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**S.C. Supreme Court**

**THE STATE OF SOUTH CAROLINA  
In The Supreme Court**

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**APPEAL FROM THE ADMINISTRATIVE LAW COURT**

**Ralph K. Anderson III, Administrative Law Judge**

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**Opinion No. 5274 (S.C. Ct. App. filed October 8, 2014)**

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**Duke Energy Corporation.....Petitioner,**

**v.**

**South Carolina Department of Revenue.....Respondent.**

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**APPENDIX FOR PETITION FOR A WRIT OF CERTIORARI**

**VOLUME VI**

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1           he's going to further evaluate whether he's  
2           going to become an expert in an area which he's  
3           already said he's not going to be an expert in.  
4           But the degree of surprise, same thing. And  
5           then the prejudice to the opposing party, which  
6           that's the one I'm struggling with is, I'm a --  
7           I may as well, at least at this point in time,  
8           comment somewhat upon my view of the law.  
9           I mean, a bankruptcy judge's evaluation of what  
10          electricity is in the context of a tax case  
11          doesn't carry a whole lot of weight with me.  
12          I recognize that the UCC does step into the  
13          arena of interpreting what "goods" are. And  
14          whether we're going to go into what "goods" are  
15          in this case, I'm not so sure. I hadn't heard  
16          it yet.  
17          I recognize that the standard of 2250 -- I said  
18          that there was two "or's," "manufacturing or,"  
19          and then you get into the goods, goods and  
20          materials. I haven't really heard a whole lot  
21          about us going into the goods and materials  
22          aspect of that.

23   MR. TRESH: Your Honor, it is -- that piece of it is  
24               mentioned in Mr. Green's brief, as well.

25   THE COURT: Okay. But the problem is, you know, the

1 belated aspect of it. I could continue this  
2 case, but that places me in a difficult  
3 position of getting this case heard. And so at  
4 this point in time, I'm going to -- my ruling  
5 is going to be to deny his testimony, unless we  
6 can work at the -- and there would have to  
7 be -- Duke Energy would have to pay the cost of  
8 the Department of Revenue deposing this witness  
9 and being able to get an expedited transcript  
10 of that deposition sometime or another before  
11 this case ends on Friday. So is that a  
12 possibility?

13 MR. TRESH: Your Honor, we'd be happy -- we don't  
14 want to continue the case.

15 THE COURT: And one more issue is, it was only going  
16 to be -- if he testified, it would only be on  
17 the narrow issue -- at least so far to me, I  
18 think the Court -- this Court needs is the  
19 narrow issue of -- and I hadn't gone through  
20 the cases yet.

21 Now, I've read them and, honestly, the reason  
22 I don't think they sunk in is they didn't mean  
23 a whole lot to me. You may be bringing  
24 attention to something that was -- should have  
25 been left unemphasized. But the narrow issue



1 of the policy of considering cases that are not  
2 within the tax arena.

3 MR. TRESH: Would it also apply to other taxes  
4 outside of income taxes and how -- and the  
5 policy behind extrapolating other taxes, be it  
6 property taxes or some other tax law, and  
7 layering that onto income tax analysis?

8 THE COURT: Well, the problem I have with that is --  
9 and, of course, if we went through the  
10 deposition again, that would open that door.  
11 But, honestly, when you bring that up, that  
12 brings me back to the degree of surprise and  
13 prejudice.

14 I mean, just looking at this case -- and I  
15 recognize what it looks like to practice law --  
16 but it's just clear that that aspect of the  
17 case was implied the whole time. Whether  
18 somebody had cited a case at that time --  
19 certainly you cite cases as the case moves  
20 along. I don't see that as anything that's  
21 new --

22 MR. TRESH: If --

23 THE COURT: -- warranting bringing him out.

24 Go ahead. Respond to that.

25 MR. TRESH: Your Honor, we had no intention of

1 calling Professor Pomp up until having  
2 considered Mr. Green's brief and how much  
3 emphasis his brief said upon those other cases  
4 and those other theories.  
5 Mr. Green's whole brief, in fact, his whole  
6 case kind of rests on extrapolating other taxes  
7 and other states' law to South Carolina income  
8 taxes. A lot of what he put in this brief in  
9 terms of what he planned to present at trial  
10 was indeed surprising.

11 I mean, his -- Mr. Green's original position  
12 was, "Hey, this is relatively simple" --

13 THE COURT: South Carolina law.

14 MR. TRESH: -- "South Carolina law," and Your Honor  
15 obviously denied that. And so then we  
16 introduced all these new theories about ten, 12  
17 days ago. We had a lot of work to prepare for  
18 trial and once we kind of dug in and we said,  
19 you know, that this would be a good idea --  
20 now, we -- to put Professor Pomp on and have  
21 the Court hear his testimony.  
22 Now, we had always noticed Professor Pomp as an  
23 expert in state tax -- the state tax policy of  
24 electricity. That's what he was originally  
25 noticed on. So it's not like we took something

1           that he was -- kind of expanded the scope of  
2           what we originally noticed him on.  
3           Of course, you heard the deposition did  
4           conclude and right after the discussion on  
5           electricity, you know, there was this idea that  
6           if other papers were filed and briefs were  
7           filed, he would consider those.

8   THE COURT: Well ...

9   MR. TRESH: We certainly didn't intentionally mislead  
10           anybody about --

11   THE COURT: Well, I just -- as you were talking -- I  
12           know you didn't. Y'all seem to be very good  
13           lawyers and -- but when you were talking, it  
14           did dawn on me one thing that Mr. Green said  
15           and that is, that depending on his testimony,  
16           he may would want to call another witness.  
17           So when you say "continuance," that is another  
18           issue that I -- that you did testify -- or  
19           state that, didn't you, Mr. Green?

20   MR. GREEN: Depending on what he said in his  
21           deposition, I might very well have named  
22           another expert. There were other experts named  
23           in different issues by -- certainly by them.  
24           I think by both sides after that point. I  
25           mean, I didn't have a chance to explore his

1 testimony because at the time it looked like  
2 they weren't going to use him for that.

3 THE COURT: At this point in time -- I do not like  
4 excluding witnesses from lawyers. I really  
5 don't. I'll always try to dance around it  
6 somehow or another, but in light of that and in  
7 light of the fact that we need to go ahead and  
8 hear the case, I'm going to deny calling  
9 Professor Pomp on that issue.

10 MR. TRESH: (Nods head affirmatively.)

11 THE COURT: All right. Thank you.

12 MR. TRESH: Your Honor, one more thing, too. For  
13 the record, probably sometime after lunch, we  
14 have spoken with Tracey and -- opposing  
15 counsel, and we'd like to submit excerpts from  
16 Professor Pomp's deposition, as well as the  
17 interrogatory response where we named Professor  
18 Pomp on what we named him for into the record  
19 as new exhibits. They were not previously  
20 offered. And I think that's going to be agreed  
21 to?

22 MR. GREEN: I think he wants to do that for  
23 preserving the record and I don't -- subject to  
24 me working through it and stuff, I think we can  
25 reach an agreement on that, if the Court is

1 comfortable with that.

2 THE COURT: All right.

3 MR. GREEN: Thank you, Your Honor.

4 MR. TRESH: Thank you, Your Honor.

5 THE COURT: Hold on one moment.

6 See, you've already started off on making me --  
7 having me make a ruling that I don't like to  
8 make.

9 MR. TRESH: We apologize, Your Honor.

10 MR. GREEN: Sorry, Your Honor.

11 THE COURT: Well, no, you didn't -- it's Mr. Green's  
12 fault.

13 MR. GREEN: It's my fault. I'm sorry, Your Honor.

14 THE COURT: All right. Okay. Are we ready to go  
15 now?

16 MR. GREEN: I think we are.

17 One more thing. I don't think this -- but I've  
18 talked to Counsel about this, though.

19 THE COURT: Are we ready to go now? Yes, we are.

20 MR. GREEN: I apologize.

21 THE COURT: One more thing.

22 MR. GREEN: I'm sorry. I don't mean to be like

23 Columbo, "Just one more question."

24 Depending on -- and I don't know the nature of  
25 their testimony today. I had spoken with

1           Mr. Tresh about this. We have a witness that  
2           we might need to take out of order,  
3           Mr. Southard. We had discussed that based on  
4           some scheduling issues that he has. And so  
5           depending on where we are, we might like to  
6           call him at around 3:30 this afternoon, because  
7           he cannot be here easily tomorrow. Mr. Tresh  
8           has agreed to that. He has no problem. I just  
9           want to make the Court aware that might be a  
10          timing issue, if that's all right.

11   THE COURT: All right.

12   MR. TRESH: We agree with that, Your Honor.

13   THE COURT: Okay.

14   MR. GREEN: Thank you.

15   THE COURT: All right.

16   MR. TRESH: Your Honor, brief opening statement.

17           And then if it's -- pleases the Court, we'll  
18           call our first witness.

19   OPENING STATEMENT BY MR. TRESH:

20   MR. TRESH: Your Honor, a few moments ago you made a  
21           point that in your ruling we have this  
22           disjunctive or conjunctive nature of the two  
23           "or's" in the statute at issue.

24   THE COURT: Well, "or" is considered a disjunctive  
25           participle.

1 MR. TRESH: Disjunctive participle, yes, Your Honor.

2 But when looking at the entire statute, we'd  
3 like to focus the Court's attention and a lot  
4 of our testimony on the beginning of that  
5 statute that speaks to -- or the statute I'm  
6 speaking to is 12-6-2250, which speaks to a  
7 taxpayer's principal business.

8 Similarly, 12-6-2290 begins and says --

9 THE COURT: Same fashion.

10 MR. TRESH: -- "principal profits or income." And  
11 so while it could be possible that a business  
12 would be in the business of manufacturing  
13 something or producing something and also be in  
14 the business of selling services, the South  
15 Carolina statutes recognize that we're going to  
16 look to what their principal business is and  
17 that has been noted by principal profits and  
18 income. And I think you'll hear a lot of  
19 testimony around what Duke's principal receipts  
20 are from. They're from the sale of services.

21 The principal business that you --

22 THE COURT: You said principal receipts?

23 MR. TRESH: Yes.

24 THE COURT: When you say "receipts," that doesn't  
25 include cost? When you say "principal

1           business," does cost enter into that from your  
2           perspective?

3   MR. TRESH: It does not, Your Honor. The statute  
4           uses two terms. 2250 says "principal  
5           business"; 2290 says "principal profits or  
6           income."  
7           The South Carolina Department of Revenue has  
8           consistently interpreted the term "principal  
9           business" and "principal profits or income" by  
10          two tests. The first test relates to the  
11          taxpayer's gross receipts.  
12          You'll hear testimony that you look to the  
13          gross receipts, look to what 50 percent --  
14          greater than 50 percent of those gross receipts  
15          are from, and if they're from selling services,  
16          one is required to apportion using a single-  
17          factor gross receipts method. If the principal  
18          gross receipts are from selling tangible  
19          personal property, then one is required to go  
20          ahead and source their income using a three- or  
21          four-factor formula.

22   THE COURT: Okay.

23   MR. TRESH: I think you'll see that test -- it's a  
24           long-standing agency policy. It's consistent  
25           with the statutes' use of the term "principal"



1 in reference to either business or the single  
2 factor -- the gross receipts method actually  
3 says not "business" but "principal profits or  
4 income," and, again, not with any relation to  
5 cost.

6 THE COURT: Okay.

7 MR. TRESH: And so I think you'll also hear  
8 testimony or you will also hear testimony that  
9 the Department of Revenue, the Legislature in  
10 other contexts, and all of the experts have  
11 stated at one point or another that the sale of  
12 electric service is just that: It's a sale of  
13 a service.

14 And so it kind of begs the question. Well, if  
15 I've got a long-standing Department  
16 interpretation that says that if my principal  
17 business, as measured by receipts or income, is  
18 related to the sale of services, single factor;  
19 sale of tangible personal property, three  
20 factor, and the Department has acknowledged  
21 that Duke is in the business of selling a  
22 service, why are we here?

23 The Department's primary line of reasoning is  
24 based on a case that's -- I guess it's 90 years  
25 old or something at this point. I think it was

1           decided in 19 -- two cases decided in '26 and  
2           '28 -- in the context of the now nonexistent  
3           Manufacturer's Tax Act, that goes ahead and  
4           said that based upon a charter that Duke filed,  
5           I believe originally back in the late 1800's --  
6           Your Honor was referring to older cases  
7           earlier; that certainly predates all of us --  
8           charter filed in the 1800's that set forth a  
9           myriad of businesses that Duke may or may not  
10          be in.

11          You'll hear testimony that that's what the  
12          Department bases its position on, that somehow  
13          the analysis of this charter, followed by a  
14          ruling in a completely irrelevant tax context,  
15          somehow should control for income taxes, when  
16          I have all of these long-standing policies and  
17          these statutes that are directly on point. We  
18          don't think that can be the case. We don't  
19          think you can extrapolate a charter written in  
20          the 1800's and some old property tax cases to  
21          this decision.

22   THE COURT: Well, if they clearly could have, you  
23               wouldn't be here today.

24   MR. TRESH: Yes, Your Honor.

25             Now, we think for other contexts and we know

1           for other contexts, you'll hear testimony that  
2           the Department has treated Duke as providing a  
3           service. So to the extent that any other taxes  
4           are relevant, I think we could say at best in  
5           South Carolina it's mixed.

6   THE COURT: Well, it's interesting what you just  
7           said because there is a -- I forget how you  
8           worded it earlier -- whether Duke Energy you  
9           could say provides a service or is in the  
10          business of providing a service. There's  
11          different definitions of "service" and one of  
12          them is fulfilling a public need.

13   MR. TRESH: (Nods head affirmatively.)

14   THE COURT: Well, I guess I'll hear about that as  
15          time goes on.

16   MR. TRESH: Absolutely, Your Honor. You'll hear  
17          that there are many service providers that,  
18          perhaps, fulfill a public need, like  
19          telecommunication service providers, for  
20          example. You'll hear -- I think you'll hear  
21          how similar that process is to the process of  
22          providing electric service. I think a lot of  
23          the experts will -- will admit and testify to  
24          the fact that there are analogies there.  
25          At the end of the day, what I think we'll be

1 left with is a whole bunch of competing law in  
2 other states on income taxes and other taxes,  
3 inconsistent law in the nonincome tax area in.  
4 South Carolina, and then this very simple  
5 policy, that I think everybody would agree, is  
6 in place that the way to test for what you do  
7 for income taxes is you look to 50 percent or  
8 more of where their business's receipts are and  
9 we'll show testimony that that's from providing  
10 services.

11 THE COURT: Okay.

12 MR. TRESH: With that, Your Honor, if there's no  
13 objections, I'd like to call our first witness.

14 THE COURT: Well, I'll allow him to -- a chance to  
15 respond, if you wish.

16 MR. GREEN: Thank you, Your Honor. Just briefly.

17 OPENING STATEMENT BY MR. GREEN:

18 MR. GREEN: I think you'll hear testimony today that  
19 shows that the generation of electricity --  
20 there is a lot of information in the record  
21 about other states, other taxes. I think the  
22 point for the Court's consideration in this  
23 hearing is whether the generation, production  
24 of electricity could be constituted a  
25 manufacturing process. We submit that it is

1 and we submit that the testimony today will  
2 show all of this. We'll show that it is a  
3 manufacturing process, Your Honor.  
4 Duke Energy has the burden to prove that it is  
5 not a manufacturer, that it should be filing  
6 not under 2250, 12-6-2250 as it did in its  
7 originally filed returns, but 12-6-2290, gross  
8 receipts factor that it asserted in its amended  
9 returns.

10 And we'd submit for the matter submitted in the  
11 brief, as well as the testimony you'll hear  
12 today, Your Honor, that they can't meet that  
13 burden and the Department's policy in that  
14 regard should be upheld.

15 Thank you, Your Honor.

16 THE COURT: All right. Call your first witness.

17 MR. TRESH: We'd like to call Mr. Cooper Monroe to  
18 the stand, please.

19 THOMAS COOPER MONROE, III, C.P.A., having been duly  
20 sworn, testifies and examines as follows:

21 MR. MONROE - DIRECT EXAMINATION BY MR. TRESH:

22 Q: Good morning, Mr. Monroe.

23 A: Good morning.

24 Q: Can you please state and spell your full name  
25 for the record, please?

1 A: It's Thomas Cooper Monroe, III. T-H-O-M-A-S  
2 C-O-O-P-E-R M-O-N-R-O-E.

3 Q: And can you please provide your business  
4 address for the Court?

5 A: 550 South Tryon Street, Charlotte, North  
6 Carolina 28202.

7 Q: And, Mr. Monroe, what is your current  
8 employment position?

9 A: I am director of state and local tax for Duke  
10 Energy Corporation.

11 Q: And can you please provide a summary of your  
12 educational background?

13 A: Yes. I have a Bachelor of Business  
14 Administration degree in accounting from the  
15 University of Texas at Austin. I have a  
16 Master's of Accounting in tax from the  
17 University of North Carolina, Charlotte.

18 Q: Do you hold any professional credentials,  
19 Mr. Monroe?

20 A: I'm a certified public accountant licensed in  
21 Texas.

22 Q: And you mentioned a moment ago that you are the  
23 managing director of state and local tax for  
24 Duke Energy. How long have you been in that  
25 position?

- 1 A: I've been in that position since 2006.
- 2 Q: And when -- were you employed by Duke Energy
- 3 prior to that?
- 4 A: Yes, I was.
- 5 Q: What position?
- 6 A: I was a manager doing tax research and
- 7 planning, mainly in federal and our unregulated
- 8 businesses.
- 9 Q: And how long were you employed in those
- 10 positions for Duke Energy?
- 11 A: From 1995 to 2006, approximately, I was doing
- 12 that type of work. I came from a company
- 13 called PanEnergy Corp., which is an interstate
- 14 gas pipeline company that merged with Duke in
- 15 1997.
- 16 Q: So you've spent your entire career, 20-some-odd
- 17 years, working in the field of taxation?
- 18 A: That's right. Twenty-four years, except one
- 19 year I was in the controllers department
- 20 working on fixed asset accounting, so 23 of the
- 21 24 years.
- 22 Q: Okay. Thank you. Mr. Monroe, what is Duke
- 23 Energy's primary business?
- 24 A: Primary business is energy service production
- 25 in the Carolinas. We also have businesses,

1 real estate development business. We have a  
2 telecom business. Those are the primary ones  
3 that -- like I said, for a time Duke Energy  
4 also was in the interstate gas pipeline  
5 business.

6 Q: Okay. And so today Duke Energy's primary  
7 business is the provision of electricity?

8 A: That's correct. We also have South American  
9 energy service businesses.

10 Q: Okay. You mentioned that Duke Energy has a  
11 number of businesses, so we've got primarily  
12 electricity. How do you measure primary  
13 business? What leads you to conclude that Duke  
14 Energy's primary business is the sale of  
15 electric service?

16 A: The vast majority of receipts for Duke Energy's  
17 business are from power -- energy service  
18 delivery in the Carolinas. There's a -- you  
19 know, the guidance from South Carolina that we  
20 saw was an '87 Revenue Ruling that gave us that  
21 test.

22 Q: You mentioned receipts. What about the profit?  
23 Where does the vast majority of Duke's profit  
24 come from?

25 A: Again, the same, energy service production in



1 the Carolinas.

2 Q: Okay. And -- so you mentioned a moment ago  
3 that Duke also has a telecommunications company  
4 or provides telecommunication service?

5 A: That's correct. We have a smaller business  
6 that does wholesale fiberoptic long-haul  
7 business, mainly in the Southeast.

8 Q: Does Duke Energy manufacture a  
9 telecommunication service?

10 A: We do not manufacture a service, no.

11 Q: Okay. I believe you mentioned that at some  
12 point Duke may have provided or sold  
13 appliances?

14 MR. GREEN: Excuse me. Your Honor, I don't want to  
15 object every time the word "service" or  
16 "manufacturing" is used. Obviously, we're  
17 going to hear that word today a number of  
18 times, but that is part of the issue here  
19 before you today.  
20 And so I sort of want to just -- I assume  
21 they'll object when we call it "manufacturing;"  
22 they'll have an objection to that. We have an  
23 objection sort of when they call it "service."  
24 I don't want to -- I don't want to be -- I  
25 don't want to object every time the word

1 "service" comes out of somebody's mouth, but I  
2 don't want to not have my record preserved,  
3 that I have waived any objection by not raising  
4 this issue.

5 I'm just sort of raising this to try to deal  
6 with the issue that he can testify to  
7 "service," I guess, and that's fine, but I am  
8 not -- by not objecting, I am not going along  
9 with his testimony in that regard.

10 THE COURT: Any response?

11 MR. TRESH: I guess Mr. Green is free to disagree  
12 and Mr. Monroe is certainly free to testify as  
13 having been employed at Duke for over 20 years  
14 as his view of Duke's business and what it  
15 sells.

16 THE COURT: Well, I would take that long-winding  
17 objection --

18 MR. GREEN: And I apologize.

19 THE COURT: -- to mean that you do not want him  
20 testifying to the legal definition of  
21 "service," but that you're not specifically  
22 objecting to the general definition of  
23 "service" as employed by his business.

24 MR. GREEN: No. I mean, I don't -- the Department  
25 doesn't agree, obviously, but I think he can

1           testify and talk about it as far as his view.  
2           And I'm not really objecting to that. I just  
3           don't want by not objecting to that to -- I am  
4           then not objecting to the ultimate issues for  
5           the Court's consideration. I'm protecting my  
6           record.

7   THE COURT: Did you hear what I just said?

8   MR. GREEN: Yes, I think I did. And, yes, I'm just  
9           making -- I'm trying to make clear that I  
10          understand that our understanding is the same  
11          and that I am in agreement with that.

12   THE COURT: I think your response was more  
13          convoluted than mine.

14   MR. GREEN: I apologize, Your Honor.

15   THE COURT: I'll go with my original ...

16   MR. GREEN: That would be fine. Okay. That would  
17          be fine. I just want to keep the record clear.

18   THE COURT: Okay.

19                   (Off the Record)

20   Q:   Mr. Monroe, I think you said at some point Duke  
21          was involved in the appliance business. Did  
22          Duke ever manufacture appliances?

23   A:   Duke never manufactured appliances. For a time  
24          period, you could buy white goods from a Duke  
25          Energy retail store, but we're not that

1 business anymore. We also had a water company,  
2 I believe. At one point we probably ran street  
3 cars, too, I believe.

4 Q: Okay. But none of these -- the revenue or the  
5 profits from any of these businesses, none of  
6 them eclipsed the revenue and the profits from  
7 the business of providing electric services; is  
8 that correct?

9 A: That's correct. The vast majority were from  
10 our energy services.

11 Q: Okay. And, Mr. Monroe, as a state tax director  
12 at Duke Energy, are you responsible for filing  
13 Duke Energy Corporation's state income tax  
14 returns?

15 A: That's correct.

16 Q: Okay. And did Duke Energy file original  
17 state -- South Carolina state income tax  
18 returns during the years at issue in this case?

19 A: They did.

20 Q: Okay. As part of making those filings, did you  
21 have to make a determination as to what Duke  
22 Energy's primary business was?

23 A: I guess not me personally, but somebody did.

24 Q: Did that person report up through the Duke  
25 Energy tax department?

1 A: Absolutely, yes.

2 Q: Okay. Mr. Monroe, are you familiar with the  
3 North American Industry Classification System  
4 codes?

5 A: Yes, I am.

6 Q: Mr. Monroe, you said also you're familiar with  
7 Duke Energy's federal income tax returns; is  
8 that correct?

9 A: That's correct. I was in charge of preparing  
10 federal tax returns at one point.

11 MR. TRESH: Your Honor, if I may approach the  
12 witness at the bench.

13 THE COURT: Yes, you may.

14 Q: Mr. Monroe, I'd like you to take a look at what  
15 I've just handed you, which is the instructions  
16 to Internal Revenue Code Form 1120. Are you  
17 familiar with this document?

18 A: Yes, I am.

19 Q: I'd ask you to take a look at page 18 of this  
20 document entitled "Schedule K, Other  
21 Information."

22 A: (Witness complies.) Yes.

23 THE COURT: What is the exhibit marked as?

24 MR. TRESH: We won't be entering this into --

25 THE COURT: Oh, okay.

1 MR. TRESH: -- the record as an exhibit.

2 THE COURT: All right.

3 MR. TRESH: Just asking Mr. Monroe to read it.

4 Q: Mr. Monroe, if you can look at question number  
5 two. So these are the instructions on how you  
6 prepare your federal income tax return; is that  
7 correct?

8 A: That is correct.

9 Q: And your federal income tax return is required  
10 to be filed with your South Carolina income tax  
11 return and made a part of that return; is that  
12 correct?

13 A: That is correct.

14 Q: If I can ask you to look at question two. Can  
15 you read the highlighted portion of question  
16 two?

17 A: Yes. "Using the list of codes and activities,  
18 determine from which activity the corporation  
19 derives the highest percentage of its total  
20 receipts.

21 Q: Okay. Thank you, Mr. Monroe. Can you then go  
22 to page 21, please?

23 A: (Witness complies.)

24 Q: Is that -- that section -- is that section  
25 entitled "Principal Business Activity Codes"?

1 A: That's right. It's a listing of all the  
2 principal activity codes.

3 Q: And can you please read the highlighted  
4 section?

5 A: "Using the list of activities and codes below,  
6 determine from which activity the company  
7 derives the largest percentage of its total  
8 receipts."

9 Q: Thank you, Mr. Monroe. Okay. Next --

10 MR. TRESH: If I may approach, Your Honor?

11 THE COURT: (Nods head affirmatively.)

12 MR. TRESH: Again, Your Honor, these are not  
13 exhibits. These are just informational to  
14 assist Mr. Monroe.

15 Q: Mr. Monroe, you mentioned this a moment ago,  
16 that you're familiar with the North American  
17 Industry Classification System; is that  
18 correct?

19 A: That's correct.

20 Q: I've handed you a document entitled "North  
21 American Industry Classification System, 2012  
22 NAICS, N-A-I-C-S, Definition." Is this the  
23 NAICS code that Duke included on its federal  
24 income tax return? Or includes on its federal  
25 income tax returns?

1 A: That's correct. This is what we include on our  
2 federal income tax return.

3 Q: And those federal income tax returns were filed  
4 with the State of South Carolina and made a  
5 part of the South Carolina income tax returns?

6 A: Yes.

7 Q: Can you read what's entitled "What the  
8 definition of the code is"?

9 A: Sure. We file as code 2211, which is under the  
10 "utilities" section. And the utilities  
11 section, there's two levels. The top level is  
12 "utilities" under 221. It's "Industries in the  
13 utilities subsector provide electric power,  
14 natural gas, steam supply, water supply, and  
15 sewage removal through a permanent  
16 infrastructure of lines, mains and pipes.  
17 Establishments are grouped together based on  
18 the utility service provided and the particular  
19 system or facilities required to perform the  
20 service."

21 Q: Thank you, Mr. Monroe. And there's a  
22 further -- there's a further section one can  
23 drill deeper into the NAICS code; is that  
24 correct?

25 A: That is correct.



1 Q: And if one were to drill deeper into the NAICS  
2 code that Duke used, one would get to code  
3 2211; is that correct?

4 A: That is correct.

5 MR. GREEN: Objection, leading.

6 MR. TRESH: Rephrase, Your Honor?

7 THE COURT: (Nods head affirmatively.)

8 Q: What would the deeper code under the NAICS  
9 classifications be --

10 A: Right.

11 Q: -- for utilities, Mr. Monroe?

12 A: As I said, the second level classification is  
13 2211, Electric Power Generation, Transmission  
14 and Distribution.

15 Q: And what does that code state?

16 A: Sure. It's an "industry group that comprises  
17 establishments primarily engaged in generating,  
18 transmitting and/or distributing electric  
19 power." And it's "Establishments in this  
20 industry group may perform one or more of the  
21 following activities: operate generation  
22 facilities that produce electric energy;  
23 operate transmission systems that convey the  
24 electricity from the generating -- generation  
25 facility to the distribution system; and

1           operate distribution systems that convey  
2           electric power received from the generation  
3           facility or the transmission system to the  
4           final consumer."

5    Q:     And, Mr. Monroe, what's your -- so what's your  
6           understanding of the relationship between  
7           section -- between 221 and 2211?

8    A:     221 is all types of utilities; 2211 is electric  
9           power service utilities.

10   Q:     Okay. Third document I handed you is entitled  
11           "North American Industry Classification System  
12           2012 NAICS Definition;" is that correct?

13   A:     Yes.

14   Q:     And what -- on the third document, what  
15           category is listed there?

16   A:     This is section 31, which is "manufacturing."

17   Q:     So is "manufacturing" for the purposes of the  
18           North American Industry Classification System  
19           codes that are included in the federal return,  
20           which is included in the South Carolina return,  
21           "manufacturing" -- is "manufacturing" a  
22           different category than "utility service  
23           providers"?

24   A:     Yes, "manufacturing" is a totally separate  
25           primary category.

1 Q: And that's the way that Duke Energy has always  
2 filed its returns under the "utility" category.

3 A: That is correct.

4 Q: Okay. Mr. Monroe, does South Carolina, the  
5 State of South Carolina, use federal taxable  
6 income as the starting point for computing its  
7 South Carolina taxable income?

8 A: Yes, it does.

9 Q: Mr. Monroe, did -- so you mentioned earlier  
10 that Duke Energy timely filed -- or Duke Energy  
11 filed its corporate income tax returns in South  
12 Carolina for the periods at issue. After that,  
13 did Duke Energy amend its corporate income tax  
14 returns?

15 A: Yes.

16 Q: And what years did they amend those income tax  
17 returns for?

18 A: We've amended all the years, 1978 through 2001.

19 Q: Okay. And why did Duke Energy amend its income  
20 tax returns for the years 1978 through 2001?

21 A: There's various reasons why you would amend.  
22 One of the more recurrent ones is because of  
23 federal audit adjustments, since federal  
24 taxable income is the starting point for state  
25 taxable income in South Carolina. Anytime

1           there's a change for federal purposes, we have  
2           to reflect the final determinations from the  
3           IRS to the State of South Carolina.

4    Q:     But in this case, Mr. Monroe, why did Duke  
5           Energy amend the returns -- the specific  
6           returns for the periods 1978 through 2001 in  
7           this case?

8    A:     In this case it's because we incorrectly used  
9           an apportionment method for those years.

10   Q:     When you say --

11   A:     We had to correct it.

12   Q:     When you say "we incorrectly used incorrect  
13           apportionment method," can you elaborate on  
14           that?

15   A:     Yeah, we initially used either a three-factor  
16           or four-factor apportionment method when we  
17           should have used the single gross receipts  
18           factor for service companies.

19   Q:     And has Duke Energy amended its South Carolina  
20           income tax returns before, separate and apart  
21           from the reason why you amended '78 through  
22           2001 in this case?

23   A:     Yes.

24   Q:     What would be a reason why you would have?

25   A:     As I said, federal tax changes is another

1 routine reason why we amend our tax returns.  
2 Q: Have you ever amended your state income tax  
3 returns where it resulted in additional tax,  
4 where Duke Energy had to pay additional tax?  
5 A: Absolutely.  
6 Q: So you file amended returns that reflect both  
7 refunds due to Duke Energy and reflect  
8 additional tax due to Duke Energy.  
9 A: That's correct.  
10 Q: In this case did any of the returns that you  
11 filed reflect a refund or did they reflect  
12 additional tax to South Carolina?  
13 A: In this case all the years reflected refunds.  
14 MR. TRESH: Okay. Your Honor, we've stipulated to  
15 entering into the record Duke's income tax  
16 returns -- excuse me, Duke's amended income tax  
17 returns for the years 1978 through 2001. We'd  
18 like to move those into the record.  
19 MR. GREEN: I have no objection. I believe the  
20 original returns are attached to the amended  
21 returns, in fact. Yes, no objection.  
22 THE COURT: They are marked as?  
23 MR. TRESH: (No response.)  
24 THE COURT: They're marked as?  
25 MR. TRESH: May I approach?

1 Exhibits One through Twenty-four, Your Honor.

2 THE COURT: They're admitted.

3 (Petitioner's Exhibit Numbers One through Twenty-four  
4 were admitted into evidence.)

5 MR. TRESH: May I approach?

6 (Off the Record)

7 Q: Mr. Monroe, I'd like to direct your attention  
8 to what's been marked as Petitioner's Exhibits  
9 One through Twenty-four, the Duke Energy's  
10 amended corporation state income tax returns.

11 Do you recognize these documents?

12 A: Yes.

13 Q: Okay. And you're familiar with these  
14 documents, correct?

15 A: Yes, I am.

16 MR. TRESH: Your Honor -- excuse me.

17 Q: Mr. Monroe, fast forwarding. So after you  
18 filed these refund claims, these amended income  
19 tax returns -- I'll refer to them as "refund  
20 claims" -- what did the Department do? How did  
21 the Department react to these refund claims?

22 A: They issued a denial within about a month or  
23 so.

24 Q: Okay. So they denied the refund claims. And  
25 I'd like to direct your attention now to what's

1           been marked as Petitioner's Exhibit

2           Twenty-five.

3   MR. TRESH: May I approach, Your Honor?

4   THE COURT: (Nods head affirmatively.)

5   Q:   Mr. Monroe, have you seen the document I've  
6           just handed you before?

7   A:   Yes, I have.

8   Q:   And what is that document?

9   A:   This is a letter from the South Carolina  
10          Department of Revenue dated February 12th,  
11          2003, to Duke Energy Corporation acknowledging  
12          receipt of our amended returns for 1978 through  
13          2001 and denying those same claims.

14   Q:   Okay. And how are you familiar with this  
15          document?

16   A:   Whenever I became the head of state tax in  
17          2006, I reviewed all open matters and this is  
18          one of the matters I reviewed.

19   Q:   Is this the type of document that Duke Energy  
20          would keep in its ordinary course of business?

21   A:   Yes.

22   MR. TRESH: Your Honor, I'd like to offer the  
23          Department's denial of the refund claims into  
24          evidence as Exhibit Number Twenty-five.

25   MR. GREEN: No objection.

1 THE COURT: It's admitted.

2 (Petitioner's Exhibit Number Twenty-five was admitted  
3 into evidence.)

4 Q: Mr. Monroe, prior to the date that the  
5 Department issued that denial letter, sent Duke  
6 Energy the denial letter, did the Department of  
7 Revenue ever conduct an audit of Duke Energy's  
8 refund claims, '78 through 2001?

9 A: No, they did not.

10 Q: Did they ever call you up and ask you any  
11 questions or call anybody at Duke Energy up and  
12 ask any questions about the refund claim?

13 A: I see nothing in the records that Duke kept,  
14 that are fairly extensive, that indicated any  
15 kind of questions from the DOR.

16 Q: Did the Department inquire into what Duke  
17 Energy's primary business was?

18 A: No.

19 Q: Did the Department look into any of the facts  
20 related to how Duke Energy provides electric  
21 service?

22 A: No.

23 Q: Mr. Monroe, have you been filing state income  
24 tax returns and managing state audits for a  
25 number of years?



1 A: Yes.

2 Q: How many years would you say?

3 A: I've been in charge of state and local tax

4 since 2006, so that's, you know, going on seven

5 years now and -- five years. And before that,

6 I was involved with our federal audits and also

7 some other state audits, so more than ten

8 years.

9 Q: So in your more than ten years of audit

10 experience, have Departments of Revenue ever

11 denied refund claims in this manner, without

12 auditing them or without asking any questions?

13 A: I've never seen that.

14 Q: Okay. And, Mr. Monroe, what was Duke Energy's

15 response after the Department summarily denied

16 the refund claims?

17 A: We immediately protested and appealed.

18 MR. TRESH: Your Honor, if I may approach?

19 THE COURT: You may.

20 Q: Mr. Monroe, the document that I've just handed

21 you, have you seen this document before?

22 A: Yes, I have.

23 Q: And what is this document?

24 A: This is Duke Energy's Application for Appeal,

25 Form C-245, submitted to the Department of

1           Revenue on March 12th, 2003, asking -- or  
2           seeking an appeal of 1978 through 2001 amended  
3           returns.

4    Q:     And are you familiar with this document?

5    A:     Yes.

6    Q:     And is this document of the type that's kept in  
7           the regular course of Duke Energy's business?

8    A:     Yes.

9    MR. TRESH: Your Honor, I'd like to move the protest  
10           to the Department's denial into evidence as  
11           Petitioner's Exhibit Number Twenty-six.

12   MR. GREEN: Just one second, Your Honor. I  
13           apologize.

14           No objection, Your Honor.

15   THE COURT: It's admitted.

16   MR. TRESH: Thank you, Your Honor.

17   (Petitioner's Exhibit Number Twenty-six was admitted  
18   into evidence.)

19   Q:     Mr. Monroe, after you submitted this protest,  
20           how did the Department respond to this protest?

21   A:     We received a letter from the appeals division  
22           saying, among other things, that they were  
23           going to send out auditors to audit the claim.

24   Q:     So after they had denied the refund claim, then  
25           you protested, only then the Department said

1           they were going to send out auditors to audit  
2           the claim.

3    A:     That's correct.

4    MR. TRESH: May I approach, Your Honor.

5    THE COURT: You may. However, with this witness you  
6           don't have to ask any further on that request.

7    MR. TRESH: Thank you, Your Honor.

8    Q:     Mr. Monroe, have you seen the document that  
9           I've just handed you before?

10   A:     Yes.

11   Q:     And what is it?

12   A:     It's a letter from Jan Crangle at the South  
13           Carolina Department of Revenue, who is the  
14           manager at the Office of Appeals, to Duke  
15           Energy dated April 30th, 2003, stating that the  
16           protest from Duke had been forwarded to her  
17           office and that as part of their review, the  
18           Office of Appeals had asked the auditors to  
19           confirm the amended returns and that auditors  
20           would be contacting Duke to schedule an  
21           appointment.

22   Q:     Okay. And is this letter of the type that Duke  
23           Energy would keep in its ordinary course of  
24           business and maintain?

25   A:     That is correct.

1 MR. TRESH: I'd like to offer this letter into  
2 evidence as Petitioner's Exhibit Number  
3 Twenty-seven.

4 THE COURT: That was "no objection"?

5 MR. GREEN: No objection, Your Honor. I'm sorry.

6 THE COURT: It's admitted.

7 MR. TRESH: Thank you, Your Honor.

8 (Petitioner's Exhibit Number Twenty-seven was  
9 admitted into evidence.)

10 Q: So, Mr. Monroe, this letter came after the  
11 denial. And so after you received this letter,  
12 did Duke Energy have any further contact with  
13 the Department?

14 A: Yes. The auditors contacted us and there were  
15 scheduled two separate site visits to -- a week  
16 a piece -- during 2003.

17 Q: And did they actually come out and do those  
18 site visits?

19 A: They did.

20 Q: And do you recall what occurred during those  
21 site visits? What did the auditors look at or  
22 ask?

23 A: I wasn't personally at those visits, but I  
24 imagine they requested information; we provided  
25 it.

1 MR. GREEN: Objection, Your Honor, hearsay.

2 THE COURT: Well, hearsay, speculation, that gets  
3 all kind of imagining. I'll have to sustain  
4 that.

5 MR. TRESH: Understood, Your Honor.

6 Q: Mr. Monroe, are you -- are you -- do you  
7 have -- are you aware of what the Department's  
8 auditors did? Do you have personal knowledge  
9 of what the Department's auditors did?

10 A: I did see in the records that they requested  
11 certain documents that we did provide and I do  
12 have records of those.

13 Q: And can you summarize for the Court what those  
14 records that they requested would have related  
15 to?

16 A: I know part of our claims also included  
17 correcting our receipts for short-term  
18 investments and I know they requested copies of  
19 records around their short-term investments for  
20 the audit period that we provided.

21 Q: Is there anything in Duke's records, which I  
22 believe you testified to which were extensive,  
23 that would indicate that the Department  
24 inquired into what Duke Energy's primary  
25 business was?

1 A: No.

2 Q: Is there anything in the record that -- in Duke  
3 Energy's records that would indicate that the  
4 Department ever conducted any kind of site  
5 visit to any of Duke's electric service  
6 facilities?

7 A: No.

8 Q: Okay. Mr. Monroe, I've handed you two  
9 documents. One is entitled "SAT Field Work"  
10 and one is entitled "State Audit Tracker."  
11 Have you seen these documents before?

12 A: Yes, I have.

13 Q: And are you familiar with these documents?

14 A: Yes.

15 Q: And how are you familiar with these documents?

16 A: These come out of a system that Duke corporate  
17 tax maintains where we log our audits and these  
18 are two separate entries showing field visits  
19 by the auditors on two separate occasions.

20 Q: And does Duke Energy keep these types of  
21 records in their regular course of business?

22 A: That's our standard procedure for all audits.

23 MR. TRESH: Your Honor, we'd like to move these into  
24 evidence as Exhibits Twenty-eighty-One and  
25 Twenty-eight-Two?

1 MR. GREEN: No objection, Your Honor.

2 THE COURT: They're admitted.

3 (Petitioner's Exhibit Numbers Twenty-eight-One and  
4 Twenty-eight-Two were admitted into evidence.)

5 Q: Okay. So -- Mr. Monroe, so Department -- Duke  
6 Energy files its amended income tax returns,  
7 the Department summarily denies them, then Duke  
8 Energy files a protest, auditors come out, they  
9 conduct some sort of evaluation. What happens  
10 next? What did Duke Energy do or what did the  
11 Department do?

12 A: Nothing ever came from the Department. We  
13 never received a determination.

14 Q: For how long?

15 A: Well, I became the head of state tax in 2006  
16 and when I came into the job, no determination  
17 had been issued at that time.

18 Q: So the Department scheduled field visits in or  
19 around March 12th of 2003 and came out,  
20 according to the tracker that you just  
21 testified to, in December of 2003 and as of  
22 2006 they had not issued any sort of decision?

23 A: That's correct.

24 Q: Did they ultimately issue a decision?

25 A: Yes, they did.

- 1 Q: And around when?
- 2 A: They issued one in 2010.
- 3 Q: Mr. Monroe, I've just handed you a document
- 4 entitled "Department Determination," along with
- 5 a cover letter saying the same. Have you seen
- 6 this document before?
- 7 A: Yes, I have.
- 8 Q: And are you familiar with this document?
- 9 A: Yes.
- 10 Q: How are you familiar with this document?
- 11 A: I was head of the state and local tax function
- 12 at Duke Energy when this was issued.
- 13 Q: And what is this document? Can you describe it
- 14 for us?
- 15 A: Yeah, it's the DOR's determination rejecting
- 16 our appeal of the 1978 through 2001 refund
- 17 claims, stating their determination and their
- 18 analysis.
- 19 Q: So from the time that the Department's folks
- 20 came out in 2003, this was issued -- this was
- 21 issued in February 2010?
- 22 A: That's correct.
- 23 Q: Do you know why it took the Department seven
- 24 years to issue a determination in this matter?
- 25 A: I do not know.



1 Q: Is that common for a state tax agency to take  
2 seven years to review an income tax claim?  
3 A: It's unprecedented.  
4 Q: Okay. And you don't know why the Department  
5 took seven years.  
6 A: I do not know.  
7 MR. TRESH: Okay. Your Honor, I'd like to move the  
8 Department's determination into evidence and  
9 mark it as Petitioner's Exhibit Number  
10 Twenty-nine.  
11 THE COURT: You're saying mark it. Is it already  
12 marked?  
13 MR. TRESH: Oh, we've already marked it. I'm sorry.  
14 MR. GREEN: No objection.  
15 THE COURT: It's admitted.  
16 (Petitioner's Exhibit Number Twenty-nine was admitted  
17 into evidence.)  
18 Q: Mr. Monroe, can you please turn to page three  
19 of this determination?  
20 A: (Witness complies.)  
21 Q: And if you would, could you please read the  
22 first three lines after the block quote  
23 including the footnote?  
24 A: "The taxpayer's contention that is not  
25 described by Section 12-6-2250 is incorrect.

1           The taxpayer is a manufacturer within the  
2           meaning of the statute and must apportion its  
3           income according to the prescribed three-factor  
4           formula."

5           "Moreover, the taxpayer's contention that it  
6           does not sell tangible personal property should  
7           also fail. 'Tangible personal property' is  
8           specifically defined to include 'services such  
9           as sales of electricity'" -- citing 12-36-60 of  
10          the South Carolina code. "Thus, while the  
11          taxpayer is correct that it provides a service,  
12          its service is statutorily defined as tangible  
13          personal property."

14    Q:     So the Department stated in its denial that  
15             Duke Energy is correct that it provides a  
16             service; is that accurate?

17    A:     That's what it says.

18    Q:     Mr. Monroe, are you familiar -- you mentioned  
19             a moment ago that the Department cited to  
20             Section 12-36-60 of the South Carolina code in  
21             its denial. Are you familiar with that code  
22             section?

23    A:     I am.

24    Q:     And how are you familiar with that code  
25             section?

1 A: I'm familiar with that code section because  
2 it's the chapter on sales and use tax in South  
3 Carolina and I have had those duties at Duke  
4 Energy.

5 Q: And what does Section 12-36-60 do?

6 A: 12-36-60 defines --

7 Q: It's up on the monitor.

8 A: -- defines "tangible personal property" --

9 THE COURT: It should be on your monitor.

10 THE WITNESS: It is. Thank you.

11 A: It defines "tangible personal property" for the  
12 sales and use -- sales and use tax code  
13 purposes. And, specifically, it defines it as  
14 "personal property which may be seen, weighed,  
15 measured, felt, touched or which is any other  
16 manner perceptible to the senses. It also  
17 includes services and intangibles including  
18 communications and sales of electricity."

19 Q: So the Department denied Duke Energy's refund  
20 claim on the basis -- at least in part on the  
21 basis of a sales and use tax statute, correct?

22 A: That's correct.

23 Q: And that sales and use tax statute says that  
24 the sales of electricity or sales of services;  
25 is that correct?

1 A: That's correct.

2 Q: So after the Department issued this Final

3 Agency Determination denying Duke Energy's

4 refund claim, what did Duke Energy do next?

5 A: We filed suit in the Administrative Law Court.

6 Q: Mr. Monroe, the document that I've just handed

7 you, have you seen this document before?

8 A: Yes.

9 Q: What is it?

10 A: It is a request for a contested case hearing

11 dated March 3rd, 2010.

12 Q: Are you familiar with this document?

13 A: Yes.

14 Q: And is it maintained in the regular course of

15 Duke Energy's business?

16 A: Yes.

17 MR. TRESH: Your Honor, I would like to move this

18 document into evidence. It's been marked

19 Petitioner's Exhibit Thirty.

20 MR. GREEN: No objection.

21 THE COURT: It's admitted.

22 (Petitioner's Exhibit Number Thirty was admitted into

23 evidence.)

24 Q: Mr. Monroe, after Duke Energy filed a request

25 for a contested case hearing, did the parties

1 file any prehearing statements?

2 A: Yes.

3 Q: Did the Department file a prehearing statement?

4 A: Yes, we both did.

5 Q: And did the Department later amend its

6 prehearing statement?

7 A: It did.

8 Q: Mr. Monroe, first, I'd like to direct your

9 attention to the document -- I've handed you

10 two. First one is marked "Respondent's

11 Prehearing Statement." Do you have that

12 document?

13 A: Yes, I do.

14 Q: And have you seen this document before?

15 A: I have.

16 Q: And what is this document?

17 A: It is the prehearing statement of the South

18 Carolina Department of Revenue for this

19 proceeding.

20 Q: Okay. And I'd ask you to take a look at the

21 second document.

22 A: (Witness complies.)

23 Q: It contains a cover letter attached to it. Do

24 you have that?

25 A: Yes, I do.

- 1 Q: Okay. And in that document -- what is that  
2 document?
- 3 A: It is the South Carolina Department of  
4 Revenue's Amended Prehearing Statement.
- 5 Q: Okay. And in that amended prehearing  
6 statement, if I can direct your attention to  
7 the last paragraph in the Amended Prehearing  
8 Statement.
- 9 A: Which page?
- 10 Q: Second to the last paragraph, excuse me, on the  
11 first page.
- 12 A: First page, okay.
- 13 Q: Second to the last paragraph begins, "Because  
14 Petitioner..."
- 15 A: Yes. You want me to read it?
- 16 Q: Can you read that paragraph?
- 17 A: "Because Petitioner is a manufacturer of  
18 electricity and a power service provider, it is  
19 required to use the three-factor apportionment  
20 formula in computing its South Carolina taxable  
21 income," citing to 12-6-2250.
- 22 Q: So the Department of Revenue said that Duke  
23 Energy was a manufacturer of electricity and a  
24 power service provider?
- 25 A: That's what it says.

1 Q: And did the Department ever throughout this  
2 entire process that went on for a fairly long  
3 period of time inquire into whether Duke's  
4 primary business, as measured by gross  
5 receipts, profit or otherwise, was as a  
6 manufacturer of electricity or a power service  
7 provider, acknowledging that they thought you  
8 were both?

9 A: They did not.

10 Q: Mr. Monroe, you've been employed at Duke Energy  
11 for quite some time; is that correct?

12 A: That's right; 24 years, two months.

13 Q: Okay. We've talked a lot about the sale of --  
14 Duke Energy's sale of electric service. I'd  
15 like to talk a little bit about how you provide  
16 that electric service with you. Does Duke  
17 Energy sell that electric service on a metered  
18 basis?

19 A: It does.

20 Q: And what would be your definition of "metered"?

21 A: The energy flows through a meter and we read  
22 the meter periodically and send a bill to the  
23 customer.

24 Q: Okay. And does Duke Energy provide electric  
25 service on a flat-fee basis?

1 A: Yes, we do.

2 MR. TRESH: Your Honor, if I can go back one moment.

3 We would like to enter the prehearing statement

4 and the amended prehearing statement into the

5 record as Exhibits Thirty-one and Thirty-two.

6 MR. GREEN: No objection.

7 THE COURT: They're admitted. I'll take judicial

8 notice of it, but ...

9 MR. TRESH: Thank you, Your Honor.

10 (Petitioner's Exhibit Numbers Thirty-one and

11 Thirty-two were admitted into evidence.)

12 Q: Mr. Monroe, I've handed you a few documents.

13 Are you familiar with these documents that I've

14 just handed you?

15 A: Yes, I am familiar with these.

16 Q: And what are they?

17 A: This is a -- this is a screen shot of our Duke

18 Energy South Carolina webpage showing products

19 and services.

20 Q: And how are you familiar with these documents?

21 Where have you seen them before?

22 A: I've seen them on the Internet.

23 Q: On Duke Energy's website?

24 A: Duke Energy's website, that's correct.

25 Q: Okay. And does Duke Energy regularly and



1           continually update its website?

2    A:     It does.

3    Q:     Including the document you have in front of

4           you?

5    A:     It does.

6    Q:     Is it part of Duke Energy's regular business to

7           publish this information on its website?

8    A:     We regularly publish this information, yes.

9    Q:     Okay. Direct your attention to the document

10          that's been labeled DE, four zeros, 6786.

11          Could you please read the description of

12          "outdoor lighting"?

13   A:     Yes. "Our complete turnkey services includes

14          equipment, installation, operation and

15          maintenance, all for one monthly fee."

16   Q:     Okay. Direct your attention to the second

17          document, DE and 6787.

18   A:     (Witness compiles.)

19   Q:     Excuse me, 6819. Sorry, flip one more page.

20   A:     (Witness complies.)

21   Q:     Can you read the second and third paragraphs on

22          that page?

23   A:     Sure. "We offer quality lighting solutions at

24          an affordable price. Our complete turnkey

25          service includes equipment, installation,

1 operation and maintenance, all for one monthly  
2 fee that can be added to your existing power-  
3 bill. Get everything you need from a single  
4 source. Our outdoor lighting program includes  
5 equipment, installation, project management,  
6 design, procurement, electricity, dusk to dawn  
7 lighting (photocell controlled), ongoing  
8 maintenance and repair service, all covered by  
9 one monthly fee on your regular power bill."

10 Q: So Duke Energy provides these services, along  
11 with electric service, for a single monthly  
12 fee; is that correct?

13 A: That's correct.

14 MR. TRESH: Your Honor, I'd like to move these  
15 documents into evidence as Exhibit  
16 Thirty-three.

17 MR. GREEN: No objection, Your Honor.

18 THE COURT: It's admitted.

19 (Petitioner's Exhibit Number Thirty-three was  
20 admitted into evidence.)

21 MR. TRESH: No further questions, Your Honor.

22 THE COURT: I do have a question for you. Exhibit  
23 Twenty-six, are there some pages missing? Are  
24 you looking at the one that we've got?

25 MS. TODOROVA: May I approach?

1 THE COURT: Yeah.

2 (Off the Record)

3 MR. GREEN: We're missing them in ours, as well.

4 MR. TRESH: Just one moment.

5 Your Honor, we're comfortable moving into  
6 evidence what's been submitted in Twenty-six  
7 thus far.

8 THE COURT: All right.

9 MR. GREEN: Your Honor, I think it ought to be  
10 complete.

11 MR. TRESH: We're happy to supply additional copies.  
12 We're happy to have copies made for tomorrow  
13 and substitute in a new Twenty-six into the  
14 existing Twenty-six, if that's --

15 MR. GREEN: I mean, I don't -- yeah, I don't know --

16 THE COURT: It's fine. He can submit the evidence  
17 and you can request under the Rules of Evidence  
18 that -- at this time, in fact, that it be  
19 complete.

20 So my ruling is that Exhibit Twenty-six is  
21 admitted subject to them submitting a full and  
22 complete exhibit, of which if that does not  
23 occur Exhibit Twenty-six will be denied.

24 MR. GREEN: Thank you, Your Honor.

25 MR. TRESH: Thank you, Your Honor.

1 THE COURT: All right?

2 MR. GREEN: Bear with me just one moment, please,

3 Your Honor.

4 MR. MONROE - CROSS-EXAMINATION BY MR. GREEN:

5 Q: Good morning, Mr. Monroe.

6 A: Good morning.

7 Q: Let's go back a little bit. Counsel referenced

8 with you the instructions for Form 1120,

9 correct?

10 A: Correct.

11 Q: Those are the instructions for the 2011 Form

12 1120, correct?

13 A: That is correct.

14 Q: And that is not one of the years at issue here

15 in this proceeding; is that correct?

16 A: That is correct.

17 Q: And the reference on page 18 to selecting a

18 principal business activity, it says, "You are

19 to determine from which activity the

20 corporation" --

21 THE COURT: Wait a second. Where I can be clear,

22 the question was Form 1120 of what year?

23 MR. GREEN: 2011.

24 THE COURT: Okay. Go ahead.

25 Q: So I'll repeat the question. On page 18 of

- 1           that document, I believe the statement was,  
2           "Using the list of codes and activities,  
3           determine from which activity the corporation  
4           derives the highest percentage of its total  
5           receipts." Is that correct?  
6    A:     That's what it says.  
7    Q:     And that is a decision that Duke Energy makes  
8           when it files its return; isn't that correct?  
9    A:     Based upon that instruction, yes.  
10   Q:     So the answer is "yes"?  
11   A:     Yes.  
12   Q:     Okay. And, again, on page 21 it says, "Using  
13           the list and activities of the codes below,  
14           determine from which activity the company  
15           derives the largest percentage of its total  
16           receipts." Is that correct?  
17   A:     Yes.  
18   Q:     And is that a decision that Duke Energy makes  
19           on its return?  
20   A:     Yes.  
21   Q:     Federal auditors don't particularly bring up  
22           that issue when they audit your return, do  
23           they?  
24   A:     I've never seen it.  
25   Q:     Okay. Thank you. I believe you referenced

1           some documents which were not introduced into  
2           evidence -- I'll just refer to them in the same  
3           way -- regarding the North American Industry  
4           Classification System; is that correct?

5   A:     Yes.

6   Q:     And I may go out a little out of order. I'm  
7           going to look at the thinner documents first.

8   A:     Okay.

9   Q:     "221 Utilities," that's the page I'm looking  
10          at. Are you with me?

11  A:     (No response.)

12  Q:     It says, "Sector 22 - Utilities. 221  
13          Utilities."

14  A:     Yes.

15  Q:     Okay. And that says the "2012 NAICS  
16          Definition," correct?

17  A:     That's correct.

18  Q:     And it says last revised November 7th, 2011; is  
19          that correct?

20  A:     (No response.)

21  Q:     At the very bottom of paragraph --

22  A:     Yes.

23  Q:     Okay. And the next sheet, which was "Sector 22  
24          - Utilities, 2211 Electric Power Generation."  
25          And it says also "2012 NAICS Definition;" is

1           that correct?

2    A:    Yes.

3    Q:    And it says "last revised November 7th, 2011;"

4           is that correct?

5    A:    It is correct.

6    Q:    Now, what is the last year at issue here in

7           this case based on your understanding?

8    A:    2001.

9    Q:    So this is last revised about ten years after

10          the last year at issue in this case; is that

11          correct?

12   A:    Correct.

13   Q:    And the years at issue in this case involve

14          about 23 years; is that correct?

15   A:    Yes.

16   Q:    Well, totally at issue what's filed, not really

17          what's for consideration here today; is that

18          correct?

19   A:    Yes.

20   Q:    You have no knowledge of what the NAICS

21          standard was in 1978, do you?

22   A:    I do not.

23   Q:    Thank you. And then you were referenced --

24          referred to a larger document. And that also

25          says "2012 NAICS Definition;" is that correct?

1 A: Correct.

2 Q: And if you will look at the last page of that  
3 document.

4 A: (Witness complies.)

5 THE COURT: Hold on one moment.

6 Go ahead.

7 MR. GREEN: Thank you, Your Honor.

8 Q: And on the last page of that document, the last  
9 revision date is November 7th, 2011; is that  
10 correct?

11 A: That's correct.

12 Q: Again, after the years that we're talking about  
13 here today; is that correct?

14 A: Correct.

15 Q: Thank you. Now, again, the issue -- all the  
16 amended returns that originally were filed  
17 started in 1978; is that correct?

18 A: That's correct.

19 Q: And in each one of those originally filed  
20 returns from 1978 to 2001, the company filed  
21 using a three-factor or four-factor  
22 apportionment formula; is that correct?

23 A: On the original returns, that's correct.

24 Q: And I think you categorized it as filing the  
25 amended returns was the correction of an error;



1 is that correct?

2 A: Yes.

3 Q: Now, does Duke Energy, and previously Duke  
4 Power, when it is -- its state tax returns were  
5 being prepared, does it have a quality control  
6 process it goes through?

7 A: Yes.

8 Q: And did it have a quality control process to  
9 your understanding in all the years at issue?

10 A: I don't know.

11 Q: You don't know. In your experience with the  
12 company, however, has there always been a  
13 quality control process?

14 A: In my experience, yes.

15 Q: And -- but your testimony here today is that  
16 despite that quality control process, an error  
17 went on for 23 years; is that correct?

18 A: Yes.

19 Q: Now, you have -- you are presently the director  
20 of state and local taxes for Duke Energy; is  
21 that correct?

22 A: Yes.

23 Q: And you are familiar with the records  
24 maintained, I think you testified, on the  
25 filing of state tax returns.

- 1 A: Yes.
- 2 Q: Is that correct?
- 3 A: Correct.
- 4 Q: And are you familiar with the
- 5 document -- strike that. Are you aware that a
- 6 request was made of the Department of Revenue
- 7 in two-thousand -- about 2004 or five to use
- 8 the three-factor formula as part of an economic
- 9 development process right under statute?
- 10 A: I'm --
- 11 Q: Are you aware of that?
- 12 A: I'm aware of an economic development agreement.
- 13 I don't believe it says what you just said.
- 14 Q: You do not believe that it provided for use of
- 15 a three-factor formula?
- 16 A: It does not -- the agreement does not provide
- 17 for that.
- 18 Q: You do not think that it does?
- 19 A: It makes a statement about the way the company
- 20 currently filed.
- 21 Q: But it does not say during the years that the
- 22 agreement is in place you will file using a
- 23 three-factor formula?
- 24 A: I'd have to recollect -- refresh my memory on
- 25 that, but I don't believe it says that.

1 MR. GREEN: Bear with me one moment.

2 Q: Okay. I'll move on. I think you -- I think  
3 you testified that the vast majority of the  
4 income earned by Duke Energy is from  
5 power -- sales of power, energy and service  
6 delivery in South Carolina and North Carolina;  
7 is that correct?

8 A: That's correct.

9 Q: But Duke Energy generates most of its own  
10 electricity that it sells, doesn't it?

11 A: Yes.

12 Q: If Duke Energy doesn't sell that electricity,  
13 there's no market -- it can't do any -- it  
14 can't make any money for it, can it?

15 A: Correct.

16 MR. GREEN: Bear with me one moment, please, Your  
17 Honor. Sorry, my exhibits had gotten a bit  
18 intermixed.

19 Q: Let me refer you to Petitioner's Exhibit  
20 Twenty-nine, the determination.

21 MR. GREEN: Do I have that number right? It's  
22 Twenty-nine?

23 MS. TODOROVA: Uh-huh (affirmatively responds).

24 Q: Do you have that in front of you?

25 A: Yes.

- 1 Q: And let me refer you to the page right after  
2 the cover letter.
- 3 A: Okay.
- 4 Q: And if you'll look down under there -- you see  
5 the heading marked "determination"?
- 6 A: Yes.
- 7 Q: And what does number one say?
- 8 A: It says, "The taxpayer is not entitled to  
9 utilize a single-factor formula for  
10 apportioning its taxable income."
- 11 Q: Okay. If you'll turn to page three of the  
12 determination.
- 13 A: (Witness complies.)
- 14 Q: And you testified on this page a moment ago, I  
15 believe; is that correct?
- 16 A: That's correct.
- 17 Q: If you -- if you see at the top of the page,  
18 there's a indented paragraph and then there is  
19 a paragraph -- full paragraph that starts  
20 underneath that. Do you see where I'm talking  
21 about?
- 22 A: I do.
- 23 Q: And would you recite the second sentence of  
24 that paragraph?
- 25 A: "The taxpayer is a manufacturer within the

1 meaning of the statute and must apportion its  
2 income according to the prescribed three-factor  
3 formula."  
4 Q: Thank you. And then is there a footnote  
5 attached to the end of that sentence?  
6 A: Yes.  
7 Q: And did you read from that footnote a few  
8 moments ago?  
9 A: Yes, I did.  
10 Q: But that was a footnote, correct?  
11 A: Indeed.  
12 Q: Let me refer you now to --  
13 MR. GREEN: Give me, again, one moment as I flip  
14 through some documents.  
15 Q: On Exhibit Thirty, is this a document filed by  
16 Duke Energy?  
17 A: Yes.  
18 Q: And on page -- there's a very tiny "three" at  
19 the right-hand corner of the contested case  
20 hearing, "Issues in this case." It's a Roman  
21 numeral two at the top, "Issues in this case"?  
22 A: Yes.  
23 Q: Are you with me?  
24 A: Yes.  
25 Q: Okay. Good. And it says, "Is Petitioner" --

1       it states "issues" at the top -- "Is Petitioner  
2       required to compute its South Carolina income  
3       tax liability using the single-factor  
4       apportionment method?" Is that correct?

5   A:   That's correct.

6   Q:   Let me refer you to -- let me refer you to  
7       exhibit -- I think exhibit -- bear with me,  
8       again, I apologize. I have a lot of -- Exhibit  
9       Thirty-one, yes, I apologize. I have a lot of  
10       papers to shuffle.

11  A:   Okay.

12  Q:   And do you see item three on the front page  
13       there?

14  A:   Yes.

15  Q:   "The issues presented for the determination"?

16  A:   Yes.

17  Q:   Does "A" say, "Is the Petitioner entitled to  
18       utilize a single-factor apportionment formula  
19       to calculate its South Carolina taxable  
20       income?"

21  A:   Yes.

22  Q:   And then in Exhibit Thirty-two? And the first  
23       page behind the cover letter?

24  A:   Okay.

25  Q:   And, again, item 3-A. Are you with me?

1 A: Yes.

2 Q: Okay. And does it say, "Is Petitioner entitled

3 to utilize a single-factor apportionment

4 formula to calculate its South Carolina taxable

5 income?"

6 A: Yes.

7 Q: Thank you.

8 MR. GREEN: Bear with me one moment, please, Your

9 Honor.

10 Q: Let me refer you to Exhibit Thirty-three. Are

11 you with me?

12 A: Yes.

13 Q: Okay. What is the date at the bottom

14 right-hand corner of that document?

15 A: July 26, 2010.

16 Q: And what about the next page?

17 A: Same, July 26, 2010.

18 Q: And the last page -- oh, excuse me, the next

19 page?

20 A: July 26, 2010.

21 Q: And the same for the last page?

22 A: Correct, July 26, 2010.

23 Q: Okay. And I think you referenced the "outdoor

24 lighting;" is that correct?

25 A: That is correct.

- 1 Q: And you said it's for one monthly fee; is that  
2 correct?
- 3 A: Yes.
- 4 Q: Doesn't Duke Energy have an idea on how much a  
5 light will use in a given month?
- 6 A: I don't know.
- 7 Q: You don't know. So you're testifying about the  
8 plan, but you don't know whether Duke Energy  
9 has that knowledge or not.
- 10 A: (No response.)
- 11 Q: Is that correct?
- 12 A: I know that this service is not metered, so I  
13 don't know how they would get that information.
- 14 Q: Okay. So you know it's not metered, so you  
15 don't -- but you do not know if Duke Energy has  
16 an idea of how much a light -- energy a light  
17 would consume in an average month?
- 18 A: I do not know.
- 19 MR. GREEN: Okay. Bear with me one moment.
- 20 Q: And that is for --
- 21 MR. GREEN: I'm sorry. Going back and forth, I  
22 apologize.
- 23 Q: That is for -- I think it says on page three of  
24 Exhibit Thirty-three. Are you with me?
- 25 A: No.



1 Q: I think it would be the third page back. It  
2 says "Outdoor Lighting, South Carolina."  
3 A: Okay.  
4 Q: Okay. And if you look down at the bullet  
5 points, it says "dusk to dawn lighting;" is  
6 that correct?  
7 A: That's correct.  
8 MR. GREEN: Okay. Sorry. Bear with me one moment.  
9 Your Honor, I don't have any more questions of  
10 this witness at this time.  
11 Thank you, Mr. Monroe.  
12 THE COURT: Redirect?  
13 MR. TRESH: Short redirect, Your Honor.  
14 MR. MONROE - REDIRECT EXAMINATION BY MR. TRESH:  
15 Q: Mr. Monroe, talking about the NAICS codes that  
16 we were just discussing, did Duke Energy prior  
17 to its use of NAICS codes -- you've been  
18 employed by Duke Energy for 20-something years  
19 in the tax department, correct?  
20 A: That's right, 24 years.  
21 Q: And prior to the use of NAICS codes, were SIC  
22 codes used?  
23 A: Yes, Standard Industry Classification codes  
24 were used.  
25 Q: And so was the NAICS classification, is it the

1 new version, if you will, of the SIC codes?

2 A: That's my understanding.

3 Q: Okay. And for federal income tax purposes for  
4 1978 through the current year, Duke Energy  
5 would have been required to put either an SIC  
6 code or an NAICS code on its federal income tax  
7 return?

8 A: Yes.

9 Q: And would the federal -- and would that -- the  
10 SIC codes, referring to those, did SIC  
11 classifications also have separate  
12 classifications for manufacturers versus  
13 electric service utilities?

14 A: Yes.

15 Q: Okay. And how would Duke Energy or how did  
16 Duke Energy file its returns from 1978 forward  
17 with respect to the requirement to put in  
18 either an SIC code or an NAICS code?

19 A: We used the SIC equivalent to the NAICS code  
20 for electric utility.

21 Q: And that code would have been code 4911?

22 A: That is correct, yes.

23 Q: And was there a separate code other than 4911  
24 in the SIC world for manufacturers?

25 A: Yes.

1 MR. TRESH: Thank you, Your Honor. No further  
2 questions.

3 MR. GREEN: Nothing from me, Your Honor.

4 THE COURT: You may step down.

5 (Witness excused.)

6 THE COURT: We're going to either take a short break  
7 or break for lunch.

8 MR. TRESH: Your Honor, I think our next witness may  
9 take a little bit of time. Depending upon  
10 everybody's stomachs and what the Court would  
11 like, we could either break for lunch or  
12 continue on with a short break, whatever the  
13 Court prefers.

14 THE COURT: Well, the emphasis that you gave to "a  
15 little bit of time" leads me to think that a  
16 little bit of time is like under the current  
17 vernacular "a minute." So I think I'll go with  
18 a lunch break.

19 If we can be back at 1:30?

20 MR. TRESH: Thank you, Your Honor.

21 (Lunch break from 12:10 to 1:30 p.m.)

22 THE COURT: All right. Call your next witness.

23 MR. TRESH: Thank you, Your Honor. Your Honor, Duke  
24 would like to call Dhiaa Jamil to the stand,  
25 please. Dhiaa Jamil.

1 THE COURT: Okay.

2 DHIAA M. JAMIL, P.E., having been duly sworn,

3 testifies and examines as follows:

4 MR. JAMIL - DIRECT EXAMINATION BY MR. TRESH:

5 Q: Good afternoon, Mr. Jamil.

6 A: Good afternoon.

7 Q: Can you please state and spell your full name

8 for the record, please?

9 A: Yes, it's Dhiaa Jamil. D-H-I-A-A. Last name

10 is Jamil, J-A-M-I-L.

11 Q: Thank you. Mr. Jamil, what is your business

12 address?

13 A: Recently moved. It is 550 South Tryon Street,

14 Charlotte, North Carolina 28202.

15 Q: Mr. Jamil, what is your current occupation?

16 A: I am executive vice president of nuclear

17 generation and the chief nuclear officer for

18 Duke.

19 Q: Mr. Jamil, I've just handed you a document. Do

20 you recognize that document?

21 A: Yes, I do.

22 Q: And can you describe what that document is?

23 A: That is basically my bio.

24 Q: And is your bio listed on Duke Energy's

25 website?

1 A: Yes, it is.

2 Q: Is it accurate?

3 A: Yes, it is.

4 Q: Have there been any changes in the information  
5 in that biography since you last looked at it?

6 A: No.

7 Q: Okay. Can you please describe your educational  
8 background for the Court?

9 A: I have a Bachelor's degree in electrical  
10 engineering and I am also a graduate of the  
11 Harvard Business School Advanced Management  
12 Program.

13 Q: Thank you. And do you hold any professional  
14 licenses or certifications?

15 A: Yes, I do. I am a professional engineer in the  
16 State of North Carolina and in the State of  
17 South Carolina. I have also have a technical  
18 nuclear certification, which is a certification  
19 required by ANSI -- ANSI is the American  
20 National Standards Institute -- required for  
21 anyone that manages large nuclear  
22 organizations.

23 Q: Okay. And do you hold any certifications that  
24 are issued by Duke Energy?

25 A: Yes, actually, the technical nuclear

1 certification is a certification that is issued  
2 by Duke Energy.

3 Q: Okay. And, Mr. Jamil, do you hold any  
4 memberships or leadership roles in any  
5 organizations?

6 A: Yes, I -- starting with the current ones, I am  
7 a member of the EAG, which is the Executive  
8 Advisory Group for INPO, which is the Institute  
9 of Nuclear Power Operators. I am also a member  
10 of the NSIAC, which is the Nuclear Initiative  
11 Strategic Committee for NEI, Nuclear Energy  
12 Institute.

13 I am a trustee of the UNC of Charlotte. I  
14 chair the EPIC center, which is the Energy  
15 Infrastructure and Production Center at UNC  
16 Charlotte. Previously been on the boards of  
17 several companies; typically, safety boards,  
18 nuclear safety review boards of the Tennessee  
19 Valley Authority, for Dominion Energy, an  
20 equivalent board, and for Pacific Gas and  
21 Electric Company, as well.

22 Q: Thank you. And you mentioned a moment ago that  
23 you are vice president and chief nuclear  
24 officer at Duke Energy. Have you been in that  
25 position for very long?

1 A: The current title since July of this year, but  
2 I have been the chief nuclear officer for the  
3 company since February of 2008.

4 Q: And prior to February of 2008, can you  
5 summarize for the Court your employment  
6 history?

7 A: Yes. I've been with the company for 31 years.  
8 I started as an electrical engineer, moved into  
9 engineering management in the late eighties,  
10 became an engineering manager over the  
11 electrical system in the nineties, became  
12 maintenance manager of McGuire Nuclear Station,  
13 station manager at McGuire Nuclear Station,  
14 site V.P. at McGuire Nuclear Station, site V.P.  
15 at Catawba Nuclear Station, senior V.P. of  
16 nuclear support, which included the variety of  
17 functions including nuclear engineering, and  
18 then chief nuclear officer in 2008.

19 And then in 2009, I assumed the role of chief  
20 generation officer, which I am -- I was  
21 responsible for all the generation, regulated  
22 generation across five states for the company.

23 Q: And so that -- your responsibilities associated  
24 with regulated generation, that would have  
25 included all types of Dukes's provision of

1 electricity, whether that was coal, hydro or  
2 nuclear; is that accurate?

3 A: That is correct. Any type of generation,  
4 whether it's coal, hydro, solar, wind, any  
5 aspect in the regulated business, I manage.

6 MR. TRESH: Okay. Your Honor, we'd like to move  
7 that Mr. Jamil's CV be entered into the record  
8 as Exhibit Thirty-four.

9 MR. GREEN: No objection.

10 THE COURT: It's admitted.

11 (Petitioner's Exhibit Number Thirty-four was admitted  
12 into evidence.)

13 Q: Mr. Jamil, can you please describe for the  
14 Court the process of Duke's electricity  
15 generation processes?

16 A: Well, the process involves generation stations,  
17 power stations, that convert energy into  
18 electromagnetic energy that is efficiently  
19 transmitted on transmission lines and then  
20 distributed to customers where it is available  
21 for access at the right specification for  
22 customer use.

23 Q: And what are the different processes by which  
24 Duke Energy generates electricity?

25 A: Well, there are several. There are the steam



1 cycle, which is the most commonly used, which  
2 basically relies on converting energy from a  
3 source that contains potential energy, such as  
4 coal or oil or nuclear; that is the most common  
5 form.

6 There are the combustion turbine where we would  
7 basically use a combustion cycle to generate  
8 energy, kinetic energy, which is then converted  
9 to electric energy.

10 There are the hydro plants where you use the  
11 energy stored in water. And then you have  
12 solar cells where you harness the energy in the  
13 sun, from the sun, and convert that into  
14 electric energy, or wind, which use propellers  
15 to do the same.

16 Q: And so in each of those processes, is  
17 the -- it's used to produce electricity; is  
18 that correct?

19 A: Yes.

20 Q: And is there any difference in the electricity  
21 that is provided to a customer whether that  
22 electricity comes from the sun or the wind or  
23 the water or the steam?

24 A: No, it's the same electric energy.

25 Q: It's the same electric energy. Is the

1 generation process the same for each of those?

2 A: On a macro level, yes, but in details, no; it's  
3 all different, slightly different.

4 Q: Once the -- once the energy is produced using  
5 whichever mechanism, whichever process that  
6 Duke has chosen to be most efficient, is that  
7 electricity provided -- is the electric service  
8 provided to the customer in much the same  
9 manner?

10 A: Yes.

11 Q: And would that involve transmission lines and  
12 distribution lines? Can you kind of summarize  
13 that process a bit?

14 A: Yes. So the energy is basically converted into  
15 electric energy and from that point on, we use  
16 the most efficient method to get it to the  
17 customer. That would involve transmission  
18 system, pretty elaborate transmission system,  
19 to step the voltage of the electrical energy  
20 such that we minimize the losses.

21 And then that is delivered to the distribution  
22 system, which is typically closer to the  
23 customer base, where the components of the  
24 electric energy is manipulated for the  
25 specification of the devices that are typically

1           used by customers. And that is done closer to  
2           the customers' house.

3   Q:     So it sounds like Duke Energy has developed  
4           this very elaborate system to go ahead and  
5           provide its customers with this electric  
6           service; is that accurate?

7   A:     Oh, yes, that's accurate.

8   MR. GREEN: Leading, Your Honor. Objection,  
9           leading.

10   MR. TRESH: I'll restate.

11   Q:     Has Duke Energy developed -- what type of  
12           process -- how would you describe the process  
13           in the facilities by which Duke Energy provides  
14           electricity to its customers?

15   A:     Well, it's basically three parts. It's the  
16           conversion part, which is called power  
17           plants --

18   Q:     Uh-huh (affirmatively responds).

19   A:     -- an efficient transmission system, and then  
20           a distribution system. That is how we provide  
21           electricity to our customers.

22   Q:     And you need all three to provide the electric  
23           service?

24   A:     Yes, you need all three.

25   Q:     And, in theory, could Duke Energy put a solar

1 panel on top of everybody's house and sell  
2 electric energy -- and sell the customers'  
3 electric energy that way?

4 A: Yes, we can, actually, and we actually do that.  
5 We have solar energy sites distributed  
6 throughout our system to where electricity is  
7 generated by conversion of sun energy into  
8 electrical energy. That electrical energy is  
9 manipulated at that location to be suited for  
10 customer use.

11 Q: And is Duke Energy -- Duke Energy -- is Duke  
12 Energy a regulated utility in the State of  
13 South Carolina?

14 A: Yes, we are.

15 Q: And as part of its regulated nature, is it  
16 obligated to provide electric service to South  
17 Carolina residents?

18 A: Yes, we are obligated to provide energy --  
19 electric energy to its customers.

20 Q: So you could provide the energy -- you  
21 testified you could provide the energy by  
22 sticking a solar panel on people's roofs and,  
23 in fact, do at times, but you also use these  
24 other processes to provide electric service.  
25 Why the multiple processes? Why not stick a

1 solar panel on everybody's roof?

2 A: The answer to that is, we have to provide an  
3 efficient, cost effective system and it has to  
4 be resilient to ensure that it withstands  
5 market changes for the source of fuel.  
6 So diversity of fuel becomes very important and  
7 that is why we use multiple types of -- not  
8 every location has -- is blessed with the  
9 ability to use hydro, for example. So  
10 geographical/environmental conditions also  
11 dictate what we can use.  
12 In addition, we are required by law to meet  
13 certain quotas of certain renewable energy;  
14 therefore, we would choose to do wind and sun,  
15 for example, to meet those requirements. So a  
16 variety of reasons why we have a diverse  
17 system.

18 Q: Thank you. And -- okay. Thank you. You  
19 heard -- I believe you were in the courtroom  
20 when you heard Mr. Monroe testify about flat  
21 fee and on how Duke provides electric service.  
22 Let me ask you. Does Duke Energy provide  
23 electric service on a metered basis?

24 A: Typically, yes, but not always.

25 Q: How else would Duke Energy provide electric

1 service?

2 A: There are services that we provide electric  
3 energy service on a flat base -- a flat-rate  
4 basis.

5 Q: I'm previously going to -- I'm going to show  
6 you what's been previously marked as -- and  
7 entered into the record as Petitioner's Exhibit  
8 Thirty-three. Have you seen this document  
9 before?

10 A: Yes, I have.

11 Q: And can you summarize for the Court what this  
12 document is indicative of?

13 A: It's indicative of a service that's provided by  
14 the company for outdoor lighting at a flat fee.

15 Q: Okay. And when Duke Energy provides service  
16 for a flat fee or on a metered basis, is there  
17 any difference in the electric service that's  
18 provided on these two bases, flat fee versus  
19 metered?

20 A: No, it's the same.

21 Q: And when a flat fee -- when a fixed-fee service  
22 is provided, if you billed for it on a flat  
23 fee, each month the customer gets a charge --  
24 \$50 a month, for example -- on their electric  
25 bill?

1 A: That's true, yeah.

2 Q: And on a metered basis, I assume that means

3 based upon usage; is that accurate?

4 A: Yes, that is accurate.

5 Q: What would happen if a customer didn't turn on

6 their lights? If it was billed on a metered

7 basis, would the customer not get charged for

8 electric service that month?

9 A: No, they would still be charged.

10 Q: And why is that?

11 A: Well, because your power bill for a typical

12 customer, while -- which you get in the mail

13 represents one number that represents all the

14 components that made up what you owe for that

15 service. It's really made up of two parts.

16 One part represents the capacity charge.

17 Since we are obligated by law to serve, we are

18 the provider of last resort in our service

19 territory. We have to build an infrastructure

20 to support your anticipated use of that

21 service.

22 We do projections of load growth and

23 projections of heating days and cooling days to

24 determine the infrastructure that's needed to

25 serve you, the customer, and add some reserve

1 on top of that.

2 For that infrastructure that we build, we have  
3 to get paid for. We get paid for through --  
4 the Public Service Commission decides what is  
5 a fair return on that investment and there's a  
6 flat charge that is applied to every customer  
7 class, regardless of usage.

8 In addition to that, there's a second component  
9 that is equivalent to your usage level. It's  
10 basically -- we call it a "fuel cost." So that  
11 is a passthrough and it depends entirely on  
12 your usage level.

13 So your -- if you use a lot, we have burned a  
14 lot of coal or used a lot of nuclear fuel to  
15 supply you, and that would be reflected on that  
16 component.

17 So, going back to your question, if you don't  
18 use any electricity, unplug all your devices  
19 for a month, you would still get a monthly  
20 because -- a monthly bill because that capacity  
21 charge never goes away. It's a flat charge  
22 that we are obligated to bill and, therefore,  
23 you're charged for it as a customer.

24 Q: So -- so my bill -- this bill for electric  
25 service, it contains a single monthly line



1 item: \$100, \$150 dollars. And so that bill  
2 is -- and I guess the receipts that Duke Energy  
3 would generate from the bill, are they directly  
4 linked in any way to Duke's generation -- are  
5 they entirely linked to Duke Energy's provision  
6 of electricity --

7 (Cell phone interruption.)

8 Q: Excuse me, generation of electricity? Is the  
9 entire charge on the customer's bill linked to  
10 Duke's generation of electricity?

11 A: No, it's not.

12 THE COURT: Say that again.

13 MR. TRESH: I'm sorry?

14 THE COURT: Ask that again.

15 THE WITNESS: Yeah.

16 THE COURT: I got distracted a little bit.

17 THE WITNESS: I had to think about it, too.

18 Q: Is the monthly charge that a customer receives  
19 for their electricity linked entirely to the  
20 generation of electricity? I think you  
21 testified that there were these infrastructure  
22 charges.

23 A: The answer to that is "no." In fact, the  
24 charge will be there even if I don't generate  
25 anything from any of my generating units that

1 I oversee.

2 Q: So Duke would still have some level, perhaps a  
3 lot of --

4 A: A significant level of your bill --

5 Q: -- receipts --

6 A: -- comes from the fixed charge that you have to  
7 carry because I'm obligated to be there for you  
8 in case you need it.

9 Q: And by "be there for you," would that include  
10 not just Duke's generation facilities, does it  
11 include the transmission and the distribution  
12 facilities, as well?

13 A: Certainly. It's all of that. It's a service  
14 that we are allowed to charge and it's  
15 regulated by utility commissions and they  
16 decide what is -- whether -- they decide two  
17 things, whether that infrastructure was,  
18 indeed, needed and whether -- what's the return  
19 on that infrastructure, is the second one.

20 Q: You testified a moment ago that Duke Energy  
21 provides electricity on a flat-fee basis and we  
22 referred you to Exhibit Thirty-three that's in  
23 front of you. It was noted earlier that that  
24 document is dated, I believe, 2010. Has Duke  
25 Energy provided flat-fee, fixed-fee based

1 electric service for some period of time?

2 A: Yes.

3 Q: How long would you say?

4 A: I would not have a precise but for a very long  
5 time.

6 Q: A very long time. Ten years, perhaps?

7 A: Yes, or longer.

8 Q: Or longer? Twenty years?

9 A: That's -- that would be possible. I don't have  
10 a precise date, but I've been with the company  
11 31 years and I've known about these types of  
12 services my entire career.

13 Q: Thank you. We talked a lot about electricity  
14 and electric energy, that Duke provides  
15 electric service. What is electric service and  
16 what is electricity and electric service? If  
17 you can describe those.

18 A: Electricity is electromagnetic energy. So  
19 providing electricity to you, as a customer,  
20 we're providing access. The service we provide  
21 is access to the electromagnetic field.

22 Q: And is that electromagnetic field tangible?

23 A: No.

24 Q: Does Duke Energy actually create any electrons  
25 as part of that, its use of this or creation of

1           this electromagnetic field?

2    A:    No.

3    Q:    When I get electric service, when I get this  
4           access as you described, to the electromagnetic  
5           field, what does that do for me? In the common  
6           vernacular, I don't think of my electric  
7           provider as giving me access to an  
8           electromagnetic field. But what does that  
9           access do for me, in my home, for example?

10   A:    Yeah. So you need the energy that we give you  
11           access to because you want to operate devices:  
12           toasters, ovens, air conditioners. The method  
13           of operating those utilize electrons that are  
14           already in those devices that are already in  
15           your homes.

16           We -- the service we provide allows energy to  
17           be transmitted to allow those electrons to  
18           oscillate. When they oscillate, they  
19           create -- they can perform work. The energy is  
20           transmitted to those devices through the motion  
21           of the oscillation of the electrons. So the  
22           electromagnetic field is transmitted in that  
23           manner.

24   Q:    And when I -- when Duke Energy provides access  
25           to the electricity, the electromagnetic field,

1 does it provide anything tangible to a customer  
2 as part of that access?

3 A: No.

4 Q: I've been told that in order to provide the  
5 electric -- access to the field, that Duke  
6 Energy steps up and steps down voltage. Can  
7 you describe the process or why Duke Energy  
8 does -- and why Duke Energy steps up and steps  
9 down voltage of the field?

10 A: Yes. So now we're shifting from the generation  
11 phase of the business into the transmission  
12 phase of the business.

13 Because power stations are typically located at  
14 a distance from the load, the customers --

15 typically, in order to get the energy to the  
16 customer the most efficient way, we need to  
17 manipulate the properties of the electric field  
18 such that we don't lose much of it on the way  
19 to getting it to the customers.

20 One way of doing that is to raise the voltage  
21 significantly to a very high level. Given that  
22 power is constant, when you raise the voltage,  
23 the current, which is the intensity of the  
24 field, drops to a very small value.

25 So power is the product of voltage and current.

1           So when you raise the voltage, current, or the  
2           equivalent level of power, is dropped  
3           significantly. And we transmit very low  
4           current on those wires that you see on the  
5           transmission wires.  
6           And the reason we do that is because as the  
7           field travels on that line, it is -- remember  
8           we talked about the electrons are now  
9           oscillating. When they oscillate, they create  
10          heat because they collide with other atoms.  
11          The more intense the current, the more heat you  
12          generate and, therefore, since energy is  
13          constant, we're losing energy in the process of  
14          getting it to customers.  
15          So one way to minimize that is to raise the  
16          voltage to a very high level, reduce the  
17          current, therefore, and the energy lost getting  
18          it to the customer would be minimized.  
19          On the other end of the transmission system, as  
20          you enter into the distribution system now, we  
21          do the opposite. We drop the voltage down to  
22          a level that is usable to the customer --  
23          typically 120 volts; sometimes 220 volts -- and  
24          the reverse will happen. The intensity of the  
25          current will go up allowing many users to use

1 it at the same time.

2 Q: And are these processes necessary to provide  
3 electric service in the manner that Duke does  
4 it?

5 A: Well, not -- this is not the only way to do it.

6 Q: Uh-huh (affirmatively responds).

7 A: This is -- we have learned this is a very  
8 efficient way of doing it. So it's required in  
9 the sense that it is the most efficient way of  
10 delivering the service.

11 Q: This is the most efficient way of providing the  
12 electric service. And is the provision of  
13 electric service -- does the provision of  
14 electric service entail all of these processes  
15 that you've discussed?

16 A: Yes, all of them are necessary for us to  
17 provide access to the service.

18 Q: And is providing access to the electromagnetic  
19 field, providing electricity, is that Duke  
20 Energy's primary business?

21 A: That is our primary business.

22 Q: And how would you define "primary business"?

23 A: It is our core business. This is where -- this  
24 is the reason why we exist, is to provide...

25 Q: To provide access to the electromagnetic

1 field --

2 A: Yes.

3 Q: -- and provide electricity.

4 A: To provide electricity in the form of access to  
5 the electromagnetic field.

6 Q: Okay. Does Duke Energy buy electricity, access  
7 the electromagnetic field, if you will, from --  
8 that it doesn't generate?

9 A: Certainly.

10 Q: Where does it get that electricity?

11 A: From other providers. We are obligated to  
12 provide the least cost service. So while  
13 hydroelectric plants are typically the most  
14 efficient from the source of energy -- nuclear  
15 is next -- if the load is higher and the demand  
16 is higher, we have to evaluate all the time  
17 what is the most cost effective way of  
18 delivering that service.

19 Coal, large coal plants, typically are the next  
20 in the dispatch order. Currently, because of  
21 the prices of gas, gas is competing very  
22 favorably currently; however, that could  
23 change, of course. And then we have to  
24 evaluate whether we operate some of the older  
25 plants, less efficient plants, or buy in the



1 open market.

2 So, essentially, we could deliver energy to our  
3 customers, and still charge, without  
4 generating. If somebody is offering -- if my  
5 nukes are down and there's a drought, for  
6 example, I can't use hydro, then it's  
7 conceivable that I'm buying power from somebody  
8 else and, you know, passing it on to you as the  
9 cheapest option; yet I'm still charging you  
10 because my infrastructure is still there.

11 Q: So during the time periods at issue, let's say  
12 1978 through 2001, is it fair to say that Duke  
13 Energy did not actually generate all the  
14 electricity that it sold?

15 A: Oh, it's most certainly we did not generate all  
16 the electricity that we sold.

17 Q: So you would have bought this electricity on  
18 the open market; is that accurate?

19 A: Yeah, that's accurate.

20 Q: And then you would have sold access to the  
21 electromagnetic field and collected monthly  
22 receipts from your customers?

23 A: Commensurate with the agreement that we've had  
24 with the Public Utility Commission.

25 Q: Okay. And is it conceivable that Duke Energy

1           could provide electric service to the customers  
2           in South Carolina without generating any  
3           electricity? Could it still provide the same  
4           electric service and get paid?

5    A:     Yes, that's -- that's possible.

6    Q:     And I understand that may not be the most cost  
7           efficient --

8    A:     The most -- yeah.

9    Q:     -- but is it possible?

10   A:     We have very efficient plants in the State of  
11           South Carolina, so we typically would complete  
12           with anybody.

13   Q:     I want to go back to -- earlier you testified  
14           when you said that Duke Energy doesn't provide  
15           anything tangible to its customers as part of  
16           its provision of electric service. I want to  
17           talk a little bit about the electricity. Does  
18           electricity have any weight --

19   A:     No.

20   Q:     -- to it? Can you touch electricity?

21   A:     No.

22   Q:     Can you see electricity?

23   A:     No.

24   Q:     Can you feel electricity?

25   A:     No.

1 Q: Mr. Jamil, when I stick my hand in a socket,  
2 don't I feel the electricity?

3 A: You are feeling the impact of electricity on a  
4 device and that device is your body. So if I  
5 may elaborate.

6 Q: Yes, please.

7 A: If you plug a radio into that socket, you hear  
8 music. I don't think anyone can claim that is  
9 electricity, but that is the impact of the  
10 electromagnetic field on that device. If  
11 you're insulated and you touch a line -- the  
12 transmission line that we spoke about?

13 Q: Yes.

14 A: You are touching an object that has  
15 electromagnetic field in it, but you don't feel  
16 anything. You would not feel anything. That's  
17 why a bird can sit on a transmission line.  
18 They're not feeling anything.

19 So it is only when you conduct. You are the  
20 conductor of electromagnetic field, that the  
21 way your body breaks down to that source of  
22 energy gives you that burning sensation that we  
23 call "shock." So you're feeling the impact of  
24 the energy on your body, but you're really not  
25 feeling.

1 In fact, there's electromagnetic energy right  
2 now all around us. We're not feeling it. So,  
3 back to the question, it's -- no, you cannot  
4 feel electromagnetic energy.

5 Q: When I pay my monthly power bill and Duke  
6 Energy gets receipts from the provision of  
7 electric service, access to the electromagnetic  
8 field, do I own that -- can I possess that  
9 electromagnetic field? Do I own it? Do I have  
10 any rights in it?

11 A: No, you have access to an electromagnetic  
12 field. You don't own it. You cannot keep it.  
13 No one can keep it.

14 THE COURT: You say no one can keep it. You can set  
15 up a system whereby you could store it if you  
16 wished when it came into your house.

17 THE WITNESS: You cannot store electromagnetic  
18 energy. You cannot store electricity. When  
19 you're thinking of -- Your Honor, if you're  
20 thinking about a battery, the battery actually  
21 stores a charge. A charge is different than an  
22 electromagnetic field. So there is no device  
23 that stores electricity.

24 THE COURT: So electricity can produce a charge  
25 which can be stored.

1 THE WITNESS: The electricity -- one form of  
2 generating electricity is to flow charge.

3 THE COURT: When you say "producing," I'm saying on  
4 the other end, receiving it. You can receive  
5 it and upon receiving it you can utilize the  
6 reception of that electricity to store a  
7 charge.

8 THE WITNESS: That -- yeah, that's possible. You  
9 could store a charge, but you can store a  
10 charge in many different ways.

11 THE COURT: Yeah, I understand.

12 THE WITNESS: Okay.

13 Q: Mr. Jamil, I've handed you a lengthy document  
14 a moment ago. Can you tell me what that  
15 document is?

16 A: Okay. This is our 10-K, Duke Energy's 10-K.  
17 10-K is the -- it's an annual report that we  
18 file required by the Security and Exchange  
19 Commission.

20 MR. TRESH: Your Honor, the 10-K that we've handed  
21 Mr. Jamil has been stipulated to prior and it's  
22 been marked as Exhibit Thirty-five. I'd like  
23 to enter it into the record.

24 THE COURT: It's admitted.

25 (Petitioner's Exhibit Number Thirty-five was admitted

1 into evidence.)

2 Q: Mr. Jamil, on page marked -- if you can turn  
3 the pages, you can see on the bottom right-hand  
4 corner there are markings DE --

5 A: Yeah.

6 Q: -- 2009. Can you turn to the page that's  
7 marked DE2012?

8 A: (Witness complies.) Yep.

9 Q: Can you please read the first paragraph on page  
10 one?

11 A: The one that -- under "General"?

12 Q: "General: Duke Energy Corp" -- begins "Duke  
13 Energy Corporation..."

14 A: "Duke Energy Corporation (collectively with its  
15 subsidiaries, Duke Energy) an integrated  
16 provider of energy and energy services, offer  
17 physical delivery and management of both  
18 electricity and natural gas throughout the U.S.  
19 and aboard. Duke Energy provides these and  
20 other services through seven business  
21 segments."

22 Q: Is this statement consistent with your  
23 understanding of Duke's business, Duke's  
24 primary business of providing electric service?

25 A: Yes, it is.

1 Q: Thank you. Mr. Jamil, I've just handed you  
2 another document. Have you seen this document  
3 before?

4 A: Yes, I have.

5 Q: And can you tell me what this document is?

6 A: This is a document that describes mission  
7 values and the purpose of the Public Service  
8 Commission of South Carolina who regulates Duke  
9 Energy.

10 Q: Is it entitled "Public Commission -- Public  
11 Service Commission of South Carolina  
12 Accountability Report Fiscal Year 2010-2011"?

13 A: Yes, it is.

14 Q: Have you seen this document before?

15 A: Yes, I have.

16 Q: And would you typically review Public Service  
17 Commission reports like this document?

18 A: Yes, I do.

19 Q: As part of your ordinary business  
20 responsibilities?

21 A: Yes.

22 Q: And why would you review a document like this?

23 A: Well, the Public Service Commission regulates  
24 Duke Energy and they decide whether the  
25 infrastructure that I manage is being managed

1 the most efficient way and whether capital  
2 investments that we need to make in the system  
3 are prudent and, therefore, would be reflected  
4 in our fixed portion of our rates that we  
5 charge customers.

6 Q: I'd ask you to -- direct your attention to page  
7 one of the report. It's a section entitled  
8 "Executive Summary"?

9 A: Yes.

10 Q: Can you please read the first paragraph under  
11 part one beginning with "Mission and Values"?

12 A: Yeah. "Mission and Values: The Public Service  
13 Commission of South Carolina regulates the  
14 rates and services of investor-owned public  
15 utility in the State of South Carolina and  
16 establishes just and reasonable standards for  
17 their rates and services."

18 Q: Is this report's characterization of Duke's  
19 business as one of providing services  
20 consistent with your understanding of Duke's  
21 business?

22 A: Yes, very much so.

23 MR. TRESH: Your Honor, I'd like to move this Public  
24 Service Commission report into the record as  
25 Petitioner's Exhibit Thirty-six.



1 MR. GREEN: No objection.

2 THE COURT: Okay. It's admitted.

3 MR. TRESH: Thank you, Your Honor.

4 (Petitioner's Exhibit Number Thirty-six was admitted  
5 into evidence.)

6 Q: Mr. Jamil, I've just placed another fairly  
7 lengthy document in front of you. It begins  
8 with a cover letter followed by certificate of  
9 service and then a docket number with respect  
10 to the Public Service Commission. Have you  
11 seen this document before?

12 A: Yes, I have.

13 Q: And can you describe what it is?

14 A: It is one of the many orders that we get from  
15 the Public Service Commission of South Carolina  
16 relative to our rates and our service.

17 Q: And what's the date on the cover letter that  
18 accompanies this document?

19 A: The date is October 25th, 1991.

20 Q: Okay. And is this the type of document that  
21 you would expect to maintain in the regular  
22 course of your business?

23 A: Oh, yes.

24 Q: And you're familiar with it why?

25 A: Well, this sets the rates that we charge our

1 customers, so it's a very important document  
2 for us.

3 Q: And could you -- if I could direct your  
4 attention to page ten?

5 A: (Witness complies.) Okay.

6 Q: And it's entitled "Evidence and Conclusions For  
7 Finding of Fact Number Five"?

8 A: Yes.

9 Q: If I could direct your --

10 MR. GREEN: Your Honor, I object to the introduction  
11 and discussion of this. This is a proposed  
12 order. There's no signature on it. It was not  
13 issued by the Public Service Commission. I  
14 object to it.

15 THE COURT: Well, he hadn't offered it yet. He was  
16 mainly identifying it at this point. But you  
17 want to address it now or ...

18 MR. TRESH: I'd like to have Mr. Jamil further  
19 identify the document, if that's okay.

20 THE COURT: He can identify it but he can't go into  
21 any aspect of the contents until we address the  
22 objection.

23 MR. TRESH: Okay.

24 Q: Mr. Jamil, is this the type of document that --  
25 is this Public Service order a document that

1           you would keep in your ordinary business  
2           records?

3    A:    Yes.

4    Q:    And are you familiar with these types of Public  
5           Service Commission orders, including this  
6           order?

7    A:    Yes.

8    Q:    And does this document reflect your  
9           understanding of the order that the Public  
10          Service Commission issued in October 25th,  
11          1991?

12   A:    Yes.

13   Q:    And it's kept in your ordinary course -- it's  
14          kept as an ordinary business record by Duke  
15          Energy?

16   A:    Yes.

17   MR. TRESH: Your Honor, I think this constitutes a  
18           business record exception. It constitutes a  
19           business record and, as such, should be  
20           admitted. Mr. Jamil has personal knowledge of  
21           the document and has read it. It's kept in  
22           Duke ordinary -- Duke Energy's ordinary course  
23           and reflects his understanding of what the PSC  
24           ordered.

25   MR. GREEN: It may be what he reflects his

1 understanding, but it is not on what the PSC  
2 ordered because the best evidence of what the  
3 PSC ordered would be a signed order issued by  
4 the PSC.

5 As it is, its probative value is outweighed  
6 because it's not the order they issued.  
7 Proposed orders are changed and altered all the  
8 time; the Court's well aware of that. PSC may  
9 change them, too. They may not. I don't know.  
10 But this is not the best evidence of what it  
11 is.

12 MR. TRESH: Your Honor, this document is stamped as  
13 received by the Public Service Commission as --  
14 from Duke Power. It was, indeed, received from  
15 the Duke's -- from Duke Power. To the extent  
16 that this order was changed and Counsel would  
17 like to submit any sort of evidence that this  
18 order is proposed and has since been revoked or  
19 this order is proposed and has since been  
20 changed, he's free to do so.

21 THE COURT: I don't think that's their duty, so I  
22 sustain the objection.

23 MR. GREEN: Thank you, Your Honor.

24 MR. TRESH: Your Honor, rather than offering this  
25 document as evidence of what the PSC did, this

1 document was sent by Duke Energy to the Public  
2 Service Commission, it was sent in 1991, and  
3 we'd like to present it for the proposition of  
4 it showed what Duke Energy's view of its  
5 services provided to the PSC was at that time.

6 THE COURT: That would be relevant if the state of  
7 mind of Duke Energy was at issue in this case.  
8 And the issue in this case is the application  
9 of the law. And I don't think the state of  
10 mind of the corporation is at issue. If you  
11 want to explain that.

12 MR. TRESH: Yeah. How Duke Energy has described  
13 itself regularly to its chief regulator in the  
14 State of South Carolina would seem to be  
15 relevant to the issue of whether Duke Energy  
16 provides a service or provides tangible  
17 personal property.

18 MR. GREEN: Your Honor, that document is being  
19 submitted because it was submitted to the PSC.  
20 They are trying to weight that evidence because  
21 it was filed with the PSC. Then it needs to be  
22 the PSC order issued in that rate case.  
23 We've got plenty of evidence talking about how  
24 Duke views themselves. That document is being  
25 submitted for a different reason, not the

1 reason -- different reason, which is it was  
2 filed with the PSC.

3 The order is the best evidence of what the PSC  
4 viewed and what was going on in the case. Its  
5 probative value, if any, which I don't concede  
6 there is because what they thought they were  
7 and what they called themselves on returns and  
8 stuff doesn't necessarily make them that.  
9 That document is going to the PSC issue and  
10 that's why its probative value -- there's no --  
11 it's not helpful here and the best evidence  
12 would be under Rule 1000 or so, whatever that  
13 is -- would be --

14 THE COURT: Six?

15 MR. GREEN: -- the original signed return.

16 MR. TRESH: With all due respect to Mr. Green,  
17 again, we're not making the argument at this  
18 point that this document is probative of what  
19 the PSC said or did. This document reflects  
20 how Duke Energy represented itself to its chief  
21 regulator, the PSC.  
22 Whether or not the PSC submitted a subsequent  
23 order or viewed it in a different way, Your  
24 Honor sustained that objection. This is  
25 probative of how Duke Energy represented itself

1 to its chief regulator, which is probative of  
2 the issue of service or tangible personal  
3 property.

4 THE COURT: I could let it in solely on the issue of  
5 how Duke Energy represented itself and nothing  
6 more.

7 MR. TRESH: (Nods head affirmatively.)

8 THE COURT: What is your objection about that?

9 MR. GREEN: I continue the objection because, again,  
10 it is very -- they are trying to weight this by  
11 the fact they submitted it to the PSC.

12 THE COURT: But the bottom line is it's admitted  
13 only for Duke Energy's -- how did I phrase that  
14 a while ago?

15 MR. MAYBANK: Limited.

16 MR. GREEN: How they represented themselves?

17 THE COURT: I know it's limited. How they  
18 represented themselves. It doesn't matter to  
19 whom. And I recognize that you say that the  
20 fact it's going to the PSC it carries greater  
21 weight. But that's only if I introduce it for  
22 the value of being a PSC order. If I'm only  
23 doing it -- it doesn't matter -- it doesn't  
24 carry any additional weight who they represent  
25 it to.

1 MR. GREEN: On those grounds, I'm fine with that.

2 THE COURT: All right. It's admitted only on that  
3 limited purpose.

4 MR. TRESH: Understood, Your Honor. Thank you.

5 (Petitioner's Exhibit Number Thirty-seven was  
6 admitted into evidence.)

7 Q: Mr. Jamil, if I could turn your attention to  
8 page ten of the order. Again, the section  
9 entitled "Evidence And Conclusions For Finding  
10 Of Fact Number Five"?

11 A: Yes.

12 Q: Can you read the second paragraph?

13 A: Okay. The paragraph that starts with "Duke"?

14 Q: Yes, please.

15 A: Okay. "Duke provides retail service in two  
16 states, as well as wholesale service to certain  
17 municipalities and electric membership  
18 cooperatives. Therefore, it is necessary to  
19 allocate the cost of service among  
20 jurisdictions and among customer classes within  
21 each jurisdiction."

22 Q: Mr. Jamil, have you -- have you testified  
23 before the South Carolina Public Service  
24 Commission before?

25 A: Yes.



1 Q: And are you familiar with how the South  
2 Carolina Public Service Commission -- putting  
3 aside this document, are you familiar with how  
4 the South Carolina Public Service Commission  
5 sets Duke's rates and regulated Duke during the  
6 course of your career?

7 A: Yes.

8 Q: And, to your knowledge, has Duke Energy always  
9 represented itself to the South Carolina Public  
10 Service Commission as in the business of  
11 providing electric service?

12 A: Yes.

13 Q: And, to your knowledge, has the South Carolina  
14 Public Service Commission ever done anything or  
15 issued an order that would conflict with Duke  
16 Energy's representation of its provision of a  
17 service?

18 A: No.

19 Q: Thank you. I've just placed a document in  
20 front of you. It's entitled "Before the Public  
21 Service Commission of South Carolina, Direct  
22 Testimony of Dhiaa Jamil for Duke Energy  
23 Carolinas, LLC."

24 A: Yes.

25 Q: Is that correct?

1 A: Yep.

2 Q: And have you seen this document before?

3 A: Yes.

4 Q: And can you describe what this document is?

5 A: This document is a filing. This portion of the  
6 filing to the Public Service Commission of  
7 South Carolina relates to generation assets,  
8 how have we ran them, the capital additions  
9 that we've made to them that are necessary, in  
10 conjunction with rate case hearings.

11 Q: Okay. And this is your testimony?

12 A: Yes, this is my direct testimony.

13 Q: Okay. And is this testimony, this record of  
14 your testimony, is this something that Duke  
15 would maintain in its ordinary course of  
16 business?

17 A: Yes.

18 Q: And Duke, in fact, did maintain this in its  
19 ordinary course of business?

20 A: Yes.

21 MR. TRESH: Your Honor, we'd like to move that  
22 Mr. Jamil's testimony be entered as Exhibit  
23 Thirty-eight.

24 MR. GREEN: Your Honor, I object, hearsay. It's an  
25 out-of-court statement going to the truth of

1 the matter asserted.

2 MR. TRESH: Mr. Jamil gave the direct testimony,  
3 Your Honor. He is here to testify to what that  
4 statement was and this document is reflective  
5 of the statement that he made. This wasn't  
6 made by a third party or -- or anybody else.  
7 It's his direct testimony.

8 MR. GREEN: Hearsay, Your Honor, I believe is a  
9 statement other than one made by the declarant  
10 while testifying at trial. That was other than  
11 while he was testifying at trial.

12 MR. TRESH: Your Honor, the South Carolina Code  
13 1-23-330(1), "...when a hearing will be  
14 expedited and the interests of the parties will  
15 not be prejudiced substantially, any part of  
16 the evidence may be received as additional in  
17 written form," as an exception to hearsay rule.  
18 I think that's particularly relevant when  
19 Mr. Jamil is here in person to testify as to  
20 what his testimony was.

21 THE COURT: Well, but the issue here is whether  
22 they're prejudiced by its submission. I don't  
23 think that rule's applicable. I've got myself  
24 in the wrong section again.  
25 There used to be a case, Crawford, State v.

1           Crawford, a long time ago that said if the  
2           declarant was available for cross-examination,  
3           the out-of-court statement of that declarant  
4           could still be admitted into evidence. But I  
5           thought it was -- are you from South Carolina?

6   MS. TODOROVA: No, but I've researched it.

7   THE COURT: What did she say?

8   MS. TODOROVA: I've researched it.

9   THE COURT: Oh. Was it Crawford?

10   MS. TODOROVA: I don't have the case name, but ...

11   THE COURT: Oh, well. But the -- now you've got me  
12           off track. If the declarant was available for  
13           cross-examination, the hearsay evidence could  
14           still come into evidence. And I think the  
15           Court recently adopted that thought process in  
16           another case.

17   MR. GREEN: Your Honor, the notes to Rule 801  
18           says --

19   THE COURT: Let me get to Rule 801. I don't know if  
20           I'm going to have the notes.

21   MR. TRESH: Your Honor, as you're pulling up 801, I  
22           would further note that this document was  
23           provided to Counsel as part of -- in terms of  
24           the prejudicial aspect, Counsel's been aware of  
25           this document for sometime.

1 MR. GREEN: We reserved all objections, Your Honor,  
2 other than authenticity.

3 THE COURT: Well, I figured that was coming. Okay.

4 MR. GREEN: If you look under the notes to 801, I  
5 think it's in subsection (d)(1). It'd be the  
6 third paragraph -- fourth paragraph under the  
7 notes. "Subsection (d)(1) changes the law in  
8 South Carolina. Previously, where the  
9 declarant testified at trial" --

10 THE COURT: It is State v. Caldwell.

11 MR. GREEN: I think that's right.

12 THE COURT: Yeah.

13 MR. GREEN: "Previously, where the declarant  
14 testified at trial and was subject to  
15 cross-examination, the general rules of prior  
16 statements by the declarant/witness were  
17 admissible regardless of hearsay nature." In  
18 other words, there was a change in the law when  
19 this rule was adopted.

20 THE COURT: Any response?

21 MR. TRESH: Your Honor, the response would be that  
22 even if this document were not admissible, it  
23 would be an objection to the hearsay rule on  
24 the grounds that it's not prejudicial.  
25 Mr. Green certainly has the opportunity to

1 cross-examine Mr. Jamil and his --

2 THE COURT: I'm not familiar with the exception to  
3 the hearsay rule that it's not prejudicial.  
4 The hearsay rules exist because of the nature  
5 of the prejudicial aspect of hearsay testimony  
6 and that was developed in common law.

7 MR. TRESH: Under South Carolina statutes under  
8 1-23-330(1) --

9 THE COURT: Oh, I understand.

10 MR. TRESH: -- concerning the admissibility of  
11 evidence --

12 THE COURT: Yeah.

13 MR. TRESH: -- the prejudicial nature of the  
14 testimony is -- can be considered by the Court.

15 THE COURT: And I'm considering it.

16 MR. TRESH: Yes, Your Honor.

17 THE COURT: So do you want to explain it any more to  
18 me what your position on the -- on whether this  
19 evidence should come in or not?

20 MR. TRESH: The evidence should --

21 THE COURT: I tell you what I'm going to do. I'm  
22 going to let it come in. I want to do this as  
23 a -- I guess I'm having a brain ... a proof  
24 of ...

25 MR. TRESH: Offer of proof?

1 MR. GREEN: Proffer?

2 THE COURT: Offer of proof, yeah. And I'm going to  
3 rule on it later because there's one case I  
4 want to find first. I want to make sure,  
5 because I'm familiar with State v. Caldwell.  
6 I'm familiar with the rule change and I thought  
7 the court later came back and adopted the  
8 concept of State v. Caldwell. And I just want  
9 to make sure I'm not wrong on that. But if I  
10 don't find that case, I'm going to sustain your  
11 objection.

12 MR. GREEN: Thank you.

13 MR. TRESH: Your Honor, before we make an offer of  
14 proof on the document itself, a few questions  
15 to Mr. Jamil in advance of the offer of proof.

16 THE COURT: Okay.

17 Q: Mr. Jamil, you've testified a moment ago that  
18 you do and have for -- that you have provided  
19 testimony to the South Carolina Public Service  
20 Commission; is that correct?

21 A: Yes.

22 Q: And you've provided testimony on a number of  
23 occasions?

24 A: Yes.

25 Q: And in the testimony that you've provided to

1 the Public Service Commission, how have you  
2 described Duke's business?

3 A: As an energy service provider.

4 Q: Energy service provider. And have you  
5 described that to the Public Service Commission  
6 during your testimony under oath as an energy  
7 service provider? Is that Duke's primary  
8 business? Is that the manner in which you've  
9 described it?

10 A: Yes, our primary business.

11 MR. TRESH: Okay. With respect to the offer of  
12 proof, Your Honor, referring to the document  
13 now.

14 (Petitioner's Exhibit Number Thirty-eight was  
15 introduced as an offer of proof.)

16 Q: Mr. Jamil, if I could turn your attention to  
17 page 26 of the document.

18 A: (Witness complies.)

19 THE COURT: When you finish the offer of proof, let  
20 me know so I'll know I've moved off of that  
21 phase.

22 MR. TRESH: Yes, Your Honor.

23 A: Yes, I'm there.

24 Q: Okay. There's a question that's entitled  
25 "Please summarize your conclusions about Duke



1 Energy Carolinas' generation operations,  
2 investment and cost management." You answered  
3 the question. Can you take a moment to read  
4 your answer?

5 A: Sure. The answer is, "In summary, Duke Energy  
6 Carolinas continues to safely operate its  
7 generation assets in a manner that  
8 appropriately balances affordability,  
9 reliability, and environmental stewardship.  
10 Since 1991, we have invested approximately \$6  
11 billion in our generation fleet for addition  
12 and capital improvements necessary to safely  
13 provide reliable electric service to our  
14 customers in full compliance with NRC and  
15 environmental requirements. Our operational  
16 track record demonstrates that we have been  
17 successful in the balance we have struck and  
18 continue to strike on these key attributes."

19 Q: Thank you. And does that answer that you gave  
20 in this testimony in 1991, would you say that  
21 that would reflect your testimony in any of the  
22 years at issue in this case regarding Duke  
23 Energy's primary business?

24 A: Yes.

25 MR. TRESH: Okay. Your Honor, that concludes our

1 offer of proof --

2 THE COURT: All right.

3 MR. TRESH: -- offered to that document.

4 Q: Mr. Jamil, a few more questions. We were  
5 talking a little bit earlier about storage of  
6 electrical charges. Does the electric service  
7 or the electromagnetic field that Duke provides  
8 have any physical form to it?

9 A: No.

10 Q: And can the electric field or electromagnetic  
11 field be seen in any way?

12 A: No.

13 Q: What would you say or how would you respond to  
14 the -- to the comment that when I see lightning  
15 in the air, I'm seeing electricity; is that  
16 accurate?

17 A: No.

18 Q: Why not?

19 A: Well, what you're seeing, once again, is the  
20 impact of intense electromagnetic energy, the  
21 impact of that on the median that is preventing  
22 it from connecting the circuit, basically.  
23 So, putting it in simpler terms, what you're  
24 seeing is the breakdown of the air molecules.  
25 When they are faced with an intense

1 electromagnetic field, basically, those  
2 molecules, air molecules, burn and you're  
3 seeing the burning of the air molecules as --  
4 as lightning. It's nothing more than that.  
5 Now, again, there is an electromagnetic field  
6 right now in this room and you're not seeing  
7 it.

8 Q: And --

9 THE COURT: All right. Are you through?

10 MR. TRESH: Just two more questions, Your Honor.

11 THE COURT: Going back to the ruling now. I found a  
12 case that I was talking about and now I see why  
13 I wasn't quite clear. It's an Advance Sheet  
14 for 2012, Advance Sheet 23. I don't have the  
15 case name itself.

16 It was dealing with an expert opinion on facts  
17 not in evidence and I'll read it real quickly.  
18 It's interesting that the Court of Appeals put  
19 two "however's" in one sentence. Makes me feel  
20 better about my writing.

21 It says, "Here, McHenry was allowed to rely on  
22 hearsay in his report when giving his expert  
23 opinion. However, the admission of the report  
24 simply because McHenry used it in forming his  
25 expert opinion was in error. The report

1 contained many instances of hearsay, including  
2 numerous statements by Scully."  
3 And here's the kicker: "However, the admission  
4 in evidence of inadmissible hearsay affords no  
5 basis for reversal where the out-of-court  
6 declarant later testifies at trial and is made  
7 available for cross-examination."  
8 Now, the problem with that case is, they don't  
9 say it's properly admitted. They just say it  
10 doesn't afford a basis for reversal.  
11 So, any response from -- and I'll let you go  
12 first -- well, you're the one that objected.  
13 Any response to that?

14 MR. GREEN: Based on what Your Honor read and my  
15 understanding of it, part of that sounds like  
16 an application of the expert rule regarding  
17 hearsay.

18 THE COURT: It was expert.

19 MR. GREEN: Whereas here we're just talking about  
20 straight up 801. And the rule clearly says  
21 this is hearsay; it's not admissible.

22 MR. TRESH: Your Honor --

23 MR. GREEN: And so just because you get down the  
24 road and it may not be reversible error on  
25 appeal doesn't mean it was the right decision

1 to introduce it in the first place.

2 THE COURT: I know.

3 MR. GREEN: And the right -- the right basis for  
4 introducing it or not introducing it is the  
5 rule.

6 MR. TRESH: Your Honor, I think what you just  
7 read -- and I've been familiar with it --  
8 reflects the proper policy --

9 THE COURT: I'm the most familiar with it,  
10 apparently.

11 MR. GREEN: You are, Your Honor.

12 MR. TRESH: Yes, you are, Your Honor. But I do  
13 believe it reflects sound policy in that the  
14 purpose of excluding evidence under the hearsay  
15 rule is because out-of-court statements made by  
16 a declarant are -- the opposing party would not  
17 have a chance to depose or contest the veracity  
18 of those statements.

19 Here we have a declarant that's in present  
20 person and able to be cross-examined.

21 THE COURT: I'm going to still cogitate upon this  
22 because I recognize the import of this. I  
23 recognize the purpose when the court originally  
24 did State v. Caldwell. But I also recognize  
25 the rules and the notes, so ...

1 MR. GREEN: And may I add this, Your Honor. This is  
2 direct pre-filed testimony, which is -- Your  
3 Honor is familiar with pretrial -- filed  
4 testimony, I think, that's drafted by Duke.  
5 It's filed by Duke. There's no  
6 cross-examination in here. It's essentially  
7 moving additional testimony into evidence other  
8 than what he's saying here by just saying,  
9 "Yes, I said that." I object to that.

10 MR. TRESH: He's here to be cross-examined and  
11 Mr. Green certainly has that opportunity.

12 THE COURT: All right. Go ahead.

13 MR. TRESH: Thank you, Your Honor.

14 Q: Just a couple more questions, Mr. Jamil. A few  
15 times during your testimony you've referred to  
16 this electromagnetic field, the provision of  
17 access to the field that Duke provides. Is  
18 gravity a field?

19 A: Gravity is a -- is a force.

20 Q: It's a force. Is there something called a  
21 gravitational field?

22 A: Yes.

23 Q: And is gravity a field in the same way that --  
24 is a gravitational field similar or the same as  
25 an electrical -- electromagnetic field?

1 A: Yes, in many ways it is.  
2 MR. TRESH: Your Honor, no further questions.  
3 MR. GREEN: Just a moment, Your Honor.  
4 THE COURT: While he's -- can gravity be harnessed  
5 as electricity can be harnessed or produced?  
6 THE WITNESS: Well, so, Your Honor, if I take a book  
7 that's sitting on the floor and I raise it to  
8 a level and I move it off of the shelf, you  
9 will see gravity in action.  
10 THE COURT: I understand that, but I --  
11 THE WITNESS: So -- so in a way you did enact the  
12 force of gravity by some action that you took.  
13 THE COURT: Well, can you increase gravity?  
14 THE WITNESS: No.  
15 THE COURT: Well, I guess in a centrifuge you use  
16 gravity, but ...  
17 THE WITNESS: Centrifuge is what you're thinking  
18 about is harnessing the gravitational force to  
19 perform work, yes.  
20 THE COURT: Is electricity a matter that has  
21 qualities?  
22 THE WITNESS: Electricity is not a matter.  
23 THE COURT: Okay.  
24 THE WITNESS: It's an energy. So, I'm sorry, Your  
25 Honor.

1 THE COURT: If it's not a matter, you don't have to  
2 get to the second part of the question.  
3 THE WITNESS: Yeah.  
4 THE COURT: All right.  
5 MR. JAMIL - CROSS-EXAMINATION BY MR. GREEN:  
6 Q: Mr. Jamil, good afternoon.  
7 A: Good afternoon.  
8 THE COURT: Wait a second.  
9 MR. GREEN: Bear with me a moment.  
10 THE COURT: Mr. Green, you can proceed.  
11 MR. GREEN: Thank you, Your Honor. Sorry, I'm just  
12 trying to gather my thoughts; a slow process  
13 for me.  
14 THE COURT: That's a good idea to do.  
15 Q: You've testified here today that the service  
16 that Duke Energy provides -- and I may say  
17 "Duke;" I may say "Duke Energy." I grew up in  
18 the Upstate, so I'm familiar with Duke Energy.  
19 You said Duke Energy provides access to the  
20 electromagnetic field.  
21 A: Yes.  
22 Q: Is that correct?  
23 A: That's correct.  
24 Q: But what comes into my house through the meter  
25 is a current, isn't it?



1 A: (No response.)  
2 Q: An electric current?  
3 A: No, actually, when you say "current" --  
4 "current" is one of several properties of the  
5 electric -- electromagnetic field that we  
6 provide. It's only one.  
7 Q: It's only one?  
8 A: Yeah. Voltage is another one, for example.  
9 Q: Well, a meter measures current, doesn't it?  
10 A: Yes, it does.  
11 Q: An electric meter?  
12 A: Yes, it does.  
13 Q: And a meter -- electric meter measures voltage;  
14 is that correct?  
15 A: Well, no.  
16 Q: Okay.  
17 A: So a meter -- so let me back up and -- well,  
18 maybe I should ask you to ask the question.  
19 The answer is no, it doesn't measure voltage.  
20 Q: It does not measure voltage?  
21 A: No.  
22 Q: It just measures current.  
23 A: Yes.  
24 Q: Nothing else?  
25 A: Nothing else.

1 Q: Doesn't that meter measure kilowatts?

2 A: Yeah. So that meter -- actually, the work  
3 that's being performed by the electromagnetic  
4 field is, in fact, measured in watt. And watt  
5 is nothing more than the product of voltage and  
6 current, corrected to the right power factor.

7 Q: So the wattage is the power that I'm using,  
8 correct?

9 A: Wattage is the power you're using, the  
10 magnitude of the power. So since your house is  
11 predominantly 120 volts, we measure the current  
12 portion of the service, because the other one  
13 is essentially constant.

14 Q: And if I flip on the light switch in my house,  
15 I've completed a current, haven't I?

16 A: Yes, you have.

17 Q: And when I complete that current, my lightbulb  
18 comes on.

19 A: Yes. You've completed a circuit, actually.

20 Q: Circuit, okay. But the current flows in to  
21 create the circuit; is that correct?

22 A: That's right.

23 Q: And the current is flowing in through the meter  
24 from the distribution and transmission system.

25 A: Yes.

- 1 Q: Is that correct?
- 2 A: Yes.
- 3 Q: And I think you've described a fairly elaborate
- 4 transmission and distribution system, if I've
- 5 heard your testimony correctly --
- 6 A: Yes.
- 7 Q: -- where there is a series of transformers,
- 8 some that step voltage up --
- 9 A: (Nods head affirmatively.)
- 10 Q: -- some that step down voltage; is that
- 11 correct?
- 12 A: That's correct.
- 13 Q: And between one of Duke Energy's generating
- 14 facilities and my home, there will be quite a
- 15 few transformers that step up and step down; is
- 16 that correct?
- 17 A: At least two, sometimes more.
- 18 Q: And I think you testified that the
- 19 electric -- and it's electric current on the
- 20 transmission lines; isn't that correct?
- 21 A: It's electromagnetic field. One of the
- 22 properties is current.
- 23 Q: Well, if --
- 24 A: So, in layman's terms, it's "current" but it's
- 25 "electromagnetic field."

1 Q: Okay. You're saying it's "electromagnetic  
2 field;" a layman describes it as "current."

3 A: Yes.

4 Q: But there is, in fact, a current going down  
5 that line, isn't there?

6 A: Yes, there is an electromagnetic field going  
7 down that line.

8 Q: And isn't the electromagnetic field -- well,  
9 there are two fields, aren't there, an electric  
10 field and a magnetic field?

11 A: It's electromagnetic field. It's one field.

12 Q: There's not two fields?

13 A: Well, there is a magnetic field and there is an  
14 electromagnetic field. Energy is transmitted  
15 on the -- on our system, it's an  
16 electromagnetic field.

17 Q: Okay. Well, let me ask you this. Then, if --  
18 let me state it wrong -- if a charge is not  
19 moving, there is an electric field; is that  
20 correct?

21 A: There is a field. It's commonly sometimes  
22 referred to as an "electric field," but it's a  
23 charge.

24 Q: Okay. And then the electric --

25 A: And so it does not do work.

1 Q: It does not. And if electric charge is moving  
2 in the form of a current, it creates a magnetic  
3 field; isn't that correct?

4 A: It creates an electromagnetic field.

5 Q: Not just a magnetic field?

6 A: Not just a magnetic field.

7 Q: But the electromagnetic field results from the  
8 moving current; is that correct?

9 A: Electromagnetic field is -- results -- ask the  
10 question again.

11 Q: The electromagnetic field results from the  
12 moving current; isn't that correct?

13 A: Well, not the moving current. It creates  
14 oscillation of the electrons.

15 Q: Okay. And it creates oscillation of electrons.

16 A: Yes.

17 Q: And then an electromagnetic field results.

18 A: Yeah, that's right.

19 Q: Okay. But the current moves first, correct?

20 A: Well, it's --

21 THE COURT: If I could be clear, there is not the  
22 existence of an electromagnetic field if there  
23 is not current?

24 THE WITNESS: That is very correct and that is,  
25 electromagnetic field, we -- we have defined it

1           with certain properties. One of those  
2           properties is current; the other property is  
3           voltage.

4   THE COURT: I get it.

5   THE WITNESS: So, commonly, people say "current,"  
6           but it is only one component of the  
7           electromagnetic field that we provide access  
8           to.

9   Q:    Okay. Now, in your --

10           (Noise interruption.)

11   THE COURT: All right. Here is my ruling. I let  
12           Mr. Maybank get away with it the first time.  
13           Normally I go with it on the first one. But  
14           everybody check your phones because the next  
15           time it rings it belongs to the Court and you  
16           can get it back at a purchase price of which  
17           the Court gets to name the purchase price.

18           (Noise interruption.)

19   UNIDENTIFIED SPEAKER: It's a laptop, Your Honor.  
20           It's a new one and it's driving me crazy.

21   THE COURT: Oh, I want that to apply to a laptop.  
22           Yeah, let me expand my ruling. The Court may  
23           keep the laptop.

24   MR. GREEN: I've never had music play while I was  
25           cross-examining a witness, so that is a first

1           for me.

2   THE COURT:  You've never done that good of a job.

3   MR. GREEN:  This is the first time you've heard me,  
4           though, Your Honor.

5   Q:   Your Exhibit Thirty-four, Mr. Jamil, if you  
6           could refer to that.

7   A:   (Witness complies.)  I'm there.

8   Q:   It doesn't refer to electromagnetic power, does  
9           it?

10  A:   Exhibit Thirty-four is my bio.

11  Q:   Yes, and it doesn't refer to electromagnetic,  
12           does it.

13  A:   I don't believe it does.

14  Q:   It also doesn't refer to services, does it?

15  A:   I'd have to read the whole thing with the  
16           intent of looking for the word "service," so I  
17           have not done that.

18  Q:   Well, at the bottom it says "Duke Energy" --  
19           and, correct me if I read this wrong of the  
20           last paragraph -- "Duke Energy, the largest  
21           electric power company in the United States,  
22           supplies and delivers electricity to  
23           approximately seven million customers in the  
24           Southeast and Midwest."

25  A:   That's correct.

- 1 Q: "Supplies and delivers electricity," that  
2 sounds like supplying and delivering a product.  
3 A: I don't view it that way.  
4 Q: Okay. And -- but it doesn't say the largest  
5 electromagnetic power company in the world  
6 supplies and delivers electromagnetic field,  
7 does it?  
8 A: No, the electric piece implies that.  
9 Q: Okay. All right. So -- anyway, so electric  
10 current is on the line and that is generated at  
11 one of Duke Energy's several generation  
12 facilities.  
13 A: Yes.  
14 Q: And you have generation facilities in South  
15 Carolina and North Carolina.  
16 A: Yes, we do.  
17 Q: Now, let me ask you about a couple of those.  
18 You have two nuclear plants in South Carolina;  
19 is that correct?  
20 A: Yes, we do.  
21 Q: One at Catawba.  
22 A: Two units at Catawba.  
23 Q: And when I say one, I don't mean units. I'm  
24 just saying a location.  
25 A: Yes.



- 1 Q: And then there's a location at Oconee.
- 2 A: Yes.
- 3 Q: Is that correct?
- 4 A: That's correct.
- 5 Q: And then you have four fossil generation plants
- 6 in South Carolina.
- 7 A: Yes.
- 8 Q: And these plants -- you have some hydroelectric
- 9 generation plants, too.
- 10 A: Yes, we do.
- 11 Q: Is that correct?
- 12 A: Yes.
- 13 Q: You have three of those in South Carolina.
- 14 A: I believe that's right.
- 15 Q: All right. And those generation plants I've
- 16 just described, some are nuclear, some are
- 17 water, some are fossil generation plants, I
- 18 believe is the term you used; is that correct?
- 19 A: Yeah, and some combustion turbine.
- 20 Q: And some combustion. And those operate on
- 21 generally the same process; is that correct?
- 22 A: Combustion turbine is a different process than
- 23 the steam cycle.
- 24 Q: Okay. But the combustion process and the steam
- 25 cycle, they both turn a turbine?

1 A: Combustion does not have a turbine, so --  
2 Q: Okay. But it turns the generator.  
3 A: It turns the generator.  
4 Q: Okay. And is the generator -- so all of these  
5 share a generator in common; is that correct?  
6 A: Yes.  
7 Q: And the generator turns by -- it's the -- I  
8 assume it's a fairly large machine; is that  
9 correct?  
10 A: Oh, yes.  
11 Q: A mechanical device?  
12 A: Yes.  
13 Q: And then it creates a varying magnetic field?  
14 A: Yes, it does.  
15 Q: And then that generates the electricity?  
16 A: That -- yes, that generates --  
17 Q: And then that is -- I'll say "uploaded" --  
18 that's probably not the term you used -- that  
19 is uploaded to the transmission system.  
20 A: It's connected to the transmission --  
21 Q: Connected to the transmission system, that's  
22 correct.  
23 Now, I think you testified that the electricity  
24 coming from the generator, so that you don't  
25 lose significant portions of it between the

1 generation plant and my home, is you go through  
2 the series of step ups and step downs that we  
3 talked about; is that correct?

4 A: That is correct.

5 Q: And you can -- do you make reports to the  
6 Public Service Commission about line loss  
7 issues? And that is called "line loss," isn't  
8 it, the loss of electricity during transmission  
9 and distribution?

10 A: Yes.

11 Q: Do you make reports on the expected line loss?

12 A: I personally do not.

13 Q: Do you know if that's done?

14 A: I would be speculating.

15 Q: Well, you said you were familiar with the PSC  
16 filing process.

17 A: Oh, yes, very familiar with that.

18 Q: So you would have an informed speculation.

19 A: I really don't know.

20 Q: Okay. All right. And -- but now the amount of  
21 energy that's going to be lost through this  
22 line loss process, that can be calculated,  
23 correct?

24 A: Yes, it can be calculated.

25 Q: Mathematically?

- 1 A: It can be calculated mathematically.
- 2 Q: Okay. And all electric utilities have to  
3 accommodate that issue; is that correct?
- 4 A: Everybody has to deal with that.
- 5 Q: Now, I think you said the current moving  
6 involves electrons oscillating; is that  
7 correct?
- 8 A: Electromagnetic energy moves through  
9 oscillation of -- that's one method. There are  
10 many other methods.
- 11 Q: Okay. But we were talking about -- you were  
12 talking about oscillating electrons.
- 13 A: Yes.
- 14 Q: Is that correct? Electrons have mass, don't  
15 they?
- 16 A: Yeah, electron has mass.
- 17 Q: And the speed or -- I would say "speed."  
18 The -- you measure moving current -- you can  
19 measure moving current, can't you?
- 20 A: You can measure current, so I don't understand  
21 the concept of "moving current."
- 22 Q: Well -- and that's fair enough. The movement  
23 of electric current is measured in amperes,  
24 correct?
- 25 A: Yes.

1 Q: And the term "amperes" measures the amount of  
2 electrons passing a single point in a second;  
3 is that correct?

4 A: No, an "ampere" is actually the intensity of  
5 the electromagnetic field.

6 Q: Well, an "ampere," isn't it the charge  
7 pertaining to one electron?

8 A: No.

9 Q: Explain to me where I'm wrong, then.

10 A: I don't know where you're going with it.

11 Q: Well, I'm asking you -- you're telling me -- to  
12 me, amperes measures the movement of electric  
13 current.

14 MR. TRESH: Your Honor, objection.

15 THE WITNESS: No.

16 MR. TRESH: Is Mr. Green testifying or is Mr. Jamil?

17 THE WITNESS: I -- I --

18 THE COURT: Well, I can stop both. He's reasking --  
19 he's asking the question again, but he asked a  
20 question of him.

21 It's your duty to answer the questions that are  
22 asked of you. So let's just start that  
23 process.

24 THE WITNESS: Okay.

25 MR. GREEN: Okay. Let me try again.

1 THE COURT: If you don't understand a question --

2 THE WITNESS: Yeah, I don't understand the question.

3 MR. GREEN: And let me --

4 Q: The electric current -- a charge is moving as  
5 part of electric current; isn't that correct?

6 A: No.

7 Q: Why is that not correct?

8 A: Electromagnetic field is imposed on the  
9 electron and causes it to oscillate. That is  
10 the way to transmit -- an efficient manner of  
11 transmitting electromagnetic energy to another  
12 location. Another way could be lightning, just  
13 like we spoke about. There are other ways to  
14 do -- to do that. This is one way of doing  
15 that.

16 Q: This is one way.

17 A: So you propagate -- you propagate the  
18 electromagnetic field through the oscillation  
19 of electrons. So I think what you're confusing  
20 is current with electromagnetic -- there is no  
21 current moving.

22 Q: There is no current moving in your  
23 transmission.

24 A: I'm not delivering current to you. I'm not  
25 sending an electron from my plant to you.

- 1 Q: That's not what I --
- 2 A: The electron's already there.
- 3 Q: That's not what I asked you.
- 4 A: Okay. So ampere is one component of the
- 5 electromagnetic energy.
- 6 Q: Well, "ampere" is a measurement of the strength
- 7 of current, is it not?
- 8 A: Yes.
- 9 Q: And it's measured by the amount of electrons
- 10 passing a single point in a second, isn't it?
- 11 A: No. It's the intensity of the electromagnetic
- 12 field.
- 13 Q: So it's not the intensity of the current.
- 14 A: It is the intensity of the current, the same
- 15 thing.
- 16 Q: Okay. So it is the intensity of the current.
- 17 A: Yes.
- 18 Q: Okay. And it's measured in coulombs, isn't it?
- 19 A: No.
- 20 Q: I may have mispronounced it, too. Don't --
- 21 A: "Coulomb" is the measure of the charge. It is
- 22 another property -- unit property of the
- 23 charge.
- 24 Q: All right. It's a measurement of the charge.
- 25 A: Yes.

1 Q: And electric current moves a charge, I think we  
2 said, right?  
3 A: Oscillates the charge.  
4 Q: Okay. And --  
5 THE COURT: You said oscillates?  
6 THE WITNESS: Oscillates.  
7 THE COURT: In one form of -- but it can be other  
8 forms where it doesn't.  
9 THE WITNESS: Yeah, that's right. There are other  
10 forms that do -- to do this. It doesn't have  
11 to be by oscillating an electron.  
12 THE COURT: Is the only way that Duke Energy  
13 accomplishes this goal by oscillation?  
14 THE WITNESS: Yes.  
15 Q: Let's go back -- let's go back. I think you've  
16 defined this several times as electromagnetic  
17 energy, correct? Or electromagnetic field; is  
18 that correct?  
19 A: I did not understand the question.  
20 Q: I apologize. I think you've defined this  
21 several times as you provide access to the  
22 electromagnetic field.  
23 A: Yes.  
24 Q: Is that correct? You've also defined it as  
25 electromagnetic energy; is that correct?



- 1 A: Yes.
- 2 Q: And so you defined what I use to power the  
3 lightbulb in my house as electromagnetic  
4 energy; is that correct?
- 5 A: That is the impact of the electromagnetic  
6 energy on that device.
- 7 Q: Okay. And that's what I use to power that  
8 device.
- 9 A: Yeah.
- 10 Q: Now, the electromagnetic energy that you're  
11 defining, that's different than kinetic energy?
- 12 A: Yes.
- 13 Q: And it's different than mechanical energy; is  
14 that correct?
- 15 A: Yes.
- 16 Q: Kinetic energy won't power my lightbulb, will  
17 it?
- 18 A: Not in pure form, it does not.
- 19 Q: And the same with mechanical energy, that would  
20 not in its pure form --
- 21 A: That would not --
- 22 Q: -- power my --
- 23 A: No.
- 24 Q: -- lightbulb. Now, you will -- you -- you and  
25 I did a deposition together; is that correct?

1 Do you recall that?

2 A: Yeah, we did.

3 Q: I took a deposition from you earlier this year;

4 is that correct?

5 A: Yes, I do remember.

6 Q: Do recall making a statement in that deposition

7 that you can touch electricity?

8 A: I don't recall.

9 Q: Okay. Would it help to see the deposition to

10 refresh your recollection?

11 A: If you say it is, then --

12 MR. GREEN: May I approach, Your Honor?

13 THE COURT: You may.

14 Q: There at the bottom.

15 A: (Reading.)

16 Q: It is on page 39.

17 MR. GREEN: Y'all have it?

18 A: The question says, "Am I touching electricity?"

19 Is that the question?

20 Q: Yes.

21 A: And the answer I gave was, "Absolutely not."

22 Q: Okay. Well -- and then what did you say

23 after -- right after that?

24 A: I said -- it reads as, "You're -- well, you're

25 touching electricity, yes, but you cannot feel

1 electricity."

2 Q: Okay. So at that time you did say you could

3 touch electricity; isn't that correct?

4 A: Yes, I did.

5 Q: Okay. Thank you. Now, I think we -- I'm

6 bouncing around. I'll try to walk you back to

7 where I am now. I think we talked a little bit

8 about the power in my house being measured

9 in -- excuse me, watts or kilowatts; is that

10 correct?

11 A: Yeah, watt hours is what we talked about.

12 Q: Watt hours.

13 A: Yeah.

14 Q: But now a lightbulb uses a different level of

15 electricity than my air conditioner; is that

16 correct?

17 A: Yes, and it's all watts.

18 Q: I mean, if I -- so, for instance, if I operate

19 a lightbulb for an hour, that uses

20 electricity -- less electricity than running my

21 air conditioner for one hour.

22 A: That's right.

23 Q: Now, I think you talked about the lightning and

24 you said that is not seeing electricity. And

25 if there is a downed power line and there is an

1 arc from that power line, power line is  
2 severed, that -- your testimony is that is not  
3 seeing electricity; is that correct?  
4 A: No.  
5 Q: But that is the path that the electricity  
6 follows.  
7 A: Yes.  
8 Q: Okay. And I think you focused a little bit in  
9 your testimony today on the conversion process  
10 that goes on in your generation facilities; is  
11 that correct?  
12 A: Yep.  
13 Q: And what you're after in that conversion  
14 process is mechanical energy to create electric  
15 energy; is that correct?  
16 A: Not necessarily. You know, on -- not  
17 necessarily.  
18 Q: Okay. But you are -- you are after electric  
19 energy, correct?  
20 A: Yes, we're in the business of providing  
21 electric energy service.  
22 Q: And I think we said mechanical energy by itself  
23 won't operate a lightbulb; is that correct?  
24 A: That's correct.  
25 Q: Now, a lot of your generation facilities use a

1 turbine; is that correct?

2 A: (Nods head affirmatively.)

3 Q: Not all of them.

4 A: Many of them do.

5 Q: Many of them.

6 A: Yeah.

7 Q: And the design of a turbine used in one of

8 these plants hasn't really changed since the

9 early 20th century, has it?

10 A: Not significantly.

11 Q: And the generation process that we're

12 discussing here today that Duke Energy makes

13 available, that's not really changed much since

14 the early 20th century, has it?

15 A: I mean, we've made it significantly more

16 efficient, but ...

17 Q: Used technology --

18 A: Yeah.

19 Q: -- and things like that?

20 A: Different material --

21 Q: Is that correct?

22 A: Yeah.

23 Q: But the basic process is the same.

24 A: Basic process is the same.

25 Q: And I think you said that it had been

1           determined that was the most efficient method  
2           of delivering electric energy to customers; is  
3           that correct?  
4    A:     I'm sorry, I must have misunderstood. Are you  
5           speaking about the generation or the --  
6    Q:     Well, now I'm onto the generation, transmission  
7           and distribution system.  
8    A:     Yeah, that's the most efficient method.  
9    Q:     Okay. Now, Duke Energy can't produce unlimited  
10           electricity, can it?  
11   A:     Can you repeat it? I'm sorry.  
12   Q:     I'm sorry, I think I was turning away from you.  
13           I apologize. Duke Energy can't produce  
14           unlimited electric energy, can it?  
15   A:     No.  
16   Q:     It's limited by the capacity of the generators  
17           it has; is that correct?  
18   A:     That's right.  
19   Q:     Now, when Duke Energy constructs transmission  
20           lines, you have many miles of transmission  
21           lines; is that correct?  
22   A:     That is correct.  
23   Q:     And they carry very high voltages; is that  
24           right?  
25   A:     Yes.

1 Q: And these high voltages create the  
2 electromagnetic field; is that correct?

3 A: No.

4 Q: Well, let me withdraw that question. You have  
5 an electromagnetic field accompanying these  
6 transmission lines; is that correct?

7 A: Yes.

8 Q: And there is electromagnetic -- is there  
9 electromagnetic radiation associated with this?

10 A: Sure, yes.

11 Q: And are your transmission lines -- do you do  
12 anything with how the transmission lines are  
13 strung to offset the electromagnetic radiation?

14 A: I don't understand the question.

15 Q: Well, do you -- do you --

16 MR. GREEN: Can I turn on this device, the drawing  
17 part?

18 THE COURT: Yeah.

19 (Off the Record)

20 Q: Excuse me, Mr. Jamil. I apologize for the  
21 delay. Transmission lines have more than one  
22 circuit running on the transmission tower; is  
23 that correct?

24 A: That's right.

25 Q: Sometimes two; is that correct?

1 A: That's right.  
2 Q: Sometimes three?  
3 A: I'm familiar with two.  
4 Q: Okay. You often run two. And are these -- the  
5 circuit will run so that, for instance, on the  
6 tower, part of it's on one side and part of  
7 it's on the other; is that right?  
8 A: That's right. Uh-huh (affirmatively responds).  
9 Q: And then if you have two, you may run them like  
10 that (drawing); is that correct?  
11 MR. TRESH: Your Honor, if I may, I don't think we  
12 can -- or at least I can't see it.  
13 MR. GREEN: Oh, I apologize.  
14 MR. TRESH: Thank you.  
15 MR. GREEN: I'm not doing that on purpose.  
16 Q: Then you would run them like that (drawing).  
17 A: That could potentially be -- well, that's not  
18 necessarily the way it would need to be done.  
19 Q: Okay. And you do them other ways?  
20 A: Yeah, they could be done other ways.  
21 Q: And, for instance, do you sometimes -- so like  
22 this would be "A" and this would be "A" and  
23 this would be "B" and this would be "B"  
24 (drawing); is that correct?  
25 A: No. I am -- I'm not sure that it is done that



1 way.

2 Q: All right. Fair enough. I withdraw that line.

3 Now, I think you've mentioned in your direct  
4 testimony these solar panels; is that correct?

5 A: That is correct.

6 Q: And, in fact, Duke Energy has a solar  
7 generation plant outside of Charlotte; is that  
8 correct?

9 A: That -- yeah, solar site outside of Charlotte.

10 Q: And -- but that was created about 2002, wasn't  
11 it, or later?

12 A: Later.

13 Q: Okay. And you talked a little bit about the  
14 flat fee for the lighting; is that right?

15 A: Yes.

16 THE COURT: Mr. Green?

17 MR. GREEN: Yes, sir.

18 THE COURT: We're going to have to take a short  
19 break.

20 MR. GREEN: Okay.

21 THE COURT: I have ran out of ink.

22 MR. GREEN: We can give you a pen but happy to take  
23 a break, Your Honor.

24 THE COURT: Thank you very much. I tell you what,  
25 let's just take a five-minute break for

1           everybody.

2   MR. GREEN:   Okay.

3       (Off the Record from 3:05 to 3:16 p.m.)

4   THE COURT:   All right.  You're still under oath.

5   THE WITNESS:  Yes.

6   MR. GREEN:   Thank you, Your Honor.  I think we were  
7                talking about the ...

8   THE COURT:   Solar panels.

9   Q:     Solar panels.  And I think, then, we were on --  
10           I was going to head to the flat fee for  
11           lighting.  Do you recall your testimony about  
12           it?

13  A:     Yes.

14  Q:     And you said that -- you testified that that  
15           was a -- you provided that -- you made that  
16           available for a flat fee.

17  A:     Yes.

18  Q:     Does that generate a significant amount of Duke  
19           Energy's revenues?

20  A:     It generates some revenue.  I wouldn't be able  
21           to tell you whether it's significant or not.

22  Q:     Do you -- one of the lights they were talking  
23           about, I think, is the -- I believe it was  
24           described as an outdoor light, that's dusk to  
25           dawn lighting --

- 1 A: Yes.
- 2 Q: -- with photocell control; is that correct?
- 3 A: That --
- 4 Q: And I'm referring to Exhibit Thirty-three.
- 5 A: Yes.
- 6 Q: I apologize. And depending on the hours, Duke
- 7 Energy would have an idea of how much that
- 8 light will consume, correct?
- 9 A: Not entirely correct, because we really can't
- 10 control some environmental conditions that will
- 11 play a significant factor in this.
- 12 For example, this morning, I am sure that
- 13 light, wherever it's used, ran at least one
- 14 hour or maybe more longer than on a sunny. I
- 15 don't know how it was in Columbia, but in
- 16 Charlotte it was very cloudy and that plays
- 17 into -- there's a significant amount of
- 18 variability in the amount of time that a light
- 19 like that would operate.
- 20 Q: Of course, average weather conditions can be
- 21 estimated, can't they?
- 22 A: I don't think so.
- 23 Q: You don't think so?
- 24 A: No.
- 25 Q: You can't make an estimate of the average

1 weather conditions?

2 A: We will make an estimate, but more so than not  
3 we'd be wrong.

4 Q: And so -- but you will -- you'll make an  
5 estimate and consider that as part of the  
6 pricing for the outdoor lighting?

7 A: Yes. You would make an assumption about what's  
8 reasonable and there's variables in that.

9 Q: And I think you testified -- I think I did ask  
10 you this before. You testified that some --  
11 you're familiar with the PSC in South Carolina  
12 and North Carolina.

13 A: Yes.

14 Q: Does the PSC worry about Duke Energy losing  
15 revenues?

16 A: Yes, they would.

17 Q: Now, I want to go a little bit back. I'm not  
18 sure I understood your testimony. I think you  
19 told me that as part of the electric bill  
20 there's a facilities charge; is that right?

21 A: Well, it's a capacity charge.

22 Q: Capacity charge?

23 A: Yes.

24 Q: And that's a flat fee?

25 A: Yes.

1 Q: And then there is -- you testified there was a  
2 fuel charge?

3 A: It's -- we call it the "energy charge," which  
4 is the fuel charge, basically.

5 Q: Isn't it called a "fuel charge" by the PSC?

6 A: Yes, there's fuel hearings.

7 Q: Are those the two components of my bill?

8 A: Yes.

9 Q: And the energy charge varies by the amount of  
10 power that I use?

11 A: Yes.

12 Q: And the capacity charge, that's a fairly  
13 minimal rate, isn't it?

14 A: No.

15 Q: What is the capacity charge?

16 A: It depends on your usage.

17 Q: Okay. A residential.

18 A: Yeah, it's -- it's -- a significant portion of  
19 your bill is the capacity charge.

20 Q: And when you say "significant," what do you  
21 mean?

22 A: Well, it depends on if you don't use  
23 electricity, it's a hundred percent of your  
24 bill.

25 Q: Okay. So it's significant. Is it -- I mean,

1 Mr. Tresh -- I don't think you ever testified.  
2 Mr. Tresh mentioned a hundred dollars. Is it  
3 that high?

4 MR. TRESH: Objection, Your Honor. I did not  
5 testify the capacity charge was a hundred  
6 dollars.

7 MR. GREEN: I recall Mr. Tresh -- the record  
8 reflects what it reflects. I recall him  
9 mentioning a hundred dollars.

10 MR. TRESH: Your Honor, I used an example of an  
11 electric bill of a hundred dollars. I didn't  
12 say --

13 MR. GREEN: Okay. And maybe I misunderstood. If I  
14 did, I apologize.

15 Q: But I recall a fee of a hundred dollars. Is  
16 the facilities charge -- is the capacity charge  
17 that high?

18 A: No, it would be less than that.

19 Q: Would it be less than 50 dollars?

20 A: It depends -- again, it depends on the customer  
21 class. It depends on the portion of the --  
22 your bill that is energy portion. There are  
23 variables to -- I can't tell you what  
24 percentage it is and I can't tell you the  
25 amount of it because it varies from class to

1 class.

2 Q: Okay.

3 A: But it is -- suffice it to say, it's a

4 significant portion of your bill.

5 Q: Well, I want to explore that with you just a

6 little bit.

7 A: Yeah.

8 Q: Let's just talk about a residence, since that's

9 what most of us probably are familiar with.

10 You do not know what the capacity charge is for

11 a residence for a month?

12 A: I don't have that information.

13 MR. TRESH: Your Honor, he's asked -- Mr. Green has

14 asked the same question three times.

15 THE COURT: I didn't hear the answer, so ...

16 MR. TRESH: He said he doesn't know, Your Honor.

17 THE COURT: I overrule your objection.

18 Q: Could you repeat your answer?

19 A: I don't know.

20 Q: You don't know? Thank you. So you don't know

21 if it's over 50, under 50? You don't know.

22 A: The only thing I can tell you about it is, it

23 represents all the assets that we built, all

24 the iron on the ground, all the equipment, and

25 it is a significant portion of what we do.

1           The core business is to provide electricity  
2           through installation of an infrastructure.  
3           That charge represents that massive  
4           infrastructure.  
5    Q:     But the amount of it you don't know, you  
6           testified to.  
7    A:     No, that's really not my area.  
8    Q:     I think you testified that you sometimes  
9           purchase electricity from other utilities; is  
10          that correct?  
11   A:     Yes.  
12   Q:     How is that electricity measured?  
13   A:     It is -- well, it depends. The most common  
14          way, of course, is megawatts.  
15   Q:     Okay. And that is -- represents megawatts of  
16          electric power that is transferred from another  
17          utility to you.  
18   A:     Yes.  
19   Q:     And then you transfer that to your customers.  
20   A:     Yes.  
21   Q:     Okay. And you've testified that Duke Energy  
22          provides a service; is that correct?  
23   A:     Yes.  
24   Q:     Do you think it's common to transfer a service  
25          in terms of megawatts? Let me strike that. Do



1           you think it's common to transfer a service?

2    A:    I'm not familiar with other services. I am  
3           really familiar with my service.

4    Q:    Okay.

5    A:    And my service it's very common.

6   MR. GREEN: Bear with me a moment, please, Your  
7           Honor. Beg the Court's indulgence. Sorry,  
8           Your Honor, I have a lot of different paper I'm  
9           trying to juggle.

10   Q:    Now, "electricity," Mr. Jamil, is not really a  
11           scientific term, is it?

12   A:    It's not the precise term, but it is a  
13           scientific term.

14   Q:    Did your college physics textbooks talk about  
15           electricity?

16   A:    Absolutely.

17   Q:    Not just electric energy?

18   A:    All of the -- all of the above terms were used.

19   Q:    Do college physics textbooks talk about  
20           electromagnetic energy?

21   A:    Yes.

22   Q:    Your college classes -- strike that. Strike  
23           that.

24   MR. GREEN: Bear with me one moment, Your Honor.

25           I think that's all I have of this witness, Your

1 Honor.

2 Thank you, Mr. Jamil.

3 THE COURT: Redirect?

4 MR. TRESH: Yes, Your Honor. Thank you.

5 MR. JAMIL - REDIRECT EXAMINATION BY MR. TRESH:

6 Q: Mr. Jamil, Mr. Green started in his  
7 cross-examination, he was talking about  
8 electricity when he was a Duke Power customer  
9 in the Upstate. I think I was a SCANA customer  
10 when I was in law school here in South  
11 Carolina.

12 What happens if SCANA or Duke or any electric  
13 service provider gave me current but no  
14 voltage, could you provide electric service?  
15 Is that possible?

16 A: No.

17 Q: What if I got voltage but no current?

18 A: No, that's not possible.

19 Q: Could Duke Energy provide me -- or SCANA, as  
20 the case may be -- could you provide electric  
21 service if you got rid of your distribution  
22 system?

23 A: No.

24 Q: Could you provide electric service if you got  
25 rid of your transmission system?

- 1 A: No.
- 2 Q: Could you provide electric service if you got  
3 rid of your generation assets?
- 4 A: Yes.
- 5 Q: Would Duke Energy get any receipts? Would it  
6 receive any money at all if it had its  
7 distribution and transmission assets and bought  
8 power from somewhere else and sold me electric  
9 services, would it still -- could it still earn  
10 the same amount of receipts, money?
- 11 A: Maybe not the same amount, but could certainly  
12 make a decent revenue since there are several  
13 companies that way --
- 14 Q: Would it --
- 15 A: -- utility companies.
- 16 Q: I'm sorry.
- 17 A: There are several utility companies that have  
18 exactly the model you just described.
- 19 Q: So there's several electric utilities that have  
20 transmission and distribution, they buy their  
21 power elsewhere, don't generate a thing and  
22 they're -- are those companies still considered  
23 to be primarily in the business of providing  
24 electric service?
- 25 A: Yes.

1 Q: And Duke Energy is, in your view, primarily in  
2 the business of providing electric service; is  
3 that correct?

4 A: Yes.

5 Q: Mr. Green asked you some questions around how  
6 you calculate things. I think he said amperes  
7 and kilowatts per hour. Can you calculate  
8 electricity, I think he might have said. Can  
9 you measure or calculate sunlight, the amount  
10 of sunlight?

11 A: You can measure and calculate the -- some  
12 properties of sunlight.

13 Q: In much the same way that you can measure --

14 A: Same as you do with electromagnetic, you can  
15 measure some properties of electromagnetic  
16 field or energy.

17 Q: Can you measure or calculate the wind?

18 A: You can measure or calculate some properties of  
19 wind.

20 Q: Okay. And would you think of wind or sunlight  
21 as tangible personal property?

22 A: No.

23 Q: Mr. Green also mentioned "line loss." Can you  
24 explain to the Court what "line loss" is?

25 A: Sure. As you impose electromagnetic field on

1 a wire and the electrons, that are already on  
2 the wire, they oscillate. When they oscillate,  
3 they collide with atoms and that friction  
4 generates heat, just regular heat, and that  
5 heat is energy.

6 And given that energy cannot be created, cannot  
7 be destroyed, it's just redistributed. We've  
8 just redistributed some of the electromagnetic  
9 energy that we harnessed from another form of  
10 energy into -- portions of it went into heat.  
11 So we've lost it for the useful use of  
12 customers.

13 Q: So the term "line loss" in a way, "loss" is  
14 sort of a misnomer. Do you lose anything?

15 A: You never lose anything. The amount of energy  
16 is constant.

17 Q: It's just the amount of usable energy that you  
18 can deliver to your customer that decreases  
19 because some of it evaporates into heat; is  
20 that correct?

21 A: That's right. And it exists in our universe.  
22 It just converts into a different form.

23 Q: So it's -- you're not creating energy; is that  
24 correct?

25 A: No, no one creates energy.

1 Q: You don't lose any energy in the term "line  
2 loss."  
3 A: You do not lose energy.  
4 Q: Mr. Green mentioned something about electrons.  
5 Does Duke Energy make electrons?  
6 A: No.  
7 Q: Does Duke Energy sell electrons?  
8 A: No.  
9 Q: I'd like to turn to your attention to your  
10 deposition, specifically page 39, line 20 --  
11 beginning at line 23 of the question Mr. Green  
12 asked around, "Am I touching electricity?" I  
13 believe you said -- your answer was,  
14 "Absolutely not. You're -- well, you're  
15 touching electricity, yes, but you cannot feel  
16 electricity." Was that your testimony?  
17 A: It was my testimony.  
18 Q: Can you further go on to page 40 and can you  
19 read beginning with line two? Do you have a  
20 copy of that?  
21 A: I don't have a copy of it.  
22 Q: Oh, I'm sorry. Can you, again, reading from  
23 line two through line 16, please?  
24 A: Okay. So continuing: "How can I touch  
25 electricity but not feel it?" "A good

1 example" -- the answer is: "A good example of  
2 that would be, have you ever seen a bird  
3 standing on a power line?" "Yes."  
4 "So that bird is touching the wire where the  
5 electric field is taking place, its property;  
6 yet, the bird is not feeling anything. In  
7 fact, if you suspend yourself or, you know, if  
8 I suspend myself from that same wire, I'd be  
9 holding onto the wire where electricity is  
10 flowing in the form of electric field, but I  
11 would not be feeling anything. So electricity,  
12 you cannot see it and you cannot feel it."  
13 Q: Okay. Thank you. And so let me ask the  
14 question again. Can you touch electricity?  
15 A: No.  
16 Q: Spent a little bit of time talking about solar  
17 energy. Can you operate a lightbulb with  
18 sunlight?  
19 A: No.  
20 Q: Can you operate a lightbulb with solar energy?  
21 A: Yes.  
22 Q: Taking a step back. How can you  
23 describe -- we've talked a lot about the  
24 properties of electricity and how it's  
25 transmitted. How -- in your words, how have

1           you represented -- how does Duke earn its  
2           money? What does it do?

3    A:     We provide access to an electric field. Maybe  
4           saying even more basic, we convert one form of  
5           energy into electromagnetic energy and we  
6           provide access to customers to it.

7    Q:     And that's what Duke gets paid to do. That's  
8           its primary business; is that correct?

9    A:     That is our primary business.

10   Q:     And it gets paid to provide access -- to  
11          provide this electric service; is that correct?

12   A:     Yes, that is correct.

13   MR. GREEN: Objection, leading.

14   Q:     What does Duke Energy get paid to do?

15   A:     We get paid to provide access to our customers  
16          to that electric field.

17   Q:     Mr. Green asked a question about the electric  
18          business in the twenties, I believe. If I go  
19          back to the 1920's, could you have purchased  
20          electricity for resale? Were there resellers,  
21          folks that just generated electric power and  
22          sold it to others, to your knowledge?

23   A:     I am not knowledgeable -- in the 1920's you're  
24          talking about?

25   Q:     Yeah.



1 A: I can't answer that.  
2 Q: Okay. In the 1920's was there nuclear power?  
3 A: No.  
4 Q: Was there solar power?  
5 A: No.  
6 Q: Did South Carolina Public Service Commission  
7 regulate utilities at that time, do you know?  
8 A: I don't know. I would imagine it did.  
9 Q: Was there competition, to your knowledge, among  
10 electric service providers?  
11 A: No.  
12 Q: Okay. And was there any obligation to provide  
13 service to all paying customers, to your  
14 knowledge?  
15 A: If there was a service commission, then the  
16 answer to that is "yes."  
17 MR. TRESH: Okay. No further questions, Your Honor.  
18 THE COURT: Re-cross on new matters.  
19 MR. GREEN: No re-cross, Your Honor. Thank you.  
20 THE COURT: All right. Where my notes can be clear,  
21 then, you said "line loss" is the conversion of  
22 electricity into heat?  
23 THE WITNESS: Yes, sir.  
24 THE COURT: Is that right? Okay. Let me make sure.  
25 Mechanical energy is used to create

1           electricity?

2   THE WITNESS: Could you repeat that, if you don't

3           mind, Your Honor?

4   THE COURT: I mean, I know --

5   THE WITNESS: Mechanical energy?

6   THE COURT: You testifying -- you were testifying

7           about means of producing electricity.

8   THE WITNESS: Yes.

9   THE COURT: And one was mechanical energy is used to

10          create electricity?

11   THE WITNESS: Yes. So a form of that would be --

12          hydroelectric is mechanical, movement of water.

13   THE COURT: Well, the nuclear facilities would

14          use ...

15   THE WITNESS: Well, so the distinction I would make

16          there is, nuclear energy is transformed into

17          heat first.

18   THE COURT: Is that -- and that's steam?

19   THE WITNESS: And that heat produces steam --

20   THE COURT: And that --

21   THE WITNESS: -- that creates mechanical energy --

22   THE COURT: Okay.

23   THE WITNESS: -- in the turbine.

24   THE COURT: And that would be the same with the

25          fossil plants, too?

1 THE WITNESS: Yes.

2 THE COURT: Okay. You said that there are various  
3 properties of electromagnetic field that comes  
4 in the house. One of the properties is current  
5 and the other is voltage?

6 THE WITNESS: Yes.

7 THE COURT: All right.

8 THE WITNESS: Now, there are many other properties.

9 THE COURT: Oh, more than that?

10 THE WITNESS: Yes.

11 THE COURT: Okay.

12 THE WITNESS: There are many other properties, but  
13 the useful ones to allow us to identify the  
14 intensity of that field is voltage and current.  
15 There are other things like power factor.

16 THE COURT: Well, I'll just change my notes to "the  
17 useful properties are current and voltage."

18 THE WITNESS: Yeah. The others are useful, but  
19 these are the most useful for your use, so --

20 THE COURT: Ah! Okay. Now the "most" useful  
21 properties.

22 THE WITNESS: Yes.

23 THE COURT: All right. That's the follow-up  
24 questions. Any questions on what I have asked?

25 MR. TRESH: No, sir, Your Honor.

1 MR. GREEN: No, sir, Your Honor.  
2 THE COURT: You may step down.  
3 (Witness excused.)  
4 THE COURT: 3:30.  
5 MR. GREEN: And Mr. Tresh and I just discussed and I  
6 think we will -- it would be a good time to  
7 call Mr. Joe Southard, so I will call him to  
8 the stand.  
9 THE COURT: Okay. While we're waiting, can you give  
10 us your name?  
11 THE WITNESS: My name is Joseph Pemberton Southard.  
12 THE COURT: Spell that last --  
13 THE WITNESS: S-O-U-T-H-A-R-D.  
14 JOSEPH SOUTHARD, having been duly sworn, testifies  
15 and examines as follows:  
16 MR. SOUTHARD - DIRECT EXAMINATION BY MR. GREEN:  
17 Q: What are you presently doing, Mr. Southard?  
18 A: I am retired from the Department of Revenue.  
19 Q: Is that all you're doing right now?  
20 A: I am reactivating my private pilot licence here  
21 at Owens Field.  
22 Q: You're getting ready to solo?  
23 A: Yes.  
24 Q: You're not nervous about that?  
25 A: No. I've done it before.

- 1 Q: Would you rather --
- 2 A: Just that I haven't done it in about 40 years,
- 3 so ...
- 4 Q: Would you rather solo or testify?
- 5 A: I'd rather solo, personally.
- 6 Q: How many years did you work for the Department
- 7 of Revenue, Mr. Southard?
- 8 A: Twenty-five.
- 9 Q: And what position did you hold -- what year did
- 10 you start with the Department, excuse me?
- 11 A: 19 -- July of 1986, I think.
- 12 Q: What position did you hold with the Department
- 13 during your time?
- 14 A: I was a foreign corporate sales tax auditor and
- 15 a foreign corporate income tax auditor.
- 16 Q: And did you ever conduct audits of electric
- 17 utilities as part of your employment?
- 18 A: Yes.
- 19 Q: And were you ever involved in a corporate
- 20 income tax or examination -- auditor
- 21 examination of Duke Energy involving the years
- 22 1994 to 2001?
- 23 A: Yes.
- 24 Q: And what role did you play in that examination?
- 25 A: I was -- I assisted the main auditor.

1 Q: Okay. And who was the main auditor?

2 A: Randy Wilson.

3 Q: And did you ever do audits of Duke -- did you  
4 ever do any other audits for other years for  
5 electric utilities, without going into  
6 particulars?

7 A: Yes.

8 Q: Did you understand the Department to have a  
9 position regarding the treatment of electric  
10 utilities for apportionment purposes?

11 A: Yes.

12 Q: What did you understand that position to be?

13 A: They were to be treated as manufacturers of  
14 electricity and, as such, they were required to  
15 file the three-factor formula, which then  
16 changed to the four-factor formula or  
17 double-weighted sales.

18 Q: How did you become aware of the Department --  
19 how were you made aware of the Department's  
20 position?

21 A: Through OJT, reading manuals on how to do an  
22 electric utility.

23 Q: And what is "OJT"?

24 A: On-the-job training.

25 Q: And were you ever given any documents or

1 classes or anything of the like?

2 A: Yes.

3 Q: Okay. I'm going to show you --

4 MR. GREEN: Let me mark this, I apologize.

5 (Off the Record)

6 Q: I'm going to show you what's been marked as  
7 Respondent's One. Do you recognize this  
8 document?

9 A: Yes, I --

10 MS. TODOROVA: Excuse me, Your Honor. We object.  
11 We believe that this is a hearsay.

12 MR. GREEN: It is just a manual going to the  
13 Department's position. It's not going to the  
14 truth of whether they should be treated that  
15 way. It is just simply a reflection of the  
16 Department's position, as part of the training  
17 that he got, as part of a manual that was  
18 provided to him by the Department of Revenue.

19 MS. TODOROVA: Your Honor, if I may.

20 MR. GREEN: It's not truth of the matter asserted.

21 MS. TODOROVA: It is for the truth of the matter,  
22 Your Honor. You will hear testimony from  
23 Mr. Green and Mr. Southard as to the contents  
24 of the manuals, so it is an out-of-court  
25 statement presented for the truth of the

1 matter. And it's a hearsay. It doesn't fall  
2 under any exceptions.

3 THE COURT: Well, I can -- if your theory was  
4 correct, that I'm going to hear testimony about  
5 the content of the record, then "not offered  
6 for the truth of the matter asserted" would  
7 never be a theory in which somebody could  
8 utilize because there would always be referring  
9 to the document and, therefore, that would  
10 subsume the rule, so --

11 MS. TODOROVA: But --

12 THE COURT: There must be some nuances there that --  
13 of which I must rule upon.

14 MS. TODOROVA: Correct. I mean, this document, it's  
15 not dated and it's not clear by whom it was  
16 prepared. And Mr. Southard is going to testify  
17 about this document, so we believe it's  
18 hearsay.

19 MR. GREEN: He's going --

20 THE COURT: That would be whether it's authentic.

21 MR. GREEN: Correct, and we've waived objections to  
22 authenticity.

23 MS. TODOROVA: Well --

24 MR. GREEN: But he can talk about he got it in the  
25 context of his training and his employment and



1           that he received it from the Department. He  
2           can make that testimony.

3   THE COURT: So what is this specifically offered  
4           for?

5   MR. GREEN: To show --

6   THE COURT: If it's not offered for the truth of the  
7           matter asserted, it must be offered for  
8           something.

9   MR. GREEN: It is offered to show that the  
10           Department had a policy. It's not to show the  
11           accuracy of that policy. There's really no way  
12           to show that policy. I mean, then no written  
13           document could show the policy, then you could  
14           never prove the Department policy.

15   MS. TODOROVA: Your Honor, this is exactly --

16   MR. GREEN: Let me --

17   MS. TODOROVA: Oh, I'm sorry. I didn't realize you  
18           were not finished, Mr. Green.

19   MR. GREEN: It is just to show the Department's  
20           policy was how treating electricity companies  
21           for apportionment purposes. It's not to show  
22           the accuracy of that thing. It's not to show  
23           that it was correct under the statute; we  
24           contend it was, but it doesn't show that. It  
25           just shows the Department had a policy. If you

1           can't show a writing about the Department's  
2           policy --

3   THE COURT: Oh, I thought he was saying something on  
4           the other side. Okay.

5   MR. GREEN: I may have said that and it's not what I  
6           meant. I'm just saying a writing is a way to  
7           prove that there was the policy.

8   THE COURT: I understand.

9   MR. GREEN: It's not the accuracy of the policy or  
10          the correctness.

11   THE COURT: I understand.

12   MR. GREEN: So that's how we submit it.

13   THE COURT: All right. For the existence of the  
14          policy.

15   MR. GREEN: Existence of the policy.

16   THE COURT: Any response?

17   MS. TODOROVA: We still believe that it's hearsay.  
18           I mean, it is offered for the fact that this is  
19           the Department's policy. And I understand that  
20           there's no other document that would indicate  
21           the Department's policy; however, that is not  
22           our concern.

23   THE COURT: Well --

24   MS. TODOROVA: The Department --

25   THE COURT: -- the problem with that is the

1 definition of "hearsay."  
2 MS. TODOROVA: Uh-huh (affirmatively responds).  
3 THE COURT: And so thinking through the definition  
4 of "hearsay," which is offered for the truth of  
5 the matter asserted --  
6 MS. TODOROVA: Correct.  
7 THE COURT: -- and they're saying it's not offered  
8 for the truth of the matter asserted but the  
9 existence of the policy, I overrule the  
10 objection.  
11 MR. GREEN: Thank you, Your Honor.  
12 Q: I'm sorry, I may backtrack on you,  
13 Mr. Southard, and I apologize.  
14 A: That's okay.  
15 Q: Do you recognize this document?  
16 A: Yes.  
17 Q: And what is this document?  
18 A: It's an Income Tax Division Foreign Corporate  
19 Training Manual.  
20 Q: And do you recall the appearance of that  
21 document?  
22 A: The one I saw when I was there was red in  
23 color.  
24 Q: And would this look like the document that you  
25 saw originally?

1 A: Yes.

2 Q: And have you seen this document before?

3 A: Yes.

4 Q: And is the copy that you have that's introduced  
5 as an exhibit, is that exactly the same as this  
6 provision here?

7 A: Yes.

8 MR. GREEN: Thank you, Your Honor. I move the  
9 introduction of Respondent's One into evidence.

10 THE COURT: You maintain your objection, I assume?

11 MS. TODOROVA: Yes, please.

12 THE COURT: Then it's admitted it over that  
13 objection.

14 MR. GREEN: Thank you, Your Honor.

15 (Respondent's Exhibit Number One was admitted into  
16 evidence.)

17 Q: In what context did you become aware of  
18 Respondent's One?

19 A: (No response.)

20 Q: In what context did you become aware of that  
21 document? How did you become aware of that  
22 document?

23 A: When I became a foreign corporate income tax  
24 auditor and in my initial training for this  
25 type of entity --

1 Q: Okay.

2 A: -- business.

3 Q: I'm sorry.

4 A: In this type of business entity, electrical.

5 Q: Okay. Were you aware of this document before

6 this present litigation that we're here for

7 today?

8 A: Yes.

9 Q: And did you refer to that document during your

10 employment?

11 A: Yes.

12 Q: Let me refer you to page 37 of that document.

13 A: Okay.

14 Q: And do you see where it says "power company"?

15 A: Yes.

16 Q: And would you read that, please?

17 A: "Power company: A power company is considered

18 to be a manufacturer and must use the

19 three-factor formula."

20 Q: To your knowledge, is that how the Department

21 treated power companies for apportionment

22 purposes?

23 A: Yes.

24 Q: Are you aware of any challenges to that

25 Department position, other than that posed by

1 Duke Energy?

2 A: No.

3 MR. GREEN: Thank you, Your Honor. I have no

4 further questions.

5 THE COURT: Any questions?

6 MR. SOUTHARD - CROSS-EXAMINATION BY MR. TRESH:

7 Q: Good afternoon, Mr. Southard.

8 A: Good afternoon.

9 Q: How are you?

10 A: I'm wonderful.

11 Q: I have a couple of questions for you.

12 A: All right.

13 Q: When you were at the Department, did you have

14 any supervisory responsibilities?

15 A: No.

16 Q: And who did you report to while you were at the

17 Department?

18 A: Do you want the name of the individual or ...

19 Q: The title of the person you reported to.

20 A: Foreign -- foreign sales tax supervisor and

21 foreign income tax supervisor.

22 Q: Did you receive any --

23 A: Corporate income tax.

24 Q: Corporate income tax supervisor. And did you

25 receive any training while you were at the

1 Department? You mentioned you were there for  
2 how long, I'm sorry?

3 A: Twenty-five years.

4 Q: Twenty-five years. What type of training did  
5 you receive?

6 A: I received training in sales tax and I received  
7 training in corporate income tax and I received  
8 training in property taxes.

9 Q: What type of training? What form did that  
10 training take?

11 A: Going out with an auditor, reading the law as  
12 applicable to what I was doing, whether it  
13 would be foreign income tax or foreign sales  
14 tax or property tax.

15 Q: Anything else?

16 A: And reading manuals that were provided and  
17 reading the law that was applicable for each  
18 case.

19 Q: Sure. And after you read the law and you read  
20 the manuals, part of your job was to make  
21 determinations on whether taxpayers were  
22 following the law --

23 A: Yes.

24 Q: -- as part of your audits? So -- and you made  
25 those determinations in the regular course of

1           your business?

2    A:     Well, we were auditing the return.

3    Q:     You were auditing the return. So you would

4           make determinations as to the validity of the

5           return?

6    A:     Yes.

7    Q:     And you made those determinations as part of

8           your regular responsibilities as an auditor.

9    A:     Yes.

10   Q:     Is that correct?

11   A:     Yeah.

12   Q:     And as an audit supervisor, correct?

13   A:     I was not an audit supervisor.

14   Q:     Just an auditor.

15   A:     Just an auditor.

16   Q:     Okay. Got it. Did you ever receive any

17           training on any kind of industry specialization

18           or, you know, specialized industry training?

19   A:     I didn't get specialized industry training.

20           There were -- like in this particular -- you'd

21           talked a little bit about the different

22           entities, types of entities: power companies,

23           service companies.

24   Q:     Who talked a little bit about power companies

25           and service companies?



- 1 A: Well, this particular -- this manual.
- 2 Q: Okay. So the manual talked a little bit about
- 3 service companies and power companies?
- 4 A: Yeah, you had to make a determination of
- 5 whether they sold tangible personal property or
- 6 not.
- 7 Q: Okay.
- 8 A: And that would determine the apportionment
- 9 method.
- 10 Q: So to determine the apportionment method, you
- 11 had to make a determination as to whether they,
- 12 the taxpayer, sold tangible personal property
- 13 or not.
- 14 A: Right.
- 15 Q: Okay. And -- okay, and so that was the test.
- 16 Did you ever receive any specialized training
- 17 in the nature or character of electricity?
- 18 A: No.
- 19 Q: Okay. Was the audit method that you used
- 20 different depending upon the industry the
- 21 taxpayer was in when you audited?
- 22 A: The audit -- I don't quite understand your
- 23 question. The audit method?
- 24 Q: Yeah, so -- so you said that you had to make
- 25 determinations. One of the ways that you

- 1           determined as to whether how somebody would  
2           file, whether they were selling tangible  
3           personal property or something else, right,  
4           that would dictate an apportionment method?  
5           And so my question is: Did you ever receive  
6           any -- did your review of what audit method  
7           they used, did that vary by the type of  
8           taxpayer? In other words, how could you  
9           determine what the taxpayer should do?
- 10    A:    We would look at the taxpayer, find out what  
11           business he was involved in, and then from that  
12           make a determination that he was either filing  
13           the correct apportionment method or the  
14           incorrect apportionment method and then we  
15           would make adjustments.
- 16    Q:    Got you. You were asked to come and testify  
17           regarding the Department's policy relative to  
18           the treatment of electric utilities for income  
19           tax purposes; is that correct?
- 20    A:    Yes.
- 21    Q:    Who sets -- who sets the Department of  
22           Revenue's policies regarding corporate income  
23           taxes and how to apportion revenue for South  
24           Carolina?
- 25    A:    Legislature.

1 Q: Do they set the policy?

2 A: Well, the powers that be way above me would set  
3 the policy.

4 Q: Who would that be?

5 A: The director, the -- probably the managers.

6 Q: And how would they set that policy?

7 A: I guess they would interpret what the  
8 Legislature passed and what the law says.

9 Q: Uh-huh (affirmatively responds). And did you  
10 do that as part of auditing taxpayers, as well?

11 A: Well, I didn't write it down, if that's what  
12 you're saying. You have to -- you have to look  
13 at what the law says and if you don't quite  
14 understand it, then you would ask your  
15 supervisor, "What does this mean? What does  
16 that mean?"

17 Q: I guess the question I asked in -- earlier in  
18 your testimony you said that you reviewed the  
19 law and you reviewed --

20 A: Uh-huh (affirmatively responds).

21 Q: -- a manual and then you made determinations in  
22 terms of looking at the returns whether  
23 adjustments were warranted. Then I asked with  
24 respect to Department policy who set Department  
25 policy and you said, well, no, the Department

1           folks above you. I think you said --

2    A:     Right.

3    Q:     -- the director and others would set the

4           Department policy.

5    A:     I --

6    Q:     Did you make the policy or did --

7    A:     I don't get in to make the policy.

8    Q:     Okay.

9    A:     I was an auditor.

10   Q:     So you would make a determination.

11   A:     That would be people that would be above me

12           that'd make policy.

13   Q:     So you would make a determination based upon --

14   A:     I would make a determination based on the

15           policy.

16   Q:     Okay. How did you become aware of the

17           Department's policies, generally? How did that

18           get communicated to auditors like yourself?

19   A:     Written -- written documentation, verbally;

20           mostly written.

21   Q:     And what forms would that --

22   A:     I mean --

23   Q:     What forms would that writing take in addition

24           to this manual? Is this manual the only --

25   A:     Manuals.

- 1 Q: What else?
- 2 A: The law.
- 3 Q: No, I didn't ask about the law. I asked, the
- 4 Department director sets policy.
- 5 A: Uh-huh (affirmatively responds).
- 6 Q: And you said -- I asked how you were made aware
- 7 of those policies and you said in writing. Is
- 8 there any other writing that would reflect --
- 9 typically reflect the Department's policies?
- 10 Would there be emails? Would there be letters?
- 11 Would there be memos?
- 12 A: Oh, yeah, emails, letters, those types of
- 13 things.
- 14 Q: And, to your knowledge --
- 15 A: Sessions. Sessions that we would have when the
- 16 law would change that we would have. They
- 17 would go over the law changes.
- 18 Q: Who would go over the law changes?
- 19 A: People at the Department of Revenue. I can't
- 20 tell you who, specifically.
- 21 Q: Would this be a meeting? Is it a --
- 22 A: Yeah, it would be a meeting. They'd pass out
- 23 pamphlets. And you would be only concerned
- 24 with your area of expertise.
- 25 Q: Okay. And so -- so we would have meetings and

1           then we would have memos or emails or bunch of  
2           writings that would -- and that was the way we  
3           communicated or the Department communicated the  
4           policy down to the auditors who were  
5           responsible for auditing the returns; is that  
6           correct?

7    A:    Right.

8    Q:    Okay. And in the context of electric  
9           utilities, you said you've audited a couple.  
10           Are you aware of any meetings that took place  
11           around how electric utilities should be treated  
12           for South Carolina income tax purposes?

13   A:    No.

14   Q:    Are you aware of any emails --

15   A:    Well ...

16   Q:    -- that were transmitted regarding how  
17           utilities --

18   A:    No.

19   Q:    -- should be taxed?

20   A:    No.

21   Q:    Any internal memorandum?

22   A:    Other than this manual.

23   Q:    Other than the manual. Any internal  
24           memorandum?

25   A:    No.

1 Q: Anything at all other than that manual?

2 A: Other than my training from experienced  
3 auditors.

4 Q: Your training from experienced auditors, let's  
5 talk about that. What type of training was  
6 that?

7 A: That was on-the-job training.

8 Q: On-the-job training. And did one of those  
9 experienced auditors tell you that electric  
10 power companies sold tangible personal  
11 property?

12 A: Yes.

13 Q: Who was that?

14 A: Randy Wilson.

15 Q: Okay. You mentioned that the Department's  
16 policies are sometimes in writing and you  
17 referenced this revenue -- the manual you have  
18 in front of you.

19 A: (Nods head affirmatively.)

20 Q: Are those manuals made public at all? Are they  
21 communicated to anybody?

22 A: I don't know the answer to that.

23 Q: Okay. Are you aware of any instance -- in the  
24 course of your audit of electric utilities, did  
25 you ever provide that manual to an electric

- 1 utility that you audited?
- 2 A: No, it wasn't necessary.
- 3 Q: Why is that?
- 4 A: Never asked for it.
- 5 Q: Okay. Did you ever otherwise communicate in
- 6 writing to any electric utility that you
- 7 audited what the Department's policies
- 8 regarding electricity were?
- 9 A: No.
- 10 Q: Did the Department ever communicate that, not
- 11 just to the public, but to an electric utility,
- 12 their policy on how electric utilities should
- 13 be taxed?
- 14 A: I can't answer that. I assume that they did.
- 15 Q: Oh, okay. Does the Department issue
- 16 regulations on how taxpayers ought to be taxed
- 17 or ought to file their returns for corporate
- 18 income tax purposes?
- 19 A: Yes.
- 20 Q: They do so, typically? Is that something they
- 21 oftentimes do?
- 22 A: They issue a lot of regulations each year.
- 23 Q: Did they ever issue a regulation with respect
- 24 to how electric utilities are taxed?
- 25 A: I -- I don't know. If they did, I can't



1           remember it.

2    Q:    A moment ago you told me that you were assigned  
3           to audit, not just one electric utility, but  
4           you audited a number of electric utilities.  
5           You said your training was on-the-job training  
6           with a review of the law and written  
7           pronouncements by the Department of Revenue.

8    A:    Uh-huh (affirmatively responds).

9    Q:    Are you aware of any regulation that the  
10          Department issued on this point? I mean,  
11          surely you would have read it if it would have  
12          been issued.

13   A:    Other than this, no.

14   Q:    Is that manual a regulation?

15   A:    No.

16   Q:    Okay. So you're not aware of any regulation  
17          the Department issued regarding utilities,  
18          despite the fact that they issue multiple  
19          regulations every year.

20   A:    No.

21   Q:    Okay. Does the Department regularly issue  
22          other policy documents, like Revenue Rulings or  
23          Private Letter Rulings?

24   A:    Yes.

25   Q:    The Department -- are you aware of any policy

1 document that the Department of Revenue issued  
2 with respect to the treatment of electric  
3 utilities for income tax purposes?

4 A: No, not off the top of my head.

5 Q: Not of the top of your head. Would you have --

6 A: There may be but I couldn't tell you what it  
7 was.

8 Q: Would you have had -- would it would be --  
9 would it be in the normal course or scope of  
10 your duties before auditing a taxpayer in a  
11 certain industry to look into not just the  
12 revenue manual but whether or not there have  
13 been rulings or other pronouncements from the  
14 Department of Revenue with respect to how that  
15 taxpayer should be taxed?

16 A: Yes.

17 Q: Okay. And so that would have been part of your  
18 duties. But you're unaware of any ruling or  
19 policy or any information of any type --

20 A: No.

21 Q: -- that the Department would have issued other  
22 than that manual?

23 A: No.

24 Q: And to the best of your manual -- best of your  
25 knowledge, that manual's never been provided to

1           any of the electric utilities?

2    A:     Not that I'm aware of.

3    Q:     Okay. Department of Revenue has a taxpayer

4           education group; is that correct?

5    A:     Yes.

6    Q:     And does that education group put on seminars

7           for taxpayers?

8    A:     I think they do.

9    Q:     Are you aware of any seminar that the

10           Department of Revenue ever communicated this

11           policy on how it taxed --

12   A:     No.

13   Q:     -- electric utilities?

14   A:     No.

15   Q:     Okay. And the DOR frequently places materials,

16           informational bulletins to taxpayers on their

17           website. Are you aware of anything on the

18           website when you were employed as an auditor

19           that would have communicated to the taxpayers

20           what the Department's policy was with respect

21           to the taxation of utilities?

22   A:     Run that by me ...

23   Q:     Are you aware -- the Department --

24   A:     I know they published policies on their

25           website, but there's a lot of policies they've

1 published. And they probably -- I really -- I  
2 can't answer it directly. They probably do,  
3 but I can't say for sure.

4 Q: When you were an auditor, if the Department of  
5 Revenue had published a policy on how a type of  
6 client -- a type of company that you were  
7 auditing ought to be taxed, when you were an  
8 auditor would you have made yourself familiar  
9 with that policy --

10 A: Yes.

11 Q: -- published by the website? And so in the  
12 course of auditing not just one utility, but  
13 more than one utility, did you ever become  
14 aware of any policy that --

15 A: No.

16 Q: -- the Department published on the website?

17 A: No.

18 Q: Okay. You testified a moment ago that electric  
19 utilities like Duke Energy, power -- I think  
20 you said "power producers."

21 A: (Nods head affirmatively.)

22 Q: Electric power producers were in the business  
23 of -- were to be taxed as manufacturers. I  
24 think that's what you testified, is that  
25 right --

- 1 A: Correct.
- 2 Q: -- as using the three-factor formula?
- 3 A: Correct.
- 4 Q: Okay. And do you know why? Why that -- why
- 5 the Department made that policy in this manual?
- 6 A: I can speculate why, but ...
- 7 Q: Sure.
- 8 A: If that's what you want me to do.
- 9 Q: Yes, please.
- 10 A: Because they are considered a manufacturer of
- 11 electricity and, as such, a manufacturer is
- 12 required to file -- and when I initially
- 13 started with the Department of Revenue -- as a
- 14 three-factor entity.
- 15 Q: You said a moment ago that the reason why Duke
- 16 Energy was taxed as a -- under the three-factor
- 17 formula was because it sold tangible personal
- 18 property. Is it that because they sold
- 19 tangible personal property or because there
- 20 were a manufacturer?
- 21 A: Well, as a manufacturer that sold tangible
- 22 personal property.
- 23 Q: Okay. And how is that determination made? So
- 24 let's say for a moment that I have a taxpayer
- 25 that's in two businesses. How would I

1           determine -- if I had this side electric  
2           utilities -- if I had a taxpayer that made  
3           chairs and provided accounting services, how  
4           would you determine what method that taxpayer  
5           ought to file their income tax returns under?

6    A:     I'd have to look at his revenue source, revenue  
7           stream, to see where the majority of his  
8           revenue came from.

9    Q:     Okay. And so the test would be based upon  
10           where the majority of the revenue was?

11   A:     In that case, yes.

12   Q:     Okay. And if Duke Energy, the majority of  
13           their revenue -- if I told you that the sale --  
14           that electricity, the sale of electric service  
15           was indeed a service, and the majority of  
16           revenue that Duke Energy received was from the  
17           sale of that electric service, would you  
18           conclude that they should file using the gross  
19           receipts method?

20   MR. GREEN: Objection. He's asking a hypothetical  
21           question. This witness is not an expert.

22   MR. TRESH: The witness is -- was an auditor for 20  
23           years and has said that he is -- he was  
24           responsible for the audits of --

25   THE COURT: Well, if you want to have him qualified

1           as an expert, that would be a different story.  
2   MR. TRESH: I'm just asking based on his experience  
3           how he would treat a taxpayer in multiple  
4           businesses.  
5   THE COURT: Well, you can ask him that.  
6   MR. GREEN: But he --  
7   THE WITNESS: But I answered --  
8   MR. GREEN: He loaded the question with  
9           hypotheticals --  
10   THE COURT: I understand.  
11   MR. GREEN: -- and I objected.  
12   MR. TRESH: I'll move on. Strike the question, Your  
13           Honor.  
14   Q:   Mr. Southard, you -- a moment ago you asked --  
15           you were speaking about revenue. You said  
16           that, you know, in my -- in the example you, in  
17           your experience, would determine where the  
18           revenue came from; is that correct?  
19   A:   Correct.  
20   Q:   Okay. How would you find revenue?  
21   A:   Income stream from the sale of the product.  
22   Q:   Or the service?  
23   A:   Or the service.  
24   Q:   Okay. I'm going to talk for a moment about the  
25           corporate training manual in front of you. Did

1           you use that manual on a regular basis?

2    A:    Not on a regular basis, depending on your  
3           definition of "regular." I read it, but once  
4           you -- once you become acclimated as an  
5           auditor, you have a good understanding of the  
6           law. In fact, you even took the law with you  
7           so you could remember specific things. But I  
8           wouldn't take this with me on an audit.

9    Q:    Why did you conclude, then, that Duke Energy  
10           was in the business of selling tangible  
11           personal property if you didn't have the manual  
12           with you? Is the manual the sole basis for  
13           your conclusion?

14   A:    My understanding when I became a corporate --  
15           foreign corporate income tax auditor that power  
16           companies were considered to be manufacturers  
17           of electricity and, as such, they should file  
18           the three-factor formula. That was my  
19           training. I wasn't in any position to say  
20           otherwise.

21   Q:    You testified a moment ago that you made  
22           independent judgments. You would review the  
23           law and then you would make a judgment about a  
24           taxpayer's return.

25   A:    Right.



- 1 Q: Why did you --
- 2 A: I would make a determination of what their
- 3 business was. You have to make -- you have to
- 4 look at what their business is. What are they
- 5 involved with? Are they selling tangible
- 6 personal property? Then they would file the
- 7 three-factor and now the four-factor
- 8 double-weighted sales formula.
- 9 Q: Read back the testimony. I think earlier you
- 10 testified that you made determinations of the
- 11 law, not just what the business the taxpayer
- 12 was in. Did you not say that?
- 13 A: I don't remember what I said exactly.
- 14 Q: Can we read that back? You said four minutes
- 15 ago that you --
- 16 A: I try to make --
- 17 Q: -- make determinations of the law. Is that --
- 18 A: Well --
- 19 Q: Is that correct or not correct?
- 20 A: I guess if I -- okay.
- 21 Q: Did you make -- well, let me ask it again. Did
- 22 you make determinations -- did you make an
- 23 independent evaluation of the law as part of
- 24 your responsibilities as an auditor?
- 25 A: Yes.

1 Q: And did you make an independent evaluation of  
2 the law as part of your responsibilities in the  
3 audit of Duke Energy's amended returns, their  
4 refund claims?

5 A: Yes.

6 Q: And so what was the basis in your -- what did  
7 you base in the law or what portions of law did  
8 you base your opinion on that Duke Energy was  
9 in the business of selling tangible personal  
10 property?

11 A: They're a manufacturer of electricity.

12 Q: Does it say --

13 A: The State has always looked at the utilities as  
14 manufacturers, those that manufacturer  
15 electricity as manufacturers --

16 Q: Does it --

17 A: -- and, as such, you file three-factor or  
18 four-factor double-weighted sales formula. Or  
19 now I think it's gross receipts. I think this  
20 year or last year it changed.

21 Q: Does it say that in the law anywhere?

22 A: Does it say what in the law?

23 Q: That electric -- that power producers are  
24 sellers of tangible personal property?

25 A: Not specifically, I don't think it does.

1 Q: Does the law imply that?  
2 A: Yes.  
3 Q: Which section?  
4 A: Under the -- the three-factor formula,  
5 manufacturer. They're considered a  
6 manufacturer.  
7 Q: Okay. So that was your determination. So you  
8 read the section of the law -- let's look --  
9 let's take a look at that for a second.  
10 A: Well, I ...  
11 MR. TRESH: Give me one moment, Your Honor.  
12 I'm going to hand him a copy of 12-6-2250.  
13 MR. GREEN: That's fine. My objection would be, I  
14 don't know if this was the version in effect  
15 during the years in question.  
16 MR. TRESH: I'm handing him --  
17 MR. GREEN: That's the only question that I have.  
18 MR. TRESH: I'm handing him a version of 12-6-2250.  
19 MR. GREEN: It was amended several times after '95.  
20 2006, 2007. I don't remember the particular  
21 language changes that occurred after that and  
22 so ...  
23 MR. TRESH: The first section of the -- I'm fairly  
24 certain, Your Honor, it was materially the same  
25 in terms of the first section of 12-6-2250(A).

1 THE COURT: You can ask him about it. You're not  
2 offering it into evidence, are you?

3 MR. TRESH: No, I'm not.

4 Q: Mr. Southard, I'd like you to take a look at  
5 12-6-2250(A). As Mr. Green pointed out, this  
6 is the 2011 version, but my recollection is  
7 it's substantially the same as the one in  
8 effect during the time periods at issue. Do  
9 you recall this statute?

10 A: Yes.

11 Q: Is this the statute that you decided that Duke  
12 Energy was a seller of tangible personal  
13 property under?

14 A: When you say "I" determined it, through my  
15 training is -- and they were always considered  
16 a manufacturer of electricity. So, obviously,  
17 I would -- if they filed a three-factor, that  
18 would be the correct method.

19 Q: You said a moment ago that you made an  
20 independent determination of the law.

21 A: Yes.

22 Q: You said --

23 A: When I was auditing other taxpayers.

24 Q: And you said --

25 A: I did a whole bunch of taxpayers. I just

1           didn't do electric utilities.

2    Q:     In the context of Duke Energy, I believe you  
3           said that you made an independent determination  
4           of the law, correct?

5    A:     Yes.

6    Q:     And I asked you whether the law stated that  
7           Duke Energy sold -- that electric power  
8           producers sold tangible personal property and  
9           you said the law implied it.

10   A:     (Nods head affirmatively.)

11   Q:     And so then I asked you if this is the section  
12           of the law that implied it and I believe you  
13           said "yes."

14   A:     Yes.

15   Q:     Can you point out which section of the law  
16           implies that a power producer is a seller of  
17           tangible personal property, which part of that?

18   A:     "A."

19   Q:     And you agree this is the section that you  
20           believe implies that?

21   A:     "Taxpayer whose principal business -- whose  
22           principal business in this state is  
23           manufacturing or a form of collecting, buying,  
24           assembling or processing goods and materials  
25           within this state" -- you want me to read the

1 whole thing?

2 Q: Well, is there a particular piece that you  
3 think was relevant to the determination of what  
4 a power producer is -- their primary business  
5 was?

6 A: "Manufacturing, selling, distributing, dealing  
7 in tangible personal property within this  
8 state."

9 Q: Would you agree that Duke Energy's primary  
10 business was the sale of electric service?

11 A: No.

12 Q: What would it be -- what would be your  
13 characterization of their primary business?

14 A: They are a manufacturer of electricity.  
15 Distribution is simply an aspect of it.

16 Q: Distribution is an aspect of it.

17 A: Aspect.

18 Q: Aspect of it, okay. So if Duke Energy created  
19 electricity and didn't do anything with that  
20 electricity, if we eliminated the transmission  
21 and distribution functions, could it earn any  
22 money?

23 A: No.

24 Q: Okay. Mr. Southard, I'd like to point your  
25 attention to page 23 of the revenue manual.

1 A: Twenty-three, okie-dokie.

2 Q: All right. If you turn to the bottom of page  
3 23 and if you could read the sentence beginning  
4 "This part of the manual..."?

5 A: "This part of the -- this part of the manual  
6 addresses itself to the two additional  
7 apportionment formulas provided for by law for  
8 computing the taxable income or ordinary  
9 corporations dealing in some manner in tangible  
10 personal property and those corporations whose  
11 principal business in this state is  
12 dealing ..."

13 Q: And can you go on to the next page and read  
14 the --

15 A: "...dealing in intangible property or  
16 services."

17 Q: Would you agree that it was the Department's  
18 long-standing policy that if a business was  
19 primarily engaged in the provision -- in  
20 selling services --

21 A: Uh-huh (affirmatively responds).

22 Q: -- that they should file using the single gross  
23 receipts tax method during the period at issue?

24 A: Correct.

25 Q: Okay. And if their primary business was the

1 provision or the sale of tangible personal  
2 property, they would file using the  
3 three-factor method?

4 A: Correct.

5 Q: And that was the Department's long-standing  
6 policy.

7 A: Yes.

8 Q: And so under the Department's long-standing  
9 policy, it would be necessary to interpret  
10 exactly what the taxpayer was selling, right?

11 A: Correct.

12 Q: Okay. Do you recall what the policy would have  
13 been for telecommunications providers,  
14 Mr. Southard?

15 A: Policy for tele -- they were selling a service.

16 Q: Okay. And was there any -- ever any regulation  
17 or do you know why the Department created that  
18 policy? Why the Department determined that  
19 telecommunication providers were selling a  
20 service?

21 A: Telephone was considered a service.

22 Q: Okay. So telephone is considered a service;  
23 electricity was considered tangible personal  
24 property.

25 A: They're providing the ways and means of



1 communication.

2 Q: Okay. Ways and means of communication, okay.

3 In terms of the Department's long-standing

4 policy that we just talked about, primary

5 business, how would you test for primary

6 business? What was the Department's

7 long-standing policy in terms of how it would

8 test for primary business?

9 A: How it would test for primary?

10 Q: Would you use receipts, profits, costs?

11 A: Oh, receipts.

12 Q: You'd use receipts?

13 A: (Nods head affirmatively.)

14 Q: Did you ever use profit?

15 A: No.

16 Q: Okay. It was always based on receipts?

17 A: Always based on receipts.

18 Q: Okay. I'm going to give you a copy of what's

19 been entered as Exhibit Number Twenty-nine.

20 This is the Final Agency Determination issued

21 by the Department.

22 A: Okay.

23 Q: I'm going to direct your attention to page

24 three.

25 A: Page three, okay.

1 Q: And I'm going to ask you to read the last  
2 sentence on that page, begins "thus"?

3 A: Oh, okay, way down here. "Thus, while the  
4 taxpayer is correct that it provides a service,  
5 its service is statutorily defined as tangible  
6 personal property."

7 Q: So if -- if the taxpayer was correct, that it  
8 provides a service, and you testified that  
9 anybody that provides a service -- whose  
10 primary business is providing a service would  
11 apportion its income using the single-factor  
12 method --

13 A: Uh-huh (affirmatively responds).

14 Q: -- why was Duke Energy denied a refund claim?

15 A: Why were they denied a refund claim?

16 Q: Why were they denied a refund? In other words,  
17 if they were correct, as this document issued  
18 by the Department says, that they provide a  
19 service --

20 A: Uh-huh (affirmatively responds).

21 Q: -- and you testified that any -- it's the  
22 Department's long-standing policy that any  
23 taxpayer whose business is more than 50 percent  
24 from -- revenue from providing a service, why  
25 was Duke Energy, in your view, required to file

1 using a three-factor formula?

2 A: Well, I mean, if that's -- the State looks at  
3 electric utilities as manufacturers of  
4 electricity and, as such, they file the  
5 three-factor or four-factor formula.

6 Q: Now, you testified --

7 A: They claim that they should be treated as a  
8 service provider, which would require the gross  
9 receipts formula.

10 Q: Mr. Southard, a moment ago you said that the  
11 Department had a long-standing policy that if  
12 you sold a service and your business was more  
13 than 50 percent selling services, you would be  
14 required to file using the single-factor  
15 method.

16 A: But --

17 Q: This document issued by the Department says  
18 that Duke Energy is correct that it sells a  
19 service. Why would it not be required, then,  
20 to file using the single-factor formula? Why  
21 would it be different than all other taxpayers?

22 MR. GREEN: Your Honor, I object. He needs to ask  
23 one question and it needs not to be a compound  
24 question. I object on that basis.

25 MR. TRESH: I'll withdraw and restate, Your Honor.

1 Q: Why would Duke Energy -- if Duke Energy  
2 provides a service, why would Duke Energy be  
3 required to file using three-factor?

4 A: Because they are a -- they are a manufacturer  
5 of electricity.

6 Q: Is it true that you testified a moment ago that  
7 if you -- if your business was more than -- if  
8 you earned your revenue from providing services  
9 more than 50 percent based on revenue, that the  
10 Department's long-standing policy would require  
11 you to file using single-factor?

12 A: Correct. That's ...

13 Q: So what is the -- why is the -- why is whether  
14 Duke is or is not a manufacturer irrelevant?  
15 You said the Department's long-standing policy  
16 was.

17 A: Yes, that's -- that's been the Department's and  
18 the State's long-standing policy, that electric  
19 utilities are treated as manufacturers of  
20 electricity. That's their main business,  
21 primary business, and if that's their primary  
22 business, then it should be filing the  
23 three-factor or four-factor formula in this  
24 time period.

25 Q: So in all the taxpayers you've audited,

1 corporate income taxes --

2 A: Yes.

3 Q: -- I believe you testified that if they sold  
4 services, they were single-factor, if they sold  
5 tangible personal property, they were  
6 three-factor; is that correct?

7 A: Well, if the majority of the revenue came from  
8 the selling -- for instance, a movie theater,  
9 they sell -- what do they sell? They sell  
10 tickets.

11 Q: Uh-huh (affirmatively responds).

12 A: But they also sell popcorn, peanuts, candy,  
13 drinks --

14 Q: Sure.

15 A: -- hot dogs, whatever.

16 Q: Yeah.

17 A: So if I was going to audit the movie company,  
18 I'd look at the revenue, where the majority of  
19 the revenue came from. And if it was tangible  
20 personal property, then it would be -- you  
21 would have to file under the three-factor  
22 formula. If it was from tickets, you would  
23 have to file for the gross receipts --

24 Q: So --

25 A: -- because you're providing a service.

1 Q: Earlier there was testimony that during this  
2 time period Duke sold appliances. If you  
3 looked at their revenue, Duke Energy's revenue,  
4 and it turns out that more than half of it was  
5 from selling appliances, you would say they  
6 were a seller of tangible personal property and  
7 should file three-factor, correct?

8 A: Yes.

9 Q: If all other taxpayers -- and you would  
10 agree -- or would you agree that Duke Energy's  
11 primary business is the sale of electricity?

12 A: Yes.

13 Q: Okay. Why -- what is special -- if the  
14 Department acknowledges here that the taxpayer  
15 provides a service, that's what this says, why  
16 was a power producer special in that all other  
17 taxpayers who earned the majority of their  
18 revenue from providing a service were taxed on  
19 a single-factor formula and power producers  
20 were three-factor?

21 A: I'm trying to formulate how I'm going to  
22 answer.

23 Q: Absolutely.

24 A: I mean --

25 Q: Please take your time.

1 A: Again, I reiterate that the State of South  
2 Carolina considered manufacturers of --  
3 utilities that manufactured electricity or  
4 created electricity were manufacturers and, as  
5 such, they were to file under the three-factor  
6 formula.

7 Q: You testified a moment ago that you would agree  
8 that Duke Energy's primary business was the  
9 sale of electricity, right? That's what I  
10 believe you said a second ago.

11 A: Yes.

12 Q: Okay. If Duke Energy were a  
13 manufacturer -- well, you've testified that  
14 Duke Energy -- strike that. You testified that  
15 Duke Energy -- the reason why you've made your  
16 conclusion is Duke Energy is a manufacturer.  
17 But you've also said that their primary  
18 business was the sale of electricity.  
19 If the Department believes that electricity is  
20 the sale of a service, which is what this  
21 document says, right? It says, "Thus, while  
22 the taxpayer is correct that it provides a  
23 service..."

24 MR. GREEN: Objection, Your Honor, asked and  
25 answered.

1 MR. TRESH: Withdrawn.

2 THE COURT: Mr. Tresh, if it's helpful at all, I  
3 recognize the determination is important, but  
4 ultimately this is a de novo hearing. This  
5 Court will make the determination.

6 MR. TRESH: Yes, Your Honor. If I could just take  
7 just one second. I don't believe we have any  
8 other questions.  
9 Just a few more questions, Your Honor.

10 Q: So your testimony here today is the only  
11 document that you're aware of that states that  
12 electric utilities should file as manufacturers  
13 is this training manual; is that correct?

14 A: Power companies. It says "power companies."

15 Q: Power producers, thank you. Let's turn to the  
16 training manual for a second.

17 A: Okay.

18 Q: If you can turn to page 24. I'm sorry, excuse  
19 me, page 38.

20 A: Thirty-eight, okay. All right.

21 Q: I believe this section -- you can take a look  
22 at it -- it describes the Department's policy  
23 for license taxes with respect to what sales of  
24 electricity are, service or intangible; is that  
25 correct?



- 1 A: Yes. I haven't read it in a long time, so ...
- 2 Q: Okay. Take your time.
- 3 A: What section are you concerned with?
- 4 Q: In the section on "license taxes."
- 5 A: (Perusing.)
- 6 Q: Let me ask a different question. Do you recall
- 7 how the Department treated electric power
- 8 producers for license tax purposes?
- 9 A: Yes.
- 10 Q: And did the Department take the view that they
- 11 were selling a service or tangible personal
- 12 property?
- 13 A: They were selling tangible personal property.
- 14 Q: That was view the Department took for license
- 15 taxes?
- 16 A: For the electricity.
- 17 Q: Can I ask you to take a look at the manual,
- 18 page 38, entitled "gross receipts"?
- 19 A: Uh-huh (affirmatively responds).
- 20 Q: Can you read paragraph two entitled "gross
- 21 receipts," first sentence?
- 22 A: You want me to read it -- okay. "As used in
- 23 Section 12-19-110 shall include all receipts
- 24 derived from services from regulated businesses
- 25 within this State. Only the receipts from

1 activities that originate and terminate within  
2 the State are to be included in the taxable  
3 base, unless the interstate journey can be  
4 interrupted. This would be true in the case of  
5 power companies generating power outside the  
6 state and transmitting the power through a  
7 substation, decreasing the voltage. Income  
8 from intangibles used in the conduct of the  
9 business within this state shall be included in  
10 gross receipts. Net gains on the sale of  
11 property shall be included if business assets  
12 are sold."

13 Q: And Section 12-19-110 is used in this document  
14 and refers to what tax?

15 A: (No response.)

16 Q: Let's go back to page 37, maybe that would  
17 refresh --

18 A: I don't recall 12-19-110 to see exactly what it  
19 says. I can't remember.

20 Q: No, if you turn the page back -- turn to page  
21 37, the language immediately preceding what you  
22 just read.

23 A: Uh-huh (affirmatively responds).

24 Q: Section (D)(1).

25 A: Oh, here we go.

1 Q: What does it refer to?

2 A: Section (D)(1), Property: "License fee on  
3 utilities and electric cooperatives are imposed  
4 in lieu of the fee imposed by Section  
5 12-19-70."

6 Q: So would you agree that in section two of this  
7 same subsection, when it's referring to gross  
8 receipts --

9 A: Yeah.

10 Q: -- it's referring to the license fee?

11 A: Probably. Yes.

12 Q: Probably or is that correct?

13 A: Yes.

14 Q: It is correct?

15 A: 12-19 -- yeah.

16 Q: And so in the "gross receipts" section, what  
17 you just read -- I think you just read that  
18 12-19-110 shall include all receipts derived  
19 from services; is that correct?

20 A: Yes, that's what it says.

21 Q: A moment ago you said that the State of South  
22 Carolina for the license fee purposes treats  
23 power producers as sellers of tangible personal  
24 property. Why the inconsistency between this  
25 manual and your testimony?

- 1 A: I don't see any inconsistency.
- 2 Q: Uh-huh (affirmatively responds). Does the
- 3 manual say that --
- 4 A: The manual says what it says. I didn't write
- 5 the manual.
- 6 Q: So the manual says that Duke Energy -- that
- 7 license fees -- that it treats license fees as
- 8 fees from -- excuse me, revenue from public
- 9 utility service companies as services; is that
- 10 what this says?
- 11 A: (No response.)
- 12 Q: What's the reference to "services"?
- 13 A: Well, probably talking about the income,
- 14 receipts. They're talking about receipts
- 15 from -- from the service of providing .
- 16 manufacturing and distributing to the customer
- 17 electricity.
- 18 Q: "Receipts" refers to income?
- 19 A: Right. Receipts is the income.
- 20 Q: Okay. And so it would be your view that Duke
- 21 Energy earned -- or that power producers, as
- 22 used in the subsection, earned their income
- 23 from services and their primary business was
- 24 selling tangible personal property? I don't
- 25 understand the consistency.

- 1 A: Well, the State treats power companies as  
2 manufacturers of electricity and, as such, the  
3 receipts from that activity is -- in the tax  
4 return should be filed as the three-factor  
5 formula.
- 6 Q: Why does the manual refer to the receipts in  
7 the context of power companies here as receipts  
8 from services?
- 9 A: I can't answer that. I don't know why. I  
10 didn't write it.
- 11 Q: Fair enough. So in the course of your audits,  
12 electric utilities, you reviewed this manual,  
13 correct?
- 14 A: Initially in my training, but I didn't -- every  
15 time I went on an audit, I didn't look at this  
16 manual, no.
- 17 Q: And -- but you testified earlier that you  
18 relied on this manual when you --
- 19 A: Well, I --
- 20 Q: -- when you said that Duke Energy was a  
21 provider of tangible personal property.
- 22 A: As a -- as a -- as a new auditor in a new area  
23 of tax, I have to rely on something --
- 24 Q: Uh-huh (affirmatively responds).
- 25 A: -- initially. And so I would read this, become

1 familiar with it, and read the law and any  
2 regulations or revenue -- anything that would  
3 apply to the taxpayer or that specific type of  
4 business, try to become familiar.

5 Q: Try to become familiar with anything that --

6 A: Anything that would -- that was available.

7 Q: And so one section of the manual says that Duke  
8 Energy -- that power producers sell services  
9 and another section of the manual says that  
10 they should file three-factor. How did you  
11 resolve that inconsistency? Or did you not  
12 read this?

13 A: Well, I've read it, but that's the way the  
14 State of South Carolina has treated people  
15 involved in the manufacturer of electricity.  
16 I have no reason to say that -- to say  
17 otherwise. They're treated as manufacturers  
18 and, as such, they file the three-factor  
19 formula, period.

20 MR. TRESH: No further questions, Your Honor.

21 MR. GREEN: Just a brief question, Your Honor.

22 MR. SOUTHARD - REDIRECT EXAMINATION BY MR. GREEN:

23 Q: The exhibit that's in front of you,  
24 Respondent's One, Mr. Southard.

25 A: Yes.

1 Q: On page 34, could you look there with me,  
2 please?  
3 A: Thirty-four, okay.  
4 Q: And what does item "C" on page 34 say?  
5 A: "Apportionment of Public Service Corporation."  
6 Q: Okay. And then could you turn with me to page  
7 37?  
8 A: Thirty-seven, yes.  
9 Q: And what does item "D" there say?  
10 A: "Telegraph Company."  
11 Q: I'm sorry.  
12 A: I'm sorry.  
13 Q: The big capital letter --  
14 A: Big "D."  
15 Q: -- there.  
16 A: "Public Service Corporations License Fee."  
17 Q: That says "license fee;" is that correct?  
18 A: Yes.  
19 MR. GREEN: I have no further questions, Your Honor.  
20 MR. TRESH: Quick re-cross, Your Honor.  
21 THE COURT: On new matter?  
22 MR. TRESH: I'm sorry?  
23 THE COURT: Re-cross I'll allow on new matter.  
24 MR. TRESH: New matter related to what Mr. Green --  
25 THE COURT: Yeah, I was wondering how that was new.

1           Go ahead.

2   MR. SOUTHARD - RECROSS-EXAMINATION BY MR. TRESH:

3   Q:    In the section entitled "Public Service

4           Corporations License Fee," section 2 "gross

5           receipts."

6   A:    Section two.

7   Q:    You were just looking at.

8   A:    Two, okay, there. On page 38?

9   Q:    Yeah, the section -- we were talking about

10          services before and how that section used

11          "services." Can you read the -- one,

12          two -- third sentence?

13   A:    Starting with "only"?

14   Q:    Starting with "This would be true..."

15   A:    "This... "

16   Q:    Page 38.

17   A:    Thirty-eight -- wait a minute.

18   Q:    Section two entitled "gross receipts."

19   A:    Okay. Okay. Here we go. "This would be true

20          in the case of power companies generating power

21          outside the State and transmitting the power

22          through a substation decreasing the voltage."

23   Q:    And so "This would be true in the case of power

24          companies...", meaning that they were treated

25          as providing --



1 MR. GREEN: Your Honor, I object. This goes beyond  
2 the scope of my redirect.

3 MR. TRESH: His redirect was implied to say that  
4 somehow this section didn't apply to power  
5 companies and I think it's relevant that it  
6 does.

7 THE COURT: What is --

8 MR. GREEN: My redirect --

9 THE COURT: The redirect was pretty straight  
10 forward. It was this, this and this. I mean,  
11 I don't know the implications thereof, but you  
12 could argue that at a subsequent time.  
13 What were you going to say?

14 MR. GREEN: No, I'm sorry, I just -- I was just  
15 making the objection.

16 MR. TRESH: If I could ask one further question,  
17 Your Honor?

18 THE COURT: Okay.

19 Q: In your view, did this section -- when I say  
20 "this section," I mean (D), "Public Service  
21 Corporations License Fee," apply to power  
22 companies?

23 A: Yes.

24 MR. TRESH: No further questions, Your Honor.

25 THE COURT: All right. You may step down.

1 (Witness excused.)

2 MR. TRESH: Your Honor, a couple of procedural  
3 issues quickly.

4 THE COURT: All right.

5 MR. TRESH: I believe we have ...

6 THE COURT: A lot of documents.

7 MR. TRESH: Yes, sir.

8 MS. TODOROVA: This is the document that was missing  
9 pages.

10 THE COURT: Oh, okay.

11 MR. TRESH: Exhibit Twenty-six.

12 MS. TODOROVA: Can we just relabel it or do you want  
13 me to bring it to you?

14 THE COURT: Remark it.

15 MS. TODOROVA: Remark it, sorry.

16 (Off the Record)

17 MR. TRESH: Your Honor, I have here -- if I may  
18 approach -- with respect to Professor Pomp and  
19 the preservation of our objection, I have the  
20 original interrogatories responses that were  
21 served on Mr. Green reflecting what Mr. Pomp  
22 would testify on.

23 THE COURT: Okay.

24 MR. TRESH: I'd like to enter that into evidence.

25 THE COURT: That's an offer of proof?

1 MR. TRESH: Yes, Your Honor.  
2 MR. GREEN: As an offer of proof, yes.  
3 THE COURT: So that will be marked as ...  
4 MR. TRESH: What number are we at?  
5 THE COURT REPORTER: I guess it'd be Fifty.  
6 THE COURT: Fifty, offer of proof.  
7 Y'all need to hold on one moment.  
8 (Off the Record)  
9 (Petitioner's Exhibit Number Fifty was introduced as  
10 an offer of proof.)  
11 MR. TRESH: Your Honor, may have I sidebar with  
12 Counsel for a moment.  
13 THE COURT: Yeah.  
14 (Sidebar off the record between counsel.)  
15 MR. TRESH: Your Honor, may we approach?  
16 THE COURT: Yeah.  
17 (Sidebar off the record with the Court.)  
18 THE COURT: All right. With that said, that being  
19 that which was not upon the record, this  
20 hearing is adjourned for today and return  
21 tomorrow at 9:30.  
22 (The proceedings adjourned at 4:39 p.m., Wednesday,  
23 September 5, 2012, and reconvened at 9:48 a.m.,  
24 Thursday, September 6, 2012, as follows:)  
25 THE COURT: All right. Proceed.

1 MR. TRESH: Good morning, Your Honor. Duke would  
2 like to call Dr. John Papapolymerou, who we  
3 will affectionately call Dr. Papa --  
4 THE COURT: All right.  
5 MR. TRESH: -- if it's okay with the Court to the  
6 stand.  
7 THE COURT: Doesn't bother me.  
8 MR. TRESH: Doctor, I did butcher that, again, a  
9 common problem.  
10 IOANNIS PAPAPOLYMEROU, Ph.D., having been duly sworn,  
11 testifies and examines as follows:  
12 DR. PAPAPOLYMEROU - DIRECT EXAMINATION BY MR. TRESH:  
13 Q: Professor, good morning.  
14 A: Good morning.  
15 Q: Can you please state and spell your full name  
16 for the record?  
17 A: Yes. It's Ioannis -- that's I-O-A-N-N-I-S --  
18 Papapolymerou, P-A-P-A-P-O-L-Y-M-E-R-O-U.  
19 THE COURT: Can you spell it one more time so we  
20 make sure we get it up here?  
21 THE WITNESS: Okay. The first name is Ioannis,  
22 I-O-A-N-N-I-S. Last name is Papapolymerou,  
23 P-A-P-A-P-O-L-Y-M-E-R-O-U.  
24 THE COURT: Thank you.  
25 Q: Professor, can you please tell the Court your

1 current occupation?

2 A: Yes. I am currently a professor at the School  
3 of Electrical and Computer Engineering at the  
4 Georgia Institute of Technology.

5 Q: And I'd like to show you what's been  
6 marked -- I'm going to show you a document.  
7 Professor, do you recognize this document?

8 A: Yes.

9 Q: And can you please tell the Court what this  
10 document is?

11 A: This is a short version of my bio from the  
12 Georgia Tech website.

13 Q: Okay. And if you can take a look at it. Is  
14 that accurate?

15 A: It has a selected number of my publications.  
16 I have since then had more peer-reviewed papers  
17 published. I have also received an award from  
18 the Antennas and Propagation Society of IEEE.  
19 It's called the Wheeler Applications Award  
20 given for the best general paper in the area of  
21 technology for antennas. I have also been  
22 named recently the editor in chief for the --  
23 one of the journals, the Microwave and Wireless  
24 Components Letters.

25 Q: And can you please describe for the Court your

1 education and background?

2 A: Yes. I received a diploma in electrical  
3 engineering from the National Technical  
4 University of Athens in Greece. The diploma is  
5 a five-year program following the German model.  
6 It's equivalent to a U.S. Bachelor of science  
7 in electrical engineering. Then I received a  
8 Master's degree in electrical engineering from  
9 the University of Michigan in Anne Harbor and  
10 then a Ph.D. degree in electrical engineering  
11 from the University of Michigan.

12 Q: Thank you. And you mentioned a moment ago that  
13 you're a full professor at Georgia Tech's  
14 School of Electrical and Computer Engineering.  
15 Are you also the associate director of Georgia  
16 Electric Design Center of Electromagnetics and  
17 Electric Design and Applications?

18 A: Yes.

19 Q: Okay. How long have you been in your current  
20 position at Georgia Tech?

21 A: I have been a Professor since the summer of  
22 2009 and I have been teaching and doing  
23 research at Georgia Tech since 2001.

24 Q: Okay. Can you please describe any prior  
25 employment that you had prior to Georgia Tech?

1 A: Yes. Prior to Georgia Tech, while being a  
2 graduate student at the University of Michigan,  
3 I was employed as a graduate research assistant  
4 until '99. Then I accepted a faculty position  
5 at the University of Arizona in Tucson. I was  
6 there for about two and a half years and then  
7 I moved to Atlanta.

8 Q: And as a visiting professor, were you a  
9 visiting professor of electrical and computer  
10 engineering?

11 A: Yes. I have spent two summers in France at the  
12 University of Limours as a visiting professor.

13 Q: Are you a fellow of any institutes?

14 A: Yes. I'm a fellow of the Institute of  
15 Electrical and Electronics Engineers, which is  
16 the worldwide professional organization for  
17 electrical and electronics engineers.

18 Q: And is it quite common for electrical engineers  
19 to be fellows of the IEEE?

20 A: No, it is not. It is highly selective. You  
21 have to demonstrate several achievements  
22 throughout your career. And, typically, every  
23 year it's about .1, .2 percent of the members,  
24 the voting members, that can be elevated to the  
25 fellow level.

1 Q: Okay. And in your current position at Georgia  
2 Tech, are you called upon to assist the United  
3 States government and other organizations in  
4 matters of electrical engineering?

5 A: Yes.

6 Q: Can you tell us which organizations?

7 A: Well, we have done research work in the area of  
8 electrical engineering for the Department of  
9 Defense where we applied electricity for, you  
10 know, various needs of the Army, the Navy, the  
11 Air Force. We have also done research for  
12 NASA, the National Aeronautics and Space  
13 Administration, and also research for the  
14 National Science Foundation.

15 Q: Thank you.

16 MR. TRESH: Your Honor, I'd like to move Professor's  
17 CV into evidence as Exhibit Forty-three.

18 MR. GREEN: No objection.

19 THE COURT: It's admitted.

20 (Petitioner's Exhibit Number Forty-three was admitted  
21 into evidence.)

22 MR. TRESH: Your Honor, I'd like to also move to  
23 qualify Dr. Papa as an expert in the nature and  
24 character of electricity and how it's provided.

25 MR. GREEN: I have no objection.



1 THE COURT: So qualified.

2 MR. TRESH: Thank you, Your Honor.

3 Q: Okay. Dr. Papa, the document I've just handed  
4 you, do you recognize it?

5 A: Yes.

6 Q: Can you please describe this document for the  
7 Court?

8 A: It's a report I prepared to describe some of  
9 the fundamentals of electricity and also  
10 describe how utility companies such as Duke  
11 provide this service.

12 Q: Okay. And were you asked to render an opinion  
13 in this matter regarding the nature of  
14 electricity?

15 A: Yes.

16 Q: And what is your opinion? What is  
17 "electricity"?

18 A: "Electricity" is a force that exists in nature.  
19 We know for a fact that we have four major  
20 forces in nature. The first one is the atomic  
21 force that exists inside the atom and it's the  
22 strongest force from all of them.  
23 The second one is the electromagnetic force,  
24 which basically governs the interaction between  
25 atoms or molecules and it's less strong than

1 the atomic.

2 The third one is the weak interaction, which  
3 is, I guess, less strong than the previous two,  
4 and that happens between some specific  
5 radioactive particles. And the fourth is the  
6 gravitational force, which happens between two  
7 bodies, two masses.

8 Q: And does this report accurately reflect the  
9 opinion you just gave?

10 A: Yes.

11 MR. TRESH: Your Honor, I'd like to move the  
12 doctor's report into evidence and have it  
13 marked as Exhibit -- it is marked as Exhibit  
14 Forty-five.

15 MR. GREEN: Objection, Your Honor, hearsay.

16 THE COURT: The expert report is hearsay?

17 MR. GREEN: Yes, out-of-court statement going to the  
18 truth of the matter asserted. He can testify  
19 about it, but the report itself is hearsay.

20 MR. TRESH: Your Honor, the doctor has rendered an  
21 expert opinion in this matter. He's  
22 produced --

23 THE COURT: I think -- do y'all have any case law on  
24 it? I think Mr. Green's correct on that. Do  
25 you have a legal position on that?

1 MR. TRESH: We do, Your Honor. Hundley versus Rite  
2 Aid of South Carolina, 529 S.E.2d 45: "An  
3 expert witness may state an opinion based upon  
4 facts not within his firsthand knowledge, but  
5 that evidence is admissible -- but it's  
6 admissible solely as the basis to show an  
7 expert's opinion."  
8 In other words, the report of the expert in his  
9 opinion, written or otherwise, are admissible  
10 to show what his expert opinion is, even though  
11 it may be an out-of-court statement.  
12 THE COURT: Say that --  
13 MR. TRESH: State -- it's Hundley versus Rite Aid of  
14 South Carolina, 529 S.E.2d --  
15 THE COURT: Do you have it? Can you hand it to me?  
16 MR. TRESH: Oh, I don't have a case. I apologize,  
17 Your Honor.  
18 MR. GREEN: I don't have that case in front of me,  
19 Your Honor, but that sounds like that's talking  
20 about whether an expert can rely on hearsay  
21 evidence --  
22 THE COURT: Yeah.  
23 MR. GREEN: -- which he can.  
24 THE COURT: Which he can, I know that.  
25 MR. GREEN: But he is not a vehicle to introduce

1           hearsay evidence, including his own report.

2   THE COURT: Well, that's the case I'm thinking about  
3           is where they recently addressed the issue of  
4           he relied -- or the expert relied on the  
5           out-of-court information to reach the decision.  
6           But the Court said recently that even though he  
7           can render the decision, that that which he  
8           relied on doesn't automatically come into  
9           evidence.

10          Now, in cross-examination the cross-examiner  
11          has the option to bring that into evidence, but  
12          I don't think that you have that option.

13   MR. TRESH: Similar to the Caldwell case we  
14          discussed yesterday, Your Honor, the witness  
15          has made this out-of-court statement. He is  
16          available for cross-examination.

17   THE COURT: Oh, that one's weaker. Good shot,  
18          though.

19   MR. TRESH: Okay.

20   THE COURT: I like the way lawyers can cut -- think  
21          on their feet, but at this point in time, I'm  
22          not -- I want to research that just to make  
23          sure.

24   MR. TRESH: Okay.

25   THE COURT: And I can always let it in later.

1 MR. TRESH: We're happy to -- thank you, Your Honor.  
2 Your Honor, may we ask the Court to turn on the  
3 monitor so that we can use the --  
4 THE COURT: You can ask us and we will do it.  
5 MR. TRESH: Thank you, Your Honor.  
6 THE COURT: Which one, the computer or the ELMO?  
7 MS. TODOROVA: The computer.  
8 THE COURT: And, Doctor, you can also draw on that  
9 screen, if need be.  
10 THE WITNESS: Yes, I can see it. Thank you.  
11 MR. TRESH: He's saying you can -- if we need to  
12 draw anything, he's saying you have the ability  
13 to have you ...  
14 THE WITNESS: Okay.  
15 Q: Okay. Dr. Papa, I'd like to start with a  
16 couple of -- get a couple of definitions out of  
17 the way. We heard a lot of testimony yesterday  
18 regarding what is "electricity" and what is  
19 "energy."  
20 In your expert opinion, can you tell us, again,  
21 is electricity tangible in any way under your  
22 definition or under the laws of physics?  
23 A: No.  
24 Q: Electricity is not tangible?  
25 A: That is correct.

1 Q: Is electricity property?

2 A: No.

3 Q: Okay. What is an "electromagnetic field"?

4 A: An "electromagnetic field" is an influence and  
5 what that means is that it's a force field. So  
6 if you bring inside an electromagnetic field a  
7 charge, the field will apply a force to the  
8 charge.

9 The easiest way to understand this is by making  
10 an analogy with the gravitational field. So  
11 right now we're all here and we are under the  
12 influence of the gravitational field that is  
13 produced by the Earth. And we all know that if  
14 we pick up something and let it go, it's going  
15 to fall on the ground.

16 Q: Okay. And is an electromagnetic field the same  
17 as electricity?

18 A: Yes.

19 Q: Okay. We heard yesterday a little bit about  
20 charges. Is a charge electricity?

21 A: The charge is a physical property of matter and  
22 it's what creates the electromagnetic field.

23 Q: But a charge itself is not electricity or is  
24 it?

25 A: It's the source of electricity.

1 Q: It's the source of electricity, okay. And what  
2 is an "electron"?

3 A: An "electron" is the most fundamental carrier  
4 of charge that exists in nature.

5 Q: And what is "energy"?

6 A: "Energy" is the ability that a system has to do  
7 work.

8 Q: Okay. I'd like to direct your attention to the  
9 expert report that you prepared. Will you  
10 please turn to page eight?

11 A: Sure. Yes.

12 Q: Will you please read your conclusion for the  
13 Court?

14 A: "Based on the previous analysis, it is my  
15 opinion that what Duke Energy provides is a  
16 service, and that the electrical energy it  
17 sells is not something that one can possess or  
18 does not have physical dimensions. Example, a  
19 table, a chair, a book, a car. The service  
20 that Duke Energy provides is to transform  
21 existing energy from one form to the other and  
22 to transmit and distribute that energy in a  
23 safe and efficient manner to its customers."

24 Q: Dr. Papa, is that still -- does that statement  
25 reflect your conclusion regarding what Duke

1 Energy provides?

2 A: Yes.

3 Q: Dr. Papa, in forming your opinion regarding  
4 what is electricity and what Duke Energy  
5 provides, how did you form your opinion? What  
6 did you base your opinion on?

7 A: The opinion is based on the fundamental laws of  
8 physics that govern the electromagnetic force,  
9 what we call in everyday life "electricity,"  
10 and these laws have been experimentally  
11 verified by several scientists over the last  
12 150 years and, as we see, it has completely  
13 changed, you know, our world.

14 Q: From a physics perspective would it be at all  
15 correct to say that electricity is tangible  
16 property in any way?

17 A: No.

18 Q: Okay. Is that -- would that violate any  
19 fundamental rule of physics?

20 A: Yes. So in the laws of physics, we have  
21 objects, we have energy and fields, and  
22 electricity is an electromagnetic field, so it  
23 is an influence; it is not an object.

24 Q: Is there any difference -- when you say it's  
25 not an object. Is there any difference between



1 electricity and energy and an electromagnetic  
2 field, those three things?  
3 A: Well, the electromagnetic field has -- carries  
4 energy. So what it does, it's another form of  
5 energy, in some sense.  
6 Q: Okay. And you said -- is electricity an  
7 object?  
8 A: No.  
9 Q: Is electricity a material?  
10 A: No.  
11 Q: Why not?  
12 A: It is not. It does not consist of matter. It  
13 is a field. It's a force field. And force  
14 fields are not matter.  
15 Q: Can you explain to the Court a little bit  
16 around -- about what a "field" is? You've said  
17 now electricity, electric energy are force  
18 fields or fields in nature. What is a "field"?  
19 Can you explain a little bit about that to the  
20 Court?  
21 A: A "field," as I said before, is an influence.  
22 So the easiest way to understand it, as I said  
23 before, is to look into the gravitational  
24 field.  
25 So right now there's a gravitational field in

1           this room. And the way we -- we understand, we  
2           feel the effect of this field is by basically  
3           a force that the field applies on an object.  
4           So in this case, for example, if I lift this  
5           cup up, we all know it's going to go down.  
6           Similarly, the electromagnetic field does the  
7           same thing. However, the source of the  
8           electromagnetic field is charge, so it's not  
9           matter, and there are differences. For  
10          example, the electromagnetic force can be both  
11          attractive and repulsive, whereas the  
12          gravitational force is only attractive.  
13        Q:   Gravitational force, gravitational field, can  
14            you harness gravity?  
15        A:   You can -- you can harness gravity.  
16        Q:   Can you measure gravity?  
17        A:   You can measure the strength of the  
18            gravitational field.  
19        Q:   And can you also measure the strength of the  
20            electromagnetic field when I transmit  
21            electricity?  
22        A:   Yes.  
23        Q:   And I can harness electrical energy.  
24        A:   Yes.  
25        Q:   Is electric energy made up of electrons or

1           electronically charged particles?

2    A:     What happens is that the -- again, the -- any  
3           charge, either static or moving, creates an  
4           electromagnetic field. A static charge  
5           creates --

6    THE COURT: What did you say? The energy charge? I  
7           didn't hear you.

8    THE WITNESS: No, the charge.

9    THE COURT: Okay.

10   THE WITNESS: Yeah. So the charge is the source of  
11           an electromagnetic field. If the charge is not  
12           moving, it creates an electric -- stationary --  
13           what we call a "stationary electric field." If  
14           the charge is moving, it creates both an  
15           electric, as well as a magnetic field.  
16           And, again, all of these have been  
17           experimentally verified. I do give a brief  
18           overview of the history in my report.

19   THE COURT: Wait a second. You said the charge is  
20           not moving; explain that. The charge does not  
21           create movement. What is that?

22   THE WITNESS: The charge -- if I have a stationary  
23           charge -- so let's say somehow magically I can  
24           hold a charge --

25   THE COURT: Yeah.

1 THE WITNESS: -- okay, that creates a field, an  
2 influence.

3 THE COURT: An influence.

4 THE WITNESS: Right. And if I --

5 THE COURT: And if it's moving, what --

6 THE WITNESS: If it is moving, it creates an  
7 electric field, as it was before, but it also  
8 creates a magnetic field.

9 THE COURT: Okay.

10 THE WITNESS: So, typically, these two fields go  
11 together. That's why we call it  
12 "electromagnetic field."

13 A very common analogy we do -- we use in our  
14 classrooms is like two people dancing together  
15 like a tango dance and, you know, basically  
16 interacting and passing energy from one person  
17 to the other one.

18 Q: When a -- when a --

19 THE COURT: Be careful about that.

20 MR. TRESH: I won't touch that.

21 THE COURT: Contempt is energy, too.

22 Q: When -- putting aside our dancing graduate  
23 students, when we -- when an electric utility  
24 like Duke provides electricity, can you explain  
25 the scientific properties that you were just

1 speaking of, the physical properties? Can you  
2 explain how that works practically when a  
3 company like Duke is providing the electric  
4 service? So, you know, I turn on my lights at  
5 home. I pay a monthly bill. How does that  
6 work from an electric service provider like  
7 Duke?

8 A: So -- okay. So what -- in order for us to do  
9 work, we need energy. So what, you know, we  
10 tried over the years to be able (sic) is to  
11 deliver energy in a very convenient, practical  
12 and cost effective way.  
13 So what basically happens is that at some point  
14 an electric -- electromagnetic field is  
15 created, all right, and that field gets  
16 propagated through a transmission line and what  
17 you really have is access to a force.  
18 So a force can move objects, okay. In this  
19 case it would be the electrons that exist in a  
20 metal. And then we can take advantage of the  
21 work that those electrons can do for us. So,  
22 in reality, it's an energy transformation.

23 Q: Okay. Energy transformation. So I'm going to  
24 talk to you about other energy transformations.  
25 So if I have a telecommunications company, for

1           example, let's say a wire line  
2           telecommunications company, AT&T or the old  
3           BellSouth, does that company also use wires to  
4           transmit its service? How does that work?  
5    A:     Yes, it works in exactly the same way. So I  
6           have an energy source on one end that transmits  
7           the energy via the wires and on the other end,  
8           your load -- in this case would be the  
9           telephone -- receives that energy and does  
10          something with it.

11   THE COURT REPORTER: It does what?

12   THE WITNESS: And does work, does something --

13   THE COURT REPORTER: Does something.

14   THE WITNESS: -- with that energy.

15   Q:     So in the -- so you said -- so the cell phone  
16           company -- oh, excuse me, the wire line  
17           telecommunications provider is creating an  
18           electric charge and using energy to do work  
19           and, in this case, to provide -- to allow me to  
20           talk to my brother in New York, for example?

21   A:     Correct.

22   Q:     Okay. And what about a cell phone provider,  
23           how does that work? So there are no wires,  
24           but -- how does that work in comparison? Is it  
25           similar, the same?

- 1 A: It is very similar. The process, of course, of  
2 transforming -- of propagating the energy is a  
3 little bit different.  
4 But what happens is that you have electric  
5 power at the base station and that power, via  
6 several devices and especially antenna, becomes  
7 electromagnetic wave; that wave propagates in  
8 free space. Our cell phone receives that wave  
9 and then basically receives a signal that  
10 contains information, such as the voice or  
11 data, and that's how we receive it.  
12 Q: So a cell phone propagates energy; is that  
13 correct?  
14 A: A cell phone uses electric energy and produces  
15 electromagnetic waves.  
16 Q: Produces electromagnetic waves.  
17 A: Uh-huh (affirmatively responds).  
18 Q: And a landline telecommunications provider  
19 propagates ...  
20 A: Also electromagnetic waves.  
21 Q: Propagates electromagnetic waves. And an  
22 electric service provider propagates  
23 electromagnetic waves.  
24 A: Yes.  
25 Q: All three -- well, the first two are the same,

1 using the wires, and cell phone is similar; is  
2 that --

3 A: Right. So the fundamentals are the same. Of  
4 course, what is different, as we know, is the  
5 characteristics of the signal; for example, the  
6 frequency, the strength, but that -- you know,  
7 we do that because for the specific purpose  
8 we're wanting to serve.

9 Q: So in all three examples, electric service,  
10 telephone service, wireless telephone service,  
11 I'm propagating a signal, an electromagnetic  
12 wave, and the difference in the wave is the  
13 signal? Can you explain that a little bit?

14 A: No, the difference are the characteristics of  
15 the wave. For example, the waves have a  
16 frequency, how many cycles per second. The  
17 electricity we use on the grid is 60 hertz,  
18 which stands for 60 cycles per second. For  
19 cell phones, we use frequencies of around one  
20 gigahertz; that's one billion cycles per  
21 second. And telephone we use either, again, DC  
22 or very low frequencies for the signal.

23 Q: So it's just -- excuse me, it's just the  
24 frequency of the signal that --

25 A: The frequency and, of course, the strength.



1 Q: Okay. The frequency and the strength. But  
2 still an electromagnetic wave in all three  
3 services.

4 A: Correct.

5 Q: Okay. And with regard to -- with regard to  
6 landline telecommunication service providers,  
7 do their customers receive anything tangible?

8 A: No.

9 Q: And in cell phone providers, do their customers  
10 receive anything tangible?

11 A: No.

12 Q: And in electric service providers, do their  
13 customers receive anything tangible?

14 A: No.

15 Q: Dr. Papa, does electricity or the  
16 electromagnetic field, does it have any  
17 discernible physical form, like a desk, a book  
18 or a chair?

19 A: No.

20 Q: And does electricity have any shape?

21 A: No.

22 Q: Electricity -- does electricity have any  
23 length?

24 A: No.

25 Q: Does it have any thickness?

1 A: No.

2 Q: Does it have any breadth?

3 A: No.

4 Q: Can electricity be seen?

5 A: No.

6 Q: When I see a lightning strike in the air, a lot  
7 of people would say, "Well, I'm seeing  
8 electricity;" is that not accurate?

9 A: No. What you are seeing is the effect of a  
10 very high electric field. So what typically  
11 happens is that the electric field is very,  
12 very, very strong that it basically breaks up  
13 the molecules of the air particles. When that  
14 happens, a lot of effects happen. Basically,  
15 light is created. You also have audio waves.  
16 And we know that if lightning strikes close it  
17 can actually break a window. And also you have  
18 heat generated.

19 Q: And so what you're seeing is the effects of the  
20 electric current in the air as opposed to  
21 seeing electricity; is that correct?

22 A: You see the effects of a very strong electric  
23 field on matter. And in this case, matter are  
24 the air particles that are in the air.

25 Q: And would the principals be the same, when I

1 say -- you just testified that you can't see  
2 electricity, that it doesn't have shape,  
3 length, thickness, breadth. Would these be the  
4 same for telecommunications --

5 A: Yes.

6 Q: -- service providers?

7 A: Yes.

8 Q: Would it be the same for television broadcast  
9 companies?

10 A: Yes.

11 Q: Can you explain that a little bit? Is that the  
12 same principle?

13 A: So we have the same principle. For example, we  
14 use the radios that we have in our cars. So  
15 somewhere we have a radio station that  
16 basically transmits electromagnetic waves via  
17 an antenna and in our car, we have another  
18 antenna that receives the electromagnetic wave.  
19 And, basically, then, through the electronic  
20 circuits in the radio crosses that signal  
21 for -- you know, for us to hear music or, you  
22 know, whatever other purpose.

23 Q: Similar process as providing an electric  
24 service?

25 A: It's similar.

- 1 Q: Can electricity be touched?
- 2 A: No.
- 3 Q: Certainly I can stick my finger in a socket and  
4 get hurt, get a charge.
- 5 A: Correct. So, again, very common misconception.  
6 What happens is that the strong electric field  
7 interacts with matters, in this case your  
8 finger, you know, your body, and our bodies  
9 have charges and, of course, the electric field  
10 applies a force on the charges in our bodies  
11 and that's how we feel the effect of the field.
- 12 Q: And the idea that I can't see or touch  
13 electricity, are these rules that -- your  
14 testimony, are these fundamental laws of  
15 physics that have been in place for sometime?
- 16 A: Yes.
- 17 Q: How long?
- 18 A: Well, since, you know, the beginning of the  
19 universe. Of course, it takes us a long time  
20 to understand what happens, but that's a  
21 different story.
- 22 Q: And among -- and among -- and would you say  
23 these laws are -- this point commonly  
24 understood?
- 25 A: Not only understood but they have been

1 experimentally verified, so the laws are strong  
2 and accurate.

3 Q: Never been -- in recent times, in the last 50  
4 years, in the last 100 years, never really been  
5 debated seriously by anybody?

6 A: No.

7 Q: When you say you couldn't touch electricity but  
8 you can feel the effects of electricity, are  
9 feeling the effects of electricity similar to  
10 feeling the effects of sunlight? Are there any  
11 differences?

12 A: Well, there are differences, some differences.  
13 The -- typically the -- in sunlight we -- what  
14 we feel is heat. So sunlight can basically  
15 provide heat. The electricity provides a force  
16 and part of that energy, basically, that is  
17 provided could become heat, but the force can  
18 also move things. So there are some  
19 differences.

20 Q: But can I see sunlight?

21 A: You can see sunlight.

22 Q: Like I can see lightning?

23 A: Different. The lightning, the result of the  
24 breakdown of the material is that, you know,  
25 light is produced.

1 Q: Okay. You mentioned earlier in your testimony  
2 that gravitational -- that a gravitational  
3 field can be harnessed. Can you explain that  
4 a little bit?

5 A: Sure. So in all of these fields, one way  
6 we -- one concept we typically use is the  
7 potential energy.

8 So if I, for example, pick up this cup and move  
9 it up here, it has potential energy. What does  
10 that mean? It can do work. When does it do  
11 work? If I let it go and it falls down. Okay?

12 A typical example is in hydropower stations  
13 where they use the energy of falling water.

14 You know, if, for some reason, they want to  
15 increase the energy at some point that the  
16 generator is producing, they can move up water  
17 at a higher level and then basically use that  
18 energy as the water falls to increase, you  
19 know, the energy of the generator.

20 Another example is what we use in space travel.  
21 So when we launch, for example, a satellite  
22 into Mars or other planets, we use the force of  
23 the gravitational fields of those planets to  
24 guide, you know, our satellite, our spacecraft  
25 to the desired location.

1 Q: You mentioned earlier that electricity is not  
2 tangible and it's not property. Can you  
3 measure electricity?

4 A: You can measure the -- for example, the  
5 strength of the electric field. So, yes, you  
6 can measure it.

7 Q: Are there other intangibles that you can  
8 measure, other fields or other tangibles --

9 A: Yes.

10 Q: -- in the universe?

11 A: So you can -- we can measure a force. We can  
12 measure time. We can measure the speed of a  
13 car. That's what happens in freeways, right,  
14 when the police measure via radar the speed of  
15 our car.

16 Q: So if an electric utility like Duke -- we heard  
17 testimony -- measures their electric service in  
18 kilowatt hours, a cell phone provider might  
19 measure their service in minutes of use, time,  
20 for example?

21 A: Yes, you can measure time. You can also  
22 measure energy.

23 Q: Can I measure wind?

24 A: You can measure the speed of wind, yes.

25 Q: Can I measure light?

- 1 A: You can measure light.
- 2 Q: In your view, is measuring something, the  
3 ability to measure something instructive at all  
4 into determining whether something is tangible  
5 or property?
- 6 A: No. The example I brought before is time. So  
7 I can measure time, but, you know, time is not  
8 an object. I can measure the force. The force  
9 is not an object. I can measure speed of an  
10 object, but speed itself is not an object.
- 11 Q: Does the power company, electric service  
12 provider like Duke Energy, do they make or  
13 create electricity?
- 14 A: No. What happens is that they transform energy  
15 from one form to another and in this case it  
16 would be electromagnetic field energy.
- 17 Q: Okay. Can I store electric service?
- 18 A: What one can do is that you store electric  
19 charge, which is the source of the electric  
20 field.
- 21 Q: Could store the source of an electric charge.  
22 Can you explain that a little bit further?
- 23 A: Yes. So we know and have proven experimentally  
24 that charges are the sources of the electric  
25 and magnetic fields. Now, what we can do is,



1            basically, via chemical reactions, we can  
2            create charges via specific chemical reactions  
3            and we can store them; most common device used  
4            is the battery.

5    Q:    Is it common that fields and other intangibles  
6            have properties associated with them?

7    A:    It is common, yes.

8    Q:    In the context of gravitational field, what are  
9            some of those properties?

10   A:    It's the strength of the field, the direction  
11           of the field.

12   Q:    Is that similar, the same, for an  
13           electromagnetic field?

14   A:    Yes, the strength of the field, the direction,  
15           also, and then the time variation of the field,  
16           because as I said before, in most applications  
17           we -- the sources move over time, so that has  
18           to do with the frequency of the field, which  
19           translates into frequency of the signal.

20   Q:    Does the electric -- switching gears for a  
21           moment. Does the electric energy that Duke  
22           provides -- you mentioned that they don't  
23           create the energy; is that right?

24   A:    That is correct.

25   Q:    Okay. And can energy be created or destroyed?

1 A: No. So one of the fundamental laws of physics,  
2 probably the most important one, is that one  
3 cannot create or destroy energy.

4 MR. TRESH: Okay. One moment, Your Honor.

5 No further questions, Your Honor.

6 THE COURT: Oh, while I'm at it, I'll go ahead and  
7 rule on the -- specifically on Petitioner's  
8 Exhibit Forty-five.  
9 I'm relying on Jones versus Doe, 372 S.C. 53,  
10 and then the more recent case of -- let me back  
11 up -- Allegro, A-L-L-E-G-R-O, Inc., v. Scully.  
12 It was decided July 11, 2012. That case almost  
13 directly addressed this particular subject and  
14 ruled that it was -- that the document was not  
15 admissible. All right?

16 MR. TRESH: Thank you, Your Honor.

17 MR. GREEN: Thank you, Your Honor.

18 DR. PAPAPOLYMEROU - CROSS-EXAMINATION BY MR. GREEN:

19 Q: Good morning, Doctor.

20 A: Good morning.

21 Q: Nice to see you again.

22 A: Same here.

23 Q: Your testimony here today is based on abstract  
24 concept, isn't it?

25 A: Yeah. It's based on the laws of physics.

- 1 Q: But the answer to my question is "yes"?
- 2 A: I'm answering that it's based on the laws of  
3 physics.
- 4 Q: The answer to my question is "no," then?
- 5 A: (No response.)
- 6 Q: Let me ask the question again. I'm not -- I'm  
7 just trying to get an answer to my question.  
8 Your testimony here today is based on something  
9 abstract, isn't it -- abstract concept, isn't  
10 it?
- 11 A: My testimony is based on the laws of physics  
12 that I've learned as an engineer and I practice  
13 and I teach. I'm not sure I understand how  
14 you -- you know, how you define "abstract."
- 15 Q: Well, didn't you previously testify that energy  
16 is the ability to do something, something very  
17 abstract?
- 18 A: It's the ability to do work.
- 19 Q: But you testified it was something very  
20 abstract, didn't you?
- 21 A: I believe I testified that it's the ability to  
22 do work.
- 23 Q: All right. Let's look at what you testified.  
24 You previously gave a deposition in this case,  
25 did you not?

- 1 A: Yes.
- 2 Q: And I have just handed you a copy of your  
3 deposition. I would draw your attention to  
4 page 52 of that deposition, lines seven and  
5 eight. Are you with me?
- 6 A: Yeah.
- 7 Q: And does it say, "You have energy, which is the  
8 ability to do something, something very  
9 abstract"?
- 10 A: Yes.
- 11 Q: So that was your testimony, then.
- 12 A: That is correct, yeah.
- 13 Q: And I think you've described electricity as a  
14 "phenomenon;" is that correct?
- 15 A: Yes. I have described it as a force field.
- 16 Q: Yes. But the answer -- my question is, I think  
17 you've described electricity as more of a  
18 "phenomena;" is that correct?
- 19 A: Yes.
- 20 Q: Okay. And I think you've testified that  
21 "Electromagnetic energy can propagate in the  
22 form of waves even in a vacuum; actually, this  
23 is how we know that other galaxies or star  
24 systems exist in outer space."
- 25 A: Yes.

- 1 Q: Is that correct?
- 2 A: Yes.
- 3 Q: I think you testified that you can pick up  
4 waves seen and unseen; is that correct?
- 5 A: Yes.
- 6 Q: Now, I think Exhibit Forty-three has a lot of  
7 your publications here, a lot dealing with  
8 microwaves and the like; is that correct?
- 9 A: Yes.
- 10 Q: And you deal a lot with cell phone technology;  
11 is that correct?
- 12 A: To a good extent, yes.
- 13 Q: And you deal with radar technology for the  
14 Department of Defense; isn't that correct?
- 15 A: Yes.
- 16 Q: And you provide expert testimony or expert  
17 assistance -- let me recharacterize that -- you  
18 provided expert assistance in a case involving  
19 cell phone technology; isn't that correct?
- 20 A: Uh-huh (affirmatively responds). Yes.
- 21 Q: And you have advised Motorola on circuit  
22 designs for telecommunications products; isn't  
23 that correct?
- 24 A: Yes.
- 25 Q: And that was cell phones with Motorola?

- 1 A: Circuits -- circuits that are used in wireless  
2 communication systems.
- 3 Q: And the cell phones that you're talking about,  
4 doesn't that really involve radio technology?
- 5 A: It involves electromagnetic waves.
- 6 Q: But isn't a cell phone transmission really a  
7 radio transmission?
- 8 A: You can call it a radio transmission, but  
9 fundamentally it's an electromagnetic wave.
- 10 Q: Okay. But -- so the answer to my question is,  
11 yes, it is a radio transmission?
- 12 A: Yes.
- 13 Q: And radar -- radar technology, that involves  
14 radio -- I mean, excuse me, radar, that  
15 involves radio technology; isn't that correct?
- 16 A: It involves launching electromagnetic waves and  
17 then, you know, reading the return from those  
18 waves.
- 19 Q: Okay. What is "radar" short for?
- 20 A: Radio detection and ranging.
- 21 Q: Thank you. Now, what we're talking about here  
22 today, I think you've testified, is  
23 transforming energy, right?
- 24 A: Correct.
- 25 Q: And you agree, I think, that kinetic energy,

1           that's a form of energy, correct?

2   A:     Yes.

3   Q:     That won't power my kid's stereo, will it?

4   A:     No.

5   Q:     Mechanical energy won't power my kid's stereo.

6   A:     No.

7   Q:     Electricity or electric energy will power my

8           kid's stereo.

9   A:     Correct.

10  Q:     And that electricity has a charge, correct?

11  A:     The -- the electromagnetic field that exists on

12           the lines, that basically will apply a force on

13           the electrons that are inside the conductors of

14           the various circuits, and that is then

15           providing the work to listen to the music that

16           your kids listen to, for example.

17  Q:     There's an electric charge as part of that

18           process; isn't that correct?

19  A:     The charges are inside the conductors.

20  Q:     Okay. But there is an electric charge,

21           correct?

22  A:     Correct. Yes.

23  Q:     I think you testified earlier that charge is a

24           physical property of matter; isn't that

25           correct?

- 1 A: Yes.
- 2 Q: Now, kinetic energy doesn't have any type of
- 3 charge or electric current with it, correct?
- 4 A: Correct.
- 5 Q: Nor does mechanical energy.
- 6 A: Correct.
- 7 Q: But your testimony is that's just energy.
- 8 A: Correct.
- 9 Q: Your testimony is it's not a substantially
- 10 different use of energy from electric -- from
- 11 mechanical energy to electric energy.
- 12 A: Energy is energy.
- 13 Q: Okay. Now, you would agree that Duke Energy
- 14 generates electricity with its generators,
- 15 correct?
- 16 A: It generates energy in the form of an
- 17 electromagnetic field. So common parlance we
- 18 call it "electric energy."
- 19 Q: Now, electric --
- 20 MR. GREEN: Bear with me just one moment.
- 21 Q: An electric current is a flow of charges,
- 22 right?
- 23 A: Yes.
- 24 Q: And that's measured in amperes?
- 25 A: Correct.



- 1 Q: Electrons have mass, correct?
- 2 A: Correct.
- 3 Q: And I think you said cell phone technology, the
- 4 frequencies are different between cell phone
- 5 transmissions and electric transmissions; isn't
- 6 that correct?
- 7 A: Correct.
- 8 Q: Cell phone has a much higher frequency.
- 9 A: That's right.
- 10 Q: Electricity is about 60 hertz.
- 11 A: Correct.
- 12 Q: And then I think you said telephone company and
- 13 cell phone companies use electricity to
- 14 transmit communications; is that correct?
- 15 A: Yes.
- 16 Q: The cell phone uses a battery, correct, to
- 17 generate the -- to transmit the communications;
- 18 isn't that correct?
- 19 A: Yes. The cell phone that we have, the users
- 20 have, use a battery.
- 21 Q: Okay. And the telephone company use
- 22 electricity; is that correct?
- 23 A: That's correct.
- 24 Q: Telephone companies, to your knowledge, don't
- 25 typically generate their own electricity, do

1           they?

2    A:    They may get it from the power grid.  In the  
3           old days, they would use batteries.  For  
4           example, in the 1800's when telegraphy, you  
5           know, which was the predecessor to telephony,  
6           they would use batteries to power, you know,  
7           their transmission lines.

8    Q:    You testified you can't touch electricity.

9    A:    Correct.

10   Q:    Is that right?

11   A:    Yes.

12   Q:    If I stick my finger in a socket, I'm not  
13           touching electricity.

14   A:    You're not.

15   Q:    I feel the force of the electricity if I  
16           complete the circuit.

17   A:    You feel the force of the electric field.  In  
18           a lot of cases, you know, if the field is  
19           extremely strong, you know, you don't even have  
20           to touch the metal, for example, that  
21           propagates the energy.

22   Q:    So I can tough -- I can't touch electricity,  
23           but it can touch me; is that your testimony?

24   A:    No.  The testimony is that the human body can  
25           feel the effects of the electric field.  The

1 reason for that is that the electric field  
2 interacts with matter. As we all know, our  
3 bodies consist of matter, so that's what  
4 happens.

5 Q: And I think you testified that I can't move  
6 electricity; is that correct?

7 A: Correct.

8 Q: But the current moves, doesn't it?

9 A: The charges move.

10 Q: Okay. You testified electric current --

11 THE COURT: You said the charges?

12 THE WITNESS: The charges move, yes.

13 Q: And you testified that electric current is a  
14 flow of charged particles; is that correct?

15 A: Yes.

16 Q: And as part of that process, there are  
17 electrons that are oscillating; is that  
18 correct?

19 A: If you use an alternating current, yes.

20 Q: And that results in the charge.

21 A: No. As I explained before, and I want to make  
22 it very clear, what we do is that we basically  
23 propagate the energy. And the fact that we  
24 have the charges in motion, in the case of our  
25 wire, are electrons, we make them move in a

1           certain direction. In that way, they can do  
2           the work and give us the energy to use to power  
3           our devices.

4    Q:    Now, electricity can be measured, correct?

5    A:    Correct.

6    Q:    And I think you testified that the scientific  
7           principles really haven't changed in the  
8           last -- certainly in the last hundred years; is  
9           that correct?

10   A:    Yes.

11   Q:    And the process of generating electricity  
12          hasn't changed in the last hundred years.

13   A:    For most of the part, no. However, we have  
14          added renewable energies. So in consideration  
15          of the environment, we have developed solar  
16          panels. We have also developed more efficient  
17          wind generators. Again, mainly to mitigate any  
18          environmental effects that we may have from  
19          traditional techniques.

20   MR. GREEN: Bear with me one moment, please, Your  
21              Honor.

22            Your Honor, I don't have any more questions for  
23            this witness, excuse me.

24            Thank you, Doctor.

25   MR. TRESH: Brief redirect, Your Honor.

1 DR. PAPAPOLYMEROU - REDIRECT EXAMINATION BY MR.

2 TRESH:

3 Q: Professor Papa, what -- can you tell the Court,  
4 what does Duke Energy -- a company like Duke  
5 Energy, what do they provide to their  
6 customers?

7 A: Energy.

8 Q: Mr. Greene asked a couple of moments ago, he  
9 was saying can you touch electricity and I  
10 believe you testified that you can't touch  
11 electricity but you could feel the effects; is  
12 that correct?

13 A: Yes.

14 Q: And can you feel -- can you -- can the human  
15 body -- can you feel the effects of sunlight?

16 A: Yes.

17 Q: How do you feel the effects of sunlight?

18 A: Well, if we stand out in the sun, you know, the  
19 sun will warm up your body.

20 Q: Is it heat?

21 A: It's heat, yes.

22 Q: Okay. The same way I can feel the effects of  
23 a gravitational field; is that similar?

24 A: It's similar.

25 Q: Can I feel -- can a human body feel wind?

- 1 A: Yes.
- 2 Q: Okay. Does Duke Energy make electrons?
- 3 A: No.
- 4 Q: What do they do with electrons, if anything?
- 5 A: The electrons are used to basically propagate
- 6 the energy from the generator all way to the
- 7 load. And through various processes, you know,
- 8 you -- you want to do that in a very efficient
- 9 way.
- 10 So, for example, you increase the voltage, have
- 11 a high voltage transmission line and then you
- 12 decrease it at the location of the load. But
- 13 they do not provide electrons.
- 14 Q: And in a telecommunications signal -- and I'm
- 15 not concerned about the battery that's in my
- 16 handset, but when you have a radio tower or
- 17 wireless telecommunications and it's
- 18 transmitting a signal to my handset, is there
- 19 electrons or how -- how is that working, again?
- 20 The signal.
- 21 A: Right. It's an electromagnetic wave that
- 22 propagates in free space and even in vacuums.
- 23 Q: And a telecommunications landline provider, not
- 24 the telephone that I have in my hand and not
- 25 the base station, but what's transmitting over

1 the wire, what is that?

2 A: That is energy.

3 Q: Thank you. You mentioned a moment ago,  
4 Mr. Green asked you about whether the process  
5 of electricity has remained in place the same  
6 for a hundred years. I believe you said  
7 "fundamentally the same." I'd like to -- I'd  
8 like to drill into that a little bit. A  
9 hundred years ago, did they have nuclear power?

10 A: No.

11 Q: Fifty years ago? When did nuclear power come  
12 into existence?

13 A: Well, it's historical. It's the Manhattan  
14 Project; that was World War II. And after  
15 that, you know, in the -- sometime in the  
16 '50's, early '60's -- I don't remember  
17 exactly -- that they started making it into a  
18 commercial -- for commercial purposes.

19 Q: And the processes -- the fundamental physics  
20 behind nuclear power, they haven't changed.  
21 It's just our understanding of it and our  
22 ability to use it.

23 A: Correct. So the -- as I said before, the  
24 universe is the universe and, you know, how we  
25 understand that, you know, basically evolves

1 over time.

2 Q: But your understanding of Duke Energy today,  
3 that provides nuclear power, hydropower, solar  
4 panel -- power, those are forms of -- or part  
5 of the electric service process; is that  
6 correct?

7 A: That is correct.

8 Q: And those wouldn't have existed a long time  
9 ago.

10 A: No.

11 Q: And a company like Duke Power -- we heard  
12 testimony earlier -- would you agree with the  
13 statement that a company like Duke Power, it  
14 wouldn't have to generate any of its own  
15 electricity, it could buy it on the open  
16 market?

17 A: That's true.

18 Q: And so it could have just -- it could just  
19 provide the exact same electric service that it  
20 provides today, even if it didn't generate any  
21 electric service at all.

22 A: That's true.

23 Q: And that wouldn't have been the case a hundred  
24 years ago, correct?

25 A: Correct.



1 MR. TRESH: No further questions, Your Honor.

2 MR. GREEN: Short redirect -- re-cross, Your Honor.

3 DR. PAPAPOLYMEROU - RE-CROSS-EXAMINATION BY MR. GREEN:

4 Q: Mr. Tresh asked you about nuclear power; is  
5 that right?

6 A: Yes.

7 Q: Now, the electric energy that comes down the  
8 line to my house, that's not nuclear energy, is  
9 it?

10 A: No, it's electrical energy.

11 Q: And electrical energy that was generated  
12 through the use of nuclear power; is that  
13 correct?

14 A: It -- no, it was generated by using nuclear  
15 fuel.

16 Q: Nuclear fuel.

17 A: Using nuclear material.

18 Q: And nuclear fuel is an input that runs the  
19 generator, essentially, correct?

20 A: In very, very layman's terms. We have to be  
21 careful here. So what you use that -- you  
22 create a nuclear reaction and that's how you  
23 extract the energy. And, typically, when you  
24 do that, you boil water, you make it into  
25 steam, and the steam moves the turbine.

1 Q: And so you're generating steam. That's no  
2 different, though -- you're still generating  
3 steam even if you use a fossil fuel?

4 A: Correct.

5 Q: Or coal?

6 A: That's correct.

7 THE COURT: Coal is not a fossil fuel?

8 MR. GREEN: I guess coal is a fossil fuel. I guess  
9 I'm being redundant.

10 THE COURT: The dinosaurs would feel that way.

11 MR. GREEN: Thank you. Yes, sir.

12 Q: And those are all part of the inputs that start  
13 the generation process, isn't that correct,  
14 coal, fuel, gas, nuclear fuel?

15 A: You use it to generate energy, but then you  
16 transform into electrical energy.

17 Q: Okay. And nuclear energy uses uranium; is that  
18 correct?

19 A: Correct.

20 Q: And uranium is -- under your definition, is it  
21 a good or material? Is it tangible?

22 A: It's an object, yeah. It's matter.

23 Q: Okay.

24 MR. TRESH: Your Honor, objection. Mr. Green has  
25 gone way beyond any kind of redirect that I

1           started down. He started --

2   MR. GREEN: He started talking about nuclear power,

3           Your Honor, so --

4   MR. TRESH: We did not talk about how -- what

5           uranium was or anything like that, Your Honor.

6   MR. GREEN: Nuclear power, it depends on uranium.

7   THE COURT: You're on re-cross.

8   MR. GREEN: I'm raising issues involved in what he

9           raised on redirect.

10   THE COURT: What are you responding -- what issue

11          did he --

12   MR. GREEN: He talked about nuclear power as being a

13          difference -- or whatever it was. He made a

14          point about nuclear power that wasn't available

15          a hundred years ago is available now. Well, I

16          asked him about -- I am probing into the nature

17          of that nuclear power in the context of the

18          transmission -- generation, transmission and

19          distribution system.

20   THE COURT: And your objection is?

21   MR. TRESH: My objection, Your Honor -- my question

22          was limited to whether nuclear power existed a

23          hundred years ago or not and the answer was

24          "no."

25   THE COURT: Well ...

1 MR. GREEN: Your Honor, I think I'm entitled to  
2 explore the nature of that impact of nuclear  
3 power.

4 THE COURT: You did open up the issues -- I mean, by  
5 saying that, whether or not it existed, you  
6 open up the issue of -- to explore its benefits  
7 or -- I can't find the word I want to use --  
8 aspects in energy. So I'm going to let him go  
9 into it.

10 MR. TRESH: Okay. Thank you, Your Honor.

11 THE COURT: At least right now.

12 MR. GREEN: I apologize, Your Honor. I lost my  
13 train of thought.

14 Q: I think we said that uranium was -- it's  
15 matter. It's tangible under your definition.

16 A: That's correct.

17 Q: Same as the coal?

18 A: That's correct.

19 Q: Same as whatever fossil fuel it might be.

20 MR. TRESH: Your Honor, if I may. I did not ask any  
21 questions on coal or fossil fuels. That is not  
22 the scope of --

23 THE COURT: I'll sustain that.

24 MR. GREEN: Okay. Withdrawn.

25 No further questions. Thank you.

1 MR. TRESH: No further questions, Your Honor.

2 THE COURT: All right. Where I can understand, you  
3 testified -- I'm phrasing a little different,  
4 but the egis of electricity is the charge?

5 THE WITNESS: I'm sorry, I couldn't hear. The ...

6 THE COURT: The -- well, the -- I said, "The egis of  
7 electricity is the charge?" Electricity is  
8 derived from the charge?

9 THE WITNESS: The source --

10 THE COURT: Source.

11 THE WITNESS: -- of electricity, or an electric  
12 field, to be accurate, is a charge.

13 THE COURT: Is a charge. So Duke Energy generates  
14 the charge first which creates the electrical  
15 field?

16 THE WITNESS: No, they do not generate the charge.

17 THE COURT: Where does the charge come from, then?

18 THE WITNESS: The charge exists in the metals.

19 THE COURT: In the what?

20 THE WITNESS: In the metal in the wires.

21 THE COURT: Okay.

22 THE WITNESS: So what -- what fundamentally happens  
23 through the generator is that it separates the  
24 positive from the negative charges and that can  
25 give you a very strong electric field. And if

1           you bring a third charge now in that field,  
2           it's going to -- a force will be applied to the  
3           charge.

4   THE COURT: A charge can be stored, correct?

5   THE WITNESS: That's correct.

6   THE COURT: If Duke Energy didn't through their  
7           generators create something that created the  
8           charge, then how would you have the electrical  
9           field?

10   THE WITNESS: Through the force. Through the force.  
11           The electric field applies a force to the  
12           electrons in the conductors and that field  
13           propagates and you get it at the other end and  
14           you hook it up to a device that takes advantage  
15           of that force. So, in essence, what --

16   THE COURT: The generators generate force? I mean,  
17           what ...

18   THE WITNESS: Yes, a force field, exactly.

19   THE COURT: They generate the force field. By what  
20           means?

21   THE WITNESS: It is called electromagnetic induction.  
22           So when you have a moving metal inside a  
23           magnetic field, or the opposite, you have a  
24           metal inside a time varying magnetic field,  
25           the -- a force gets applied in the electrons

1           inside the metal and you can basically separate  
2           the negative from the positive. And that  
3           basically is how we create an electric field,  
4           between the positive and the negative.

5   THE COURT: If charge is the source of electricity,  
6           then how does it enter into all that?

7   THE WITNESS: Well, you manipulate the charges;  
8           that's what you do, Your Honor. So ...

9   THE COURT: So Duke Energy manipulates the  
10          charges --

11   THE WITNESS: Correct.

12   THE COURT: -- to create the electric field.

13   THE WITNESS: That's correct.

14   THE COURT: All right. And that charge is moved via  
15          whatever transmission means that they have  
16          available, wires --

17   THE WITNESS: Right. So the --

18   THE COURT: -- to the ultimate source.

19   THE WITNESS: Correct.

20   THE COURT: All right. Now, you said that you can  
21          feel electricity because we are matter. And I  
22          gather that the principle by which you can feel  
23          electricity is because it is therefore because  
24          we are matter. If we weren't matter, we  
25          couldn't feel electricity, correct?

1 THE WITNESS: That's correct.

2 THE COURT: If that's the theory, then we could  
3 equally not feel a pinprick if we were not  
4 matter, correct?

5 THE WITNESS: (No response.)

6 THE COURT: I mean, we feel a pin pricking our skin  
7 because we are matter, do we not? I'm just  
8 trying to understand if there is a distinction  
9 there that I'm missing or ...

10 THE WITNESS: Yes, you can feel it, but the pin is  
11 an object. So you have an object touching your  
12 body. The field is not an object. It exerts  
13 a force on your body.

14 THE COURT: Well, that being the case, then what --  
15 if it's only because we're matter, it's  
16 not -- it would seem to me that the distinction  
17 is not that we are matter but that we possess  
18 electrons.

19 THE WITNESS: That is true, too. But the electric  
20 field can interact also -- it does interact  
21 with, for example, insulators; materials that  
22 don't have any free electrons.

23 THE COURT: It does interact with those?

24 THE WITNESS: Yes.

25 THE COURT: Okay. Follow up on what I have asked?



1 MR. TRESH: Thank you, Your Honor.

2 THE COURT: If you wish.

3 MR. TRESH: I do and I think it's relevant.

4 DR. PAPAPOLYMEROU - FURTHER REDIRECT EXAMINATION BY

5 MR. TRESH:

6 Q: So, in the pin example, you can certainly feel  
7 a pin or a pen hit your finger, matter. Can  
8 you -- again, on the sunlight, can you feel the  
9 sunlight because we're matter, for example? In  
10 other words, if we didn't have matter, we  
11 couldn't -- you know, our bodies wouldn't heat  
12 in the sunlight, right?

13 A: Correct.

14 Q: And in the context of what Duke Energy sells to  
15 its customers -- and I think this is  
16 critical -- how would -- when Duke Energy's  
17 customers -- I'm at home, I plug in my  
18 television set, what's -- what's happening in  
19 that television set? Are there -- are there  
20 excited electrons that are in that television  
21 set and that field is exciting those electrons?  
22 Is that what's happened?

23 A: When you connect it to the plug, yes.

24 Q: When I connect it to the plug. So it's not  
25 Duke Energy sending electrons down the wire.

1           It's there's electrons in my television set or  
2           my battery or my cell phone, whatever the case  
3           may be, and that's what's being excited by the  
4           field, right?

5    A:     That's correct.

6    Q:     And the difficulty regarding all of this, at  
7           least to me as a nonengineer, has always been  
8           this field is abstract, as you said to  
9           Mr. Green in the beginning, right?

10   A:     It is abstract, yes.

11   Q:     So the idea and concept of electricity, which  
12           is what people have had a hard time with, is it  
13           has no form, it has no shape, it has no  
14           existence, correct?

15   A:     It has no form, correct, yes.

16   Q:     No form, no shape?

17   A:     Shape, right. Correct.

18   Q:     And so what I'm getting in my house is just  
19           this field. I can't see it, I can't touch  
20           it...

21   MR. TRESH: And that's makes it so difficult, Your  
22           Honor.

23   Q:     Is that accurate?

24   A:     Yes.

25   MR. TRESH: Okay. Thank you, Your Honor.

1 THE COURT: Re-cross?  
2 MR. GREEN: None from me, Your Honor. Thanks.  
3 THE COURT: You may step down.  
4 THE WITNESS: Thank you.  
5 THE COURT: Wait a second.  
6 You may step down.  
7 (Witness excused.)  
8 THE COURT: Do we need to take a break or ...  
9 MR. GREEN: It's up to y'all. Are y'all resting?  
10 MR. TRESH: We're fine. We're ready to go if you  
11 are.  
12 MR. GREEN: Well, I mean, are you resting your case?  
13 MR. TRESH: Oh. Yes, Your Honor, we have no further  
14 witnesses. We rest.  
15 THE COURT: I guess you were operating under one  
16 definition of "resting" and --  
17 MR. TRESH: That is correct, Your Honor. I was  
18 asking if he thought I was taking a break, yes.  
19 THE COURT: You were a body at rest.  
20 All right. He has legally rested.  
21 MR. GREEN: Yes, he has legally rested. Your Honor,  
22 we would move for under Rule 41(b) for an  
23 involuntary nonsuit. We contend that based on  
24 the record thus far that Duke Energy has failed  
25 to meet its burden of proof and the judgment --

1           the Department is entitled to judgment as a  
2           matter of law for the reasons you've heard here  
3           today, as well as for the reasons stated in our  
4           pretrial brief.

5   THE COURT: All right. That's denied.

6   MR. GREEN: Thank you. It might be appropriate to  
7           take a five or ten-minute break, if that'd be  
8           all right with the Court.

9   THE COURT: That's fine with me.

10   (Off the Record from 10:59 to 11:14 a.m.)

11   THE COURT: Proceed away.

12   MR. GREEN: First, Your Honor, I'd like to go ahead  
13           and move into the record the articles of --  
14           corporate charters that we've already  
15           stipulated to as part of -- I just wanted to go  
16           ahead and move those in as Exhibits Two, Three  
17           and Four.

18   THE COURT: You started with "articles," but it's  
19           the corporate charter?

20   MR. GREEN: It's the corporate charter. Articles of  
21           incorporation, articles of -- but it's the  
22           corporate charter.

23   THE COURT: All right.

24   MR. TRESH: No objection.

25   MR. GREEN: Thank you.

1 THE COURT: They're admitted. They've been marked  
2 as?

3 MR. GREEN: Respondent's Two, Three and Four.

4 THE COURT: Okay.

5 MR. GREEN: Thank you.

6 (Respondent's Exhibit Numbers Two, Three and Four  
7 were admitted into evidence.)

8 MR. GREEN: And now I would call Glenn Robinson to  
9 the stand.

10 GLENN ROBINSON, P.E., having been duly sworn,  
11 testifies and examines as follows:

12 MR. ROBINSON - DIRECT EXAMINATION BY MR. GREEN:

13 Q: Mr. Robinson, please state your name for the  
14 record.

15 A: I'm Glenn Robinson.

16 Q: And what is your current employment and  
17 position?

18 A: I am an electrical engineer. I work for  
19 Engineering, Design & Testing as a consultant.

20 Q: Are you a registered professional engineer?

21 A: Yes, I am.

22 Q: What states are you registered in?

23 A: Georgia, South Carolina, North Carolina, Ohio,  
24 Indiana and Washington.

25 Q: Thank you. Now, tell me a little bit about

1 ED&T. What type of work do you do at ED&T?

2 A: Engineering, Design & Testing primarily  
3 performs services for the insurance industry.  
4 They investigate claims and the purpose of this  
5 investigation generally is to determine the  
6 facts of -- or circumstances of loss so that  
7 the insurance adjusters can determine whether  
8 the loss is covered by the policy language. We  
9 also do work in the scope of damage, cost of  
10 reconstruction, and we occasionally do work  
11 directly work for attorneys.

12 Q: Okay. And as part of your work for ED&T, do  
13 you evaluate plant-wide electrical systems?

14 A: I have.

15 Q: Do you evaluate damage and repairs, needed  
16 repairs to electrical systems and equipment?

17 A: I have.

18 Q: And do you -- are you involved in  
19 troubleshooting and analyzing failures of  
20 electric and control networks?

21 A: Yes.

22 Q: How long have you worked with ED&T?

23 A: Thirteen years now.

24 Q: And prior to that, did you used to work for a  
25 company called FiberMark?

1 A: Yes.

2 Q: And what projects were you involved in at  
3 FiberMark regarding, of course, the electrical  
4 issues?

5 A: FiberMark is a small custom paper manufacturer  
6 in New Jersey. They have two mills near the  
7 Delaware River, about a mile and a half apart.  
8 I was -- my job title was electrical and power  
9 superintendent. In regard to that, I was  
10 responsible for operations of two water wheel  
11 generators and a steam turbo generator and I  
12 also ran a crew of six electricians, two at one  
13 mill and four at another, doing maintenance  
14 work, primarily. I did occasionally get into  
15 system design and construction where we were  
16 adding capabilities to the mills.

17 Q: And prior to that, did you work for a company  
18 called Getchell Gold, Inc.?

19 A: Yes, I did.

20 Q: And what electrical projects were involved in  
21 for Getchell Gold?

22 A: I was a project engineer and I was involved in  
23 a wide variety of projects. The largest  
24 electrical project I was involved with was the  
25 addition of a feeder to a new underground mine,

1           which involved working with the electric  
2           utility to provide a new substation to step  
3           down transmission voltage to an intermediate  
4           voltage and the construction of the lines and  
5           controls to bring the power to the mouth of the  
6           line (sic).

7    Q:    Okay.  And did you work for Pitt County  
8           Hospital in North Carolina as an electrical  
9           engineer for a while?

10   A:    I did, briefly.

11   Q:    And did you work for Weyerhaeuser Company --

12   A:    Yes.

13   Q:    -- as a electrical engineer?

14   A:    I worked -- I did.

15   Q:    And just very briefly, what were your  
16           responsibilities for Weyerhaeuser?

17   A:    At Weyerhaeuser I had two sequential jobs.  The  
18           first one, I was a research and development  
19           project manager responsible for implementing a  
20           computer-based control system for cross-cutting  
21           tree length stems into saw logs and plywood  
22           blocks with the objective of placing the cut  
23           points to maximize the economic return to the  
24           mill.

25           At the -- I stayed with that project long



1 enough through the first commercial  
2 implementation, Wright City, Oklahoma, and then  
3 because the next stage was just replication at  
4 other mills, I chose to move to a different  
5 line of endeavor and I became the engineering  
6 manager for a new technology sawmill project in  
7 North Carolina.

8 I worked with the design and construction  
9 outfit in Atlanta for a couple of years during  
10 that phase of the job and then I stayed on as  
11 plant engineer after that phase of the job.

12 Q: Okay. And for a period of years, you were  
13 employed with the Oregon Graduate Institute; is  
14 that correct?

15 A: That's correct.

16 Q: Prior to that you were employed with the  
17 University of Washington?

18 A: Yes, I was the staff electrical engineer. My  
19 first assignment was in development of control  
20 systems for torpedoes. This was a Navy  
21 contract lab.

22 Q: Okay.

23 A: And then after about five years at that -- six  
24 years, possibly -- at that, I went for two  
25 years to the high energy physics lab where I

1 managed their instrument development and their  
2 experimental workforce. And then I put in two  
3 years, also, at the computer center, where I  
4 worked on developing campus data network.

5 Q: And prior to that, did you work for a while for  
6 the Boeing Company?

7 A: Yes, I did.

8 Q: And what did you do for the Boeing Company  
9 group?

10 A: I was involved in the wiring for the Minuteman  
11 II missile.

12 Q: And what is your educational background?

13 A: Excuse me.

14 Q: Do you need some water?

15 A: I have a Bachelor of Science in electrical  
16 engineering from the University of Washington  
17 and a Master of Science in electrical  
18 engineering from the same institution.

19 MR. GREEN: Your Honor, I would tender Mr. Robinson  
20 as an expert in the areas of principles of  
21 manufacturing electricity, its scientific and  
22 technical intricacies and industry standards.

23 MR. TRESH: Your Honor, we would object to  
24 Mr. Robinson serving as an expert in this  
25 regard and I'd ask the Court for permission to

1           examine Mr. Robinson's credentials further?

2   THE COURT:   Proceed.

3   VOIR DIRE EXAMINATION BY MR. TRESH:

4   Q:     Good morning, Mr. Robinson.   How are you?

5   A:     Good morning.   I'm nearly perfect.

6   Q:     Nearly perfect.   Excellent.   Mr. Robinson, for  
7           the past 13 years, August '99 to the present,  
8           approximately 13 years, you've been an  
9           insurance investigator for Engineering, Design  
10          & Testing corporation?

11  A:     No.

12  Q:     Tell me what your responsibilities are at  
13          Insurance (sic) Design & Testing corporation.

14  A:     My responsibilities at Engineering, Design &  
15          Testing was as an engineer in charge for  
16          engineering investigations into cases of loss.  
17          I was involved in cases where somebody  
18          perceived that there was an electrical aspect  
19          or I was brought in as a second engineer if the  
20          initial investigation developed the need for  
21          that expertise.

22  Q:     So what would be an example of an electrical  
23          issue?   A hospital gets -- somebody gets  
24          electrocuted in a hospital, would that be an  
25          example?

1 A: I have -- I worked on a variety of types of  
2 losses. Some involved personal injury. Many  
3 of them were fires, defects in control systems.  
4 I had a couple of cases involving substations  
5 and large transformer failures. I think that  
6 pretty well covers it.

7 Q: Has any -- in the last 13 years, how many cases  
8 have you worked on investigating insurance  
9 claims regarding manufacturing electricity?

10 A: I have not handled any claims in regard to  
11 commerce. My role is strictly engineering.

12 Q: That was not my question I asked. How many  
13 cases have you been involved in involving the  
14 manufacturing of electricity?

15 A: I would say a handful of generator files.

16 Q: Handful of cases in 13 years?

17 A: Yes.

18 Q: And how many cases have you been involved in  
19 involving scientific intricacies -- the  
20 scientific intricacies of electricity?

21 A: That ...

22 Q: These are your counsel's words, not mine.

23 A: I understand. One can't really control what a  
24 lawyer will say.

25 Q: Absolutely true. Except the Judge.

1 THE COURT: No, I can't.

2 A: We --

3 THE COURT: I can only react to it.

4 MR. TRESH: And I will feel the effects of that.

5 A: We base our investigations on the scientific  
6 method and to the -- to that degree, all of the  
7 work that I have done, which were primarily  
8 electrical in nature, involved the application  
9 of scientific principles and my engineering  
10 training to the resolution of the matter.

11 Q: But only a handful of those cases involved  
12 manufacturing electricity?

13 A: That's correct.

14 Q: And how many cases -- are you an expert in  
15 industry standards regarding electricity?

16 A: I am a near expert in the National Electric  
17 Code, which has to do with the application of  
18 electricity. I am somewhat familiar with the  
19 National Electrical Safety Code, which is what  
20 the transmission and distribution industry goes  
21 by. I am familiar with the transmission and  
22 distribution technology. And to the extent  
23 needed, if a specific code or standard is --  
24 needs to be consulted to resolve an issue, then  
25 I go to that code or standard to resolve it.

- 1 Q: So you are an expert in electric industry  
2 standards or are you not?
- 3 A: I have a working familiarity with the National  
4 Electrical Safety Code, which is what the  
5 electrical industry -- transmission industry  
6 uses in its transmission system.
- 7 Q: A working familiarity. And are you an expert  
8 in manufacturing industry standards?
- 9 A: I'm an expert in manufacturing by virtue of my  
10 experience in manufacturing.
- 11 Q: For the past 13 years, you said you were --  
12 worked on insurance claims.
- 13 A: Yes.
- 14 Q: What expertise in manufacturing do you have as  
15 part of insurance claims?
- 16 A: From the period of 1980 -- excuse me, 1979  
17 through 1999, I worked in manufacturing.
- 18 Q: But in the last 13 years you have not; is that  
19 correct?
- 20 A: That's correct.
- 21 Q: Would an electrician be familiar with  
22 electrical safety codes/standards?
- 23 A: Yes.
- 24 Q: Would that make an electrician an expert in the  
25 scientific and technical intricacies of

1 electricity?

2 A: No, that's a different question.

3 Q: That was just the question I asked.

4 A: Yep.

5 Q: Okay. Do you consider yourself an expert in  
6 the National Electric Code?

7 A: Yes, I would say so.

8 Q: Do you recall during your deposition when I  
9 asked you whether you're an expert in any  
10 electrical industry standards, your response  
11 was, "I came close to being an expert in the  
12 National Electrical Code"?

13 A: Yes.

14 Q: So which is it, do you come close or are you an  
15 expert?

16 A: Being an "expert" is a relative term. My  
17 client employed me as an expert; I'm an expert.

18 Q: You mentioned you worked at a paper mill in New  
19 Jersey --

20 A: Yes.

21 Q: -- about 14, 15 years ago?

22 A: I guess that's right. Time flies.

23 Q: Okay. And at that paper mill, what were your  
24 responsibilities?

25 A: I was responsible for improvement projects, for

1 supervising maintenance electricians and  
2 supervising the operation of a turbo generator  
3 and two water wheel generators.

4 Q: And in the past 13 years, in your role -- in  
5 your current position, did many of your claims  
6 involve physical damage to equipment?

7 A: Yes.

8 Q: Did they involve damage to equipment as a  
9 result of equipment malfunction?

10 A: Yes.

11 Q: Fires?

12 A: Yes.

13 Q: Machines that broke down?

14 A: Yes.

15 Q: And yet only a handful of those involved  
16 electricity?

17 A: No.

18 Q: What did a handful involve?

19 A: You asked me a question about generation of  
20 electricity and I answered that question.

21 Q: Uh-huh (affirmatively responds).

22 A: But virtually all of my jobs involved some  
23 aspect of electricity.

24 Q: Since 1990, your capacity as being employed by  
25 Engineering, Design & Testing, have you done



1           any actual engineering work?

2    A:     It was all engineering work.

3    Q:     I'd like to read your deposition.  When I asked

4           you that question, line 17 of your deposition,

5           "Okay, since 1999 in your capacity as being

6           employed by Engineering, Design & Testing

7           corporation, have you done any actual

8           engineering work?"  Answer:  "Only incidental

9           to investigations.  I do calculations,

10          sometimes prepare sketches and drawings."  Is

11          that not correct?

12   A:     I said that.

13   Q:     So you don't always do engineering work.  It's

14          only incidental to your --

15   A:     I'd like to explain that.

16   MR. TRESH:  Now, Your Honor, Mr. Robinson in 13

17          years has only done incidental engineering work

18          as he just testified to --

19   THE COURT:  Well, one, he just asked to explain that

20          but, number two, do you -- are you through with

21          your voir dire?

22   MR. TRESH:  I am, Your Honor.

23   THE COURT:  Well, that's --

24   MR. TRESH:  Fair enough.

25   MR. GREEN:  Thank you, Your Honor.

1 THE COURT: Then I'll hear your argument.  
2 MR. GREEN: Thank you, Your Honor.  
3 VOIR DIRE EXAMINATION BY MR. GREEN:  
4 Q: Mr. Robinson, are you a registered professional  
5 engineer?  
6 A: Yes, I am.  
7 Q: You have an undergraduate in electrical  
8 engineering.  
9 A: Yes, I have.  
10 Q: Do you have a Master's degree in electrical  
11 engineering?  
12 A: Yes, I have.  
13 Q: Do you do electrical engineering for employers  
14 in your employment history?  
15 A: Yes, I did.  
16 Q: Are you involved in the installation of  
17 electrical systems?  
18 A: Yes.  
19 Q: Are you involved in the installation of  
20 electrical substations?  
21 A: Yes.  
22 Q: Were you involved in the installation of  
23 electric lines?  
24 A: Yes.  
25 Q: Were you involved in a manufacturing process

- 1           involving electricity?
- 2    A:     Yes.
- 3    Q:     Did you -- how long -- when did you -- did you
- 4           first start work in 1963?
- 5    A:     Yes.
- 6    Q:     For the Boeing Company?
- 7    A:     Yes.
- 8    Q:     And then did you start -- and then you've
- 9           proceeded there through your present job, the
- 10          Engineering, Design & Testing; is that correct?
- 11   A:     Yes.
- 12   Q:     So you have how many years of employment
- 13          history?
- 14   A:     Forty-nine.
- 15   Q:     And what has been your profession for those 49
- 16          years?
- 17   A:     Electrical engineer.
- 18   Q:     And did you serve as an electrical engineer for
- 19          the Boeing Company?
- 20   A:     Yes.
- 21   Q:     And what, again, was your employment for the
- 22          Boeing Company?
- 23   A:     I was working on wiring for the Minuteman II
- 24          missile.
- 25   MR. GREEN: That's all I have, Your Honor.

1 MR. TRESH: Your Honor, for the past 13 years, if I  
 2 can focus on what Mr. Robinson has been doing  
 3 for over a decade, he hasn't done engineering  
 4 work other than sketches and drawings.  
 5 Mr. Robinson has never been involved in the  
 6 generation of electricity. The fact that he  
 7 worked for plants that used electricity --  
 8 virtually every business uses electricity.  
 9 The fact that Mr. Robinson hasn't worked as an  
 10 engineer in the last 13 years -- his primary  
 11 responsibilities involve investigating  
 12 insurance claims and that in only a handful of  
 13 those claims in a 13-year period have involved  
 14 electricity? Or it seems -- I find it hard to  
 15 believe that he is an expert in the intricacies  
 16 of manufacturing of electricity and in the  
 17 principles and industry standards regarding  
 18 manufacturing electricity. There's nothing in  
 19 the past 13 years in his background that  
 20 suggests he's been involved in any of that.

21 MR. GREEN: Your Honor, his record -- his employment  
 22 history, 49 years, establishes that he's got  
 23 the knowledge, training, his educational  
 24 background, his work experience, both current  
 25 and past. All that Mr. Tresh has gone into,

1           frankly, at most goes to weight and  
2           credibility; doesn't go to admissibility.  
3           Everything that you've heard here today, Your  
4           Honor, shows that he's an expert qualified to  
5           testify regarding electrical engineering issues  
6           that we've tendered him for.

7   THE COURT:   What, again, are you seeking him to be  
8           qualified as?

9   MR. GREEN:   I think he was identified to be  
10           qualified as -- witness as the principles of  
11           manufacturing electricity, its --

12   THE COURT:   Whoa, whoa, you're going too fast.

13   MR. GREEN:   I'm sorry.

14   THE COURT:   Slow down.  Principles ...

15   MR. GREEN:   Principles of manufacturing electricity,  
16           its scientific and technical intricacies and  
17           industry standards.

18   THE COURT:   All right.  On the first part,  
19           principles, I can qualify him on.  The industry  
20           standards?  I don't understand.  There's lots  
21           of industry standards.  So is there something  
22           more specific there?  Because he's talked about  
23           certain industry standards by which he has a,  
24           quote, "working familiarity with," end quote.

25   MR. GREEN:   Yes.

1 THE COURT: I mean -- and "working familiarity" can  
2 reach to the level of being an expert under  
3 the -- under Rule 703.

4 MR. GREEN: It's 703, yes, Your Honor.

5 MR. TRESH: If it was frequent, Your Honor. His  
6 working familiarity --

7 THE COURT: But -- frequent, yes. I don't want to  
8 cut you off. When you say "frequent," it  
9 doesn't -- the rules don't say it has to be  
10 recently frequent. It's, you know, skill,  
11 training, experience, education or knowledge.  
12 You know, those are the -- that's the list. I  
13 don't know if I did it exactly in order, but  
14 that's the list.

15 MR. TRESH: But in the past 13 years -- I understand  
16 that, Your Honor. So not only frequently, but  
17 in his current role. In the past 13 years,  
18 we've only got a handful of instances where he  
19 was involved in matters concerning electricity.  
20 And he's never been involved in a position  
21 where he's recently -- where -- in the past 13  
22 years where he's responsible for manufacturing  
23 electricity.

24 If I went -- you know, if I got my JD and then  
25 went off and consulted on an area outside of

1 the law having nothing to do with my law  
2 degree, that wouldn't make me an expert in the  
3 law in any way. If I was a certified public  
4 accountant and worked in a grocery store for 13  
5 years, that wouldn't make me an expert in tax  
6 accounting.

7 THE COURT: Well, I think he did testify about  
8 expertise or experience in generating or  
9 manufacturing electricity.

10 MR. GREEN: Generating, manufacturing issues.

11 THE COURT: I think he used the word  
12 "manufacturing."

13 MR. TRESH: In the past 13 years --

14 THE COURT: Well, in the past 13, okay, I follow  
15 you.

16 MR. TRESH: I mean, recent -- in recent history. I  
17 mean, if -- again, if I was licensed as a  
18 certified public accountant and changed careers  
19 and spent 13 years doing something else and  
20 somebody called me into testify into court, I  
21 doubt that I would be qualified as an expert as  
22 a CPA having not done it for 13 years.

23 MR. GREEN: Your Honor, I --

24 THE COURT: Well, I think I may agree with you on  
25 that because the tax law has changed

1 significantly. But our earlier professor  
2 explained to us how the principles of  
3 electricity have not changed significantly as  
4 of recent.

5 MR. TRESH: Well, I think his testimony was on the  
6 intricacies, the technical intricacies, which I  
7 do believe have changed.

8 THE COURT: Look, I'm okay with the first -- the  
9 first part. The second was one was the  
10 industry -- then it was the intricacies of the  
11 standards. Now, that is where I'm asking  
12 questions.

13 MR. GREEN: Well, it was principles of manufacturing  
14 of electricity, its scientific and technical  
15 intricacies and industry standards.

16 THE COURT: Okay. Well, the "and industry  
17 standards" is the one I'm having trouble with,  
18 because I want to know what standards we're  
19 talking about.

20 Then when you say "intricacies of scientific  
21 principles," I think for purposes of this case  
22 I can qualify him for -- do you know that  
23 quote?

24 MR. TRESH: "Scientific and technical intricacies"?

25 THE COURT: I don't see the need to do all that,



1 but ...

2 MR. GREEN: If I understand, you're qualifying  
3 principles of manufacturing electricity, its  
4 scientific and technical intricacies, period.

5 THE COURT: I don't see the need to do the  
6 "scientific." If I can get to the science, I  
7 don't need to get to the technical intricacies.

8 MR. GREEN: That's fine. Okay.

9 THE COURT: I don't know what means. I don't know  
10 what it means to qualify somebody like that,  
11 unless there was something in the case that  
12 made it more -- if there was a -- something in  
13 this case that there was -- that phrase was of  
14 specific significance and I don't see that.

15 MR. GREEN: Yes. Frankly, what I really -- I'm just  
16 tendering him on the principles, the science --

17 THE COURT: Okay.

18 MR. GREEN: -- the technical industries (sic) and  
19 industry standards. That's fine.

20 THE COURT: All right.

21 MR. TRESH: Your Honor, on the principles of  
22 manufacturing electricity, I don't believe that  
23 Mr. Robinson has ever worked or had experience  
24 in manufacturing electricity.

25 THE COURT: Well, according to you, that doesn't

1           happen, so ...

2   MR. TRESH: That is true.

3   THE COURT: That would be a little difficult to have  
4           an experience in that which does not occur. So  
5           I get the -- I get the gist of what he's  
6           testifying to from his perspective. So I'm  
7           going to qualify him as I said earlier.

8   MR. GREEN: Thank you, Your Honor.

9   MR. TRESH: Thank you, Your Honor.

10   MR. ROBINSON - DIRECT EXAMINATION (Continued) BY

11   MR. GREEN:

12   Q:   Mr. Robinson, let's start out with: What is  
13           "electricity"? Is "electricity" a scientific  
14           term?

15   A:   It is not really useful as a scientific term.  
16           It is commonly understood to be the field of  
17           endeavor having to do with electric charges.  
18           We heard earlier about the four fundamental  
19           forces of which one is electromagnetic. We  
20           heard about electromagnetic fields. And then  
21           we have as a subset of that the phenomena  
22           associated with electrical charge. So that,  
23           for example, propagation of radio waves would  
24           not be included in the field of electricity as  
25           commonly understood. But phenomena --

1 MR. TRESH: Your Honor --

2 THE WITNESS: Excuse me, I'm not done speaking.

3 THE COURT: You don't get to rule.

4 You have an objection?

5 MR. TRESH: I do, Your Honor. If Mr. Robinson is  
6 testifying as an expert, is he an expert in the  
7 common understanding or the common meaning of  
8 any of these words? If he's testifying from a  
9 scientific perspective as to what "electricity"  
10 is from a scientific perspective or in his  
11 technical expertise, I believe that's what Your  
12 Honor allowed. To testify what a common  
13 understanding of terms are, I don't believe  
14 Mr. Robinson is an expert in that area at all.

15 MR. GREEN: He can testify what the common  
16 understanding is and relate that back to the  
17 scientific understanding he's about to go into.

18 THE COURT: Common understanding within his field of  
19 expertise, that's what I'm limiting your  
20 testimony to.

21 THE WITNESS: Yes, Your Honor. Okay.

22 Q: Okay. So let me rephrase the question. In  
23 your field, when the term "electricity" is  
24 used, what does it encompass?

25 A: It encompasses phenomena associated with the

1 use of the electric charge that's associated  
2 with electrons and protons.

3 Q: What is "electric current"?

4 A: It's the motion of electric charge.

5 Q: What is "electric energy"?

6 A: "Electrical energy" is the form of energy that  
7 can be transmitted by means of electrical  
8 charges moving on a conductor.

9 Q: What are -- what are the components of electric  
10 power -- of electric current?

11 A: Well, electric current is merely the motion of  
12 a specified number of electrons past a given  
13 point in one second.

14 Q: Okay. And what is "electric power"?

15 A: "Electric power" -- first of all, any kind of  
16 power is the ability to apply a force.  
17 "Electric power" means the ability to apply a  
18 force at a given location. "Electric energy"  
19 is the amount of power delivered in one second.  
20 The -- or any other specified unit of time.

21 Q: And I think you said "current" was the movement  
22 of electric charge; is that correct?

23 A: Yes.

24 Q: How is the movement of current measured?

25 A: (No response.)

1 Q: Or, excuse me, how is current measured?

2 A: Current is measured in amperes.

3 Q: And what is the formula for amperes, generally  
4 speaking?

5 A: Well, ampere is -- one ampere is one coulomb  
6 per second. A coulomb is six times ten to the  
7 18th electrons.

8 Q: And is it the charge associated with those  
9 electrons?

10 A: The charge associated with those electrons,  
11 yes.

12 Q: And electric current consists of moving  
13 electrons; is that correct?

14 A: Yes.

15 Q: What is "voltage"?

16 A: "Voltage" is potential energy per unit charge,  
17 but it -- in practical terms, it represents the  
18 electrical force available between two  
19 specified points, usually two conductors.

20 Q: Do electrons have mass?

21 A: Yes.

22 Q: Can you measure electricity?

23 A: Yes, we -- we measure electrical energy. We  
24 measure electrical current. We measure  
25 electrical potential, which is voltage. We

1           measure frequency. We measure many aspects of  
2           electricity.  
3    Q:     Okay. And the electric utility doesn't just  
4           give away power, does it?  
5    A:     No.  
6    Q:     Does it charge for electric power?  
7    A:     Yes, it does.  
8    Q:     How does the electric utility measure electric  
9           power that -- say a manufacturing company?  
10   A:     They actually measure energy. They -- in terms  
11           of their generating capacity, it's stated in  
12           megawatts. In terms of the delivery to a  
13           customer, it's so many kilowatt hours in a  
14           billing interval.  
15   Q:     Okay. And the meter on a residential house,  
16           let's just say, for example, what does that  
17           meter measure?  
18   A:     It is a kilowatt hour meter.  
19   Q:     And does it measure current and voltage?  
20   A:     Yes, it does. Power is current times voltage.  
21           The meter totalizes the amount of current and  
22           voltage -- actually, it -- the mechanism of the  
23           meter multiplies the two and the product is  
24           totalized over a period of time so that the --  
25           the amounts consumed in any small interval are

1           added together and the total is available to be  
2           read at the end of the month.  
3    Q:     When someone turns on a light in their house,  
4           is that a load, an electric load?  
5    A:     That's -- we -- we use that term, yes.  
6    Q:     And is that load completing a circuit?  
7    A:     Yes, it is. It does.  
8    Q:     And what happens when the circuit is completed?  
9    A:     When the circuit is completed, there is a  
10           complete path for electrons that pass through  
11           the load to return to the source.  
12   Q:     And does a current flow as part of that?  
13   A:     Yes.  
14   Q:     And when I -- if I stick my finger in a socket,  
15           electric socket, do I complete a current -- a  
16           circuit?  
17   A:     If you're standing on a conductive surface, you  
18           may well complete a circuit.  
19   Q:     And what happens if I complete a circuit?  
20   A:     Then electricity will flow through your body.  
21   Q:     Do you consider that touching electricity?  
22   A:     I do. One has to determine what you mean by  
23           the word "touch." My understanding of the word  
24           "touch" is that it's something that I can sense  
25           through my skin. It's also --

1 THE WITNESS: Excuse me.  
2 MR. TRESH: May I object, Your Honor?  
3 THE COURT: Yes.  
4 MR. TRESH: Your Honor, I believe that you qualified  
5 Mr. Robinson as an expert in the manufacturing  
6 of electricity and I think you said not into  
7 the scientific and technical intricacies and  
8 industry standards. Whether or not  
9 Mr. Robinson's opinion is one can touch  
10 electricity, I think that would go to the  
11 science behind electricity and not to its  
12 manufacture.  
13 MR. GREEN: I thought you said the science was okay,  
14 the technical intricacies and industry  
15 standards.  
16 THE COURT: I said science was okay.  
17 MR. TRESH: Okay. Thank you, Your Honor. Objection  
18 withdrawn.  
19 Q: I'm sorry, I don't even recall the question,  
20 Mr. Robinson.  
21 A: It was about touch.  
22 Q: About touch, yes. Thank you.  
23 A: Can you touch electricity? Maybe that was not  
24 the question.  
25 THE WITNESS: Could we have it read back?



1 MR. GREEN: Is it possible to read that back?

2 THE COURT: I think the question -- I can make it  
3 easier. Although she can read it back. You  
4 were talking about feeling it or passing  
5 through the body and then whether you can feel  
6 it and then you went into touch.  
7 If you want it read back --

8 MR. GREEN: Could she read it back, I guess, the  
9 question and the beginning of his answer?

10 Thank you, Your Honor.

11 (The requested question and answer were read back by  
12 the court reporter.)

13 MR. GREEN: Thank you.

14 A: One aspect of the word "touch" has to do with  
15 proximity between two bodies. So, for example,  
16 as we heard earlier, you can experience a force  
17 without actually touching something. If you  
18 grab -- for example, a gravitational field,  
19 okay, but you can also apply a force by  
20 touching something.

21 The -- when one says, "Are you touching  
22 something?" What I am referring to is that I  
23 can actually experience pressure through my  
24 skin.

25 And, remember, all these sensations are

1           conducted by our nerves. So that if you  
2           complete an electrical circuit, the electricity  
3           flowing through your body can be sensed as  
4           variations in muscle tension through the  
5           nervous system.

6           So, yes, I am comfortable saying that if a  
7           current flows through my body, I am touching  
8           electricity.

9    Q:     And when a current flows through your body, do  
10           you feel electricity?

11   A:     Absolutely. If it's strong.

12   Q:     Is it your opinion that electricity has  
13           physical characteristics?

14   A:     Yes.

15   Q:     Is it material? Is it a material? Excuse me.

16   A:     Is electricity a material? No, it is not a  
17           material. It is --

18   Q:     I'm sorry, I didn't mean to interrupt you.

19   A:     It is material in the sense that it's tangible.

20   Q:     So you believe electricity is tangible?

21   A:     Yes.

22   Q:     Can it be touched? I think we've said that.

23           Strike that. Can you taste it?

24   A:     Yes, you can -- there's a kids' science fair  
25           demonstration where you can generate -- you can

1           create a battery using dissimilar metals and  
2           orange juice. You can put it in your mouth.  
3           You can taste the bitter and -- excuse me, the  
4           word escapes me. But it activates a couple of  
5           different kinds of taste buds.  
6    Q:     Now, let's go back a little bit to how we were  
7           talking about the meter and the measurement of  
8           current; is that right? We were talking about  
9           that earlier?  
10   A:     Yes.  
11   Q:     Meter measures current and voltage; is that  
12           correct?  
13   A:     Yes, that's --  
14   Q:     Electric. What's a "kilowatt"?  
15   A:     A thousand watts. It's a measure of power.  
16   Q:     What is a "kilowatt hour"?  
17   A:     It is the amount of energy transferred at that  
18           power level in one hour.  
19   Q:     If I use a light bulb for an hour, do I consume  
20           a kilowatt?  
21   A:     No. The standard hundred watt bulb takes  
22           approximately -- it's rated at 100 watts, so  
23           that would be a hundred watt hours or a tenth  
24           of a kilowatt hour.  
25   Q:     Okay. And if I turn on my air conditioner for

1           an hour have I used a kilowatt?

2    A:     Approximately.

3    Q:     Is every kilowatt of electricity the same?

4    A:     Yes.

5    Q:     In your opinion they're fungible?

6    A:     Yes.

7    Q:     Now, do electric utilities charge by the amount

8           of power, the electric power used?

9    A:     By the amount of electric energy used, yes.

10   Q:     If electricity was sold at a flat rate -- well,

11           strike that. Is it your opinion that electric

12           utilities are engaged in manufacturing?

13   A:     Yes.

14   Q:     It is your opinion they're engaged in

15           manufacturing of electricity?

16   A:     The precise quantity manufactured is electrical

17           energy, which is one aspect of electricity.

18   Q:     Now, and I think you testified that the

19           electric utility charges by the quantity of

20           power consumed; is that correct?

21   A:     Quantity of energy consumed.

22   Q:     Quantity of electric energy consumed. If an

23           electric utility sold electricity at a flat

24           rate, all you can consume, would that change

25           your opinion about whether an electric utility

1 is a manufacturer?

2 A: No.

3 Q: And could you explain your answer?

4 A: There's really a couple of different aspects to  
5 the determination of whether a -- excuse me.  
6 There's a couple of different aspects to the  
7 energy business. One is the generation of  
8 energy and the other is the transmission,  
9 distribution and sale of energy.

10 So that if a -- if a person -- a company  
11 decided to ignore economics and give away its  
12 product, which is essentially what would happen  
13 if you just charged a flat rate per month  
14 regardless of energy consumption, you still  
15 have to manufacture the electricity, the  
16 energy. So -- or in this context, I would use  
17 "generation" and "manufacture" as synonymous.

18 Q: The electric -- the electricity that goes from  
19 the generator to the transmission lines to the  
20 distribution lines into my home, is that  
21 electricity readily available?

22 A: In general, yes. All you have to do is call up  
23 the electric company and ask them to connect  
24 you up.

25 Q: But is it -- what does -- what does the

1 electric utility do to generate that  
2 electricity?

3 A: Oh. They have to construct a generation plant,  
4 okay, which consists of the fuel management, a  
5 conversion system to -- usually a boiler to  
6 convert the fuel energy to steam energy, a  
7 turbine to convert the steam energy to  
8 rotational mechanical energy, an electrical  
9 generator to convert the mechanical energy to  
10 electrical energy, and then that is connected  
11 to the transmission and distribution network to  
12 be made available to customers. Did I answer  
13 your question?

14 Q: Yes. And ...

15 MR. GREEN: Bear with me one moment.

16 Q: In the process that you've described, what role  
17 does the transmission and distribution system  
18 play in the delivery of electricity?

19 MR. TRESH: Objection, Your Honor. Mr. Robinson,  
20 even as a -- being qualified as an expert in  
21 manufacturing of electricity and the scientific  
22 and technical intricacies of electricity,  
23 Mr. Robinson is not an expert in the  
24 transmission or distribution of electricity or  
25 the provision of it to customers.

1 THE COURT: Well, he hasn't testified, at least that  
2 I remember, to any specifics of the  
3 transmission and distribution.

4 MR. GREEN: He has not testified yet, but I'm going  
5 to go into it. Frankly, I think his testimony  
6 will be that's part of the manufacturing  
7 process to manufacture electricity.

8 THE COURT: Well, then at this point in time, if you  
9 could first lay the groundwork for his  
10 expertise in this area and then I'll determine  
11 if he's qualified to continue down the path --

12 MR. GREEN: Okay.

13 THE COURT: -- at which time you could object, if  
14 you wish.

15 MR. GREEN: That's fine. Okay.

16 Q: Mr. Robinson, what -- you have -- what  
17 experience do you have in the transmission and  
18 distribution of electricity?

19 A: In the context of industry, in-plant  
20 distribution, and interfacing with the electric  
21 utility. I mentioned the job I did in Nevada  
22 where we had to construct a -- cooperating with  
23 the local utility a step-down substation to  
24 convert from 115 kilovolts to 13.8 kilovolts  
25 and --

1 Q: And --

2 A: -- to install a line from that location to our  
3 mine entry.

4 Q: And that was involved, I think you testified,  
5 in installing a substation?

6 A: Yes. Also, when we designed the sawmill in  
7 North Carolina, we had a in-plant distribution  
8 system. In that case, we received power at  
9 13.8 kilovolts and routed it to a number of  
10 point-of-use substations serving individual  
11 buildings.

12 Q: And is it your understanding that substations  
13 are part of the transmission and distribution  
14 system?

15 A: Yes.

16 Q: And what purpose do they serve?

17 A: They serve a number of purposes. One of them  
18 is adjusting the voltage levels to be  
19 appropriate to the -- to the location. Another  
20 is to provide circuit protection and another is  
21 to split power into local service transmission  
22 lines.

23 Q: And the -- let's go back to the substation that  
24 you installed at Getchell Gold?

25 A: Yes.



- 1 Q: What was the voltage that substation is  
2 designed to process?
- 3 A: It took in 115 kilovolts from the utility and  
4 put out 13.8 kilovolts to the mine.
- 5 Q: Okay. Would that be called "step down"?
- 6 A: Step down, yes. We also had in-plant  
7 distribution at the mine, unit substations at  
8 various buildings.
- 9 Q: And what about the -- and obviously there is  
10 interaction in the -- I think you've testified  
11 the substation is part of the transmission and  
12 distribution system. What other experience  
13 might you have with transmission and  
14 distribution systems?
- 15 A: In conjunction with a couple of large losses,  
16 one in Colombia, South America, one in San  
17 Juan, Puerto Rico, I had to get the fault  
18 information from the utilities and analyze that  
19 in conjunction with determining what happened.
- 20 Q: Okay. And what about -- did you previously do  
21 some electric work for a sawmill?
- 22 A: Yes, I mentioned that.
- 23 Q: And would you just go back into that very  
24 briefly?
- 25 A: It was a new construction sawmill. Part of the

1        job was the in-plant distribution system. Part  
2        of the job was process control.

3    Q:    And at the paper mill, were you in charge of  
4        the electric generation and distribution  
5        process?

6    A:    Yes. We had a -- a feeder line between the two  
7        mills a mile and a half long. The power to the  
8        Hughesville Mill came from the Warren Glen  
9        Mill, which was our tie-in point to the  
10       electric utility.

11       We had a rather large steam boiler whose  
12       primary purpose was to provide heat to the  
13       paper making process. But we ran a three  
14       megawatt turbo generator off of that to provide  
15       electricity to the plant and we also had two  
16       water wheel generators. We did not sell  
17       electricity because of the -- the State of New  
18       Jersey law at the time.

19    Q:    But you were involved in the transmission and  
20        distribution of electricity between those two  
21        mills?

22    A:    Generation, transmission and distribution, yes.

23    MR. GREEN: Your Honor, I would submit that  
24        qualifies him as an expert in this matter. Any  
25        challenge would go to the weight, not the

1           admissibility.

2   MR. TRESH: Your Honor, what I just heard was over  
3           20 years ago he cooperated with a utility  
4           setting up some sort of -- setting up some sort  
5           of electric system for a mine. That was  
6           Getchell Mines company.

7   THE COURT: Step down.

8   MR. TRESH: Step down. Thirty years ago he worked  
9           at a sawmill and he was in charge of process  
10          control, perhaps involving electric utility.  
11          And he worked as -- and his experience with two  
12          losses as an -- I think he said "a couple" --  
13          but two losses as an insurance adjuster where  
14          the fault involved information he took from a  
15          utility. That's in a career that spans  
16          40-something, 50-something years.  
17          I apologize if I'm overstating how long you've  
18          been active.

19          That does not make him an expert in the  
20          transmission -- utility transmission and  
21          distribution systems. He's never worked for a  
22          utility. He's never been involved in running  
23          a transmission and distribution system. He's  
24          worked with it in a very limited process that  
25          goes back decades, Your Honor. He just hasn't

1           done this in years and years and years.  
2           And even if the process is substantially the  
3           same, the number of times he's even been  
4           involved in this process is limited. Four,  
5           five, six process -- six times over 30 years?  
6           I just don't see how that qualifies him as an  
7           expert.

8   MR. GREEN: He's an electrical engineer. He has a  
9           Bachelor's in Science. He's worked at -- with  
10          electrical engineering issues for almost 50  
11          years. He is involved in setting up generation  
12          distribution system for one of his employers.  
13          While he didn't work directly for a public  
14          utility, Dr. Papa did not either, so that just  
15          goes to weight. It goes to the credibility  
16          that you as the Finder of Fact might assign to  
17          him. It does not go to the admissibility of  
18          his testimony. He has a sufficient basis for  
19          that.

20   THE COURT: Are you going to be asking him about  
21           distribution and transmission from a public  
22           utilities standpoint or just generating from  
23           the scientific principles of transmission and  
24           distribution?

25   MR. GREEN: I'm only asking him his opinion as to

1           whether that is a component of the  
2           manufacturing process, the generation and  
3           distribution, if that involves the process of  
4           the manufacturing of electricity.

5   MR. TRESH: In the context of the public utility, he  
6           has no experience.

7   THE COURT: I recognize that. I also heard the  
8           components of your expert's qualifications  
9           today.

10          I'm going to -- I'm going to let him go into  
11          what I just asked and that is the scientific  
12          aspects of the transmission and distribution of  
13          electricity.

14          I don't know if he can get -- you know, again,  
15          I go back to the case law, and Mr. Green keeps  
16          referring to it, about the qualifications in  
17          South Carolina courts do keep reemphasizing  
18          that over and over: It goes to the weight.

19   MR. GREEN: Yes, Your Honor.

20   THE COURT: So a lot of times --

21   MR. GREEN: It goes to the weight as long it's not  
22           something that was acquired just for the  
23           purpose of litigation. He's been doing this  
24           for years.

25   THE COURT: Yeah, I recognize that. Although it

1           does have to meet -- it's got to meet the  
2           threshold --

3   MR. GREEN: Absolutely.

4   THE COURT: -- of education, experience, skill,  
5           knowledge or training. And there has been none  
6           in the public utility arena.

7   MR. GREEN: There has been none in the public  
8           utility. But, again, their expert has none in  
9           the public utility arena and I didn't object to  
10          their expert. And --

11   THE COURT: Well, I've seen it happen before where  
12          if one person doesn't object and the other  
13          objects ...

14   MR. GREEN: Oh, okay. Understood. Understood.  
15          But, you know, he's got -- he's got skill,  
16          training, knowledge and expertise. He can  
17          testify about the principles of electricity and  
18          how it works in that context.

19   THE COURT: All right. Well --

20   MR. GREEN: You know, if it goes further, I mean,  
21          you obviously can revisit the issue if I go too  
22          far.

23   THE COURT: Okay. Mr. Tresh?

24   MR. TRESH: Your Honor, Dr. Papa is -- works with  
25          electricity on a daily basis, not only for

1           universities but for the United States  
2           government.  
3   THE COURT:   Yeah.  
4   MR. TRESH:   In contrast, with all due respect to  
5           Mr. Robinson -- I'm sure he's very good at what  
6           he does -- but for the past 13 years ...  
7   THE COURT:   I recognize that, but we're talking  
8           about weight.  
9   MR. GREEN:   We're talking about weight.   And he  
10           worked for the Boeing Company years ago.  
11   THE COURT:   Yeah.  
12   MR. GREEN:   So ...  
13   THE COURT:   Okay.   I'm going to let him go in as I  
14           said.   He starts entering the public utility  
15           area, I may revisit that.  
16   MR. TRESH:   Thank you, Your Honor.  
17   MR. GREEN:   Thank you.  
18   Q:       Let's step back just a minute, Mr. Robinson.  
19           So electricity is generated at a generator.  
20   A:       I'm sorry, say again please?  
21   Q:       Electricity is generated at a generator?  
22   A:       Yes.  
23   Q:       Does it then go through a transmission and  
24           distribution system before it reaches my house?  
25   A:       Yes, it does.

1 Q: Are there step-down transformers as part of  
2 that system?

3 A: Yes.

4 Q: Are there step-up transformers as part of that  
5 system?

6 A: At the -- at the generating plant, yes, there's  
7 a generator -- step-up transformer for each  
8 generator.

9 MR. TRESH: I believe we're talking about the public  
10 utility context, Your Honor. Mr. Green said  
11 his house.

12 MR. GREEN: I'm talking generally about the  
13 transmission.

14 THE COURT: Yeah, I think -- from what I've heard,  
15 he can testify to that because he said he's  
16 worked in that area --

17 MR. GREEN: He was --

18 THE COURT: -- where it came from a public utility.  
19 So I'll let him proceed on that answer.

20 MR. GREEN: All right. Thank you, Your Honor.

21 Q: Are those step-up and step-down transformers  
22 necessary to deliver electricity to my house?

23 A: In principle, no. They are done for reasons of  
24 efficiency.

25 Q: For whose efficiency?



1 A: The power company. Excuse me, the energy  
2 utility.

3 Q: Now, is it your understanding that electricity  
4 is generated based on the same principles in  
5 play as a hundred years ago?

6 A: Yes. When I worked for the paper company, one  
7 of the water wheel generators had a name plate  
8 dated 1923 and it is pretty similar to  
9 generators of that sort that are available  
10 today.

11 Q: Okay. And what about the scientific principles  
12 behind the generation of electricity?

13 A: Those were worked out, as was said earlier, in  
14 the last 150 years. There's a lot of  
15 fundamental work done between the American  
16 Revolution and the Civil War, a lot of device  
17 development done between the Civil War and  
18 World War I, and the separation of generation  
19 from use into generating entities and using  
20 entities started about 1881.

21 MR. GREEN: Bear with me just a moment, please, Your  
22 Honor.

23 I have no further questions at this time, Your  
24 Honor.

25 Q: And --

1 MR. GREEN: Well, one more question. Columbo, I  
2 apologize.

3 Q: And, again, it's your opinion that the  
4 generation, transmission and distribution of  
5 electricity constitutes manufacturing?

6 A: Yes.

7 MR. GREEN: Thank you. No further questions.

8 THE COURT: Go ahead. I'm trying to decide whether  
9 to take a break for lunch.

10 MR. TRESH: Would it make sense, Your Honor?

11 THE COURT: How long are you going to be?

12 MR. TRESH: I think it could be a little bit, 20, 30  
13 minutes at least.

14 (Off the Record)

15 THE COURT: We're going to take a break for lunch.

16 (Lunch break from 12:23 to 1:28 p.m.)

17 MR. GREEN: I rested with this witness.

18 THE COURT: Yeah, that's right.

19 You're still under oath.

20 THE WITNESS: Yes.

21 THE COURT: And you're up.

22 MR. TRESH: Thank you, Your Honor.

23 MR. ROBINSON - CROSS-EXAMINATION BY MR. TRESH:

24 Q: Good afternoon, Mr. Robinson. How are you?

25 A: Still nearly perfect.

- 1 Q: Excellent. Mr. Robinson, you had indicated  
2 earlier in your testimony that you were an  
3 expert in the principles of manufacturing  
4 electricity and its scientific and technical  
5 intricacies. Can you tell me what those  
6 scientific and technical intricacies -- which  
7 of those are relevant to the matter at hand?
- 8 A: I wish that the attorney had used the words  
9 "principles" instead of "intricacies."  
10 However, what is relevant to the matter at hand  
11 is Ampere's law, Faraday's law and Ohm's law.
- 12 Q: Okay. Anything else?
- 13 A: That will do.
- 14 Q: Okay. Well, that will do or are there others?
- 15 A: I'm sorry?
- 16 Q: Is it that those will do or are there others,  
17 I'm sorry?
- 18 A: Well, I don't know where you're going with  
19 that. There's -- I have experience in most  
20 branches of electrical engineering and so the  
21 questions you're going to ask, I just have to  
22 fall back on my experience.
- 23 Q: I'm not questioning your qualifications at this  
24 point.
- 25 A: Okay.

1 Q: I was asking you what principles do you believe  
2 are relevant to the matter at hand.  
3 A: Okay.  
4 Q: You said Faraday's law. What else did you say?  
5 A: Ampere's law and Ohm's law.  
6 Q: Any others?  
7 A: These are representative of the approaches used  
8 in implementing electrical and electromagnetic  
9 systems. I acknowledge the -- talking science  
10 now?  
11 Q: I just asked what principles are involved here.  
12 You said Faraday's law --  
13 A: Okay.  
14 Q: -- Ohm's law.  
15 A: There's -- all right. To dive into it, then,  
16 we're talking about the principles that lay  
17 behind electrical generation and conduction and  
18 transmission lines and consumption at the  
19 users' premises.  
20 Q: Okay. And you testified earlier that your  
21 expertise is based upon your experience in  
22 those areas; is that correct?  
23 A: Yes.  
24 Q: Okay. And in forming your opinion, what  
25 sources did you rely upon?

- 1 A: Primarily on my experience, however, I did  
2 consult college textbooks and I consulted  
3 dictionaries.  
4 Q: College textbooks. Which college textbooks?  
5 A: Sears and Zemansky is a very good one. It's a  
6 college physics text.  
7 Q: Did you consult that prior to rendering your  
8 opinion in your deposition?  
9 A: It's been on my desk forever. I can't answer  
10 the question when -- when's the last time I  
11 looked at it.  
12 Q: Did you look at it prior to your deposition?  
13 Not the last time you look at it, prior --  
14 A: I don't -- I don't know the answer to that  
15 question.  
16 Q: Okay.  
17 A: Well, all right, did I look at it prior to the  
18 deposition? Yes, because it's been on my desk  
19 forever.  
20 Q: Did you prepare for your deposition by  
21 reviewing that text?  
22 A: I don't think so.  
23 Q: Thank you. Did you rely on any other sources?  
24 College textbooks, your experience, what else?  
25 A: I think I mentioned dictionaries.

1 Q: Dictionaries. Did you rely on something called  
2 a "Wiktionary"?

3 A: I did not rely on it. I used it and I used  
4 Merriam-Webster, as well. I'm relying  
5 primarily on Merriam-Webster.

6 (Off the Record)

7 Q: In your deposition, do you recall saying -- I  
8 asked you a question, "In forming your opinion  
9 regarding issues in this case, you testified  
10 that you're an expert in these subjects, did  
11 you rely on Internet sites such a Wikipedia?"  
12 Answer: "Among others, yes."

13 A: That's still true.

14 Q: I think a moment ago you said you did not rely  
15 on Wikipedia.

16 A: (No response.)

17 Q: Here's your deposition, sir. If I can direct  
18 your attention your to page 26, line nine.

19 A: I can -- I can remember the language. I relied  
20 on Wikipedia among others, yes.

21 Q: Okay. So that's different than what you  
22 originally testified to a moment ago.

23 A: Yes.

24 Q: Okay. Do you remember looking at something  
25 called "Wiktionary Verb Produce"?

1 A: I know that's in my file notes.

2 Q: So did you review it in order to form an  
3 opinion in this case?

4 A: Yes, I did.

5 Q: Okay. And in forming your notes for this case,  
6 did you cut and paste a section of Wikipedia  
7 Verb Produce into your notes that you submitted  
8 as part of this case?

9 A: Yes.

10 Q: And why is "Wikipedia Verb Produce" relevant to  
11 the matter at hand? Why is Wikipedia relevant?

12 A: I was using Internet resources to consult on  
13 language, because the questions involved  
14 questions of what is a -- what is  
15 "manufactured", what is "tangible property,"  
16 and so I consulted dictionaries to determine  
17 the meanings of the words and the meanings of  
18 the related words. "Produce" was not one that  
19 I initially searched for but it came up in  
20 context of other words.

21 Q: So you testified earlier that you're an expert  
22 in manufacturing. You had to look up what the  
23 word "manufacture" meant for purposes of  
24 rendering an expert opinion in this case?

25 A: I prefer to be as informed and precise as I can

1           and so, yes, I did look up the meanings of the  
2           words "manufacture" and several other terms,  
3           "produce".

4    Q:     Are you aware that Wiktionary and Wikipedia,  
5           that those -- do you consider those  
6           authoritative sources?

7    A:     Semi. You have to read them with an informed  
8           mind and skeptical mind.

9    Q:     Okay. And would you -- do you believe that  
10           it's the regular practice of a professional  
11           engineer such as yourself to look up sources  
12           like Wikipedia to inform you about engineering  
13           definitions and engineering aspects?

14   A:     If I went -- if I wanted an engineering  
15           definition, I probably wouldn't go to  
16           Wikipedia. I would probably go to my college  
17           textbooks.

18   Q:     Then why would you go to Wikipedia? If you  
19           would not go for engineering resources, why  
20           would you go for it for manufacturing  
21           resources? Is Wikipedia more authoritative  
22           with respect to manufacturing?

23   MR. GREEN: Objection, compound question.

24   Q:     Is Wikipedia --

25   MR. TRESH: I'll rephrase.



1 THE COURT: Yeah.

2 Q: Is Wikipedia more authoritative for  
3 manufacturing than it is for engineering?

4 A: In the following sense: Part of the question  
5 posed to me was, "What is the meaning of  
6 'manufacturing'?" And it's a linguistic  
7 question, really. It is not a matter of  
8 engineering. It's a matter of language and  
9 it's also -- I understand it's a legal term.

10 Q: Did you render an opinion as a matter of  
11 linguistics in this case?

12 A: Had to.

13 MR. TRESH: Your Honor, if Mr. Robinson's expert  
14 opinion is based upon linguistics, I would  
15 submit he's not an expert in linguistics, if  
16 that's what his opinion is based upon, and I'd  
17 ask the Court to give that due weight.

18 MR. GREEN: Your Honor ...

19 THE COURT: Well, that's not an objection, so --

20 MR. GREEN: Okay.

21 THE COURT: He said "give due weight," so ...

22 MR. GREEN: Thank you, Your Honor.

23 MR. TRESH: Okay.

24 THE COURT: That is a preliminary closing argument,  
25 I guess.

1 Q: Did you review anything else as part of forming  
2 your opinion in this case, Mr. Robinson?

3 A: I cannot remember everything that I referred  
4 to. You have a copy of my file notes and  
5 anything in the file notes I referred to.

6 Q: Do you recall looking at a submission by Duke  
7 Energy to the Regulatory Commission, South  
8 Carolina Regulatory Commission in 1991 as part  
9 of your report?

10 A: I reviewed that, yes.

11 Q: Okay. Is this the copy of the report that you  
12 reviewed?

13 A: (Perusing.) I guess it's part of it. What I  
14 reviewed was about a four-inch thick binder.

15 Q: Okay. So that's part of what you reviewed; is  
16 that correct?

17 A: Appears to be, yes.

18 Q: Okay. And do you have any other expert  
19 knowledge of Duke's business other than what's  
20 in that report? Have you ever -- to avoid a  
21 compound question -- have you ever reviewed a  
22 Duke Energy plant? Have you ever done a plant  
23 tour for Duke Energy?

24 A: I've been on Duke Energy premises for purposes  
25 of investigation.

1 Q: Let's talk about that a little bit. You were  
2 investigating Duke Energy?

3 A: I was investigating a claim submitted by Duke.

4 Q: Were you representing Duke Energy or the  
5 claimant?

6 A: Duke Energy was the claimant.

7 Q: And was it your role -- so you represented the  
8 insurance company in that claim.

9 A: Yes.

10 Q: Is that correct? You did? So you were  
11 representing the insurance company. Duke  
12 Energy had gone ahead and made an insurance  
13 claim.

14 A: That's correct.

15 Q: And so in that sense your task was to go ahead  
16 and determine the validity of Duke Energy's  
17 claim; is that correct?

18 A: That's correct.

19 Q: Okay. And so in that sense you -- so your  
20 experience with Duke Energy is you were on  
21 site, to go ahead and figure out whether you  
22 should deny or accept their insurance claim; is  
23 that correct?

24 A: Well, I don't deny or accept. I only -- I only  
25 present the -- my opinion as to what took place

1           and the insurance adjuster -- and I'm not an  
2           adjuster. The insurance adjuster makes the  
3           determination based on facts that I can present  
4           to him.

5    Q:    Okay. So that was the only time you were at  
6           Duke Energy's facilities; is that correct?

7    A:    I'm trying to think if there are other times or  
8           places. Relative to Duke Energy, I think  
9           that's correct.

10   Q:    Okay. You didn't conduct any sort of  
11           independent analysis where you went out and  
12           visited a Duke Energy plant or went and looked  
13           at a substation or looked at their facilities  
14           as part of your expert report in this matter?

15   A:    I was at their plant site, which was relevant.  
16           It's their generating plant on -- northwest of  
17           Charlotte.

18   Q:    For purposes of the insurance claim?

19   A:    Yes.

20   Q:    Okay. And when was that?

21   A:    Probably six years ago.

22   Q:    Okay. And then you reviewed this report in a  
23           binder that was four-inches thick. You  
24           reviewed this document that was in front of  
25           you, correct?

1 A: Yes.

2 Q: There's a part of the document that's labeled  
3 with a green tab. Can you open up to the green  
4 tab?

5 A: Sure.

6 Q: Can you read the description of Duke Energy's  
7 business on line ten, please?

8 A: Yes. It says, "Duke provides retail service in  
9 two states, as well as wholesale service to  
10 certain municipalities and electric membership  
11 cooperatives."

12 Q: Thank you. Now, you testified earlier to  
13 Mr. Green that in your view that Duke Energy  
14 provided tangible personal property; is that  
15 correct?

16 A: Yes.

17 Q: And so did you just discount Duke's filing to  
18 the Public Service Commission? How did you  
19 reconcile the PSC filing with your view? Was  
20 it Wikipedia or --

21 A: I -- I considered that Duke's statement to the  
22 PSC was in common parlance and did not address  
23 the issues of what is "service" versus  
24 "manufacturing."

25 Q: So you believe that Duke's statement was common

1           parlance?

2    A:     Yes.

3    Q:     But you testified earlier that --

4           linguistically speaking, that it was common  
5           that Duke Energy provided electricity and  
6           electricity was tangible; is that correct?

7    A:     That's all true.

8    Q:     So it's common parlance that Duke Energy  
9           provides a service and it's a common  
10          parlance -- and would you agree that Duke  
11          Energy provides electricity?

12   A:     Provides electrical energy, which is in this  
13          case, I think, synonymous with electricity.

14   Q:     Duke Energy provides electric energy and,  
15          common parlance, Duke Energy provides a  
16          service, okay. You said earlier that Duke  
17          Energy -- or that electricity, electric energy,  
18          is not a material; is that correct?

19   A:     It is not correct. I'm sorry, is that correct?  
20          Electric energy is not a material.

21   Q:     Okay. Thank you. Would you agree that  
22          electric energy is the ability to provide a  
23          force?

24   A:     It's the ability to do work.

25   Q:     Okay. Does Duke Energy sell electrons?

1 A: No, it does not. It uses electrons, but the  
2 customer returns every electron to Duke.

3 Q: Does Duke Energy sell electrons?

4 A: No. I answered that.

5 Q: Okay. Thank you. I didn't ask about  
6 whether -- what they returned or how they  
7 returned it. Okay.

8 MR. GREEN: I object, Your Honor. The witness can  
9 explain his question.

10 THE COURT: Well, I think he answered "no" and then  
11 explained it while ago, but now -- so I don't  
12 think we'll accomplish anything at this point  
13 in time other than to please just listen to his  
14 answer.

15 MR. TRESH: Yes, Your Honor.

16 Q: You mentioned earlier you can measure  
17 electricity; is that correct?

18 A: Yes.

19 Q: Can you measure wind speed?

20 A: Yes.

21 Q: Can you measure sunlight?

22 A: Yes.

23 Q: Can you measure cell phone minutes of time?

24 A: Yes.

25 Q: Is sunlight tangible?

1 A: Yes. It excites the nerves in your skin.  
2 Q: So you would say -- and is sunlight tangible  
3 property?  
4 A: Only if you have the right to block my access  
5 to sunlight.  
6 Q: So your view would be that sunlight is tangible  
7 personal property in the same vein that  
8 electricity is tangible personal property,  
9 linguistically speaking?  
10 MR. GREEN: I object to that question, Your Honor.  
11 That calls -- "tangible personal property" is  
12 a legal conclusion. The testimony has been  
13 about whether it's tangible to this point.  
14 MR. TRESH: I believe he testified that it was  
15 tangible personal property and I'm trying to  
16 understand the basis for his conclusion given  
17 that he's also testifying that sunlight is  
18 tangible personal property.  
19 MR. GREEN: I object to that line of questioning.  
20 THE COURT: He testified it was tangible personal  
21 property because you asked him.  
22 MR. TRESH: No, no, no, when Mr. Green was --  
23 THE COURT: Okay.  
24 MR. TRESH: -- asking him questions.  
25 MR. GREEN: I think -- I thought we just talked



1           about it was tangible. Now, I don't  
2           specifically recall that he didn't say that,  
3           but I -- the questions we went into was whether  
4           it was tangible.

5   THE COURT: I'll have to go -- my memory is, is it  
6           was "tangible," because I've noted the personal  
7           property aspects of the definition and I've  
8           been trying to pay attention to that. So I  
9           think it's been "tangible."

10   MR. GREEN: No. And, in fact, I think in my notes I  
11           have, "Is electricity tangible?" I stayed away  
12           from the "personal property."

13   MR. TRESH: I'll stay away from the personal  
14           property for the time being, Your Honor, with  
15           this witness, Your Honor.

16   THE COURT: All right.

17   Q:    Okay. So sunlight is tangible.

18   A:    Yes.

19   Q:    Is that correct? Is wind tangible?

20   A:    Yes.

21   Q:    Is wind tangible in the same way that  
22           electricity is tangible, in your view?

23   A:    Not identically. "Tangible" is anything that  
24           you can sense. You can sense wind in several  
25           ways. You can sense electricity in several

1           ways. They're not the same ways.

2    Q:     Okay. Would you -- if it's anything you can  
3           sense, can you sense gravity?

4    A:     Actually, no. All I can sense is the pull  
5           of -- excuse me, the pressure on my feet.

6    Q:     The effect of gravity; is that correct?

7    A:     Yes.

8    Q:     Would you agree with the statement -- so  
9           gravity is a gravitational field; is that  
10          correct?

11   A:     There is gravitational field produced by  
12          masses, yes.

13   Q:     And I believe you testified that electricity,  
14          electric energy, involves an electromagnetic  
15          field; is that correct?

16   A:     I parsed that one apart. "Electricity" is a  
17          subset of electromagnetic phenomena.

18   Q:     So "electricity" is a subset -- does it involve  
19          an -- does electricity involve an  
20          electromagnetic field?

21   A:     Not necessarily.

22   Q:     Can you give me an example of electricity that  
23          does not involve an electromagnetic field?

24   A:     Stationary charges produce an electric field  
25          but not a magnetic field.

- 1 Q: Stationary electric. What's an example of a  
2 stationary charge?
- 3 A: If I run a generator and do not connect a load  
4 to it, I have stationary -- let me use a  
5 different example and I'll tell you why later.  
6 Let me run a DC generator and connect wires to  
7 it, do not connect a load. The charges on the  
8 wires are stationary. You can measure the  
9 voltage, which is the electric field, but no  
10 matter what instrumentation you apply, you  
11 cannot detect a magnetic field.
- 12 Q: And is Duke Energy, when it provides  
13 electricity, does it provide -- the electricity  
14 it provides involve an electromagnetic field?
- 15 A: It does.
- 16 Q: Thank you.
- 17 A: Explanation. It is a result and not a cause of  
18 their activities to deliver electrical energy  
19 to their customers.
- 20 Q: And so Duke Energy provides an electromagnetic  
21 field that's part of electricity. And you  
22 testified a moment ago that one can feel the  
23 effects of gravity; is that correct?
- 24 A: It is. You misstated what I said.
- 25 Q: Oh? Please correct me.

1 A: Electricity is part of electromagnetic  
2 phenomena, okay, but there are -- but  
3 electromagnetic phenomena are not part of  
4 electricity, except in an incidental way.

5 Q: So when Duke provides electric service to their  
6 customers, they're not providing an  
7 electromagnetic field; is that your testimony?

8 A: That is my testimony.

9 Q: Okay. Let's talk about -- a little bit about  
10 parallels between electricity and  
11 telecommunications. When you transmit and I  
12 make a cell phone call --

13 A: Yes.

14 Q: -- and there's a signal that goes from a cell  
15 tower somewhere to my telephone, what is that  
16 signal?

17 A: It is radio waves which you would describe as  
18 electromagnetic waves.

19 Q: Electromagnetic waves.

20 A: Uh-huh (affirmatively responds).

21 Electromagnetic waves are not electricity.

22 Q: What's the difference in the electromagnetic  
23 wave that a cellular provider uses to make its  
24 phone call uses to complete a cell phone and  
25 the electricity that Duke provides?

- 1 A: The electromagnetic waves are propagating in  
2 free space. They're not guided. Anyone can  
3 pick them up. You cannot exclude access to  
4 them.
- 5 Q: Uh-huh (affirmatively responds).
- 6 A: That was the reason for the Radio Communication  
7 Act of 1917, which -- in which we decided we  
8 would not license receivers of any sort of  
9 radio wave.
- 10 Q: So the difference is in that -- in how the  
11 electromagnetic waves function. You can block  
12 them in terms of how they're sent and received;  
13 is that your testimony?
- 14 A: The difference -- the difference between  
15 electromagnetic radiation --
- 16 Q: Uh-huh (affirmatively responds).
- 17 A: -- and conducted current has to do with, first  
18 of all, the purpose of electromagnetic  
19 radiation is to convey information. The  
20 purpose of conducted electricity is to provide  
21 energy. Now, you do transfer energy, minuscule  
22 amounts, from the cell transmitter to the cell  
23 receiver.
- 24 Q: Uh-huh (affirmatively responds).
- 25 A: But the value is in the information and not in

1 the energy.

2 Q: Okay. And that's not -- I didn't ask you about  
3 the purpose, although we'll get there in a  
4 minute.

5 A: All right.

6 Q: In terms of, they both use electromagnetic  
7 waves. Now, I didn't ask about the strength of  
8 them. I didn't ask about the purpose of them.  
9 They both use electromagnetic waves; is that  
10 correct? I think that's what you --

11 A: No. Actually, no.

12 Q: Okay. Well, tell me -- tell me where I'm  
13 wrong.

14 A: Because electromagnetic waves, the term implies  
15 electromagnetic propagation; that is, it is not  
16 guided propagation. It is radiated energy in  
17 free space. Like sunlight.

18 Q: So they're radiated energy in a cell phone.  
19 Sunlight is radiated energy. Duke is guided  
20 energy; is that what you're saying?

21 A: That's correct.

22 Q: Okay. But they all involve electric energy; is  
23 that correct?

24 A: Actually, the electromagnetic radiation -- I'm  
25 sorry, would you repeat the question, please?

1 Q: Cellular telephone service and the transmission  
2 of electricity both involve the transmission of  
3 energy; is that correct?

4 A: That's correct.

5 Q: Okay.

6 THE COURT: While ago your question was electricity,  
7 I think.

8 MR. TRESH: Energy and I said -- yes, energy, yep.

9 Q: And they both involve the transfer --  
10 transmission of electricity; is that correct?

11 A: No.

12 Q: Okay.

13 A: Electromagnetic waves in a free space do not  
14 involve the motion of charge. They -- and  
15 then, hence, do not involve electricity.

16 Q: Now, would you say -- what about a landline  
17 telecommunications provider? They transmit a  
18 signal over the landline, do they not?

19 A: Yes. That is -- electricity is involved in  
20 landline communication.

21 Q: Okay. So they're transmitting electricity.  
22 Are they transmitting it using an  
23 electromagnetic wave?

24 A: No, they're using conduction, just like every  
25 other electrical circuit.

1 Q: Like every other electrical circuit, including  
2 those used by Duke Energy.

3 A: Yes.

4 Q: Okay. Similar process, would you agree?

5 A: What is similar to what?

6 Q: That the transmission of an electric signal  
7 over a telephone line is similar to the  
8 transmission of an electrical signal over a  
9 line used by Duke Energy.

10 A: Well, a very weak similarity but, yes, in  
11 principle. In principle they are both  
12 conduction of current on copper conductors.

13 Q: So, in principle, both conduction of current on  
14 copper conductors. Now, would you say that  
15 telecommunications service, landline, is that a  
16 service or is that, in your view, a provision  
17 of tangible personal property?

18 A: In my view, that is a service. It is -- the  
19 product delivered is intelligence and not  
20 energy.

21 Q: So what is delivered is being -- is the same.  
22 It's the same -- you testified a moment ago  
23 that it's the same process, right? We're  
24 transmitting an electrical -- we're  
25 transmitting an electrical energy over a copper



1 wire. Is Duke providing anything else other  
2 than that electrical energy?

3 A: The means have similarities, which I have  
4 already agreed to, okay. The product, what's  
5 for sale, is not the same.

6 Q: Is Duke providing anything other than electric  
7 energy to its customers?

8 A: In the main, no.

9 Q: If Duke isn't providing anything other than  
10 electric energy to its customers, what product  
11 is it providing?

12 A: Electrical energy.

13 Q: And is -- when you -- when I have -- when I  
14 make a telephone call, what is -- what is it  
15 that I'm receiving from the telephone company?  
16 What is it that's flowing across those lines?

17 A: The communication from whoever's on the other  
18 end, the intelligence in the signal. The --  
19 the electrons just, as in Duke Energy's case,  
20 are a means -- electrons are not energy. I  
21 agree with what's been said on that. They are  
22 a means of transferring energy. In the -- in  
23 the case of Duke Energy, the means transports  
24 energy and no communication. In the case of  
25 the phone company, the means transports

1 communication and negligible amounts of energy.

2 Q: So when the phone company would -- transmits  
3 negligible amounts of energy and communication,  
4 Duke Energy just submits -- just transmits  
5 communication.

6 A: No.

7 Q: Oh, excuse me. Duke Energy just transmits  
8 energy; is that correct?

9 A: Yes.

10 Q: Okay. And if the phone company is sending a  
11 signal that is energy, as you said, and your  
12 view is that energy is tangible property, why  
13 isn't the cell phone company providing tangible  
14 personal -- tangible property?

15 MR. GREEN: Objection. It's just tangible, Your  
16 Honor.

17 MR. TRESH: Tangible, excuse me. I'll withdraw.

18 A: All right. Now, let's go back. First of all,  
19 we're talking landline and not cell phones,  
20 okay?

21 Q: Yes, sir.

22 A: All right. Because the tangible entity  
23 transferred, the minuscule amounts of energy  
24 needed to activate a telephone receiver, is  
25 waste energy. It is not the product. It is a

1 waste by-product.

2 Q: Waste by-product, okay. And is the difference  
3 between the amount of energy, is that a  
4 function of power and voltage?

5 A: Yes.

6 Q: Okay. So the difference between the low level  
7 of energy in the telecommunications signal and  
8 the high level of energy in an electric energy  
9 provider like Duke is the voltage and the level  
10 of power, correct?

11 A: Among many other things, yes.

12 Q: Okay. You mentioned earlier that you can touch  
13 electricity; is that correct?

14 A: Yes.

15 Q: Okay. And did you testify that the reason why  
16 that was your view was that because you could  
17 feel the effect of electricity?

18 A: I didn't say that.

19 Q: What did you say?

20 A: I said that the electricity passing through the  
21 body excites the nervous system and so,  
22 therefore, we can sense electricity and,  
23 therefore, it's tangible.

24 Q: In the same way that one can sense sunlight?

25 A: In a similar sense, yes. You don't have to be

1 connected to a circuit to experience sunlight.

2 Q: Does sunlight -- when I feel the sunlight on my  
3 skin, does it excite the nerves in my body?

4 A: Yes, it does.

5 Q: Okay. And does it excite those the nerves in  
6 the same way that it would when I feel  
7 electricity?

8 A: Only if you're talking about flash burns. If  
9 you're talking about electricity passing  
10 through the body --

11 Q: Uh-huh (affirmatively responds).

12 A: -- you can experience electricity without  
13 injury.

14 Q: Can I experience sunlight without injury?

15 A: Yes, you can.

16 Q: Okay.

17 A: But the point is, you don't have to be part of  
18 a circuit to collect sunlight. You get what  
19 falls on your skin. Whereas in terms of  
20 electricity, to experience electricity  
21 internally, you need to be part of a circuit.

22 Q: Does it excite the nerves in the same way? I  
23 didn't ask whether it had to be part of a  
24 circuit. When I feel -- when my nerves feel  
25 the sunlight on my skin or I touch electricity,

1 are the nerves excited in the same way?

2 A: No.

3 Q: No? What's the difference in the way nerves  
4 are excited?

5 A: First of all, different receptors are involved.  
6 Secondly, the passage of electricity through  
7 your nerves disrupts the internal  
8 communication, so you lose control -- with  
9 enough current you lose control of your  
10 muscles.

11 Q: Uh-huh (affirmatively responds).

12 A: This does not happen in sunlight.

13 Q: But you would still agree that both sunlight  
14 and electricity are tangible, correct?

15 A: Yes.

16 Q: Can electric energy be created or destroyed?

17 A: Electric energy cannot be created or destroyed.  
18 It has to be the result of a conversion  
19 process.

20 Q: Electric energy has to be the result of a  
21 conversion process. There's no electric energy  
22 without a conversion process? You said it has  
23 to be.

24 A: Yeah, and I'm just checking for exceptions.

25 Yes, electric energy is the result of

1 transformation of energy from some other form.

2 Q: How does the telecommunications provider that  
3 transmits energy, where does its electrical  
4 energy come from? What conversion process does  
5 it envision?

6 A: Ultimately, from Duke's power pile, coal pile.

7 Q: So the electric -- so the telecommunications  
8 company just uses electrical energy that it  
9 receives from a company like Duke Energy; is  
10 that correct?

11 A: That's correct.

12 Q: Okay. It doesn't broadcast its own signal?

13 A: That's a different question.

14 Q: Does it broadcast its own electrical energy  
15 signal?

16 A: Does it broadcast its electrical signal -- or,  
17 excuse me, its electromagnetic energy? Yes, it  
18 does.

19 Q: Do you know the difference between an object  
20 and a field?

21 A: A "field" is a mental construct which states  
22 that a body is experiencing a force without  
23 being in contact with another body.

24 Q: It's a mental construct. Fields don't exist as  
25 one of the laws of physics?

- 1 A: All of our laws of physics are mental  
2 constructs. They're very useful. You can do  
3 engineering with them. You can make product.  
4 But they're still mental constructs.
- 5 Q: So what is the difference between an object and  
6 a field?
- 7 A: Difference between an object and a field is  
8 that with an object -- excuse me, a field can  
9 exert a force on an object. An object -- and  
10 by the way, as far as I know, fields have no  
11 mass. Objects have mass.
- 12 Q: Objects have mass; fields have no mass, okay.
- 13 A: Close enough.
- 14 Q: Any other differences?
- 15 A: That's good enough for now.
- 16 Q: Does electric energy have mass?
- 17 A: Actually, no.
- 18 Q: So, in that regard, it's more like a field than  
19 an object.
- 20 A: No. Electric energy is the product of current  
21 and voltage. A field is a -- let's go back.  
22 Would you restate the question, please?
- 23 Q: You testified that an object has mass.
- 24 A: Uh-huh (affirmatively responds).
- 25 Q: That one of the differences between a field and

1           an object is an object has mass and a field  
2           doesn't.

3    A:     That's correct.

4    Q:     And then you said that an electric field,  
5           electric energy -- excuse me, electric energy  
6           does not have mass.

7    A:     That's correct. That does not make it a field.

8    Q:     I did not say that.

9    A:     Okay. I just wanted to explain.

10   Q:     And my question was, is that one of the  
11           similarities -- or, excuse me, one of the  
12           differences between an object and a field, mass  
13           versus no mass?

14   A:     That's one of the principal differences.

15   Q:     Okay.

16   A:     The other principal difference, now that we've  
17           talked about it, is that to exert a force on a  
18           secondary object, two objects have to be  
19           touching one another; whereas a field can exert  
20           a force without a -- what you might call  
21           "touch."

22   Q:     Okay. Does the propagation of electricity in  
23           transmission lines, is that analyzed in terms  
24           of the propagation of electromagnetic waves?

25   A:     Not by most people in the power industry, nor



1 by most electrical engineers because it is  
2 normally dealt with in terms of Ampere's law,  
3 Faraday's law and Ohm's law.

4 Q: Can I direct your attention to page 49 of your  
5 transcript?

6 A: (Witness complies.)

7 Q: Line 22, please.

8 A: Yes.

9 Q: If I can actually -- starting with line 20, can  
10 you read the question?

11 A: "So when they transmit electricity, they're not  
12 transmitting any electromagnetic energy?"

13 Q: And your answer?

14 A: Answer: "The propagation of electricity in the  
15 transmission lines can be analyzed in terms of  
16 the propagation of electromagnetic waves."

17 Q: And I think the question I just asked was, can  
18 the propagation of electricity be analyzed --  
19 in the transmission lines be analyzed in terms  
20 of propagation of electric --

21 A: If -- if that was the wording of your question,  
22 then that's identical to what's in my testimony  
23 and I agree with that.

24 Q: Okay. Thank you. And is Faraday's law  
25 inconsistent with what you testified to?

1 A: No, it is just -- electromagnetic wave theory  
2 is normally applied to objects -- excuse me, to  
3 systems where the wavelength is similar to the  
4 size of the object.

5 Q: Uh-huh (affirmatively responds).

6 A: So, for example, your favorite cell phone  
7 example, the size of my antenna is related to  
8 the wavelength of the radio wave at that  
9 frequency.

10 A power frequency, 60 hertz, the wavelength is  
11 3,000 miles long. So very little that we deal  
12 with is 3,000 miles long, that we deal with as  
13 systems. Once in a while, yes, you do. But  
14 for routine business, you're talking about  
15 components and systems whose dimensions are  
16 much less than the wavelength of the power  
17 frequency. And so using electromagnetic  
18 analysis is not productive. It is too hard,  
19 too complicated.

20 Q: Can I ask you to turn to page 69 of your  
21 deposition, please?

22 A: (Witness complies.) Sixty-nine.

23 Q: Actually, strike that. Is the reason that you  
24 believe that Duke Energy provides something  
25 tangible is because you can measure it?

- 1 A: That's one of the reasons, yes.
- 2 Q: You can measure cell phone minutes, right?
- 3 A: And I can measure cell phone minutes, that's
- 4 correct.
- 5 Q: Okay. In your deposition, do you recall when
- 6 we last spoke, you had made a distinction
- 7 between electric energy sold for a flat fee
- 8 versus that sold on a per kilowatt hour basis?
- 9 A: I remember that.
- 10 Q: Do you recall saying that if electric energy
- 11 were sold for a flat fee it would be the
- 12 provision of a service?
- 13 A: Yes, I recall saying that. And to --
- 14 Q: Is there any --
- 15 A: And I'd like to add to -- that that is intended
- 16 as a reductio ad absurdum.
- 17 Q: Okay. Did you not mean that when you said
- 18 that? Was that testimony incorrect?
- 19 A: It is not incorrect. It is merely that the
- 20 world doesn't operate that way.
- 21 Q: When you say the world doesn't operate that
- 22 way, what do you mean?
- 23 A: I mean, people don't give away electrical
- 24 energy.
- 25 Q: I didn't say -- that's not the question. I

1           said if it was provided on a flat-fee basis.

2    A:     If it were provided on a flat-fee basis, you

3           could consider it a service.

4    Q:     Thank you. And I believe you weren't here, but

5           we heard testimony earlier that Duke Energy

6           provides electric service on a flat-fee basis.

7           Do you have any reason to believe that

8           electricity provided on a flat-fee basis, other

9           than the way it's billed, is any different than

10          the electricity or electric energy provided on

11          a per kilowatt hour basis? Scientifically, are

12          they the same?

13   A:     Oh, yes, all kilowatt hours are the same.

14   MR. TRESH: One moment, Your Honor.

15          Just a few more questions.

16   Q:     I'm going to hand you a copy of the -- a few

17          documents.

18   A:     Yes.

19   MR. TRESH: I've handed him the North American

20          Industry Classification System documents.

21   MR. GREEN: Oh, okay.

22   Q:     Are you familiar with the North American

23          Industry Classification System?

24   A:     Yes.

25   Q:     And what, in your view, is the purpose or what

1 is the North American Industry Classification  
2 System?

3 A: I believe it comes out of the Census Bureau.  
4 In fact, I see that at the bottom here it does.

5 Q: What's --

6 A: And so the Census Bureau collects information  
7 to characterize America's economy and  
8 infrastructure, in addition to its primary  
9 mission, which is to enumerate voters.

10 Q: And do you agree that -- if you look at the  
11 first document entitled "Sector 22 Utilities"  
12 and "Section 221 Utilities," those two pages,  
13 would you agree that they describe electric  
14 utilities like Duke Energy?

15 A: Yes.

16 Q: And if I could ask you to take a look at the  
17 stapled document that's labeled at the top  
18 right "one of 22." I believe that's -- begins  
19 with NAICS code -- NAICS Code 31,  
20 Manufacturing. Would you believe that -- would  
21 you agree that these NAICS's codes that  
22 constitute the next 22 pages describe  
23 "manufacturers"?

24 A: (Perusing.) Yes.

25 Q: Mr. Robinson, are you familiar with the

1           National Electric Safety Code?

2    A:     I have used it in the past, yes.

3    Q:     Are you an expert in that area?

4    A:     Not really, no.

5    Q:     Are you very familiar with it?

6    A:     I have a working knowledge of it.

7    MR. GREEN: I object to this. He made a big deal

8           about standards not being appropriate for his

9           expertise and now he's going to ask him about

10          a standard.

11   THE COURT: It is an interesting approach.

12   MR. TRESH: I'm just curious in his experience -- he

13           knows a lot about manufacturers -- whether

14           under this code or standard -- whether there's

15           any standard that would say what a

16           "manufacturer" is.

17   MR. GREEN: I'm curious about a lot of things, but I

18           don't get to ask about them if I've moved to

19           get them out of --

20   THE COURT: I was about to ask him if his curiosity

21           is probative.

22   MR. TRESH: Probative as to what a "manufacturer"

23           is, Your Honor.

24   THE COURT: Well, then proceed at your own risk.

25   MR. TRESH: Thank you, Your Honor.

1 Q: Does the National Electric Safety Code anywhere  
2 talk about electricity?  
3 A: It ...  
4 MR. GREEN: I'm sorry --  
5 A: It has primarily to do with the installation  
6 and maintenance of transmission and  
7 distribution lines. I am -- I would be much  
8 surprised if somewhere in there it did not  
9 mention "electricity."  
10 MR. GREEN: Before we go any further down this road,  
11 have you provided a copy of the document?  
12 MR. TRESH: I asked him are you familiar with them.  
13 MR. GREEN: You're just asking?  
14 MR. TRESH: Yeah.  
15 THE COURT: Well, if you're asking from a document,  
16 he has the right to review the document.  
17 MR. TRESH: I'm not asking from a document, Your  
18 Honor.  
19 THE COURT: Okay.  
20 MR. TRESH: And at this point, I would say I have no  
21 further questions, Your Honor.  
22 THE COURT: Okay. Mr. Tresh, you did do one thing I  
23 thought was really interesting.  
24 MR. TRESH: What's that, Your Honor?  
25 THE COURT: You asked a compound question and then

1           you killed the first part of the compound  
2           question and finished with asking only the  
3           latter part of the compound question.  
4   MR. TRESH: I did my best, Your Honor.  
5   MR. GREEN: All right. Just a few questions on  
6           redirect, Your Honor.  
7   MR. ROBINSON - REDIRECT EXAMINATION BY MR. GREEN:  
8   Q:   Mr. Robinson, Mr. Tresh asked you about your  
9           statement about electricity being sold as a  
10          flat fee. Do you recall that?  
11   A:   I recall that.  
12   Q:   And I think the question was -- and I'll refer  
13          you to pages 72 and 73 in your deposition, of  
14          which I think is where those come from. And I  
15          think the question was -- read with me starting  
16          on line 23, page 72 -- "Okay. So in your  
17          view" --  
18   A:   Hold on, please.  
19   Q:   Sure. Let me know when you get there.  
20   MR. TRESH: Line 22?  
21   MR. GREEN: Line 23 on page 72.  
22   A:   Seventy-two. Line what?  
23   Q:   Twenty-three.  
24   A:   Thank you.  
25   Q:   And I think it starts there: "Is this correct?"



1           Okay. So in your view, electricity,  
2           electricity that Duke sells, electric energy  
3           that Duke sells, it would change from a  
4           material to a service if Duke went ahead and  
5           sold it on a single charge, you know, 40  
6           percent -- \$40 dollars per month for all the  
7           electricity?" And your answer -- is that  
8           correct?  
9    A:     That's what it says, yes.  
10   Q:     And then your answer beginning on line four of  
11           73 was: "All you can eat"?  
12   A:     Yes.  
13   Q:     And then on line five the question was:  
14           "That's a service?" And then on line six the  
15           question is: "All you can eat. For example --  
16           a good example -- well, strike that." Were you  
17           discussing quantity in that context?  
18   A:     Yes.  
19   Q:     And, in fact, let me refer you back to page 72.  
20   A:     (Witness complies.)  
21   Q:     Line 12. Was your answer, "But if you're  
22           paying by quantity of goods transferred, then  
23           it is manufacturing"?  
24   A:     Yes.  
25   Q:     And what were you trying -- point were you

1           trying to make with respect to quantity?

2     A:     Really a couple of points. One is, when you're  
3           transferring a commodity, you can't maintain a  
4           business without billing on the basis of  
5           quantity. If you do a flat fee, you're going  
6           to go out of business.

7           Second point, however, is that if the unlimited  
8           demand is -- if you try to meet the unlimited  
9           demand, you run out of generation facilities.  
10          And so you have to go through a capital cost  
11          upgrade to try to meet this unlimited demand,  
12          which is impossible.

13    Q:     Thank you, Mr. Robinson. Let me refer -- I  
14           think you were handed a document, a cover  
15           letter, 1991 that was part --

16    A:     Yes.

17    Q:     -- of your file?

18    A:     Yes.

19    Q:     Would you refer to page, I guess, six of that  
20           document? At the bottom it has 00006538?

21    A:     Yes.

22    Q:     And do you see on there number 14 near the  
23           bottom of that page?

24    A:     Yes, I do.

25    Q:     And is it talking about depreciation and

1 decommissioning expenses?

2 A: Fourteen is depreciation and 15 is  
3 decommissioning.

4 Q: Okay. And under 14, does it have the word  
5 "production"?

6 A: Yes.

7 Q: And does an electric company produce  
8 electricity?

9 A: Yes.

10 Q: There's been some discussion about your opinion  
11 in this case. What is your definition of  
12 "manufacturing" that you have used?

13 A: I prefer Merriam-Webster. One of their -- one  
14 of their definitions, which covers the ground  
15 based on my experience is, is that it's a  
16 productive activity involving the use of  
17 machinery and division of labor.

18 Q: And it is your opinion that an electric company  
19 like Duke Energy falls within that definition?

20 A: Yes.

21 MR. GREEN: I have no further questions, Your Honor.

22 Thank you.

23 MR. TRESH: Short redirect, Your Honor.

24 THE COURT: You said short?

25 MR. TRESH: Yes, Your Honor. Short redirect.

1 Re-cross, I'm sorry.

2 THE COURT: Yeah, that's what I was ...

3 MR. TRESH: I apologize.

4 MR. ROBINSON - RE-CROSS-EXAMINATION BY MR. TRESH:

5 Q: You mentioned earlier that if Duke provided  
6 electric service on a flat-fee basis that that  
7 would be the provision of a service, correct?

8 A: Yes.

9 Q: Okay. And you said that's not possible because  
10 if people provided items on a flat-fee basis,  
11 they'd go out of business; is that correct?

12 A: I said that.

13 Q: Do you have any experience with respect to  
14 working in an electric utility that provided  
15 electricity on a flat-fee basis?

16 A: I know that all electric utilities provide a  
17 minority of their product on a flat-fee basis,  
18 but the majority is charged for.

19 Q: But the product, in your view, the electric  
20 service doesn't change, right?

21 A: The product is a commodity. Every kilowatt  
22 hour is the same.

23 Q: Okay. And with regard to manufacturing, you  
24 said you looked at --

25 (Cell phone interruption.)

1 Q: -- Wikipedia and other dictionary sources.

2 A: Uh-huh (affirmatively responds).

3 Q: Why do you think the North American Industry  
4 Classification System has separate industry  
5 codes for manufacturers versus utilities?

6 A: Utilities --

7 MR. GREEN: I object. I didn't go into that in  
8 redirect, Your Honor.

9 MR. TRESH: He's an expert in manufacturing and he's  
10 stating why his -- why he formed that basis,  
11 why he formed his expert opinion. He should be  
12 able to justify why --

13 THE COURT: Well, the question isn't what he's up to  
14 justifying. The question is, did he go into  
15 that matter on re-cross as a new matter and  
16 that's the standard I have said.

17 MR. TRESH: Uh-huh (affirmatively responds).

18 THE COURT: If it was a new matter opened up  
19 in -- and I said "cross," I meant -- you  
20 started with your redirect; now I'm doing his  
21 as re-cross.

22 In his redirect, did he open up a new matter  
23 that you can go into?

24 MR. TRESH: Your Honor --

25 THE COURT: That's the --

1 MR. TRESH: He opened up manufacturing, Your Honor.

2 MR. GREEN: Your Honor, he talked about the  
3 standards in his cross and I didn't bring them  
4 up.

5 THE COURT: And I don't think he opened up anything  
6 new. He addressed that which you had opened.  
7 So if you want to refresh my memory, I'll look  
8 for it.

9 MR. TRESH: What he opened up was manufacturing,  
10 Your Honor. He opened up what --

11 THE COURT: He asked him to define "manufacturing."

12 MR. TRESH: Right. And I'm offering a different  
13 definition and asking him why this definition  
14 is different than the definition that he --

15 THE COURT: If that's the path, I'll overrule your  
16 objection.

17 MR. TRESH: Thank you, Your Honor.

18 Q: So why is this definition different? Why is  
19 the North American Industry Classification  
20 System definition different than the one that  
21 you think ought to be used?

22 A: Because utilities occupy a special place in our  
23 economy.

24 Q: So utilities are not manufacturers.

25 A: I didn't say that.

1 Q: Well, are they --

2 A: They may -- they may well be manufacturers.  
3 You can categorize any way you like for  
4 whatever purposes you have. These happen to be  
5 manufacturers classed as utilities, fine.

6 Q: The classification "manufacturers," how many  
7 pages is it in the North American Industry --

8 A: Many, many, many, many pages.

9 Q: And yet they didn't choose to classify  
10 utilities as manufacturers; is that correct?

11 A: Because it did not serve their purposes.

12 MR. TRESH: No further questions, Your Honor.

13 MR. GREEN: Nothing from me, Your Honor.

14 THE COURT: You may step down, sir.

15 (Witness excused.)

16 MR. GREEN: Thank you, Your Honor. The State rests.

17 We have no further witnesses.

18 One moment. Let me make sure I've gotten  
19 everything.

20 Yes, the State rests.

21 MR. TRESH: Your Honor, we'd like to call a rebuttal  
22 witness.

23 THE COURT: All right.

24 MR. TRESH: I'd like to call Dr. Papa back to the  
25 stand, please.

1 THE COURT: If we could take a break?

2 MR. TRESH: Yes, Your Honor.

3 THE COURT: All right.

4 (Off the Record from 2:29 to 2:47 p.m.)

5 THE COURT: All right.

6 MR. TRESH: Dr. Papa?

7 THE COURT: You're still under oath, Doctor.

8 THE WITNESS: Okay.

9 IOANNIS PAPAPOLYMEROU, Ph.D., having been previously  
10 sworn, testifies and examines as follows:

11 DR. PAPAPOLYMEROU - DIRECT EXAMINATION BY MR. TRESH:

12 Q: Dr. Papa, just a few questions. You heard  
13 Mr. Robinson's testimony just a few moment ago?

14 A: Yes.

15 Q: And did you hear Mr. Robinson testify that the  
16 provision of electrical energy by a company  
17 like Duke Energy is not the provision of  
18 electro -- of an electromagnetic field?

19 A: Yes.

20 Q: Do you agree with that testimony?

21 A: No.

22 Q: Can you tell us why?

23 A: I do not agree because what -- as I explained  
24 in my testimony, what we are getting is a field  
25 force. And what we have in nature are



1 electromagnetic fields.

2 There was a little bit of talk about, you know,  
3 the voltage and the current and, you know,  
4 current is an effect of the field. The field  
5 applies a force to charges, for example.

6 Voltage is a way for us to help us analyze a  
7 little of the electrical and electronic devices  
8 much faster than, you know, when dealing with  
9 a field. But what exists is a field, either  
10 electrical or magnetic.

11 Q: And what exists in terms of -- and what Duke --  
12 and what does Duke provide? Not just what  
13 exists. What does Duke provide to its  
14 customer?

15 A: It provides access to an electromagnetic field.

16 Q: So in that regard you would disagree with what  
17 Mr. Robinson said earlier?

18 A: Yes.

19 Q: Okay. Are there other areas -- are there other  
20 things that Mr. Robinson testified to that you  
21 would disagree with?

22 A: (No response.)

23 Q: So, for example, would you agree that you can  
24 touch electricity?

25 A: No, I do not agree. As I explained earlier in

1           my testimony, what we feel, what our body  
2           feels, are the effects of the field.

3   THE COURT: I don't know if that's reply testimony,  
4           but ...

5   MR. GREEN: Yes.

6   MR. TRESH: Okay.

7   THE COURT: I don't quite know what that "yes"  
8           meant, either, but ...

9   MR. GREEN: Sorry. I was reading and I'm listening  
10           and I'm not very -- my wife will tell you I'm  
11           not very good at multitasking. Yes, I don't  
12           think that's reply testimony, Your Honor. I  
13           think that is ...

14   Q: I believe that Mr. Robinson testified that  
15           electricity is not a field; is that correct?

16   A: No.

17   Q: Can you tell us why?

18   A: Because electricity is a force and a field  
19           basically applies a force, in this case, to  
20           other charged particles, so it is a field.

21   Q: I believe that Mr. Robinson said that Duke  
22           Energy produces electric energy. Is that true?

23   A: No. What happens is that a company like Duke  
24           Energy converts one form of energy to another.  
25           So, in this case, the original form of energy,

1           for example, kinetic, as we said, gets  
2           transformed into electromagnetic energy.

3    Q:    I believe that Mr. Robinson testified that the  
4           electromagnetic field or that the electric  
5           energy associated with cell phone transmissions  
6           is different than that associated with electric  
7           energy that Duke provides. Can you tell us  
8           what -- do you agree with that statement?

9    MR. GREEN: Your Honor, I object to this -- the  
10           formulation of these questions. He is  
11           characterizing how Mr. Robinson testified and  
12           then he is getting the witness to answer his  
13           characterization of that testimony. It's not  
14           the witness's understanding of it. It's a  
15           repackage of the testimony.

16   THE COURT: It's called "pitting the witness" rule  
17           in South Carolina. You're not allowed to pit  
18           one witness against another.

19   Q:    Dr. --

20   MR. TRESH: I'll withdraw that question, Your Honor.

21   THE COURT: That's a good idea.

22   MR. TRESH: Thank you, Your Honor.

23   Q:    Dr. Papa, do you believe that you can touch  
24           electricity?

25   A:    No.

1 Q: Do you believe you can taste electricity?  
2 A: No.  
3 Q: Do you believe electricity has mass?  
4 A: No.  
5 Q: Do you believe that the provision of electric  
6 energy by Duke is the provision of an electric  
7 service?  
8 A: Yes.  
9 MR. TRESH: No further questions, Your Honor.  
10 THE COURT: Mr. Green?  
11 MR. GREEN: Just hopefully very briefly, Your Honor.  
12 Thank you.  
13 DR. PAPAPOLYMEROU - CROSS-EXAMINATION BY MR. GREEN:  
14 Q: You testified -- the electromagnetic field that  
15 you were discussing, you testified that that is  
16 caused by the flow of current; is that correct?  
17 A: I testified that the electric field is caused  
18 by a static charge, by any charge actually, and  
19 the magnetic field is caused by a moving charge  
20 or at times varying electric field.  
21 Q: And so that field results from the moving  
22 charge; is that correct?  
23 A: The magnetic field results from a moving  
24 charge.  
25 Q: Now, as part of your file in this case, didn't

1           you reference a Wikipedia article?

2   MR. TRESH: Your Honor, objection. We didn't call  
3           Dr. Papa on rebuttal for anything involving  
4           Wikipedia.

5   MR. GREEN: No, but they did call him as a rebuttal  
6           witness and they did raise that issue in  
7           cross-examination of my witness.

8   MR. TRESH: But we didn't raise that issue in our  
9           rebuttal testimony.

10   THE COURT: That's interesting. I don't know if  
11           I've ever researched that. Is rebuttal  
12           testimony -- there's a rule in South Carolina,  
13           different than the federal rule, is there's  
14           wide latitude on cross-examination in South  
15           Carolina. But then you're in rebuttal. And I  
16           don't know if there's a case out there that  
17           sets forth whether or not there's wide latitude  
18           on cross-examination in rebuttal.

19   MR. TRESH: It's true with wide latitude, Your  
20           Honor, but typically I would -- I believe it's  
21           limited to the matters raised.

22   THE COURT: That's the difference. In South  
23           Carolina it's not in the case in chief. I'm  
24           going to let him go into it, but ...

25   Q:   As part of your file, did you reference a

1           Wikipedia article regarding electricity?

2    A:     If I remember correctly, yes.

3    Q:     And did you say that that Wikipedia article was  
4           extremely close to the statements that you made  
5           in your report?

6    A:     I believe so, yeah.

7    MR. GREEN: Thank you. I have no further questions,  
8           Your Honor.

9    MR. TRESH: One question, Your Honor?

10   THE COURT: Okay.

11   DR. PAPAPOLYMEROU - REDIRECT EXAMINATION BY MR.

12   TRESH:

13   Q:     Dr. Papa, in forming your expert opinion in  
14           this matter, did you rely on Wikipedia?

15   A:     No.

16   MR. TRESH: Thank you.

17   MR. GREEN: Nothing.

18   THE COURT: All right. You may step down.

19           (Witness excused.)

20   MR. TRESH: Your Honor, we have no further  
21           witnesses.

22   THE COURT: All right.

23   MR. GREEN: None from the Department, Your Honor.

24   THE COURT: Okay. Are we going to have closing  
25           arguments today or are we going to put them in

1           our proposed orders -- how do y'all want to do  
2           it -- or both?

3   MR. TRESH: Your Honor, I'd propose, if it please  
4           the Court, to do a short closing argument and  
5           submit a post trial brief, if that would be  
6           acceptable to the Court.

7   THE COURT: I normally do proposed orders --

8   MR. TRESH: Proposed orders, okay.

9   THE COURT: -- of which my normal rule is 30 days  
10           from today's date or 30 days from the date that  
11           the transcript -- if someone requests a  
12           transcript, 30 days from the date the  
13           transcript is made available to you.

14   MR. GREEN: I think we'll both want the transcript.

15   MR. TRESH: I think that's right. Yes, Your Honor.

16   MR. GREEN: I would propose no closing arguments,  
17           but --

18   THE COURT: Well, he --

19   MR. GREEN: -- he asked, so ...

20   THE COURT: Then you just get to decide -- you want  
21           to make one, too? You've got the option of  
22           going first, last or both. If you do both, you  
23           have to open in full.

24   MR. TRESH: Both, Your Honor.

25   THE COURT: All right.

1 CLOSING ARGUMENT BY MR. TRESH:

2 MR. TRESH: Your Honor, a few points, all of which I  
3 assume will be addressed in our order. But  
4 what we've heard over the past two days is --  
5 we've heard a couple of things. We've heard  
6 testimony that the Department of Revenue had a  
7 long-standing policy in place whereby it  
8 assessed single-factor versus multi-factor  
9 formula with regard to a corporation's primary  
10 business.

11 The test for that primary business is based  
12 upon what 50 percent or greater of its receipts  
13 were from. Receipts or profit, I think was the  
14 actual testimony we heard.

15 Now, we heard testimony from Duke Energy that  
16 without question, greater than 50 percent of  
17 its receipts and profit were received from the  
18 sale of electric services. That testimony's  
19 not been controverted in any way.

20 Now, we also heard testimony from the  
21 Department of Revenue in the Final Agency  
22 Determination that they categorized Duke's  
23 provision of electric service as just at that,  
24 a service. Mr. Southard testified that that  
25 was what was in the FAD; the Department had,



1           indeed, characterized it that way.  
2           Now, when asked about what appeared to be an  
3           inconsistency in the Department's revenue  
4           manual, Mr. Southard couldn't explain the  
5           difference between the characterization in the  
6           revenue manual -- not just the FAD but in the  
7           revenue manual -- with electric service as just  
8           that, a service, versus the statement that  
9           power producers should file using a  
10          three-factor formula.  
11          So what are we left with? We're left with  
12          testimony by the Department of Revenue that  
13          Duke Energy provides a service. Testimony from  
14          all of Duke's witnesses that the sale of  
15          electric energy is a service and that that is  
16          greater than 50 percent of the business that  
17          they're in. And if that's the case and under  
18          the Department's long-standing --  
19   THE COURT: You said 50 percent. I don't remember  
20              any testimony about the amount of gross  
21              receipts.  
22   MR. TRESH: Mr. Monroe testified that more than  
23              50 percent of its -- of Duke Energy's receipts  
24              came from the provision of electric service.  
25   THE COURT: He did?

1 MR. TRESH: Yes, sir. Yes, Your Honor.

2 THE COURT: From the provision of electrical  
3 services. He didn't give any specificity in  
4 that regard, though, did he? From whether it  
5 came from the generation plants or -- you're  
6 just saying generally it flows in from the  
7 provision of the service at the site.

8 MR. TRESH: He didn't break down -- and, indeed,  
9 there was no breakdown of the revenue.

10 THE COURT: The only breakdown was the -- what was  
11 that phrase called, the "capacity charge? That  
12 wasn't really broke down. It was just that it  
13 is a charge.

14 MR. TRESH: Yes. Yes, Your Honor. Mr. Jamil  
15 testified -- Dhiaa Jamil testified that what  
16 Duke charged customers, too, that their primary  
17 business was, indeed, the provision of electric  
18 service, more than 50 percent, and he discussed  
19 that there were different components of that  
20 bill.  
21 He discussed that in arriving at the monthly  
22 charge, the hundred dollars in my example  
23 yesterday, that one might pay a month for  
24 electric service, that that charge was made up  
25 of a few different components --

1 THE COURT: Yeah, okay.

2 MR. TRESH: -- some of which were related to

3 generation, some of which were related to

4 other.

5 Now, if Duke's primary business is, indeed, the

6 provision of a service -- we've got this

7 long-standing agency policy. So what is --

8 what is Duke in the business of?

9 Well, we've heard testimony from Duke's

10 executive vice president in charge of nuclear

11 operations, who serves on nuclear generation

12 facility boards across the county, advises

13 other utilities on how to run their generation

14 operations, and has been in the business for 24

15 or 25 years or so, that without question what

16 Duke provides is an electric service.

17 We then heard testimony from an esteemed

18 professor from the Georgia Institute of

19 Technology, who advises the United States

20 government, who advises NASA and who is a full

21 professor at Georgia Tech and has been involved

22 in studying electricity for 20-some-odd years,

23 that without question electric -- the provision

24 of electricity is a service and electricity

25 itself is an electromagnetic field.

1 And so what are we left with? We're left with  
2 testimony from one Department witness, who has  
3 some level of experience involving electricity  
4 and, in his view, electricity is tangible in  
5 the same way that wind and sun are tangible, as  
6 well.

7 I think for the purposes of South Carolina law,  
8 it would be a stretch to say that the provision  
9 of sunlight or the provision of wind are  
10 tangible in any respect. Nonetheless -- and  
11 certainly not tangible personal property.

12 THE COURT: Well, the second part was -- tangible  
13 personal property is difficult.

14 MR. TRESH: Very, Your Honor. And so we have no  
15 testimony, then, from the Department as to  
16 whether Duke provides tangible personal  
17 property. We have two highly credible  
18 witnesses who gave, both from a scientific  
19 perspective and from a business perspective,  
20 that Duke provides a service.

21 The Department argues that, well, wait a  
22 minute, Duke's a manufacturer and that the  
23 section -- the apportionment provisions of  
24 South Carolina law should be read that  
25 "manufacturer" -- one can be a "manufacturer"

1 and still be a service provider.

2 We've heard no testimony on how that can  
3 happen. It's, quite frankly, very hard to  
4 conceive that someone could manufacture a  
5 service.

6 But the better read of that statute is that one  
7 must manufacture or process a good or material.

8 And we heard testimony from Mr. Jamil and  
9 Dr. Papa that electricity was not tangible.

10 How could it be a good or material? Even the  
11 Department's witness, Mr. Robinson, testified  
12 that electricity wasn't a material.

13 And so because of that, because that -- what  
14 Duke's primary business is, is the provision of  
15 an electric service, Duke Energy is required to  
16 use the single-factor apportionment formula.

17 THE COURT: All right.

18 MR. GREEN: Your Honor, just very briefly.

19 CLOSING ARGUMENT BY MR. GREEN:

20 MR. GREEN: What you've heard testimony, in the  
21 Department's view, is that there is a process  
22 in producing electricity that involves  
23 generation, it involves transmission, it  
24 involves distribution, and all that is one  
25 system that processes and reprocesses the

1 electricity until it is delivered to the  
2 customer.

3 You've heard that from, frankly, both sides of  
4 witnesses. There's a lot of descriptions of  
5 it. Duke references a lot of stuff they have  
6 calling it a "service," other times they've  
7 called it the production of -- "generation of  
8 electricity," which is what they do.

9 Really the question is whether -- one of the  
10 questions I think is whether Duke Energy has  
11 met its burden to establish that the Department  
12 unreasonably viewed electricity as  
13 manufacturing under that statute.

14 We submit that the better reading of that  
15 statute is not manufacturing, a form of  
16 processing. It is manufacturing "or" any form  
17 of processing.

18 The statute is in the disjunctive. The  
19 legislative history supports that  
20 interpretation, quite frankly.

21 THE COURT: The legislative history?

22 MR. GREEN: The history that that statute, how it  
23 originally read "manufacturing" and then later  
24 on the clause "or any form of manufacturing" --  
25 excuse me, "processing goods and materials" --

1           and we referenced that in our pretrial brief,  
2           Your Honor -- that supports that manufacturing  
3           stands alone by itself.  
4           So we submit that they have not proven that the  
5           Department's view of that was unreasonable and  
6           they certainly -- and they have not met their  
7           burden to prove that it was not manufacturing  
8           based on the whole system of processing.  
9           The system for delivering electricity, it  
10          really is processed, it is just -- it is  
11          stepped up and it is stepped down until it  
12          finally reaches the meter at a customer's home  
13          or business at which point in time, then it is  
14          delivered in a form they can use. Not before.  
15          Not at any time. And that is -- it is  
16          essentially a big assembly line, a big conveyor  
17          belt that takes the product to the customer.  
18          For that reason, Your Honor, we submit they  
19          have not met their burden of proof and the  
20          Department is entitled to judgment on this  
21          issue.

22       REPLY BY MR. TRESH:

23       MR. TRESH: Couple of quick points, Your Honor.

24           Mr. Green's interpretation of the statute as  
25           being disjunctive omits the word "primary" at

1 the beginning of the statute.

2 THE COURT: You mean "principal."

3 MR. TRESH: Or "principal," excuse me, Your Honor.

4 THE COURT: Well, there's no "or." It's  
5 "principal."

6 MR. TRESH: It is "principal". It is "principal."

7 And so one can only -- if one's principal  
8 business is manufacturing or processing goods  
9 or materials, that implies there's only one  
10 business. And the uncontroverted testimony  
11 we've heard is that Duke's primary business is  
12 dealing in services.  
13 Now, in terms of how that's been interpreted,  
14 for years, going back at least 20 years,  
15 probably more, we have guidance from the  
16 Department of Revenue and case law that says  
17 that the single-factor method is used for those  
18 dealing in services, and the three-factor or  
19 four-factor method is used for those dealing in  
20 tangible personal property.

21 THE COURT: The four-factor method's not at issue  
22 here, is it?

23 MR. TRESH: Not in these years, Your Honor.

24 THE COURT: Okay.

25 MR. TRESH: You're right, not in these years.



1           So the three-factor method versus the  
2           single-factor is reserved for those dealing in  
3           tangible personal property.

4           And with regard to the four-factor method, it  
5           is -- the whole idea of dealing in tangible  
6           personal property has, indeed, been continued.  
7           That same test has been continued to the  
8           current time.

9   THE COURT:   Wonderful.

10  MR. TRESH:   That test has always been dealing in  
11           tangible personal property and Duke Energy  
12           doesn't do it.  And for that reason, Your  
13           Honor, we request that the Court find in favor  
14           of Duke.

15  THE COURT:   Okay.

16  MR. TRESH:   Your Honor, one last matter.  We did not  
17           earlier move the 10-K's into the record,  
18           although they were stipulated to.  We've  
19           consulted with Mr. Green.  I don't believe he  
20           has any objection.

21  MR. GREEN:   No objection.

22  MR. TRESH:   I'd like to move them into the record.

23  THE COURT:   They're admitted.

24  MR. TRESH:   Thank you, Your Honor.

25  MR. GREEN:   Are they labeled?

1 MS. TODOROVA: Yes. I relabeled --

2 MR. GREEN: Okay. That's fine.

3 THE COURT: Well, I don't really care if they're  
4 labeled. I'd like to know if they're marked.

5 MS. TODOROVA: They're marked.

6 THE COURT: All right. They're marked as what?  
7 I've admitted them.

8 THE COURT REPORTER: Forty-nine-B-1 through  
9 Forty-nine-B-24.

10 (Petitioner's Exhibit Numbers Forty-nine-B-1 through  
11 Forty-nine-B-24 were admitted into evidence.)

12 THE COURT: All right. This hearing is adjourned.

13 (There hearing concluded at 3:08 p.m.)

STATE OF SOUTH CAROLINA  
ADMINISTRATIVE LAW COURT DIVISION  
Docket No. 10-ALJ-17-0270-CC

Duke Energy Corporation,

Petitioner,

v.

South Carolina Department of  
Revenue,

Respondent.

(COPY)

**MOTIONS HEARING**

\*\*\*\*\*

**Tuesday, June 26, 2012**  
9:56 a.m. - 2:22 p.m.

The hearing before the Honorable Ralph King Anderson, III, was taken at the Edgar A. Brown Building, 1205 Pendleton Street, Suite 224, Columbia, South Carolina, on the 26th day of June, 2012 before Cassandra E. Vance, Court Reporter and Notary Public in and for the State of South Carolina.

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EXHIBITS

(There were no exhibits marked during the hearing.)

STIPULATIONS

It is stipulated and agreed that this hearing is being taken pursuant to the rules of the Administrative Law Judge Division and the South Carolina Rules of Civil Procedure.

1 THE COURT: All right. This is a case in matter of  
2 Duke Energy Corporation, Petitioner, versus  
3 South Carolina Department of Revenue,  
4 Respondent. It's Docket Number  
5 10-ALJ-17-0270-CC.

6 This is a Summary Judgment Motions Hearing and,  
7 apparently, you may want to add other things,  
8 but I'll address that first, so -- let's see.  
9 Department of Revenue made the initial request,  
10 so ...

11 MR. GREEN: Yes, Your Honor.

12 THE COURT: You're going to start the party?

13 MR. GREEN: Be happy to, Your Honor. Thank you.

14 (Off the Record)

15 MR. GREEN: May I approach, Your Honor?

16 THE COURT: Yes, sir.

17 MR. GREEN: This is what we're handing out to the  
18 other parties. It's what you'll see on the  
19 screen. Does everybody have a copy?

20 ARGUMENT BY MR. GREEN:

21 Good morning, Your Honor. May it please the  
22 Court. Are you ready for me to proceed, Your  
23 Honor?

24 THE COURT: Go ahead.

25 MR. GREEN: Good morning. May it please the Court.

1 My name is Tracey Green. With me is John  
2 Roberts, operating the computer here. We are  
3 with the law firm Willoughby & Hoefer, as well  
4 is with me is Harry Hancock and a gutting of  
5 the Department of Revenue. We all collectively  
6 represent the Department of Revenue in this  
7 matter. We are here today on the Department's  
8 Motion for Summary Judgment.

9 The Department -- and let me say at the outset,  
10 Your Honor, there are three issues here today  
11 that we're going to ask the Court to consider,  
12 which is what we filed our motions about. My  
13 presentation on these is lengthier than I would  
14 like and most of that time is spent with the  
15 refund claims.

16 THE COURT: That probably means it's longer than I  
17 would like.

18 MR. GREEN: Yes, sir.

19 THE COURT: I can almost guarantee that it's longer.

20 MR. GREEN: I can almost guarantee that, as well,  
21 Your Honor. You know, I'll try to get through  
22 it as quickly as I can.

23 THE COURT: That's fine.

24 MR. GREEN: But, first, the refund claim argument  
25 takes a little bit longer than the last two.

1 THE COURT: Well, I read it, so I recognize it's  
2 not --

3 MR. GREEN: Okay. So I apologize in advance.

4 THE COURT: Go ahead and apologize in advance,  
5 because I'm going to make it longer because I'm  
6 going to probably ask you questions.

7 MR. GREEN: Yes, sir, Your Honor, that will be fine.  
8 And I'll jump around with you as best I can.  
9 The Department contends that it's entitled to  
10 Summary Judgment for three reasons: The Duke  
11 Energy's pre-1994 refund claims are untimely;  
12 that Duke Energy is a manufacturer for purposes  
13 of the apportionment statutes; and that a  
14 taxpayer's return of principal from short-term  
15 securities transactions is not -- should not be  
16 included in its apportionment formula.  
17 Now, just a little bit of background, Your  
18 Honor. In 2002, Duke Energy resolved some  
19 ongoing issues with the Department. These  
20 involved sales taxes, license fees and income  
21 taxes. The income tax issue mainly pertained  
22 to the sale, I think, in the late seventies or  
23 early eighties involved with Catawba facility  
24 in Cherokee County. The sales tax issue, none  
25 of which is before you today, pertained to tax



1 years 1991 through 2001.

2 As part of that resolution, Duke Energy got a  
3 refund of 9.4 million on income taxes. They  
4 paid 3.6 million on license fees; 2.9 on sales  
5 taxes. Those were offset against the income  
6 tax refund and Duke received a check for a  
7 little over \$3 million.

8 There was some dispute over interest  
9 calculation, which, again, is not before you,  
10 and that was resolved through an order of this  
11 Court in the early 2000's, I think.

12 Thereafter, Duke filed some rounds of amended  
13 returns for the year '78 to 2001. In the first  
14 round, they just sought some additional tax  
15 credits. In the second round, which I believe  
16 were filed on December 30th or so of 2002, Duke  
17 changed its method of apportionment and  
18 calculation of its apportionment formula, the  
19 last two issues that are here before you today.  
20 Later on in 2007, I think, they filed some more  
21 amended returns related to the years '86 to '98  
22 pertaining to some federal audit issues, which  
23 really aren't, I think, before you today.

24 The Department denied Duke Energy's refund  
25 claims in whole. Duke is looking for \$126

1 million plus interest, roughly. I think they  
2 have had some issue with the calculation. I  
3 think that is taken from their Exhibits A and  
4 F, though. Giving the amounts we're talking  
5 about any difference I don't think is material,  
6 Your Honor.

7 THE COURT: I like that they have some issue with  
8 the calculation; y'all don't.

9 MR. GREEN: Well, they have some issue with the  
10 calculation. I was referring to the absolute  
11 amount, not whether they're entitled to it or  
12 not, Your Honor.

13 The requested refund for the closed periods at  
14 issue, '93 and earlier, is about 63 million;  
15 '94 and later is about 63 million. The refund  
16 attributable to the manufacturing issue is 35  
17 million for all years. The apportionment  
18 formula issue, the principal return is about 36  
19 million for all years, almost 37, and about  
20 22 million for '93 and before.

21 Okay. What I want to talk about first, Your  
22 Honor, is the refund issue. And I want to go  
23 into some general principals about that before  
24 I get into sort of breaking down the refund  
25 statutes.

1 Now, the Department's authority to grant  
2 refunds is controlled by statute and no  
3 employee or agent of the Department has the  
4 authority to exceed a statute. They've got to  
5 comply with it. If the statute says one thing,  
6 the employee believes it says something else,  
7 that's not binding. The Department has to do  
8 what the statute says.

9 The refund of taxes is a matter of legislative  
10 grace. That's been decided in numerous cases  
11 by the Supreme Court and by this court; *Asmer*  
12 *v. Livingston* is an often cited example.

13 Refunds claims must comply strictly with the  
14 authorizing statute. And example of that is  
15 *Guarantee Bank & Trust*, but there are other  
16 decisions holding the same.

17 Department employees can't waiver or alter the  
18 statutory time frames. *TNS Mills* case, which  
19 I'll refer to several times during this, a  
20 Department employee -- actually, a whole  
21 division of the Department allowed taxpayers to  
22 file retroactive claims for property tax  
23 exemption, to do so late. The Supreme Court  
24 held that this was impermissible. It affirmed  
25 the decision of the Commission rejecting what

1 that employee had allowed to happen. The  
2 Supreme Court said it was contrary to the  
3 statutory framework and language, so they  
4 denied the taxpayer any benefit from what the  
5 employee had allowed them to do.

6 This Court has reached that same conclusion in  
7 one of the many *Anonymous Taxpayer* decisions --

8 THE COURT: Well, let me cut -- or save y'all both  
9 some time. Both of y'all have a tendency to  
10 cite the decisions of this Court in your  
11 arguments.

12 MR. GREEN: Yes, sir.

13 THE COURT: The decisions of this Court are not  
14 binding. The decisions that I have made in  
15 this court are not binding upon me. I've  
16 issued decisions in the past and, especially  
17 with pro se litigants when they come back and  
18 had good lawyers on both sides arguing and  
19 reversed my decision.

20 I can save you the time of addressing that  
21 which this Court's done. Let's stick with  
22 courts that may have either precedential value  
23 or more persuasive value.

24 MR. GREEN: Yes, sir, Your Honor. I'll move on from  
25 those, then.

1 I will cite briefly expired refund periods are  
2 forever closed. I do have a Yamshak decision  
3 up there, but I'll cite the South Carolina  
4 National Bank decision, which held that when it  
5 was interpreting the newly adopted 12-54-80 in  
6 this case regarding assessment period. The  
7 Court held that the adoption of a new statute  
8 establishing a longer period of time for  
9 assessment didn't go back retroactively. So  
10 that had expired.

11 The Department is not subject to estoppel.  
12 Three decisions I've cited for that are in the  
13 brief, as well: *Texaco, Inc.*, *Heyward v. South*  
14 *Carolina Tax Commission*, and, again, the *TNS*  
15 *Mills* case.

16 In *Texaco* --

17 THE COURT: When you say they're not subject to  
18 estoppel, they're not subject to estoppel  
19 regarding the extension of a time to file for  
20 refund, I assume is what you're arguing,  
21 because state agencies can be subject to  
22 estoppel under certain circumstances, correct?

23 MR. GREEN: I think state agencies can be subject to  
24 estoppel if they act within the scope of their  
25 authority. Our whole argument here, Your

1 Honor, is that they -- the forms that are  
2 issued -- which I will get to as part of my  
3 argument -- could not have extended the refund  
4 period --

5 THE COURT: Okay.

6 MR. GREEN: -- because there was no authority to do  
7 so.

8 THE COURT: I want to be clear we're on the same --

9 MR. GREEN: Yes, sir. Yes, sir. Yes.

10 Heyward v. Commission -- and I'll point out in  
11 Texaco that the Department employee had said  
12 that -- they told him to use a specific  
13 accounting method. The Court said the  
14 Department was not estopped from assessing  
15 additional taxes.

16 Heyward, taxpayer said that the Department had  
17 acquiesced and approved the election of  
18 installment method; again, that was contrary to  
19 statute. The Court did not permit that to  
20 happen.

21 TNS Mills, the Department had issued a  
22 memorandum saying that you could -- a recently  
23 enacted statute gave the Department authority  
24 to accept exemption applications any time. The  
25 Court rejected that again, held estoppel did

1 not apply.

2 So I argue that there's no equitable  
3 estoppel --

4 THE COURT: So does TNS Mills -- I was following  
5 that. That's the only example where it was --  
6 it was in written format, correct?

7 MR. GREEN: No, sir, I believe Texaco involved a  
8 letter to the taxpayer saying, "You must use  
9 this accounting method -- method of  
10 accounting." But --

11 THE COURT: Okay. So both of them were situations  
12 in which the Department set forth in writing a  
13 particular method and the Department -- then  
14 the Courts held you could not -- even though  
15 that was set forth in writing, it was  
16 nonbinding.

17 MR. GREEN: That is correct, Your Honor.

18 THE COURT: All right.

19 MR. GREEN: No equitable estoppel or equitable  
20 tolling, Your Honor. I'll move on from those  
21 since they are ALJ decisions, but I would say  
22 they're based upon that.

23 Problems with equitable tolling, I won't cite  
24 to that decision. I'll just make the argument  
25 they create stale claims. They work havoc with

1 the State's settled financial situation. They  
2 create budget problems.

3 An example of that was a *TNS Mills* case where  
4 the retroactive property tax exemptions would  
5 cause counties budgetary problems, because say  
6 in year one they budgeted based on the property  
7 tax amounts that had been filed. If it could  
8 be retroactively changed in year five, their  
9 whole budget projections are messed up. So  
10 budgetary issues are something to be considered  
11 in determining the equitable estoppel and  
12 equitable tolling issues, Your Honor.

13 Court of Appeals agrees, I think, with that.  
14 It has rejected taxpayer's argument that  
15 statute of limitations should be tolled based  
16 on a letter requesting a refund, because  
17 nothing prevented the taxpayers from learning  
18 of the right statutes.

19 U.S. Supreme Court has held in *Brockamp*, which  
20 is tax law not normally characterized by  
21 case-specific exceptions, and so Congress -- or  
22 the Legislature in our context -- would likely  
23 have decided just whether and when they wanted  
24 to expand the limitations period.

25 And I think that holding, while that is a



1 Supreme Court holding under Federal tax law, I  
2 think that analysis is consistent with the  
3 Supreme Court decisions from this State that  
4 we've cited in our brief, Your Honor.

5 The Department has consistently applied that  
6 rule, which in, for instance, Revenue Procedure  
7 95-5, "Although the statute of limitations is  
8 arbitrary and can cause hardships, its  
9 application is designed to be neutral." And I  
10 think the Department has consistently applied a  
11 statute of limitations on refund claims  
12 consistent with the Supreme Court precedence.

13 So, Your Honor, to summarize all that, we would  
14 argue that the refund of taxes is a matter of  
15 legislative grace, expired refund periods are  
16 closed, and the Department is not subject to  
17 estoppel or equitable tolling for acts by its  
18 agents inconsistent with the statute or taken  
19 outside of the statutory authority. Now, based  
20 on that, we would argue that pre-1994 claims  
21 are untimely. We've got two refund frameworks  
22 here at issue, I think, Your Honor: what I  
23 call '95 to present or the "modern era" and  
24 then the pre-'95 era. In the modern era, the  
25 Department may extend the time to file a refund

1 claim. It may grant a refund claim.

2 12-60-40 enacted in nineteen-ninety -- I had  
3 four on there, but I think that's five --  
4 permits the Department to extend applicable tax  
5 periods. 12-60-470 permits taxpayers to file  
6 written refund claims within the time period  
7 specified in Section 12-54-85.

8 12-54-85 was enacted in '95, as part of the  
9 Revenue Procedures Act, superseded Section  
10 12-54-80 and the three-year -- essentially the  
11 federal three year from the time the return is  
12 filed or two years from the date of payment,  
13 whichever is later.

14 The Department set forth parameters of these  
15 claims in Revenue Procedure 95-5; in that,  
16 based on the statutes I just mentioned, the  
17 Department ruled that an extension of time for  
18 assessment extends the time to file a refund  
19 claim and all periods open on the effective  
20 date of the Revenue Procedures Act, which I  
21 think was in August of '95, could be extended  
22 further.

23 So a little bit less restrictive provisions  
24 than before and there is a provision that open  
25 refund periods may be extended by the

1 Department.

2 This leads to the issues: What periods were  
3 open when 12-60-40 was enacted and were those  
4 periods timely extended by Duke Energy?

5 In the pre-'95 era, the refund statutes' much  
6 restrictive and limited. 12-47-440 applied to  
7 the tax periods 1990 to 1994. Sections  
8 12-47-210 and 220 applied to the period '78 to  
9 '89. 1990 to '94 is 12-47-440, three years  
10 from the date the payment was originally due,  
11 without regard to extensions.

12 The Department had originally taken the  
13 position that that statute applied to all  
14 taxes. The Supreme Court in both Bass  
15 decisions -- I think I'm citing the second one  
16 here -- said that's not the case. This Court  
17 has previously stated that the exclusive remedy  
18 for testing income tax assessments is 12-47-210  
19 and 220.

20 Noteworthy in that case is that the Court noted  
21 that the Department had advised taxpayers that  
22 they had a three-year refund limitation period  
23 in which they could file their claim. The  
24 Court said, "We regret that, but it doesn't  
25 help the taxpayer."

1 Now, what ultimately happened with this is the  
2 Legislature amended in 47-440 in 1994 to apply  
3 to 1990 years and later. So they made -- the  
4 Legislature went in and made a change to deal  
5 with that. I cite to a decision of this Court,  
6 not for precedent but just recognizing the  
7 change in the statute.

8 So from 1990 to 1994, refund claims were timely  
9 filed within three years from the date payment  
10 was due, without reference to extensions. Duke  
11 Energy always filed on a calendar year and so  
12 their payment would have been due on March 15th  
13 of the next year.

14 Based on that --

15 THE COURT: Their payment? The refund --

16 MR. GREEN: Their refund claim would have been -- in  
17 other words, they had -- and this chart, I  
18 think, helps illustrate it. Their original --

19 THE COURT: That's the same chart that's in your --

20 MR. GREEN: Yes, sir, Your Honor.

21 THE COURT: Okay.

22 MR. GREEN: And so it would have just been -- that  
23 sets forth the time.

24 Based on this chart, Your Honor, we would  
25 contend that 1990 and 1991, the extensions

1        were -- could not -- these years couldn't be  
2        extended because those periods closed before  
3        the Revenue Procedures Act became effective in  
4        late '95. '92 and '93, potentially could have  
5        been extended; but they were -- they closed  
6        before a form was executed in '96 and '97. And  
7        we've gotten these dates set forth --

8        **THE COURT:** What form?

9        **MR. GREEN:** The Form FS-43 that is at issue in this  
10       case. And, again, I apologize, I'll get to  
11       that shortly.

12       '94, the Department concedes, based on Revenue  
13       Procedure 95-5, that appears timely because  
14       that period would have closed March 15th of  
15       '98. And I think the waiver form was signed in  
16       December of '97, if I remember right.

17       **THE COURT:** All right. So where I can be clear on  
18       this case, so 1994 on the extensions were  
19       timely.

20       **MR. GREEN:** Yes, sir.

21       **THE COURT:** For purposes of this Summary Judgment  
22       hearing, we're dealing with '93 on back. If I  
23       grant Summary Judgment regarding '93 back,  
24       we've got the other issues of whether or not  
25       they're a manufacturer and we got the -- I

1 think it's a three-part test.

2 MR. GREEN: Yes.

3 THE COURT: And then we've got the other factors --

4 MR. GREEN: Yes.

5 THE COURT: -- or the third issue. What would be

6 left to determine in the case-in-chief?

7 MR. GREEN: If, for instance, you were to grant the

8 Department's Motion for Summary Judgment on all

9 three issues, there would be nothing left.

10 THE COURT: Okay. That was --

11 MR. GREEN: I think there is an issue preserved

12 dealing with Crescent Resources; that's not

13 before the Court right now and that's a

14 separate issue. We have to go back and work

15 that out, but --

16 THE COURT: And the determination regarding

17 manufacturing --

18 MR. GREEN: Yes.

19 THE COURT: -- would also resolve this particular

20 issue, would it not? I'm asking.

21 MR. GREEN: I'm sorry, which issue, Your Honor?

22 THE COURT: The issue of timeliness. I'm asking.

23 If I determine that Duke Energy was a

24 manufacturer --

25 MR. GREEN: Yes.



1 think we would still have to have a hearing on  
2 whether the distortive effect of including the  
3 short -- the principal from the short-term  
4 transactions --

5 THE COURT: Okay.

6 MR. GREEN: -- in the denominator, I think that  
7 would be a factual hearing.

8 THE COURT: All right. Well, I got you off track,  
9 but I kind of wanted to know where we were  
10 going on all this.

11 MR. GREEN: That's all right, Your Honor. Please  
12 interrupt me any time you need to ask  
13 questions.

14 Okay. So '94 was a timely --

15 THE COURT: Can I define "need" broadly, then?

16 MR. GREEN: Pardon me?

17 THE COURT: Can I define "need" broadly, because I  
18 may want to interrupt you and you may not feel  
19 that that's --

20 MR. GREEN: Yes, Your Honor. It's not my  
21 definition; it would be yours, yes, sir.

22 THE COURT: Good. I get to make the ruling.

23 MR. GREEN: So to summarize, we would say '94 was  
24 timely extended and '93 through '90 were not  
25 timely extended, Your Honor.



1 For the years '78-'89, Sections 12-47-210 and  
2 220: Exclusive remedy for obtaining income tax  
3 refund prior to 1990. I think with the Bass  
4 decision, as well as *Perpetual Building & Loan*  
5 go to that issue. I think *Perpetual* is cited  
6 in Bass.

7 There was a limited refund window. The  
8 taxpayer was required to expressly pay taxes  
9 under protest and then institute an action in  
10 circuit court within 30 days after payment.  
11 Failure to pay under protest was fatal to the  
12 claim.

13 Under these statutes, Your Honor, we submit the  
14 pre-1990 claims are untimely. Nothing paid  
15 under protest, no actions filed in circuit  
16 court, refund claims filed here. So we submit  
17 that all those claims prior to 1990 are  
18 untimely under 210 and 220.

19 And we would say that '78 through '82 have some  
20 additional process. They were first added to  
21 Form FS-43 in May 30, 1996, well after the  
22 original periods expired. Those periods could  
23 have been opened only by virtue of an IRS  
24 report under 12-54-80 or -85 and we submit that  
25 IRS wouldn't have examined the apportionment

1 issue, either of the apportionment issues,  
2 really, that are at issue here. And so that  
3 would not assist them in opening those years  
4 for the refund claims that they've filed.

5 Now, taxpayer's whole argument comes down to  
6 Form FS-43, keeping the '78 to '93 years open.  
7 And that form doesn't do what they say it does  
8 or if it's not authorized to do what they say  
9 it does, their claims are untimely.

10 There were 21 Forms FS-43 executed beginning in  
11 about 1988.

12 Go to the next slide.

13 Form FS-43 shows its limited purpose: Consent  
14 to extend the time to assess tax. Then it  
15 says, "This agreement extends the time for  
16 mailing notice of assessment or refund of the  
17 above tax" -- which is cited in the  
18 fill-in-the-blank part -- "pursuant to  
19 provisions of Section 12-54-80."

20 So it says, "This agreement extends the time  
21 for mailing the notice of assessment or  
22 refund" -- which is really a Department  
23 action -- "pursuant to the provisions of  
24 Section 12-54-80." So that form references its  
25 authority, 12-54-80, and at the top it says,

1 "Consent to extend the time to assess tax,"  
2 again, a Department action.  
3 So Form FS-43's authority was Section 12-54-80.  
4 For all years prior to '95 and sometimes  
5 thereafter, Form FS-43 referenced 12-54-80.  
6 12-54-80 was entitled "Time within which amount  
7 of tax due must be determined and assessed,"  
8 and imposed a 36-month limitation on the  
9 Department determining and assessing taxes.  
10 12-54-80 was adopted in '85. Here is the first  
11 version, I think, and it just imposes a  
12 36-month limitation and then says, "If, before  
13 the time expires for mailing a notice of  
14 assessment, the taxpayer has consented in  
15 writing to the mailing of notice after that  
16 time, then you can mail it at a later date  
17 during the period set forth and the consent --  
18 the written consent."  
19 Statute was amended a little bit later. You'll  
20 see the second sentence of the first paragraph  
21 was added to deal with IRS issues and gave  
22 180-day extension after that.  
23 THE COURT: That has nothing to do with this case.  
24 MR. GREEN: Has nothing to do with this case, at  
25 least not primarily.

1        So, again, there was no general authority for  
2        refund claim extension prior to 1995, which was  
3        enacted as part of the Revenue Procedures Act.  
4        So 12-54-80 doesn't contain any references to  
5        refund authorization.

6        There was no general authority to extend the  
7        time period for refund claims. And so if  
8        12-54-80 was the source of authority, it  
9        doesn't reference refund claims, then there has  
10       to be some other refund remedy if the taxpayers  
11       are to prevail.

12       Section 12-54-30 permitted a refund of amounts  
13       discovered by the Department on examination of  
14       a return or otherwise. It applied even if a  
15       claim for refund hadn't been filed. And  
16       previous to that, there were some statutes,  
17       12-7-2240 and 2210, that roughly dealt with  
18       these same issues.

19       But 12 -- the remedy in 12-54-30 and those  
20       predecessor statutes was pretty limited. There  
21       was a three-year statute. The taxpayers could  
22       request a conference, but there was no right to  
23       judicial review. And the statute didn't give  
24       greater rights than were available under the  
25       refund statutes.

1 And the Commission recognized this in 88 --  
2 Commission Decision 88-162. There was a refund  
3 claim that didn't meet the requirements of  
4 12-47-440. The taxpayer argued that they could  
5 still review it under 12-54-30 because they  
6 filed their request during the audit period set  
7 forth in 12-54-80.

8 THE COURT: Hold on a second.

9 MR. GREEN: The Commission concluded -- I'm sorry,  
10 Your Honor?

11 THE COURT: So that Commission Decision is -- when  
12 you said it didn't meet the requirements of  
13 12-47-440 --

14 MR. GREEN: Yes, sir.

15 THE COURT: -- that's interpreting what the previous  
16 statute you referenced?

17 MR. GREEN: That is interpreting whether 12-54 ...

18 THE COURT: 30.

19 MR. GREEN: Excuse me, yes, 12-54-30 would permit  
20 the Commission to grant review and issue a  
21 refund during a time period after. In other  
22 words, I think what happened was, there was  
23 a -- you had the three-year window that would  
24 have been under 12-47-440, but the taxpayer  
25 filed a return on an extension. So the

1 three-year period from the date they actually  
2 filed in which the Department could assess  
3 taxes would run later than the 12-47-440  
4 period. It would extend a little bit longer.

5 THE COURT: Would 12-47-440 been an applicable  
6 statute in this case or are you just presenting  
7 this as a global treatment of 12-54-30?

8 MR. GREEN: I'm sorry, and I'm misquoting, it's  
9 12-7-2240. 12-7-2240 was a predecessor to  
10 12-54-30.

11 THE COURT: Okay.

12 MR. GREEN: Excuse me, 12-54-85. I apologize. I'm  
13 making this more confusing than it is, I  
14 apologize. 12-54-80 was the successor enacted  
15 in '85 to 12-7-2240. And they both gave the  
16 Department, if they discovered a refund on  
17 examination, some authority to issue a refund.

18 THE COURT: Okay. Well, I'm more interested in the  
19 application of 12-54-30, so ...

20 MR. GREEN: And I apologize, Your Honor. I'm still  
21 confusing this. 12-7-2240 and 12-54-30 are  
22 similar statutes. They gave the Department the  
23 authority to issue a refund in certain  
24 situations.

25 THE COURT: There's where I'm trying to figure out.

1 MR. GREEN: Yes, sir, I apologize. I'm mixing 30  
2 and 85 up and I apologize for that.

3 12-7-2240. 12-54-30 says on examination of  
4 return or otherwise, the Commission may order  
5 a refund or give a credit. It was a matter  
6 committed to the Commission's discretion under  
7 the precedence of the Supreme Court and it was  
8 not reviewable by a Court. It was sort of an  
9 administrative action.

10 What happened -- let me step back. I  
11 apologize, but I think to be clear I need to do  
12 that. When they -- the taxpayer's return would  
13 have been due March 15th, '84, but they  
14 extended it, so it wasn't ultimately paid until  
15 September 14th, '84. They got a six-month  
16 extension.

17 A refund came after the three-year period,  
18 which would expire on March 15th, 1987, under  
19 12-47-440, but it would have been within the  
20 three-year period for assessment provided under  
21 12-54-80, which is the statute, obviously,  
22 referenced in the form.

23 THE COURT: Okay.

24 MR. GREEN: The Commission denied that refund claim  
25 and said -- it quotes here, "The company argues

1           that because the Tax Commission could audit  
2           through the period when the return was filed,  
3           36 months after, the Commission has the  
4           authority to refund through that same period."  
5           And the Commission held concluding, no, that it  
6           doesn't. It rejected that argument because it  
7           said to do so would render the refund statutes  
8           meaningless.

9           And we would -- we would submit, again, to go  
10          back to the *TNS Mills* case, there's a similar  
11          line of argument in there whereas to look at  
12          the exempt -- the statute that was at issue  
13          there that was argued would permit a  
14          retroactive refund. The Court looked at the  
15          statutes, read them together and concluded that  
16          that would render the other property tax  
17          statutes meaningless. And so it concluded  
18          that, no, you can't file those retroactive  
19          claims. That same type of analysis followed in  
20          this Commission Decision.

21          And I think what this Commission Decision also  
22          goes to, Your Honor, is that the Commission,  
23          frankly, has -- did not authorize refunds  
24          during the 12-54-80 36-month limitation period,  
25          because they held in here that you can't do



1           that. That was the conclusion they reached in  
2           this Commission Decision 88-162, which is  
3           attached to our materials, I think, at Tab J,  
4           5.

5       **THE COURT:** All right.

6       **MR. GREEN:** So, to summarize, Your Honor, Form FS-43  
7           references 12-54-80. Section 12-54-80 does not  
8           reference refunds. Based on that Commission  
9           Decision, I'm not sure they were entitled to  
10          any review under 12-54-30 or 12-7-2240. But if  
11          they were, they've received the benefit of that  
12          review and the Commission denied it.

13          The general refund extensions were not  
14          available for '95 and so 12-54-30 and 12-54-80  
15          and its predecessors and successors do not  
16          assist Duke Energy's refund claims in this  
17          case, Your Honor, is our position.

18          Now, I apologize, again. I confused all that  
19          with the references to 30 and 80 and 85. I  
20          hope I've cleared it up. Before I proceed to  
21          the next issue, do you have any questions for  
22          me on that?

23       **THE COURT:** The only question I have is, would you  
24          rather us separate each one of those issues and  
25          have argument from the Respondents now or do

1           you want to proceed and deal with it all at one  
2           time?

3   MR. GREEN:   I'm happy to proceed on.   It may be  
4           easier with the PowerPoints to just do it at  
5           one time, but ...

6   MR. TRESH:   Would it be helpful to Your Honor to  
7           have it all grouped together?   What would be  
8           best, Your Honor?

9   THE COURT:   I don't care.   I'm just asking from your  
10          perspectives.

11  MR. GREEN:   Okay.   We'll just proceed on.   Thank  
12          you.   If I get into it and you change your  
13          mind, let us know and we'll switch gears.

14          The next issue is generating electricity is  
15          manufacturing.

16          12-6-2250, the pretty common three-factor  
17          apportionment factor: property, payroll and  
18          sales; applies to entities whose principal  
19          business is manufacturing or any form of  
20          collecting, buying, assembling, processing  
21          goods.

22          Duke Energy originally when it filed its  
23          returns for '78 to 2001 used the three-factor  
24          formula.   Duke Energy in its refund claims has  
25          changed that.   It says that generating,

1 producing electricity is not manufacturing. So  
2 they've changed a method they've used for many  
3 years.

4 The Department obviously denied the refund  
5 claims and took the position that Duke Energy  
6 is a manufacturer required to use the  
7 three-factor formula.

8 Now, Duke Energy's corporate charter states in  
9 one of its corporate purposes is manufacturing  
10 electricity. This was a '77, I think, Restated  
11 Charter, but that had been in their corporate  
12 charter, I think, for many years.

13 If you look at the 1930, I think, Duke Power  
14 decision and some of the factual recitations,  
15 that same provision is quoted from a charter of  
16 Duke Power: "To manufacture, generate, buy" --  
17 blah, blah, blah -- "electric current for  
18 light, heat and power."

19 Maybe more importantly --

20 THE COURT: When you say -- you cite that, is that  
21 an exhibit or affidavit attached to your  
22 Summary Judgment Motion?

23 MR. GREEN: It was attached to the Summary Judgment  
24 Motion, yes. It was provided in the --

25 THE COURT: Okay.

1 MR. GREEN: -- discovery as well to them and so --  
2 but it was attached to the motion, yes, sir,  
3 Your Honor.

4 THE COURT: All right.

5 MR. GREEN: The Supreme Court says generating -- and  
6 I think it was a certified copy, if I remember  
7 right, I think.  
8 The Supreme Court says generating electricity  
9 is manufacturing. Columbia Railway and Gas  
10 decision in 1926, predecessor of SCE&G,  
11 question was the application of Manufacturer's  
12 Tax Act.  
13 The Court said the three exceptions present the  
14 single question whether the plaintiff is  
15 engaged in the business of manufacturing. And  
16 the Court went on to hold, "We don't think  
17 there's any doubt that the appellant is engaged  
18 in the business of manufacturing gas and  
19 electricity, and it is clearly within the  
20 provisions of the Manufacturer's Tax Act."  
21 So I want to point out, I submit that holding -  
22 - it's not saying, well, they're just a  
23 manufacturer for this purpose. They are  
24 engaged in the business of manufacturing and,  
25 therefore, they come within the Manufacturer's

1 Tax Act.

2 Now, the Manufacturer's Tax Act applied to  
3 every person, firm or corporation engaged in  
4 the business of manufacturing. So if you look  
5 at the statute, highlighted terms there:  
6 "Every person, firm or corporation engaged in  
7 the business of manufacturing." And then (a)  
8 talks about manufacturing.

9 The two statutes here at issue today are both  
10 directed to manufacturing. At the top is the  
11 Manufacturer's Tax Act, that every person is  
12 engaged in the business of manufacturing --

13 THE COURT: Now, wait a second. The Manufacturer's  
14 Tax Act dealt with -- when you say both are  
15 directed toward manufacturing, the issue here  
16 under 12-6-2250?

17 MR. GREEN: 22 -- yes.

18 THE COURT: I thought it was another one, too; maybe  
19 90?

20 MR. GREEN: I think 2290 is the gross receipts  
21 statute, if I remember right.

22 THE COURT: Oh, okay. Then we're to interpret 2250  
23 as to whether or not it defines them as a  
24 manufacturer, correct? I mean, it says  
25 "manufacture" --

1 MR. GREEN: "A taxpayer whose principal business in  
2 this State" --

3 THE COURT: "...is manufacturing."

4 MR. GREEN: Yes, sir, Your Honor.

5 THE COURT: All right. I see where you --

6 MR. GREEN: Yeah, so --

7 THE COURT: Because you said that there was two  
8 parts to that in your argument. You said "or  
9 processing goods."

10 MR. GREEN: There is another provision: "...or any  
11 form of collecting, buying, assembly or  
12 processing goods."

13 THE COURT: But that's not an issue.

14 MR. GREEN: We submit that's not an issue here.  
15 It's a question of whether they're engaged in  
16 the business of manufacturing.

17 THE COURT: All right. So in Columbia ...

18 MR. GREEN: Railway and Gas?

19 THE COURT: Railway and Gas, they determined that  
20 they were engaged -- well, at least SCE&G, the  
21 predecessor to them, was engaged in  
22 manufacturing.

23 MR. GREEN: Yes, sir.

24 THE COURT: Is that determination by the court a  
25 factual determination by the court or a legal

1           determination by the court?

2   MR. GREEN: I submit that based on that last part  
3           it's both. The factual determination is that  
4           it's engaged in the business of manufacturing  
5           gas and electricity and then it's applying that  
6           provision -- applying that finding to the  
7           provisions of the Manufacturer's Tax Act, which  
8           in this case apply to a manufacturer.

9   THE COURT: All right.

10   MR. GREEN: Or somebody engaged in the business of  
11           manufacturing.

12   THE COURT: Well, let me follow that, then. So the  
13           first aspect of it is both. Is the factual  
14           determination by the court that a -- that  
15           electricity is manufacturing, is that of  
16           precedential value in the future?

17           In other words, I'm getting at -- I'm asking.  
18           I recognize that when courts make  
19           interpretations of the law, that that's  
20           precedential value. I'm just -- and this is a  
21           legitimate question. I don't have any answer.  
22           Sometimes I set y'all up, but this one I don't  
23           know.

24           Is a court's determination factually binding in  
25           the future regarding other cases that come

1 before the court?

2 MR. GREEN: Well, I would submit that it is binding  
3 here, Your Honor, in this case for a couple of  
4 reasons. One --

5 THE COURT: And I will allow y'all to brief any of  
6 these questions I ask, if you wish to do so  
7 later.

8 MR. GREEN: Okay. Thank you, Your Honor. I think,  
9 Your Honor, in this case it would be binding  
10 because you've got a determination that a  
11 company engaged in the business -- producing,  
12 generating electricity, they are a  
13 manufacturer. You've got a determination  
14 dealing with manufacturing as applied in a tax  
15 statute on virtually the same language that  
16 we've got at issue here today.

17 THE COURT: Well, that would take it to the legal  
18 aspects of it.

19 MR. GREEN: But I do think that -- yes, but I  
20 do -- but I think -- if I understand the  
21 question correctly, I think that is binding on  
22 you because that was a determination that -- a  
23 legal determination under statute, a tax  
24 statute directed to manufacturing. It covers  
25 companies like SCE&G, in that case, that



1 produces electricity.

2 THE COURT: Well, hence -- I mean, the question is  
3 somewhat confusing because the issue is  
4 somewhat confusing.

5 MR. GREEN: The issue is -- yes.

6 THE COURT: Because if you had the same exact  
7 statute, I think this would all be clear.

8 MR. GREEN: Yes.

9 THE COURT: This activity is almost directly related  
10 or similar to that which another act dealing  
11 with the same language; that's why I'm trying  
12 to parse this out.

13 MR. GREEN: Yes, sir, Your Honor. No, I think --  
14 again, I think it is because I think they  
15 reached the determination that generating  
16 electricity is manufacturing and generating  
17 electricity is roughly done the same way now  
18 that it was done then. I mean, it's  
19 technically more advanced, but the basic  
20 process is the same. That's really a factual  
21 determination not here. But --

22 THE COURT: Well, don't know if it matters, the  
23 process is the same. It's whether the end  
24 result of what is produced is the same, because  
25 electricity being the transmission of

1           electrons, I assume that that hasn't changed a  
2           whole lot.

3       MR. GREEN:   I think that has not changed, Your  
4           Honor.

5           Now, I would also submit as addition to the  
6           binding nature, there's the 1930 Duke Power  
7           decision where the Court -- again, different  
8           statute, admittedly, but the Court relied on  
9           the Columbia Railway decision, says that a  
10          company engaged in generating electricity is a  
11          manufacturer. For the purposes of the statute  
12          imposing a tax, the place where it generates it  
13          is a manufacturer.

14          So, I think you've got a couple things there.  
15          You've got a finding that this taxpayer is  
16          engaged in the business of manufacturing and  
17          you've also got the application of the Columbia  
18          Railway decision to another statute. So I  
19          think that indicates that it has effect beyond  
20          just the Manufacturer's Tax Act. And I think  
21          it has effect here, Your Honor. And we submit  
22          that's why Duke Energy is a manufacturer for  
23          purposes of the apportionment statute.

24          In fact, they treat themselves as a  
25          manufacturer on their recently filed returns,

1 and for that reason, we think the Department's  
2 determination on this should be sustained.

3 Now, Duke references *Consolidated Hydro*, which  
4 is a decision of this Court. I gather you do  
5 not want me to spend any time on decisions of  
6 this Court, so I'm going to move right along,  
7 unless you'd like to hear my argument on that.

8 THE COURT: Lucky for you, unlucky for Duke on this  
9 one.

10 MR. GREEN: I will move on, Your Honor.

11 THE COURT: Or you can argue the pertinent aspects  
12 of what *Hydro* is based upon.

13 MR. GREEN: I will argue -- I will point out that  
14 *Consolidated Hydro* dealt with a completely  
15 different statute.

16 THE COURT: Okay.

17 MR. GREEN: And then I will move on to slide 79,  
18 Agency Precedent.

19 Under property tax, the agency has applied  
20 these decisions. If there's language going to  
21 manufacturer or manufacturing, the Department  
22 has applied those decisions. And, frankly,  
23 they applied it to give taxpayers the benefit.  
24 So, for instance, if there's a property tax  
25 benefit, sales tax benefit or whatever directed

1 to a manufacturer, they give them the benefit  
2 of that, as well. So it's been a -- it's been  
3 a two-way street, frankly.

4 The Attorney General, which used to be the  
5 legal advisor to the Commission, applied  
6 Columbia Railway and Duke Power to include that  
7 SCE&G was a manufacturer, again, based on the  
8 cited decisions.

9 So I'd submit those go to agency precedent  
10 regarding this and the consistent application  
11 of that precedent, Your Honor.

12 If there are no questions on that issue, I'll  
13 move on to the last one.

14 **THE COURT:** Is there -- under your view, is there  
15 any factual input that could be made to clarify  
16 whether or not producing electricity is  
17 manufacturing or not or is that solely based on  
18 statute?

19 **MR. GREEN:** I think it's solely based on statute and  
20 the Columbia Railway and Duke Power decisions.  
21 I don't -- I think based on those decisions,  
22 this is not a novel issue for this Court that  
23 would require any factual input to that issue.  
24 I think the Supreme Court has already resolved  
25 those issues for you.

1 THE COURT: All right. So to rephrase that question  
2 to where I can be clear, there is no need for  
3 a factual exploration of the issue because the  
4 Supreme Court's resolved it or because that  
5 would not be anything that would -- for which  
6 a factual exploration of the issues would be  
7 pertinent?

8 MR. GREEN: The Department submits it's not.

9 THE COURT: If the Supreme Court -- I'll make it  
10 easier for you. If the Supreme Court had not  
11 made a previous -- any determinations on this  
12 issue, would that be an issue that this Court  
13 needs to have a factual hearing to resolve?

14 MR. GREEN: I would submit that it would not be. I  
15 would submit that to some extent, probably  
16 Department precedent reasonably concluding that  
17 a company generating electricity is  
18 manufacturing.

19 Now, I guess my response gets a little circular  
20 because some of that agency precedent is based  
21 upon the Columbia Railway decision. But I  
22 would submit --

23 THE COURT: I think there's no dispute about what is  
24 indeed -- or what the end result of  
25 manufacturing electricity or producing

1 electricity is, so ...

2 MR. GREEN: We would submit there's not --

3 THE COURT: (Inaudible.)

4 MR. GREEN: I'm sorry, I didn't mean to interrupt  
5 you.

6 THE COURT: No, that's okay.

7 MR. GREEN: We would submit there's not. I know the  
8 taxpayer will vehemently disagree with me on  
9 this point. We would submit there's not, Your  
10 Honor. We would submit that it is a matter  
11 that, frankly, could be adjudicated by this  
12 Court without any further factual exploration.

13 THE COURT: Okay. All right. Move on to the next  
14 one.

15 MR. GREEN: All right. Last issue is the return of  
16 principal issue. We've called it here the  
17 "Proper Calculation of the Apportionment  
18 Formulas."

19 Starting point, you've seen the decisions of  
20 the Supreme Court. The *Colonial Life* case, I  
21 think, was a big one. But taxpayer -- it's  
22 12-6-2210 and that focused on whether --  
23 focuses on ensuring that "the South Carolina  
24 income tax is imposed upon a base which  
25 reasonably represents proposition of the trade

1 or business carried on in this State."

2 Now, the statute, then, has two formulas that  
3 go to that. The three-factor formula under  
4 12-6-2250, which I've already referenced, and  
5 then the gross receipts factor under 12-6-2290,  
6 which is used by companies whose principal  
7 business is not manufacturing; in other words,  
8 not described in 12-6-2250.

9 The sales factor is just the proposition of  
10 sales in this state to other states. Gross  
11 receipts is the same; it's just a proportion of  
12 gross receipts here to gross receipts  
13 everywhere.

14 Now, issue in this case are I think what we  
15 colloquial call "short-term investment  
16 transactions." As I understood from discovery,  
17 Duke Energy will -- obviously intakes cash.  
18 They will have excess cash or excess working  
19 capital that I think they determine, pursuant  
20 to a fairly complicated formula, and then they  
21 will use that money to invest in certain  
22 short-term transactions.

23 These are typically municipal bonds, commercial  
24 paper, and what I'll call "repos" or loan  
25 repurchase agreements, whereas some Duke --

1           somebody has a security, they'll give Duke  
2           Energy the security, Duke Energy gives them  
3           some cash for a period of time. They then  
4           repay the money plus a little bit extra and  
5           they get a security back. It's not unlike a  
6           title loan. And they just get their principal  
7           back plus a little bit of interest for the  
8           time.

9           There are -- these transactions have been done  
10          for many years and they are not atypical by  
11          companies. Transactions have little risk.  
12          Testimony of their witness was that Duke never  
13          suffered a loss on any of these transactions.  
14          And I believe the testimony was that they were  
15          typically outstanding for 30 days or less.  
16          They're very short-term transactions.

17          They generate a minimal amount of gain or  
18          interest relative to the principal invested and  
19          the activities involved in these transactions  
20          all occur outside South Carolina.

21          I believe the testimony was that they're  
22          directed in North Carolina or set by the  
23          corporate headquarters and then they're  
24          typically placed in New York.

25          A review of -- this was one of the -- this is



1 just an example of a report that was provided  
2 to us in discovery. This shows the type of  
3 transactions that were done just during a  
4 representative month. You can see "repo" up  
5 there. You can see "commercial paper."  
6 There's some municipal bonds and the like.  
7 And then if you go to the next slide, you can  
8 see that the principal involved in those  
9 transactions is nine figures and approaches a  
10 very high number, almost a billion dollars, but  
11 with a return of just a few hundred thousand  
12 dollars. So very big transactions  
13 principal-wise, very small in the actual  
14 increase in Duke Energy's working capital. And  
15 so that's what's at issue in this case.  
16 Now, what happened was, in their original  
17 returns, I believe they included only the  
18 interest -- that number on the right-hand side  
19 there -- their net gain or interest from these  
20 transactions in their sales factor. That was  
21 consistent with the Department precedent I  
22 believe going back to about '77, at least.  
23 In 2000, Duke Energy starts filing its returns  
24 and included not only the interest, but the  
25 principal in these transactions.

1 Now, what happens with that is -- well, excuse  
2 me, in 2002, then they changed -- they filed  
3 their refund claim, changed their method of  
4 apportionment to the gross receipts factor, and  
5 added the return of principal all the way back  
6 to 1978.

7 What happens to that is that you've got a much  
8 higher denominator based on these principal --  
9 the principal of these transactions being  
10 included. But because they -- all the  
11 transactions occur outside this State, you have  
12 a much lower amount of income apportioned to  
13 South Carolina, because the denominator is much  
14 higher, but the numerator stays the same.

15 The Department denied that, said it was  
16 directly contrary to their long-standing  
17 policy. It would unreasonably represent the  
18 amount of business Duke Energy does in South  
19 Carolina and would lead to an absurd result,  
20 one that could not possibly have been intended  
21 by the Legislature.

22 This is based upon their long-standing policy,  
23 which has been to interpret the allocation of  
24 apportionment statute as excluding the return  
25 of principal in transactions like this.

1 I-D-309 -- Commission Decision 88-11 and  
2 I-D-309, sales of intangible property were  
3 included only to the extent the sale results in  
4 a gain. In other words, essentially in a  
5 transaction like this is just, to the extent  
6 the pool is increased, you add that, but you  
7 don't add the principal coming back to you. It  
8 concluded to do otherwise would distort the  
9 sales factor.  
10 And 88-11, the Department -- has been the  
11 policy since '77 to include only the gain from  
12 the sale of foreign exchange contracts. I  
13 think that first one, I-D-309 referred to  
14 intangibles. This one refers to foreign  
15 exchange contracts.  
16 There were some briefs in the 19 -- I think it  
17 was the 1987 Duke Power case regarding license  
18 tax and in those briefs, which are attached to  
19 our Summary Judgment memoranda, there was some  
20 argument about Duke took the position that this  
21 would -- the Department's position in that case  
22 would require including principal. The  
23 Department said no, that's not the case; it  
24 would not. And Duke Energy, in fact, argued  
25 that that would be absurd to do so and the

1 Department agreed, said it wouldn't do that.  
2 Now, courts in other jurisdictions -- and they  
3 are, admittedly, not uniform on the subject.  
4 The courts in other jurisdictions have agreed  
5 with this policy. We cited four here. They're  
6 in our brief. But all those courts say  
7 including certain types of transactions, these  
8 short-term investments transactions, is absurd  
9 and does not fit within the statutory terms.  
10 The *General Motors Corp.* decision there at the  
11 bottom dealt with repo transaction, like I  
12 mentioned earlier, and said those shouldn't be  
13 included, as well, even though, as Duke Energy  
14 points out in his brief, California did take a  
15 little bit decision on the other short-term  
16 transaction. But even California said repos  
17 shouldn't be included.  
18 We submit the Department's policy furthers the  
19 purpose --

20 THE COURT: Did California do the *Microsoft* case?

21 MR. GREEN: Yes, sir, Your Honor.

22 THE COURT: So *General Motors*, they went one way and  
23 *Microsoft* -- well, of course, *Microsoft* you  
24 argued that that was based on --

25 MR. GREEN: No, we argued -- we argued that --

1 THE COURT: You argued that it was based on the fact  
2 that they had made a concession.

3 MR. GREEN: Made a concession. Yeah, we think a lot  
4 of that drove that. And General Motors and  
5 Microsoft were issued the same day --

6 THE COURT: Okay.

7 MR. GREEN: -- which is kind of interesting.

8 Now, the Department's policy, we submit, is  
9 entirely consistent with the -- how the Supreme  
10 Court has interpreted these statutes, which is  
11 provide for the reasonable basis rule that I  
12 mentioned earlier. The Department policy  
13 furthers Legislative intent.

14 THE COURT: You left out an important aspect of  
15 Hertz. Hertz says that you should be -- it  
16 says you should literally construe the -- what  
17 is it -- should literally construe in favor of  
18 inclusion of business which are formally as  
19 appropriate.

20 MR. GREEN: Well, Hertz -- Hertz references that.  
21 Hertz also -- I take that as a preference for  
22 the three-factor formula. There seemed to be  
23 a three -- a preference for applying that  
24 formula. And the --

25 THE COURT: There's a preference for doing that

1 which is appropriate.

2 MR. GREEN: Which is doing that which is  
3 appropriate.

4 And, again, that decision, Colonial, they all  
5 focus not merely on just taking certain  
6 language in a statute in isolation. It's that  
7 reasonable -- a reasonable basis --

8 THE COURT: Yeah.

9 MR. GREEN: -- a base which reasonably represents  
10 proportion of trade or business carried on  
11 within this state." We submit that's pretty  
12 critical language, as we pointed out in our  
13 brief.

14 Etiwan Fertilizer, just says Commission  
15 Decision, a policy which has been applied here  
16 since '77, shouldn't be overturned without  
17 cogent reasons. We submit that there are no  
18 cogent reasons here, because this would lead to  
19 an absurd result, which is what the Department  
20 recognized in its policy going back to '77.

21 We submit that the policy -- excuse me, the  
22 Department's position on this is it's entitled  
23 to deference because the Department -- as  
24 Colonial Life recognizes, the Department has  
25 the power and duty to prescribe a method for

1 reasonably represents basis.

2 And *Ryder Truck*, the Court recognized it  
3 wouldn't be justified in overturning a long,  
4 continued application of the statute, which the  
5 Legislature's given at least implied assent.

6 And there was some changes in '95 to the  
7 allocation apportionment statute. They were  
8 moved around. Moved from, I think, Chapter  
9 Seven to Chapter Six. No changes were made  
10 that would have addressed this issue in any  
11 way.

12 So we submit the Department's policy in this  
13 situation is entitled to deference, Your Honor,  
14 because they are the agency in charge with  
15 interpreting and applying those statutes.

16 We submit that Duke Energy's interpretation of  
17 "gross receipts" is an erroneous one and not  
18 compelling enough to overthrow the Department's  
19 long-standing policy, which is based upon the  
20 whole statute.

21 Effectively, Duke's position effectively  
22 ignores the sales factor as a factor that  
23 you're applying that you're trying to get that  
24 represents a reasonable basis, not just words  
25 taken out of isolation and not construed in

1 context.

2 So we -- what would happen, Your Honor, is if  
3 principal -- if taxpayers can include principal  
4 in transactions like those at issue, they could  
5 easily increase their income from one state or  
6 another by increasing the denominator from  
7 another state; that would cause distortions in  
8 income from year to year. We submit that's an  
9 absurd result that really could not have been  
10 contemplated by the Legislature.

11 And with that, Your Honor, if you don't have  
12 any more questions, I will --

13 THE COURT: Not right now.

14 MR. GREEN: -- wrap it up. Thank you, Your Honor.

15 THE COURT: All right.

16 MR. MAYBANK: Thank you, Your Honor.

17 THE COURT: Mr. Maybank, I might forewarn you. I  
18 might ask you more questions.

19 MR. MAYBANK: Okay. Fair enough. Fair enough.

20 We're going to load our PowerPoint while we  
21 start and I can go ahead and get started while  
22 we're doing that.

23 (Off the Record)

24 ARGUMENT BY MR. MAYBANK:

25 MR. MAYBANK: Your Honor, I know you've been one --



1           one    of    the    original    members    of    the  
2           Administrative Law Court and I know you've seen  
3           a lot, particularly since the *Shabaz* (phonetic)  
4           case, but I'll dare say you haven't seen a case  
5           where a governmental agency attempts to deny 12  
6           of its own contracts in your time on the bench.  
7           What we'd like to do is, we have split up our  
8           argument, Your Honor. As you know, this case  
9           arises out of Duke Energy's amended corporate  
10          income tax returns, requested a refund of South  
11          Carolina corporate income taxes for 1978  
12          through '81.

13          On our original returns, we mistakenly  
14          apportioned income to South Carolina based on  
15          the manufacturer's three-factor formula. We  
16          also -- or also erroneously failed to include  
17          gross receipts, even though that's what the  
18          statute required.

19          When we filed our amended returns, we corrected  
20          the errors. We apportioned based on the  
21          single-factor gross receipts formula and we  
22          included gross receipts from -- total gross  
23          receipts from the sales of securities and not  
24          net gross receipts, as the statute required.

25          The Department denied Duke's refund claims and

1 we instituted with an action before the  
2 Administrative Law Court. We've moved for  
3 Summary Judgment on one issue, the issue of  
4 whether gross receipts from the sale of  
5 investment securities are included in the  
6 apportionment formula. As I've indicated, the  
7 statute so requires. And the Department has  
8 moved for Summary Judgment on three issues.  
9 First, the Department contends "gross  
10 receipts," it means "net receipts." We'll call  
11 that "gross receipts issue." Second of all,  
12 that Duke was prohibited from filing refund  
13 claims, even though the Department signed a  
14 waiver form on anywhere between 12 and 21  
15 times. Third, the Department claims Duke is a  
16 manufacturer, despite the fact that what Duke  
17 does in South Carolina is provide electrical  
18 services. We'll refer to that as the  
19 "manufacturing issue."  
20 One area indicated -- where it's indicated --  
21 Tracey indicated neither side moved for Summary  
22 Judgment is on the issue of: If "gross" means  
23 "gross," which we contend that it does, is that  
24 net result distortive? And neither side moved  
25 for Summary Judgment for that because that's

1 just an inherently factual type of issue.

2 As you know, the standard for summary judgment  
3 in South Carolina is well-settled. Summary  
4 judgment is a drastic remedy and it's  
5 appropriate only when it's clear there's no  
6 genuine issue of material fact. When a fact is  
7 in dispute, the fact is resolved in favor of a  
8 non-moving party for purposes of summary  
9 judgment motion.

10 Summary judgment is not appropriate when  
11 further inquiry of facts is desirable to  
12 clarify the application of the law. And the  
13 party seeking summary judgment bears a burden  
14 of proving the absence of a genuine issue of  
15 material fact.

16 Your Honor, we've split our arguments into  
17 three parts. I'll address the waiver issue.  
18 Jeff Friedman will address the gross receipts  
19 issue. And Eric Tresh from Sutherland will  
20 handle the issue of whether Duke is a service  
21 provider. So if that's agreeable to Your  
22 Honor, I will go into the waiver issue, then.

23 THE COURT: All right.

24 MR. MAYBANK: Your Honor, on the waiver issue,  
25 it's -- we contend that the waiver issue is a

1           straightforward one. Before we get into the  
2           waiver issue, the first question that's got to  
3           be on your mind is: How on earth has this case  
4           managed to drag on for such a long period of  
5           time?

6           THE COURT: Hold on one moment.

7           MR. MAYBANK: And we --

8           THE COURT: Hold on one moment.

9           Okay. Go ahead.

10          MR. MAYBANK: Thank you.

11           The case started in 1978 or at least for the  
12           tax year 1978. The tax year 1978 was the first  
13           year that Duke Energy and the Department  
14           executed waiver agreement on the Form FS-43.  
15           Things then rocked along until 2002. The  
16           Department executed -- we have about 12 waiver  
17           agreements in our file. Tracy referenced 21 of  
18           them a few minutes ago. And so the Department  
19           kept extending the time line to file the  
20           amended return, largely because -- well, for  
21           several reasons.

22           First of all, the auditor had a series of  
23           personal issues and was out some period of time  
24           and because of his personal issues, he had  
25           difficulty completing the waiver. Second of

1 all, Duke's obviously a huge corporation and  
2 any audit of Duke, a corporation that size is  
3 going to be lengthy. And then, third, Duke was  
4 going through a number of federal changes as a  
5 result of the construction of its nuclear power  
6 plant and that produced federal adjustments.

7 In any event, on December 12, 2002, Duke filed  
8 South Carolina amended tax returns for 1978  
9 through 2001. The Department denied those  
10 fairly quickly, just a month and a half later.  
11 So on February the 12th of 2003, the Department  
12 denied them.

13 We then timely protested it within 30 days of  
14 the Department's denial and that was done March  
15 13th, 2003. Shortly thereafter, just two  
16 months later, the Department contacted Duke and  
17 they came in and audited Duke Energy's 1978 to  
18 2001 refund claims and factually made no  
19 changes to the refund claims.

20 A solid -- a solid six years then commenced.  
21 The case sat at the Department of Revenue. We  
22 filed a protest. They denied the claim. We  
23 filed a protest. They audited the file.

24 Finally, six years later, Duke Energy worked up  
25 the nerve or the whatever to ask the

1 Department, "Look, we've been here a while. I  
2 think we would ask that you admit or deny or  
3 grant or deny the amended returns," and the  
4 Department then issued a Department  
5 Determination on February 4th, 2010.

6 THE COURT: Just curious. How long after the  
7 Federal IRS involvement did Duke Energy work up  
8 the nerve?

9 MR. MAYBANK: The RAR's would have been very early  
10 in the process. I don't think it's in the  
11 record as to exactly when that -- I don't  
12 believe either side has submitted anything in  
13 the record as to when that time period was.  
14 But it would have been -- I know it's early in  
15 the process. How early? That, I don't know.

16 THE COURT: All right.

17 MR. MAYBANK: So that's where we -- that's what's  
18 got us into court here today. And what I'd  
19 like to do is address the waiver issue.  
20 The waiver issue is straightforward. Duke and  
21 the Department issued a number of waivers  
22 starting in '78 for the periods at issue.  
23 These waivers or agreements are found on the  
24 DOR Form FS-43, a form obviously drafted by the  
25 Department, in many cases requested by the

1 Department for Duke Energy as a result of, as  
2 I've mentioned, the personal issues suffered by  
3 the auditor. These waivers kept the statute of  
4 limitations open to allow either party to amend  
5 its tax position and in 2002 did just that.

6 The Department now claims that the waivers kept  
7 the statute of limitations open for the sole  
8 purpose to give it more time to assess a tax  
9 liability on Duke Energy.

10 That -- the Department's arguments fail for  
11 four reasons. One, the Department had the  
12 explicit authority to waive the statute of  
13 limitations under the statute, explicit  
14 statutory authority to waive the statute of  
15 limitations. Even if the statute was silent,  
16 the Department of Revenue contractually waived  
17 it. And under any circumstances, the  
18 Department should be equitably estopped from  
19 asserting the statute of limitations or  
20 equitably tolled.

21 Now, there is -- the Department had explicit --

22 THE COURT: Are you going to back up and tell me  
23 each one of those?

24 MR. MAYBANK: Yeah, I am, Your Honor.

25 THE COURT: All right.

1 MR. MAYBANK: That will be the gist of my argument  
2 now.

3 THE COURT: Okay.

4 MR. MAYBANK: Your Honor, the Department had  
5 explicit statutory authority to issue the FS-43  
6 agreements. And there's been some discussion,  
7 maybe -- I'm not sure how explicit Tracey said,  
8 but there's certainly been some intimation that  
9 the forms were not authorized by the Department  
10 or the Department didn't have the authority to  
11 waive the statute of limitations.

12 THE COURT: Well, now, clearly they have the  
13 authority to issue Form --

14 MR. MAYBANK: FS-43.

15 THE COURT: -- FS-43. The issue is whether in  
16 issuing those forms, whether they have the  
17 authority to waive -- and y'all call it -- both  
18 of y'all and I know the courts do, too, so --  
19 use the phrase "statute of limitations."  
20 I can tell you, if you -- if "statute of  
21 limitations" really is the operative phrase in  
22 this area of the law, then our case law doesn't  
23 make sense and a lot of other case law doesn't  
24 make sense.

25 I think to make all this make sense -- and I



1 know there's a Kentucky case on it. I'll tell  
2 you -- I'll give it to you if I pull it up --  
3 this is more of a condition precedent in order  
4 to seek that which you are seeking and therein  
5 lies the limitation period.

6 MR. MAYBANK: Well --

7 THE COURT: And I'll get into that later on when we  
8 have a discussion on that. But I'm not so  
9 sure -- but when you say a "statute of  
10 limitations," it doesn't reference the phrase  
11 "statute of limitations." It references a time  
12 period.

13 MR. MAYBANK: Correct.

14 THE COURT: So ...

15 MR. MAYBANK: And it's our contention that the  
16 Department has explicit authority to extend  
17 that time period. Whether you call it a  
18 "statute of limitations" or whatever, they --

19 THE COURT: Well, where is that?

20 MR. MAYBANK: Under modern law, it's found in the  
21 Revenue Procedures Act. The Department of  
22 Revenue has given it in two places.

23 THE COURT: I understand modern law.

24 MR. MAYBANK: Right.

25 THE COURT: But I go back and look at the older law.

1 MR. MAYBANK: Right. And that's what I'll go --  
2 that's what I will proceed immediately, Your  
3 Honor, if that's agreeable to you.

4 THE COURT: Yeah.

5 MR. MAYBANK: All right. Under -- the Department  
6 has always had the authority to extend the  
7 statute of limitations under Section 12-54-80.  
8 That gives the Department the explicit  
9 authority to execute a waiver, to execute the  
10 FS-43 agreement. And the Department's  
11 attorneys misunderstand the nature of an  
12 "assessment."  
13 Now, what 12-54-80 states -- and I apologize,  
14 I don't have a PowerPoint to put up -- well,  
15 what it states is, if before the expiration of  
16 the time prescribed in this section for the  
17 mailing of a notice of any assessment, the  
18 taxpayer has consented in writing to the  
19 mailing of the notice after the time. The  
20 notice of assessment may be mailed at any time  
21 prior to expiration of the period agreed upon.  
22 The party so agreed upon may be extended by  
23 subsequent agreements in writing made before  
24 the expiration of the period previously agreed  
25 upon.

1 Well, that statute came in 1985, but there was  
2 a predecessor statute. The operative word  
3 there is "notice of assessment." Now, again,  
4 this is not to be repetitive. What I'm reading  
5 from is not a DOR policy document; it's a  
6 statute.

7 It says, "If before the expiration of the  
8 time -- before the expiration of the notice of  
9 assessment, the taxpayer has consented in  
10 writing to the mailing of the notice after the  
11 time. Notice of assessment may be mailed at  
12 any time prior to the expiration of the period  
13 agreed upon."

14 Now, "notice of assessment" is a term of art.  
15 The Department's job is not to maximize revenue  
16 for the State of South Carolina. The  
17 Department's job is to fairly and accurately  
18 estimate what a taxpayer owes in taxes.

19 Many times when the DOR audits a taxpayer, it  
20 doesn't produce a tax liability. In fact, it  
21 produces a tax refund. And there's no  
22 statistics kept, but the Department, in their  
23 annual report, they pointed out that it's their  
24 job to fairly and accurately estimate what a  
25 taxpayer owes.

1           So when the DOR does an audit, if they  
2           determine that a refund is due -- and as I've  
3           indicated, many audits produce refunds. The  
4           taxpayer has miscalculated either the law or  
5           the facts to negatively hurt itself. So many  
6           audits the DOR produces a refund.  
7           If the taxpayer agrees with the amount of the  
8           refund, the DOR comes in with a field agent's  
9           report and says, "Gee, Burnie, we think you're  
10          owed a thousand dollars." If I agree with  
11          that, I say "fine," and they send me a check  
12          and the file is closed and never hear -- the  
13          Court never hears from us.  
14          If they come in and say, "Gee, Burnie, we think  
15          we're owed -- your -- we audited your  
16          individual income tax" -- corporate income tax,  
17          it doesn't matter what -- "we've audited your  
18          corporate income tax and we think you're owed  
19          a refund," that's obviously good news. And  
20          they say, "We've calculated your refund to be  
21          \$1200," and I say, "No, I calculated it and  
22          it's \$2,000," then I protest it.  
23          They then send a notice of assessment out that  
24          says Burnie's owed -- under our calculations,  
25          Burnie's owed \$1200. If I think I'm owed

1       \$2,000, I file a refund and under today's era,  
2       that refund would come to the Court.  
3       So a proposed assessment includes -- the  
4       proposed assessments is DOR's calculation of  
5       taxes. Many cases it's a tax liability. In  
6       many cases it's a tax refund, but it's their  
7       version.  
8       If it's a refund and I like their numbers, I  
9       take it; the file's closed. If it's a refund  
10      and I think the refund is too low, I appeal the  
11      proposed assessment to the Administrative Law  
12      Court.  
13      So, the -- simply put, 12-54-80 and its  
14      predecessor statute explicitly allowed the  
15      Department of Revenue to delay the issuance of  
16      an assessment, which was the predecessor or the  
17      predicate for filing a claim for refund.  
18      And that's exactly what the Department of  
19      Revenue did on some 12 to 21 times. And that's  
20      a factual matter -- one of the factual matters  
21      involved in this is exactly how many waivers  
22      the Department executed.  
23      But that explicit statutory authority is what  
24      gave the Department the right to execute or  
25      draft -- to promulgate, draft and sign the Form

1 FS-43 agreement. And that's why, an important  
2 point, the FS-43 reads almost exactly the same  
3 today as it did previously.

4 If you look at the pre-'95 language, the  
5 language is virtually identical, except for the  
6 reference to the code section.

7 And it's no amazing coincidence that it reads  
8 almost identical. We've heard a lot of  
9 testimony about the dramatic change in the law,  
10 the Revenue Procedures Act, and the Revenue  
11 Procedures Act was fairly dramatic. But it's  
12 not coincidence that form looks exact --  
13 virtually exactly the same today as it did pre-  
14 '95, because under the Department of Revenue's  
15 interpretation, or the people who signed our  
16 waiver form, that particular little part of the  
17 law never changed, because it was found in  
18 12-54-80.

19 Now, if we go --

20 THE COURT: Mr. Maybank, where I can be clear,  
21 you're talking about -- in dealing with the  
22 phraseology "notice of assessment" under 54-80,  
23 you're talking about the Department reviews the  
24 case. They issue -- in issuing their  
25 assessment, they either assess for taxes or

1 refund taxes.

2 MR. MAYBANK: Exactly.

3 THE COURT: All of that is actions that is by the  
4 Department; whereas in this case, the  
5 distinction is that Duke Energy has not gone  
6 with their original filing, but they have  
7 sought a new and distinct reason for a refund  
8 that was not part of the original filing.

9 So wherein do you derive the authority out of  
10 80, when it says the Department can issue a  
11 notice of assessment, that the taxpayer has a  
12 right to amend their filing to seek anything  
13 that they wish to now claim is a new reason for  
14 getting a refund?

15 MR. MAYBANK: Our position, Your Honor, is under  
16 12-54-80, the statute of limitations never ran.  
17 The Department had the contractual authority  
18 to waive or toll, what have you, the statute of  
19 limitations. They did so. And so for that  
20 entire period of time, the statute of  
21 limitations never commenced running.  
22 We could have filed amended returns for  
23 anything in the world we had wanted to, as  
24 opposed to RAR adjustments, which were more  
25 limited.

1 So our position can be stated simply, 12-54-80  
2 gave the Department explicit power to waive the  
3 statute of limitations, they exercised that  
4 power on a form drafted by them, and in most  
5 cases they exercise the power by asking us to  
6 sign it.

7 Now, there's not a whole lot in the record as  
8 to who requested it, but if you look on many of  
9 the forms, the Department signed them first,  
10 and there is testimony in the record of the  
11 personal trials and tribulations that the  
12 auditor was having.

13 So not only did they promulgate it and sign it,  
14 they requested us to sign it. So in some  
15 cases -- and there's -- I'm sure in some  
16 years -- I don't have any doubt in some years  
17 we requested it, but in other years it was done  
18 for their convenience.

19 So our position is, the statute never started  
20 running and we could have amended our returns  
21 for anything in the world we had wanted to.

22 Now, if you say what is --

23 **THE COURT:** So when you say it's "explicit," you're  
24 getting the explicit language out of the fact  
25 that 54-80 sets forth that the notice of



1           assessment may be mailed at any time prior to  
2           the expiration of the period agreed upon.

3   MR. MAYBANK: Correct. And as I've come to, that's  
4           exactly the way the Department viewed it.

5           Under post '85 law -- and the only change done  
6           in the Revenue Procedures Act was the  
7           Department was then given the power to waive  
8           all statutes of limitations or all limitations  
9           periods.

10          The basic, same language of 12-54-80 is in the  
11          code, but they were given another power in  
12          which they could extend any deadline.

13          Now, I haven't counted up the number of  
14          deadlines in Title 12, but I'm sure there are  
15          hundreds of them. Tobacco tax returns. You  
16          could imagine the number of liquor ABL issues.  
17          So it gave them the explicit authority to waive  
18          every other time limitation, in addition to  
19          what was found in 12-54-80.

20          Now, if you say, "Gee, Burnie, where are you  
21          coming up with all of that?" The form reads  
22          exactly the same and the Department of Revenue  
23          on a number of occasions has said, "This new  
24          form waives the time for or extends the time  
25          for filing refund claims."

1           So post '95, they say that form works. We say  
2           it works for pre-'95 because they had explicit  
3           statutory authority to do it. Now, it's not  
4           just me. I'm not the only one that reads the  
5           form like that.

6   **THE COURT:** Okay. When you say that the new forms  
7           reads exactly the same, there is one little  
8           difference, isn't there?

9   **MR. MAYBANK:** There's --

10   **THE COURT:** Like 54-80 versus 54-85(C).

11   **MR. MAYBANK:** Correct.

12   **THE COURT:** So don't I need to look at 85(C) to see  
13           what it authorizes in order to interpret what  
14           the form authorizes?

15   **MR. MAYBANK:** Well, under the Revenue Procedures  
16           Act, naturally, of course, the statutes -- the  
17           statutes have changed; the statutory references  
18           have changed. But, basically, what the Revenue  
19           Procedures Act, the major significance of that  
20           is, it allowed them to waive every other time  
21           limitation and not just assessments.

22   **THE COURT:** Now, when you say "it" allowed, was that  
23           85(C) allowed it or was it another provision?

24   **MR. MAYBANK:** It was another provision. In fact --

25   **THE COURT:** Is it referenced by 85(C)? Because I

1 don't --

2 MR. MAYBANK: I've actually got it here, Your Honor.

3 Let me real quickly ...

4 THE COURT: I don't think I have 85(C).

5 MR. MAYBANK: Well, I've got 470. I didn't bring my  
6 darn code.

7 THE COURT: That's fine. I'll pull it up.

8 MR. MAYBANK: Okay.

9 THE COURT: Go ahead.

10 MR. MAYBANK: Now, it's not just me who reads the  
11 forms in that regard. It's the Department of  
12 Revenue, as well as Duke Energy.

13 THE COURT: Well, I assume Duke Energy reads it that  
14 way.

15 MR. MAYBANK: Your Honor, I don't think anybody ever  
16 thought about it. The form was so crystal  
17 clear, nobody ever thought about it.

18 But in the record is an affidavit of Rickey  
19 McCarver, retired with Duke Energy. To the  
20 best of my knowledge, both the Department and  
21 Duke understood that all waiver extended the  
22 time of statute of limitations with respect to  
23 both audits and refund claims.

24 THE COURT: Back up and say that again.

25 MR. MAYBANK: And by the way, Your Honor, it's not

1 in the record anywhere, but, you know, you've  
2 never seen this case before. You've never seen  
3 the Department claim its form doesn't say what  
4 it says. And we've also put up the  
5 affidavits -- we've given you affidavits from  
6 Marvin Davant and Robby Anderson.

7 Marvin Davant, as his affidavit shows, he  
8 worked for the Department for 30 years. He  
9 retired as a head of the field service division  
10 just, oh, probably eight years ago, and he came  
11 back as an independent contractor for the  
12 Department.

13 So he signed many of the Duke forms, but more  
14 importantly, he was head of the field service  
15 division. And in his affidavit, he said he  
16 understood the Form FS-43 agreement to not only  
17 extend the time to assess additional tax, but  
18 also authorizes -- extended the time for the  
19 taxpayer to file a claim for refund. And he  
20 said both in his eyes, the Revenue Procedures  
21 Act made no difference as far as the FS-43  
22 agreement. It extended the time for a refund  
23 before the RPA, exactly as it did after the  
24 RPA.

25 We also got an affidavit from Robby Anderson.

1 Robby worked at the Department of Revenue from  
2 1975 to 2008; again, some 30 years. He retired  
3 as a number three official at the Department of  
4 Revenue, what in most agencies would be called  
5 the "deputy chief of staff" or in this case,  
6 senior administrator. He was also head of the  
7 field service division. He also signed some of  
8 the Duke forms.

9 He basically said the same thing. The RPA made  
10 no difference in terms of the Form FS-43. It  
11 allowed pre-RPA exactly as the way it did post  
12 RPA.

13 And I know I'm being repetitive, but the  
14 Department policy document says the form works  
15 post RPA. Marvin Davant and Robby Anderson  
16 said it worked pre RPA for the simple reason  
17 that that's the way the Department had  
18 administrated it in thousands of -- there's  
19 nothing in the record that shows the number of  
20 waivers granted. But if you look at just the  
21 number Duke's was granted to Duke, you've got  
22 to assume there was probably thousands of those  
23 waivers out there.

24 We asked the actual auditor, who testified for  
25 the Department of Revenue did it work for a

1 refund and he basically says "yes." "If a  
2 taxpayer were to seek a refund, would you have  
3 told them they couldn't?" "No, I don't see why  
4 I would."

5 And we asked Ron Urban, who was the chief legal  
6 counsel, retired chief legal counsel. He also  
7 testified on behalf of the Department and he  
8 agreed that the form today works both ways.  
9 Now, that's the argument in terms of the  
10 explicit authority.

11 The second issue is, the Department has waived  
12 the statute under either a standard contract  
13 basis or a common law analysis. I argue  
14 they've got explicit authority to do it. If  
15 I'm wrong, at worse the statute is silent.  
16 There is no statute that prohibited them from  
17 doing it. They either had the explicit  
18 authority or, if I'm wrong on that, the statute  
19 is silent. So do they have the common law  
20 right to -- or do they by contract waive the  
21 statute of limitations?

22 Now, there are surprisingly a large number or  
23 a fair number of cases on waiver of the statute  
24 of limitations against the government. And the  
25 most recent one, there's a 2004 case. There's

1 actual two cases against the Department of  
2 Revenue, a *Anonymous Taxpayer versus South*  
3 *Carolina Department of Revenue 2008* case. The  
4 Court -- which is a Court of Appeals case in  
5 2008 -- just a blink of an eye in the tax  
6 world -- the Court of Appeals said a party can  
7 waive a statute of limitations defense, but the  
8 waiver must be shown by words or conduct,  
9 including an expressed agreement. So that  
10 was --

11 THE COURT: Both of those cases are dealing with  
12 where the person was authorized to do so,  
13 correct?

14 MR. MAYBANK: Correct. Correct.

15 THE COURT: The problem I've got with your argument  
16 now is you've said, okay, we were, A,  
17 explicitly authorized to do it and, B, now  
18 you're moving to a common law theory. But the  
19 common law theory requires explicit  
20 authorization to do so.

21 MR. MAYBANK: Correct.

22 THE COURT: So your argument falls off the cliff  
23 because your argument needs to go back to "A"  
24 again in order to win on "B."

25 MR. MAYBANK: Well, the -- there's no -- there's

1           about four or five cases involving waiver of  
2           the statute of limitations against the  
3           government and in no case has the court imposed  
4           that requirement.

5           Now, obviously --

6   THE COURT:  -- then has to be authorized?

7   MR. MAYBANK:  Well, clearly, it'd have to be  
8           authorized by a proper official.  There's no  
9           doubt about that.

10  THE COURT:  Oh, so the authorization -- let me back  
11           up.  Then -- all right.  Under your theory, if  
12           Duke Energy consults someone who is part of the  
13           cleaning crew at DOR --

14  MR. MAYBANK:  Correct.

15  THE COURT:  -- and they ask if they can have -- if  
16           they can get a Form FS-53 (sic)...

17  MR. MAYBANK:  And he says "sure."

18  THE COURT:  Sure.  Then that person doesn't have the  
19           authority to do it, so you obviously would not  
20           argue that.

21  MR. MAYBANK:  Correct.

22  THE COURT:  So -- and even if that person appeared  
23           to have the authority --

24  MR. MAYBANK:  Correct.

25  THE COURT:  -- and even if that person says, "I do



1           have the authority to do it," Duke Energy  
2           wouldn't rely upon that assertion of authority.

3   MR. MAYBANK: Correct.

4   THE COURT: So the -- when the authority -- when you  
5           say the authority exists, there must be  
6           something for which you base the authority  
7           upon.

8   MR. MAYBANK: The two persons who signed it -- well,  
9           first of all, the form was drafted by the  
10          Department of Revenue. We didn't draft the  
11          form. They --

12   THE COURT: Well, taking it back to my question,  
13          then. If the cleaning crew drafted the form,  
14          it wouldn't make any difference, because they  
15          never had the authority.

16   MR. MAYBANK: Well, if the cleaning crew drafted the  
17          form and the Department signed it for 30 years,  
18          at some point maybe the cleaning crew had the  
19          authority. But in our case, the clean -- it  
20          wasn't the cleaning crew. It was a number  
21          three official at the Department of Revenue.  
22          It was the head of field services division.  
23          Collectively they worked at the Department for  
24          60 years. And Mr. Davant testified they were  
25          using the form before he got there.

1 THE COURT: But there again, still, they must derive  
2 their authority from where? That's what I'm  
3 asking you.

4 MR. MAYBANK: In my --

5 THE COURT: Where do you get the authority for them  
6 to exercise this?

7 MR. MAYBANK: Because of their high rankingness  
8 (sic) within the Department of Revenue. One  
9 was a number three official in the entire  
10 Department of Revenue, Robby Anderson, and  
11 number -- the second one was head of the field  
12 services division. He was in charge of all the  
13 auditors in the Department of Revenue.

14 THE COURT: Is there any case law out there that  
15 sets forth that the ranking of an individual in  
16 an agency therein reflects their authority to  
17 do something other than the statutory authority  
18 to do something?

19 MR. MAYBANK: Well, there's no case law that  
20 discusses the ranking within an agency signing  
21 a contract. There are several cases that talk  
22 about the person who signed it or gave the  
23 advice was not authorized to do so.

24 THE COURT: Okay.

25 MR. MAYBANK: They didn't just -- none of those

1 cases discuss -- well, in one case they said  
2 the city -- the city claimed it didn't have  
3 authority, but he really did, and the case was  
4 so -- and I've got the citation for that. The  
5 facts in the case were so abbreviated, you  
6 really can't see what the swearing match was  
7 about.

8 **THE COURT:** Okay.

9 **MR. MAYBANK:** But there's no doubt that the person  
10 in the Department of Revenue signed that form  
11 had to have the authority to do so. And we  
12 contend that the number three official in the  
13 Department of Revenue and the head of the  
14 entire audit division had the authority to do  
15 so.

16 **THE COURT:** By essence of their position.

17 **MR. MAYBANK:** By essence of their position; that's  
18 correct, Your Honor.

19 And I know I'm using up my time, so I'm going  
20 to pick up the pace a bit here.

21 **THE COURT:** You're not limited on time.

22 **MR. MAYBANK:** Okay. Thank you.

23 The -- real quickly through waiver. There are  
24 a number of waivers of statute of limitations  
25 defense against the government. In most cases

1 the party, the private litigant did not  
2 prevail, but there are a number of those cases.  
3 And in none of those cases was there any  
4 doctrine that waiver doesn't run against the  
5 government the way there is for estoppel  
6 purposes.

7 So the five or six waiver cases we've cited,  
8 three or four of them are against the  
9 government and not a single case references  
10 that there's some public policy against waiver  
11 by the government of the statute of  
12 limitations, the way admittedly there is for  
13 estoppel.

14 So you don't see cases waiver doesn't run  
15 against the government the way you see cases  
16 that says estoppel doesn't run against the  
17 government.

18 THE COURT: Well, when you say "waiver," are the  
19 cases dealing with waiver of the statute of  
20 limitations against the government based on a  
21 cause of action or is it explicit statutory  
22 time frame of which I call it "condition  
23 precedence"? Do you --

24 MR. MAYBANK: No, that's --

25 THE COURT: If you don't know --

1 MR. MAYBANK: That's too fine a point for me. But,  
2 I mean, one of them involved medical  
3 malpractice.

4 THE COURT: That's a cause of action.

5 MR. MAYBANK: Right.

6 THE COURT: See, the statute of limitations squarely  
7 fits within causes of action.

8 MR. MAYBANK: Right. Ours --

9 THE COURT: The statute of limitations, the case law  
10 says the statute doesn't begin to run until  
11 you're aware of the cause -- rightfully aware  
12 of the cause of action.

13 MR. MAYBANK: Right. But now --

14 THE COURT: But a specific explicit time frame to  
15 file a tax refund doesn't fit within that  
16 particular --

17 MR. MAYBANK: Well, Your Honor, there are two cases  
18 involving the Department of Revenue. One of  
19 them is -- as I've mentioned, one of them is  
20 South Carolina Tax Commission versus  
21 Metropolitan Life Insurance Company. That's a  
22 1975 case. The Department asserted there that  
23 the taxpayer had waived the statute of  
24 limitations. The wiley, cagey taxpayer  
25 basically lulled the DOR to sleep. When the

1 DOR then issued a proposed assessment against  
2 the wiley taxpayer, the taxpayer said, "No, the  
3 statute of limitations has run."

4 And the Court of Appeals in 1975,  
5 221 S.E.2d 522, the Court said -- and this is  
6 waiver of statute of limitations -- "To  
7 constitute a waiver, there need not be a new  
8 agreement for a valuable consideration, a  
9 simple voluntary relinquishment of a right with  
10 knowledge of all the facts. Here the fact show  
11 conclusively by the speech, writings and  
12 conduct, the taxpayer has waived the defense of  
13 the statute of limitations. Such conduct on  
14 the part of the taxpayer wholly inconsistent  
15 with its rights to claim this defense against  
16 the Commission and amounted a waiver of such  
17 defense."

18 In the second case, *Anonymous Taxpayer versus*  
19 *the --*

20 THE COURT: Can you tell me what that case is about?

21 MR. MAYBANK: It involved I believe unclaimed  
22 property, a forfeiture of contract under  
23 unclaimed property.

24 THE COURT: Okay. Thank you.

25 MR. MAYBANK: These cases are so concise. It's not

1           always clear.

2       **THE COURT:** I understand. I understand that.

3       **MR. MAYBANK:**     The second case involved the  
4           Department of Revenue, as well. That's a 2008  
5           Anonymous Taxpayer versus South Carolina  
6           Department of Revenue.

7           In that case, the taxpayer claimed the  
8           Department waived the statute of limitations  
9           defense where it didn't raise it as an  
10          additional sustaining grounds in Evans. So  
11          this is a follow-up to all the Evans retiree  
12          lawsuit litigation.

13       **THE COURT:** Okay.

14       **MR. MAYBANK:**   And the Court said simply, "A party  
15           can waive a statute of limitations defense by  
16           the -- but the waiver must be shown by words or  
17           conduct including an expressed agreement," and  
18           then that particular case, they held that the  
19           Department of Revenue had not waived it, but  
20           they said it quite simply.

21           "The general rule of waiver against the  
22           government" -- now, this is waiver against the  
23           government for statute of limitations, is found  
24           in the *City of North Myrtle Beach versus Lewis-*  
25           *Davis.* The Court -- the Supreme Court held in

1           that case -- Court of Appeals held in 2004, "A  
2           party can waive a statute of limitations  
3           defense". It cites a lawsuit against the  
4           Highway Department. "Waiver is a question of  
5           fact for the finder of fact. Waiver's a  
6           voluntary and intentional abandonment or  
7           relinquishment of a known right. It may be  
8           expressed or implied by a party's conduct."

9           "A simple voluntary relinquishment of a right  
10          with knowledge of all the facts of an  
11          expression of intention not to demand a certain  
12          thing is sufficient to constitute a waiver."

13          And they cite the *Tax Commission* case in that  
14          one. "Waiver of the statute of limitations may  
15          be shown by words or conduct. Thus, waiver may  
16          result from an expressed agreement or by any  
17          action or inaction manifestly inconsistent with  
18          intent to insist upon the statute."

19          So, in our case we argue, Your Honor, they  
20          contractually waived it under the form of the  
21          agreement and under general litigation  
22          principles -- under common law litigation  
23          principles, they have waived the right to  
24          assert the statute of limitations as a defense  
25          in this particular case.



1       The courts do routinely have -- waiver is  
2       obviously a question of fact. A couple of  
3       other cases, sort of the preeminent waiver of  
4       statute of limitations cases are *Mende versus*  
5       *Conway Hospital*, 404 S.E. 2d 33, and *R.W.*  
6       *Newcomb versus E.N.S.R.*, 644 S.E.2d 703. Those  
7       are not cases against the government, however.  
8       The third argument, Your Honor, is that the  
9       Department should be estopped from asserting  
10      the statute of limitations because of its  
11      contact. We cheerfully admit estoppel  
12      generally doesn't run against the government.  
13      Estoppel generally doesn't run against tax  
14      matters. And, clearly, the Department could  
15      not be estopped from giving erroneous  
16      interpretation of tax laws, particularly by low  
17      level employees. We feel like that has nothing  
18      whatsoever to do with this case.  
19      The estoppel sought here is not an  
20      interpretation of the tax laws. It's their  
21      right to assert the statute of limitations as  
22      a defense.  
23      We're not saying that "owe us the money."  
24      We're not saying they should be estopped from  
25      claiming we're a manufacturer or a service

1 provider. We're simply saying they're estopped  
2 from asserting the statute of limitations as a  
3 defense in this matter.

4 Now, the most recent case, it's a 2010 case  
5 involving estoppel against the government to  
6 assert a statute of limitations -- it's  
7 directly on point. Now, the litigant in that  
8 case didn't prove factually his case, but the  
9 Court said the law was as follows.

10 THE COURT: What case?

11 MR. MAYBANK: This is *Logan versus Cherokee*  
12 *Landscaping and Grading*. And it doesn't appear  
13 in the caption of West Law, but it was also  
14 against Gaffney County. The issue involved  
15 estoppel to assert the statute of limitations  
16 against the County of Gaffney.

17 And what the court said is -- again, bears  
18 repeating, a 2010 case -- "In South Carolina,  
19 a defendant may be estopped from claiming the  
20 statute of limitations as a defense if some  
21 conduct or representation by the defendant has  
22 induced the plaintiff to delay in filing suit.  
23 An inducement for delay may consist of an  
24 express representation or other conduct; an  
25 intentional misrepresentation is not required."

1 And then it says, "Estoppel may apply against  
2 a government agency, but the party asserting  
3 estoppel against the government must prove lack  
4 of knowledge and means of knowledge of the  
5 truth as to the facts in question, justifiable  
6 reliance upon the government's conduct, and a  
7 prejudicial change in position."  
8 Now, in our case, lack of knowledge is the lack  
9 of knowledge that 20 years later, six years  
10 after we filed the amended return, the  
11 Department of Revenue's lawyers would assert  
12 that the FS-43 was ineffective. Now, was there  
13 any reason for us to know it?  
14 Well, Marvin Davant said in his mind it worked  
15 both ways. Robby Anderson said in his mind it  
16 worked both ways. Joe Southard, the auditor,  
17 said you can get a refund. Ron Urban the chief  
18 legal counsel said post '95 you can get a  
19 refund.  
20 And then when the Department denied our claim -  
21 - on the screen is a 2003 denial. They gave  
22 two reasons why Duke's refund claim should be  
23 turned down: A, we're a manufacturer and, B,  
24 a change to gross receipts method is a change  
25 of accounting method.

1 Even they didn't. The person who denied the  
2 claim didn't say that there was -- that we were  
3 untimely, that we had filed the claims  
4 untimely. It wasn't until, let me see, how  
5 many years after -- we filed the amended  
6 returns in 2002. It wasn't until eight years  
7 later that for the first time, the first time  
8 ever, the Department of Revenue raised the  
9 issue that the claims were untimely.

10 So the first issue is lack of knowledge. Not  
11 only we not know it, the people who signed the  
12 form didn't know it.

13 Justifiable reliance upon a government's  
14 conduct. Again, I think if you sign 12 of them  
15 or 21 of them, they -- the Department drafted  
16 the form. They promulgated it. They executed  
17 it and they gave it to you to sign. I would  
18 say most of us would consider that to be  
19 justifiable reliance.

20 And, lastly, prejudicial change in position,  
21 that that would be -- we could have filed  
22 amended returns much earlier. We would have  
23 filed them timely had we known that they were  
24 going to ten years later say the -- eight years  
25 later say the form were ineffective.

1 Now, estoppel does run against the government.  
2 There's a 2010 case, *HHHunt Corporation versus*  
3 *Town of Lexington*, 699 S.E.2d 699. There are  
4 a bunch of cases where the plaintiff did not  
5 prevail. That's one case where a government  
6 was actually estopped. And there's actually  
7 four -- there's actually four cases in which  
8 the government discusses the application of  
9 equitable estoppel to assert the statute of  
10 limitations. There are actually three of them.  
11 In none of those three cases did the court give  
12 the presumption that estoppel doesn't run  
13 against the government. It discusses -- and  
14 this is not explicit in there, but it's clear  
15 to the Court of Appeals, estoppel to assert the  
16 statute of limitations is different than  
17 estoppel to assert a substantive position.  
18 "Yeah, Burnie, you got your zoning request,"  
19 or, "Yeah, Burnie, you are a manufacturer.  
20 Here's a huge check."  
21 Estoppel to assert the statute of limitations  
22 is discussed differently. But those cases are  
23 *Black v. Lexington School District*,  
24 48 S.E.2d 327. And these are all in our brief,  
25 but I have -- we have such a blizzard of cases,

1 I thought I'd culled them down, distilled them.  
2 And the second one is Vines versus Self  
3 Memorial Hospital, 443 S.E.2d 909. And,  
4 lastly, the Logan case I just mentioned.  
5 I'm out of time here, so I would like to  
6 briefly talk about equitable tolling.

7 THE COURT: Well, let me -- all of the cases you've  
8 referenced I think refer to causes of action  
9 and they all -- if you look at them on their  
10 face, they would be -- I mean, if you just  
11 juxtapose them against TNS Mills and the other  
12 cases of that ilk, they are at odds.  
13 And it appears to me that the reason that  
14 they're at odds is the concept of statute of  
15 limitations in a cause of action arena  
16 certainly exists against the government. But  
17 when there's a specific statute setting forth  
18 that this is the time frame for which you can  
19 do an action of which the State granted the  
20 authority to do that particular action, then  
21 it's viewed differently.

22 MR. MAYBANK: TNS Mills is a good case to contrast.  
23 In that case, the taxpayer never made -- made  
24 its pollution control exemption filing very  
25 untimely. There was no doubt about that. It