, SCSBA would respectfully submit that this Commission overlooked and misapprehended the evidence of record.

PETITION FOR RECONSIDERATION/REHEARING

1. The Commission Required the Intervenors to Provide Alternative Rates but Prevented Them From Doing So.

The parties presented ample evidence at the hearing that the Company's proposed rates were unreasonable. And although they did not reach the same conclusion on every issue, the witnesses for ORS, SACE/CCL, and the SCSBA all agreed that the Company's proposed capacity rates (which assigned a zero capacity value to solar) were not reasonable. The Commission's Order approving the proposed rates did *not* find that the evidence showed that the proposed capacity rates were reasonable – only that the proposed capacity rates were "...reasonable at this time, *in the absence of a viable alternative proposal being presented by any other party*." Order No. 2018-322(A) at p. 15, (emphasis not in original). The Commission's reiterates several times the fact that its holding is predicated on the Intervenors' failure to provide alternative rates.

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Order No. 2018-322(A) at p. 15 ("The Commission further reiterates that no other party presented an alternative estimate of SCE&G's avoided capacity costs."), Order No. 2018-322(A) at p. 16 ("In fuel proceedings before this Commission, mere assertions that fail to offer and justify an alternative just and reasonable rate are of limited value in the final determination of a final just, reasonable, and appropriate rate."); *also see,* April 25, 2018 Directive Order (the Commission purported to rely on the following, that they, "...were not presented with a viable avoided capacity cost factor by any party except SCE&G. The other parties took great pains to explain how they believe SCE&G inappropriately derived its factor, but the parties failed to present an alternative for us to consider.")

There are several errors in this holding. In the first instance, and as discussed further below, it is the Company's burden to show that its proposed rates are reasonable. It is *not* the Intervenors' burden to show that Company's proposed rates are unreasonable, much less their burden to formulate "viable alternative proposals" for rates.

As a practical matter it would be nearly impossible to come up with completely sound proposals. As Dr. Lynch testified, the utility calculates rates based on a combination of spreadsheets and computer modeling. Even after the limited discovery that was available given the short time frame in this docket, the Intervenors do not have access to all the inputs used by the Company to calculate their rates, and moreover do not have access to the PROSYMM computer model used by the Company to calculate energy rates (a license for PROSYMM costs tens of thousands of dollars to purchase).

And Intervenors did propose, to the best of their ability given the limited information available, some alternative rate calculations, such as Dr. Horii's suggestion that the PR-2 capacity value be set at 19.5% of the avoided cost of 16 per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity. Horii Direct Testimony, at 21:13-23. The Commission overlooked these proposals.

The Commission's Order also faults the Intervenors for not filing a Motion to Compel SCE&G to produce alternative rates. Order No. 2018-322(A) at p. 16, "During the hearing, the Commission heard several complaints that SCE&G was not forthcoming with discovery production. However, the Commission did not receive any Motion to Compel nor any other indication of disputes in the discovery process, prior to the hearing." However the Company maintained in discovery that it had never calculated such alternative rates (although Dr. Lynch admitted at the hearing that the Company had in fact made preliminary revised rate calculations in the fall of 2017, Hearing Tr. at E-51:3-23).

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In Order No. 2018-28 (in Docket No. 2014-246-E), the Commission clarified that Motions to Compel are properly limited to circumstances where a party is alleged to have failed or refused to comply with discovery. Thus, a Motion to Compel would not have been appropriate here. Consistent with that Order, instead of filing a motion to compel, Intervenors CCL/SACE filed a "Petition" asking the Commission, prior to the hearing, to require the Company to produce a rate calculation based on alternative inputs. Petition For An Order Requiring South Carolina Electric And Gas Company To Comply With Commission Order No. 2018-55 (March 21, 2018). The Commission's denial of that request barred the Intervenors' only mechanism for obtaining complete alternative rate calculations.

2. The Commission Improperly Shifted the Burden of Proof Regarding the Reasonableness of SCE&G's Rates from the Company to the Intervenors.

The Commission's Order approving the Company's proposed rates simply because no other party had come up with a better set of alternative rates effectively shifts the burden of proof with regard to reasonableness from the Company to the Intervenors. This was contrary to law. A utility seeking Commission of a proposed rate change bears the burden of showing that its proposed rates are reasonable. Although a utility's proposed rates are entitled to a presumption of reasonableness, when another party produces evidence to rebut that presumption, the burden of persuasion shifts back to the Company. *Utils. Servs. of S.C., Inc. v. S.C. Off. Regulatory Staff*, 392 S.C. 96, 109 (2011) (quoting *Hamm v. S.C. Public Service Comm'n*, 309 S.C. 282, 289, 422 S.E.2d 110, 114 (1992)).

The Intervenors in this proceeding introduced substantial evidence to rebut any presumption of reasonableness in the Company's proposed rates. The Commission does not deny that. Consequently the Commission should have shifted the burden of persuasion to the Company to prove the reasonableness of its rates. Instead, it simply approved the proposed rates because it found (contrary to the evidence) that no other party had demonstrated that an alternative proposed rate was more reasonable.

The Commission's inappropriate shifting of the burden of proof is further confirmed by this passage in the April 25, 2018 Directive Order: "Moreover, it is not sufficient for a litigating party to meet its burden of proof by asking a utility, after the hearing, to develop a new factor pursuant to that party's specifications for inclusion in rates – an approach several parties would have us do as suggested by proposed orders." (Emphasis in original). As discussed above, the Intervenors asked the Company prior to the hearing to develop new rates, and asked the Commission for its assistance in this regard as well. They were rebuffed by both the Company and the Commission.

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This inappropriate burden-shifting is explicit in the motion made by Commissioner Bockman at the Commission's open meeting, as set forth in its April 25, 2018 Directive Order. The April 25, 2018 Directive Order states, "...it is not legally sound under 58-27-865(A)(2)(c) to assert that, because a party disagrees with the newly proposed factor, then a legacy factor approved in a prior proceeding should be maintained."

The Commission's burden-shifting effectively penalized the non-utility parties for gaps in record that were caused by, or exacerbated by SCE&G. Penalizing the other parties for gaps in the record is particularly unreasonable in this case, considering that:

- SCE&G had more than six months to prepare its proposed tariff filing, while the other parties were given less than 45 days to review that proposal and prepare their responsive evidence.
- SCE&G made dramatic changes to its methodology and approach to developing QF rates, yet it did not provide a comprehensive, detailed explanation of its proposals in its direct testimony.
- SCE&G could have, but did not provide a complete set of workpapers and supporting documentation in its initial filing – forcing ORS and the other parties to lose valuable time trying to understand its proposals and determine what additional information was needed.
- These problems were further exacerbated by SCE&G's unwillingness to be cooperative during discovery, failing to provide some of the requested information, and taking longer than necessary to respond to other requests.

3. <u>The Commission's Refusal to Maintain the Current PR-2 Rates in Effect was Erroneous.</u>

Intervenors did, in fact, suggest another alternative rate that has been approved by the Commission – the current PR-2 rates. The Commission rejected this suggestion, finding that "There is no evidence to demonstrate that maintaining such rates would be appropriate or that it would not result in SCE&G's customers having to pay for excessive avoided capacity costs." Order No. 2018-322 at p. 16. In so holding, the Commission fails to acknowledge that the existing tariff enjoys a presumption of reasonableness. *Cf. Edge v. State Farm Mutual Insurance Company*, 366 S.C. 511, 623 S.E.2d 387 (2005).

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4. The Commission Ignored the Option of Requiring a "Compliance Filing."

The Commission's Order also ignored the option of requiring a "compliance filing" by the Company at the conclusion of a hearing, to resolve any gaps in the record. It is common practice in utility rate proceedings for the parties to cross examine the utility's witnesses and put forward evidence disputing specific aspects of the utility's proposals. At the conclusion of the hearing, the regulatory commission issues an order ruling on the disputed issues, and it requires the utility to submit a "compliance filing" which reflects the impact of its rulings. This "compliance filing" is then subjected to further review to confirm the utility has correctly interpreted and implemented the commission's ruling on the disputed issues.

This common practice flows in part from the fact that the utility has the burden of proof, and in part from the fact that it is not practical for other parties to quantify the impact of each issue (or sub-issue) since they do not have access to much of the required information. Moreover, the parties cannot readily determine how issues they are concerned about will interact with issues raised by other parties, nor can they predict in advance how the Commission will rule on all of the disputed issues and sub-issues. Nor is it possible to know prior to the hearing all of the evidence or all of the issues that arise during the hearing – unlike most civil litigation, which is typically focused to a smaller set of issues, and the parties have months to prepare for the trial, including depositions of the expert witnesses. In contrast, in utility rate proceedings it is not feasible for the parties to anticipate and quantify the impact of all of the potential combinations and permutations of ways the Commission might rule on the disputed issues and sub-issues.

It is common practice in utility rate proceedings for the Commission to rule on the disputed issues after the hearing, and to require the utility to submit a new set of tariffs that comply with its decision. This procedure eliminates the need to calculate rates based on hypothetical possibilities concerning how the Commission might rule on potential combinations of issues and sub-issues, and it ensures that the final tariff accurately accounts for all of the decisions made by the Commission.

The use of a "compliance" filing also reduces the incentive for "gamesmanship" by the utility, which otherwise have a strong incentive to withhold information in order to prevent ORS and other parties from quantifying the effect of their position concerning the disputed issues.

By ignoring the option of a "compliance filing", the Commission has effectively penalized ORS and other parties for gaps in the evidentiary record. This is particularly unreasonable in this case, because the party with the burden of proof – the utility – is largely responsible for the gaps in the record (because it refused to provide information within its exclusive control) and because the other parties did not have adequate time to obtain the needed information or prepare the quantification sought by the Commission prior to the hearing.

5. Commission did not Afford Due Process to the Non-Utility Parties.

The Commission's Order recognized the severe time restraints on the non-utility parties.

6. Key Issues Where SCE&G Failed to Meet its Burden of Proof:

1. Eliminating the standard offer rate for non-solar QFs.

2. Relying on a single solar profile that is not representative of other solar QFs.

3. Relying on a 21% winter reserve margin.

4. Assigning zero capacity value to solar QFs.

5. Relying on the Company's sub-optimal resource plan.

CONCLUSION

Based on the foregoing, and in the interest in providing due process to the Petitioner, this Commission should rehear and/or reconsider this matter and **(i)** require the existing QF tariff to remain in effect **(ii)** require a "compliance filing" which would be subject to further review and approval **(iii)** require SCE&G to submit a new QF tariff filing which overcomes the flaws identified in this proceeding **(iv)** temporarily hold the proposed QF tariff in abeyance and provided an opportunity for the Intervenors and ORS to conduct additional discovery, provide additional testimony and another hearing.

AND GRANT SUCH OTHER AND FURTHER RELIEF AS IT DEEMS APPROPRIATE.

[Signature Page Follows]

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Respectfully Submitted,

/s/

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