BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 060038-EI

In the Matter of:

PETITION FOR ISSUANCE OF A STORM
RECOVERY FINANCING ORDER, BY FLORIDA
POWER & LIGHT COMPANY.

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VOLUME 4
Pages 285 through 347

PROCEEDINGS: HEARING

BEFORE: CHAIRMAN LISA POLAK EDGAR
COMMISSIONER J. TERRY DEASON
COMMISSIONER ISILIO ARRIAGA
COMMISSIONER MATTHEW M. CARTER, II
COMMISSIONER KATRINA J. TEW

DATE: Wednesday, April 19, 2006

TIME: Commenced at 3:50 p.m.
Concluded at 5:18 p.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: LORI DEZELL
Registered Professional Reporter

APPEARANCES: (As heretofore noted.)
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CHAIRMAN EDGAR: We are ready to get started
again. We will go back on the record. And
Mr. McGlothlin --

MR. MCGLOTHLIN: Yes.

CHAIRMAN EDGAR: -- you are up for continued
questioning.

CROSS-EXAMINATION (CONTINUED)

BY MR. MCGLOTHLIN:

Q. Dr. Brown, turn, if you will, to page 43 of
the KEMA report document. Under 5.6.4, cross bracing,
the first paragraph, within the description of the
connection, this statement appears: "The bolt was only
loaded with a shear force and the design allowed
rotating of the cross brace around the bolt. This
rotation ensures that the cross brace is only loaded
purely on tensile or on compression."

Would you take a moment and describe for us
nonengineers what is meant by some of these terms. For
instance, loaded only on a shear force, what does that
mean?

A. These cross braces here, if you imagine, say,
a stick or a pencil, the cross braces are designed to
support axial load. So pushing and pulling of the pencil you wouldn't expect the pencil to break. It's not designed to take radial loads, meaning torquing the pencil. You can snap the pencil if you put a radial load on it, but if you push or pull the pencil, an axial load on the pencil, then the pencil is strong in that direction.

So for these tower designs, the cross braces are designed for the cross braces to be loaded axially, not radially. And so the connections are supposed to support that type of loading on the cross braces.

Q. With respect to the bolt itself, I suppose if the bolt is the source of a problem that causes a tower to collapse or fall, that suggests that either the bolt has pulled free and there's no longer a connection or that the bolt has, I think the word is, sheared, cut in two. Is that more or less the universe of possibilities in terms of how a problem with the bolt could lead to a failure of the cross brace?

A. There really could be three. If you over-tighten the bolt such that you don't have the ability of the connection of the cross brace to the bolt, if the nut is over-tightened, then you could potentially have this radial force on the cross brace which could result in a cross brace failure. So
over-tightening is one problem.

The other problem is under-tightening so you have too much play in the cross brace between the bolt and the -- and the plate.

And then the third would be the bolt is actually missing. In this case the cross brace could just come loose from the entire structure.

Q. Now, with respect to the design of the bolt, we're not talking about the type of bolt that attaches a license plate onto the back of a car, are we? We're talking about a substantial heavy duty bolt, maybe two inches or thereabouts in diameter?

A. For the new design they are two-inch bolts, correct.

Q. What are they for the old design?

A. I --

MR. MCGLOTHLIN: If the counsel doesn't object to that answer as being somehow proprietary.

MR. BUTLER: I don't think there's a confidentiality problem with it.

A. I believe the old design had a smaller nut. I'm not certain of the dimensions of that nut though.

Q. But still, in terms of the environment in which they would have been operating, would you agree with me that it's unlikely that high wind would cause a
substantial bolt to snap?

A. Unlikely?

Q. Yes.

A. I would agree that it's unlikely.

Q. Would the more likely scenario in terms of the bolt being the source of a poor connection of the cross brace leading to the tower to collapse or fall be the fact that the bolt is pulled free, is loose and has either pulled free or is no longer part of the connection?

A. No. I believe that structural failure in this case appears to have occurred both when the nut came completely loose and also when the nut was loosened such that there was too much play between the cross brace and the nut and the plate. So both of those situations appeared to result in reduction in structural strength of the structure.

Q. Okay. With respect to your new information, can you tell me which tower the locknut was found on?

A. No, I don't have the specific tower number.

Q. Or which connection at the cross brace that was involved?

A. Yeah. I would refer that to witness Jaindl. She would know the answer to that.

Q. Is she the source of your new information?
A. Correct, yes. I had asked her that question. I had a series of questions when I was preparing for my testimony. That was one of the questions.

Q. And when did you receive the new information?

A. That particular piece of information, as I described earlier, I received yesterday after I asked her that specific question.

Q. Tell me again the question you posed that brought that information to light?

A. I asked her if any of the loose or missing nuts post-Wilma were on the new structure designs, and she said yes. And then I asked what the nature of that was. And in the course of investigating that, she determined the type of nut that was used on that structure. That's all the information I know.

Q. Bear with me because I didn't understand your answer. You said that you asked her if any of the loose notes were off the new design?

A. If any of the loose and/or missing bolts were on the -- excuse me, the older designed structures. I misspoke. I'm sorry.

Q. Okay. And did she reply that, yes, there were loose nuts -- loose bolts on the old structures or did she specifically say one of them had a locknut on it?

A. No. She requested one of her employees to
investigate the answer to my question, and then this person came back with the answer. And then we delved into it a little bit further and she investigated the characteristics of this particular tower and it was identified, the characteristics of the nut that came loose for this tower.

Q. Have you seen references to what FPL describes as its asset management system?

A. The transmission asset management system?

Q. I think it's more a general -- a more general asset management system.

A. I am familiar with a system called Orion which is the asset management system for the transmission structures.

Q. I refer to the system of records that FPL uses to base future decisions for inspection frequency. Are we talking about the same asset management system?

A. No.

Q. Okay. Well, let's just assume for the purpose of the question that FPL has a record keeping system that it regards as the -- as the basis for future inspections. Would you believe that -- would you be of the opinion that the discovery of 31 transmission towers with loose or missing cross brace bolts should be the subject of an entry into that record keeping system, the
one that governs future inspections?

A. The question is -- I'm sorry, I'm trying to understand. You're saying that there was loose and/or missing bolts that were discovered that were not entered into this asset management system?

Q. Yes.

A. And the question is, should they have been entered into this asset management system?

Q. In your opinion.

A. In my opinion, it would be more desirable to have all of the activities associated with a specific structure or specific asset in the same database. However, it is extremely rare for utilities to have such systems that consolidate all of their activities into a single database.

So ideally, yes, I believe that that would be desirable. Do I think that most utilities have that systems that do this? Absolutely not.

Q. Well, in terms of whether the discovery in 1998 was of sufficient significance to warrant being placed in the record keeping system that governs future inspections, do you think it was sufficient and significant to warrant being included?

A. No, I don't think that's how the process works for that particular system.
Q. So the significance of the import of a maintenance issue has no bearing on whether it belongs in the records that govern future inspections?

A. For this particular system, as I understand it, that's correct. The severity is not relevant to whether it gets entered into the system or not.

Q. What would be relevant in your estimation?

A. Whether the activities that -- whether the processes that are related to this system capture -- or they're the source for this particular type of data.

For example, if their asset management system, their Orion system had scheduled a climbing inspection and that climbing inspection had resulted in the identification of the loose bolts, then yes, I would absolutely say that that result should be recorded into this system. But in this case that's not what happened. What happened was a different process identified these problems and documentation was kept according to that separate corporate process.

Q. You mentioned something called Orion. What is that?

A. Orion to my understanding is the database that FPL uses to keep track of their transmission structures in terms of the types of structure, the locations, maintenance activities, condition, that type of
Q. Do you know whether or not the discovery of loose and missing cross brace bolts on 31 conservation corporate towers was entered into the Orion system?

A. No, I don't.

Q. You don't know?

A. I don't know for sure. The person that did the transmission section in the report probably knows, but I haven't asked that specific question.

Q. I'll turn now to KEMA's evaluation of the public inspection program. One aspect of the program that KEMA evaluated was the thermovision component. You're aware, are you not, that those inspections apply only to the feeders on FPL systems?

A. Yes.

Q. And I found the reference that I was missing a while ago. Referring to page 35 of the report, is it KEMA's estimation that some 845,000 laterals are not the subject of such visual inspections through the thermovision report? It's the third full paragraph, line 4.

A. Is there a question?

Q. I asked you to confirm that KEMA's estimate is that some 845,000 laterals are not encompassed within the thermovision visual inspection.
MR. BOWMAN: I'm sorry, Joe, do you mean lateral poles?

MR. McGLOTHLIN: I do.

A. Yes, that's an estimate. 845,000 lateral poles is the number that KEMA is using as an estimate for our calculations. This includes FPL poles and non-FPL poles. So this is the entire pole population that FPL has equipment on.

Q. I'll refer you now to page 32 of the report. Within section 4.2 and below the little table of columns for voltage and number of feeders, this statement appears: "It shows that the average percentage of feeder poles inspected by thermovision that are effective is 0.52 percent." Do you see that statement?

A. Yes.

Q. But above that I want to refer you to another paragraph, the one that begins "for the poles." Do you see that?

A. Yes.

Q. The visual inspections reveal whether there are broken, cracked or severely deteriorated cross arms, split pole tops or conditions that would call for pole replacement," dash, "the definition of defective poles," in quotes, "and this process." Do you see that?

A. Yes.
Q. Now, it's true, is it not, that the limitation on a visual inspection is that a visual inspection can detect only obvious defects such as broken, cracked or severely deteriorated cross arms, et cetera, et cetera?
A. Yes.
Q. But would you agree with me that by defining defective poles in this process to consist only of broken, cracked or severely deteriorated cross arms, the 0.52 percent failure rate is confined to the very obvious defects that the visual inspection is capable of detecting?
A. Yes.

MR. BUTLER: I would object to the question as being predicated on facts that aren't in the record. Mr. McGlothlin did not read the full list of the types of conditions that were within the definition of defective poles in his question.

MR. McGLOTHLIN: Well, that's interesting.

CHAIRMAN EDGAR: Mr. McGlothlin?

MR. McGLOTHLIN: Well, first of all I believe it was just answered. But I don't know what I left out.

MR. BUTLER: Let me try -- it will probably make this go faster, just express more clearly my objection.
Unless I missed it in your question, Joe, you just referred to broken, cracked or severely deteriorated cross arms as being what would be within the definition of defective poles in the last question that you posed, whereas the report goes on to also refer to split pole tops or conditions that would call for pole replacement.

MR. McGLOTHLIN: I'm perfectly happy to include that within the definition of defective poles that the KEMA report uses as the basis for the calculation of a .52 percent failure rate.

BY MR. McGLOTHLIN:

Q. And as modified, is your answer yes, Mr. Witness?

A. Yes. A visual inspection can only detect problems that can be identified through visual optics. So that's the way it has to be.

Q. And that means, for instance, that there may be poles which are deteriorating below ground level that would not be within the definition of defective poles that is used for the purposes of calculating this, this .52 percent rate?

A. No. I think it would be in this definition, but this particular inspection would not detect that. It says conditions that would call for pole replacement.
Deterioration below ground line, if it's severe enough, would call for pole replacement. But this particular process would not be able to identify that.

Q. Looking at the same paragraph, wouldn't you agree that the items listed there are those which, according to your own statement or KEMA's only statement, visual inspections can reveal? It says the visual inspections reveal whether there are broken, cracked or severely deteriorated cross arms, split pole tops or conditions that would call for pole replacement. Isn't that all modified by matters that visual inspections can reveal?

A. No. I think that it's possible if a pole is leaning in the wind and rocked back and forth and part of the pole was naturally excavated and a visual inspection saw that there was below ground line deterioration where there's natural excavation that has occurred, then this process would identify this as a defective pole.

But it's not contested that potentially there are deterioration that can occur in poles internal or below ground line that potentially this process cannot identify. This is not contested.

Q. You're not contesting it?

A. No.

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Q. Do you contest, then, the fact that there would be defective poles that would not be incorporated within the definition of defective poles in this process?

A. No. I think that there would be defective poles that potentially could not be identified by this process. But the definition is any pole that would require replacement.

Q. I'll refer you to page 84 of the report, Dr. Brown. There's a short paragraph under the caption "Quality Processes." Do you see that?

A. Yes.

Q. And the last sentence in that paragraph says, "Thirdly, the quality systems of the FPL pole inspection and treatment vendor are such that it is reasonably ensured that inspected wood poles requiring treatment or replacement are identified as such." Do you see that statement?

A. Yes.

Q. Now, the quality systems of the -- first of all, there's a reference here to the inspection and treatment vendor. We're talking here about the Osmose program, are we not?

A. Yes.

Q. And the quality systems include the
specifications FPL has imposed on that program, documentation that spells out the steps that the -- each inspection is to encompass such as sounding, excavating, boring and reporting; is that correct?

A. Yes. Just to be clear, the Osmose process does not require boring of every pole. It requires boring if deemed necessary. So if they do excavation and sounding and they believe that there's a reason to bore, then they will bore. But it is not done on every pole.

But, yes, the quality systems would include documentation of what you're going to do and then proof that you actually did do what you said you were going to do.

Q. And that proof would be the information that is generated in a report that is then placed into FPL's database? Is that one of the quality systems to which you refer?

A. Yes.

Q. And is it based -- and is the last statement, which is that the quality systems are such that it is reasonably ensured that inspected wood poles requiring treatment or replacement are identified as such, based upon the existence of the matters we've just discussed?

A. Yes.
Q. Now, this applies -- this statement applies to the Osmose program. Is it -- isn't it true that that similar statement was made by KEMA with respect to either the thermovision visual inspections or the hazardous assessments performed by workmen?

A. Yes. I will say, though, that in context, when we initially engaged Florida Power & Light to do this study, the quality processes that were going to be -- that we were going to investigate included issues related to procurement. So internal specifications for products that Florida Power & Light was going to purchase, quality systems of the vendors.

So our quality auditor went to the wood pole manufacturing plant, the concrete pole manufacturing plant, and then also audited the Florida Power & Light's purchasing department. This was the initial scope of work, is are the -- is the equipment that Florida Power & Light is purchasing, can this be reasonably assumed to be high quality equipment?

And the results are, yes, Florida Power & Light has outstanding quality systems internally. Our quality auditor then actually had a free afternoon and decided to do a quality audit on the Osmose program. Not because it was core to the findings of the report, in fact it was not in the original scope of work. It
A. I'm not certain for the thermovision program. I know that we did get good data from the thermovision program. So possibly; possibly not.

For the daily work activities, it is true that these are handled locally and are not -- the hazard assessment forms are not entered into a central database. This is common for utilities around the country and around the world.

And so these quality systems are not as audible and it's not as easy to compile the date for uses other than for what they were intended.

However, I will say that in terms of data, I mean, I've worked with dozen and dozens of utilities...
around the country and around the world, and the availability of quality data at FPL is much better than almost every other utility that you can imagine. And so at least in terms of the job of a consultant in identifying how you're performing and how you're performing over time, the quality of data and the amount of data for Florida Power & Light is just outstanding.

In fact, the ability of people to generate arguments against Florida Power & Light is in part because they collect such good data compared to the rest of the industry. So just from my perspective, from the consultant's perspective and our ability to generate a quality report is a function of Florida Power & Light's good data collection processes. However, in the case of the hazard forms, it's a paper process.

Q. I believe at the outset of that statement, there might have been indication that the answer to my question was, no, the other programs do not have the same quality systems as the Osmose. Is that a fair statement?

A. No. I do not know for thermovision, but for the hazard assessment program, these are not entered into a common -- into a central database. The quality systems that are handled locally for the hazard assessments, I don't know the answer to that.
Q. You don't know whether the thermovision program results in entries to the central database of the same type of information that the Osmose program generates?

A. No, I don't know the answer.

Q. Okay. Turn to page 34 of the KEMA report, Dr. Brown. Table 4-3 shows creosote pole inspection results from the Brevard area by Osmose in 2005. Now, is it your understanding that the Osmose program was focused on and limited to the Brevard area in 2005?

A. Yes, I believe this particular targeted area started in August of 2005.

Q. It shows 1,620 inspections in 2005. Do you know whether that's the total for the -- for the year?

A. I don't believe that's the total for the year. I believe that's the total for the Brevard area which was in 2005, from August through December, is my understanding. The decision to focus on creosote poles in Brevard occurred in August of 2005.

Q. Did you hear earlier testimony to the effect that the number of inspections conducted by Osmose in the 2000-2001 time frame was on the order of magnitude of 28,000 inspections per year?

A. Yes.
Q. So would you accept that as ballpark accurate for --
A. Subject to check.
Q. Okay. And you are aware, are you not, that in more recent years the total number of inspections by Osmose has been reduced to less than 10,000 in some years and more like 7,000 in the year 2004?
A. Yes. And I will also add that when I look at other utilities -- I've done a lot of consulting in the area of reliability programs -- and one of the biggest problems that I see at most utilities around the U.S. is the inability to transfer budgets from one reliability program to another reliability program. They're siloed and you don't have, when one particular program is very effective and another is not, the ability to shift budgets from one program to another.

So the ability of FPL to actually do zero-based budgeting in every year to determine the required budgets for each program, this is best practice in the industry and it's something that many utilities cannot achieve.

And so yes, the number is lower and in my opinion, I applaud them for their ability to manage their reliability programs in this manner.

Q. Do you know for a fact that the lower number
of inspections was the result of a conscious decision to shift resources elsewhere?

A. I know for a fact that reliability trended well during this time period. I also know for a fact that I did some investigation actually on other utilities and how pole failures contribute to overall customer reliability experience. And here is what I came up with, if I can find it here.

MR. McGLOTHLIN: Excuse me. The pending question is whether the witness knows for a fact that the reduction in Osmose inspections resulted in a conscious decision to shift resources to other programs. And I really -- I understand the Chair's indulgence in terms of giving witnesses some leeway, but I think this is a little over the top.

A. No.

Mr. McGlothlin, I'll respond by saying that although I find it a little embarrassing to talk about myself in the third person, but in my opinion the Chair has given latitude to the parties, the attorneys and the witnesses, and I have done that purposely.

However, I started this morning by asking -- by noting the time frame that we have, which is directly related to the statutory framework within
which we are working, and asking all of the parties to be focused and concise in their questions.

I will raise that again and make the request that we strive for focus and concise questions and answers. And I will probably make that request again.

So I would ask that you keep your questions concise, and I would say again to the witness as I have said previously, if you can answer with a yes or no, please do so. You may elaborate and I will continue to allow elaborations so that you feel that you have answered the question in the way that you need to. Mr. McGlothlin.

MR. McGLOTHLIN: Chairman Edgar, may I ask that you rule that any elaboration be needed in terms of the context of the question presented and not --

The answer should be responsive to the questions that are asked.

MR. McGLOTHLIN: Thank you very much.

BY MR. McGLOTHLIN:

Q. I believe you answered no. Is that where we are?

A. I do not know for a fact that reductions in the pole inspection program resulted in corresponding
increases in spending in other programs.

Q. Throughout the KEMA document, when describing another component of the pole inspection processes that KEMA evaluated, the words "touch" and "touch point" occur. Did those terms originate with KEMA or were those supplied by FPL to KEMA as a description of FPL's view of what they were doing?

A. I do not know the answer to that question. The person that did the section -- the KEMA employee that was responsible for this section was the first person that I heard that term from. But where it originated, I do not know.

Q. Turn to page 35 of the KEMA document. On page 35, in the second paragraph, the author of this section of the report combines three components that he refers to as 199,000 touches, 69,000 thermovision inspections, and 12,000 Osmose inspections to arrive at a total of 280,000 total. Do you see that treatment?

A. Yes.

Q. And is it the intent of this paragraph or this section to communicate that on an overall basis, when one combines these components, one arrives at 280,000 total inspections?

A. No.

Q. What is the intent? What is the significance
of the 280,000 figure?

A. The intent is to provide a general indication as to the level of activity that could allow a pole to be investigated with the possibility of identifying deterioration or other types of problems on those poles.

Q. So the word "opportunities" occurs in this document also. Is it then more accurate to say that the 280,000 figure relates to total opportunities for observations of deterioration?

A. Yes. The section that you're referring to goes on to look at just the safety inspections that are required. And I believe that the safety inspections are an effective way to identify deteriorated poles. And it tries to look at the equivalent inspection frequency, just looking at the hazard assessments on the lateral pole population, which is the population of poles that would have less frequent work done on them and then also isn't subject to the thermovision program.

So the report tries to look at the worst case situation which would be the laterals worst case because there's fewer activities that are done on these poles and they also don't have the thermovision program, and so that is why the actual statistical analysis is done for the lateral poles, only looking at the hazard assessments.
Q. Those estimates do not include either the visual inspections or the Osmose inspections?
A. That's correct, they do not include those.
Q. Okay. You would acknowledge, would you not, that by combining these three categories in arriving at a figure of 280,000, there is the appearance, at least, that the author or whoever did this arithmetic is treating these as coequal and static in terms of the quality of observations being made?
A. I don't agree with that.
Q. So there's no intent to treat these as -- as on the same plane of quality?
A. Of course not. If you read the report, it's clear that the author does not consider them equal.
Q. Okay. Now, the effort to quantify the opportunities afforded by the hazard assessment is really an exercise in probability, is it not?
A. Correct.
Q. And would you agree that this exercise in probability was necessitated by the fact that those hazard assessments are not maintained in a database of information that would allow one to determine factually the extent to which the hazard assessments are effective in inspecting poles?
A. Yes.
Q. Would you also agree that this exercise in probability is dependent upon certain assumptions?

A. Yes.

Q. At page 35, the author states that one such assumption is that the same pole is not touched more than once over this period. Do you see that?

A. Yes.

Q. And said differently, the assumption is that each, quote, touch point covers or brings in to the count a separate pole and none is duplicated with that one touch; is that correct?

A. Excuse me for a moment while I review -- these were my personal assumptions in this section, and so I'm familiar with it. But I'd like to refamiliarize myself with it.

The answer to your question is no, it does not assume that the same pole is not touched more than once in this period. The calculations allow for the fact that you're going to potentially touch multiple poles. That is precisely why this probabilistic technique is used.

Q. There was a double negative in that answer that I'm tripping over as I try to understand your answer. The assumption is that the same pole is not touched more than once; is that correct?
A. No, that is not correct.
Q. Okay.
A. The assumption is that one pole is touched per inspection. That's a conservative assumption because oftentimes the adjacent poles would also be inspected.
Q. Looking at the same sentence, "Third, it is assumed that each touch point is examined as a single pole."
A. That is correct. That is different than what you asked me to agree to.
Q. Well, all right. My question refers to this sentence and this assumption.
A. Each touch point examines a single pole. So if you have a hazard assessment on pole 12, then that would be one touch point. If three years down the road you have another hazard assessment on pole 12, that is a separate touch point that addresses the same pole. So the calculations do allow for the fact that certain poles will be revisited multiple times. If not, then you could guarantee that all poles would be inspected.
Q. Turn to page 31, if you will. At the bottom of page 31, the author states, "These pole touch points totalled about 199,000 in 2004. This number of touch points excludes storm-related services and each pole touch point may not be for a unique pole."

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Is that consistent with or inconsistent with
the assumption on page 35?

A. The assumption on page 35 is conservative with
respect to this. If you go out and you're doing work on
a pole, this pole is connected physically to other poles
through wires. So oftentimes the hazard assessment will
look at the pole that you're going to work on and you
might also do a hazard inspection on poles that are
nearby. So that these nearby poles, if they're -- if
they have problems aren't going to fall on top of you.

And so when I made my assumptions, I assumed
that you did only look at a single pole which makes the
estimate conservative. I then go on to say if I assume
that the average inspection covers two poles instead of
one pole, then the values change.

And so I come up with a range of the
percentage of poles that will be inspected over a
certain period of time based on the uncertainties of the
assumptions, including how many poles are looked at with
each hazard inspection.

Q. And this exercise in probability quantifies
the number of times, to use the author's testimony, a
pole is touched, which I believe you said does not
necessarily equate to an inspection but is an
opportunity for observation, correct?
A. No. These refer to hazard inspections, which specifically requires the investigation for deterioration including excavation around the ground line. So these are your poking screwdrivers in the wood to make sure it's not rotten, you're rocking the pole back and forth to make sure that it's sturdy, you're looking for external signs of rock and you're excavating and looking for below-ground signs of rot. These are very effective at determining deterioration on poles and can be considered an effective inspection activity.

Q. And the assumption is that each of those touches involves the performance of inspection of the caliber that you just described?

A. Yes.

Q. In other words --

A. Yes.

Q. Okay. And is it -- never -- strike that.

If I could just have a moment to see if I'm through.

Would you agree with me, Dr. Brown, with respect to these hazard assessments that the assumption that each such touching of a pole derives from the practices of -- that are prescribed by FPL as opposed to any documentation you've seen that FPL enforces those requirements?
A. If I understand your question correctly, the assumptions that I made in the report are that FPL follows its own documented processes. But as part of the KEMA engagement, we did not audit these practices.

Q. So you've seen no documentation that verified or validates the assumption that each such touch results in the quality inspection that is part of your assumption?

A. Correct. We're assuming that they do what they have documented.

MR. McGLOTHLIN: I have no further questions.

Thank you, Mr. McGlothlin.

Mr. Perry?

MR. PERRY: I have no questions.

Thank you, Mr. Wright?

MR. WRIGHT: Thank you, Madam Chairman. I have not -- not that many.

CROSS-EXAMINATION

BY MR. WRIGHT:

Q. Good afternoon, Dr. Brown.

A. Good afternoon.

Q. I just want to start by going over a couple of things we discussed in your deposition last month.

Is it a conclusion of the KEMA study that pole breakages were approximately as would have been expected
in Hurricane Wilma?

A. Yes.

Q. As to the causes of pole breakage, is it the study's conclusion that tree-related and vegetation-related pole breakages were approximately as expected?

A. Yes.

Q. And the same question for debris-related breakages?

A. Yes.

Q. And the same question for wind-related breakages?

A. Yes.

Q. And, finally, the same question with regard to pole deterioration-related breakages?

A. Yes.

Q. Thank you. Would it be fair to conclude from -- from this and from the KEMA study that the pole breakage event, substation outage events and everything else you looked at, that all of these events resulted in outages of approximately the magnitude, frequency and durations actually experienced by FPL as a result of Hurricane Wilma?

A. I'm sorry, I don't understand the question.

Q. I probably left a word out.
Would it be fair to conclude that the breakage event that we just kind of went over resulted in outages of approximately the magnitude, frequency and durations that would have been expected from those, from Hurricane Wilma?

A. Yes.

Q. Thank you. You may recall we had a discussion about knots in your deposition?

A. Yes. And I know the conversion factor now.

Q. Okay. Would you confirm to the Commission that the conversion factor is 1.150779 miles, statute miles, per nautical mile per hour?

A. Yes, that is the conversion factor from miles per hour to knots.

Q. Thank you. I'd like to get -- if we could, I'd like to get that into the context of the Saffir-Simpson scale and then also into your estimates, as I recall from your deposition, of what the gust speeds are associated with the Saffir-Simpson scale. If we could, just start with category 1. Saffir-Simpson is 74 to 95; is that right?

A. Yes. I don't have the actual numbers with me but I do have my graphics that I presented at the staff workshop.

Q. Okay.
A. And those graphics are based on the Saffir-Simpson scale numbers.

MR. BUTLER: I'm sorry, Scheff, for clarity when you say 74 to 95, you're talking about statute miles per hour?

MR. WRIGHT: I am, yes.

Q. And that is how you understood the question, Dr. Brown?

A. Yes.

Q. And then for category 2 is 95 to 110 statute miles per hour?

A. Yes.

Q. And it's your -- to try to short circuit this -- it's your opinion that an appropriate adder to the sustained wind speed -- which is what we've just been discussing, correct?

A. Correct.

Q. -- to get to the corresponding 3 second gusts is 25 percent?

A. Based on the literature search that I have done, the best accepted conversion factor from one minute sustained average wind speeds, which is what the Saffir-Simpson scale is supposed to be based on, and 3 second gusts, which is what most construction standards and safety standards are based on, is 25 to 30 percent.
Those are -- that's the range of the research numbers, and so a conservative number is 25 percent based on one-minute sustained wind speeds.

Q. Thank you. So that just -- I just want to put numbers into the record that match from -- from your graphic. So that the gust range for category 1 storm is approximately 96 to 120 miles per hour?

A. Yes.

Q. And the gust wind speed for -- for category 2 is approximately 120 to 138?

A. Yes. Although the literature always says that gusts are very localized phenomenon and that these averages can vary wildly. But as a general range, yes.

Q. Well, I was intending to discuss an estimated range of 3 second wind gusts associated with each of category 1 and category 2 as defined with the Saffir-Simpson scale. And that's what we did, right?

A. Yes.

Q. Okay. Madam Chairman, I've asked Mr. Poucher to hand Dr. Brown and the rest of the folks in the room -- I've got more if we run out -- a copy of a document titled "Tropical Cyclone Report, Hurricane Wilma 15-25, October 2005." I would ask that this be marked for identification. I believe it would be 143.

Yes, 143.
MR. WRIGHT: Thank you.

(Exhibit 143 marked for identification.)

BY MR. WRIGHT:

Q. And Dr. Brown, you've seen this document before, have you not?

A. Yes.

Q. And you have read it, as I understand it, from your deposition?

A. Yes. I would say that the KEMA report came out prior to this report being published. Right.

Q. Okay. And you recognize this as the report of the National Hurricane Center, the standard tropical cyclone report that they prepared following Hurricane Wilma?

A. Yes.

Q. Okay. And am I correct that KEMA did not update its report after receiving the National Hurricane Center's tropical cyclone report for Wilma?

A. Correct.

Q. Thank you. Dr. Brown, is it correct that the KEMA report does not comment on preventable versus nonpreventable tree-related damage?

A. I believe that there is -- this is a little bit different than our deposition, but I believe that there is one sentence that appears in the KEMA report
that says of the 1,742 records for the forensic analysis, there were three records that indicated preventable tree damage and, therefore, it was insignificant.

I actually in preparation for this revisited the actual core dataset and found that there were actually only two records that were preventable tree damage, and both of these were nonFPL poles.

So in terms of the data that the KEMA report was using for Hurricane Wilma, the number of recorded preventable tree failures was zero.

Q. Okay. And that was based on the reports or the information compiled by other forensic engineers, not KEMA; is that accurate?

A. Correct, yeah. The system had been restored by the time KEMA was engaged by FPL.

Q. Are you familiar with a term "expected unserved energy" or, as I believe you use a similar term in your textbook, "expected energy not served"?

A. Yes.

Q. And is that -- could you describe that for us briefly?

A. Expected energy not served or energy -- unserved energy is typically the measure that is used when doing capacity planning for generation. So you'll
look at the number of generators that you have on your
system and you'll look at the expected demand of all of
your customers in aggregates for each hour of the year.
And you'll look at things like forced generator outages
and scheduled generator outages, and you'll do a
probabilistic assessment to look at the number of hours
per year or the probability over ten years that the
amount of generation that you have in your system will
not be able to meet the demand of your customers. And
if you aggregate the energy that you expect to exceed
your ability to produce, then this is defined as the
expected energy not served.

Q. Thank you. And will you agree that while it
is not common, there are some utilities in the
United States that use expected unserved energy analysis
to at least rank distribution programs or options?

A. A few do. It's not common.

Q. And among those that do are some in California
and Mid American Energy?

A. Correct.

Q. Thank you. Are you familiar with -- with
literature that goes on and assigns values based on the
customer's value of experiencing outages to the expected
unserved energy as an analytical tool?

A. Yes. In fact, in the book that I published, I
have done an extensive literature survey on the customer value of unserved energy. It's not my own surveys that I've done. I'm complying research that other peoples have done and they're based on typically customer surveys.

Q. Thank you. What -- what time period did you do your survey?

MR. BUTLER: Excuse me, I'm going to object to this line of questioning. I've let it go on for a little while. It came up in the deposition. I allowed it there because it was discovery and wanted to allow Mr. Wright opportunity to do -- you know, cast a wide net.

But here I don't think that what he is asking about has any reference to anything in either Mr. -- or Dr. Brown's testimony or the attached KEMA report. And I believe it's really beyond the scope of cross-examination.

Mr. Wright?

MR. WRIGHT: Well, I believe it ultimately goes to -- to FPL's overall program and what they do. And Ms. Williams testified earlier that FPL does not do any value studies and I think it's fair to probe this with Dr. Brown.

All right. Mr. Butler, I note your
objection. Mr. Wright, I'm going to allow it, but at the risk of being too repetitive, I'm going to ask again concise and focused --

MR. WRIGHT: I -- Madam Chairman, I am so endeavoring.

BY MR. WRIGHT:

Q. So I think -- I think you're allowed to answer my first question which was what was the time period of the literature search that you did.

A. My book was published I believe in 2003. And so it would have included all of the research up until 2003.

Q. Thank you. And in general terms can you give the commissioners an idea of what the values cited in that literature were?

A. Based on customer surveys, residential costs of unserved energy range from about a dollar per kilowatt hour -- or per kilowatt interrupted to about $10 per interrupted kilowatt hour.

My personal opinion is that if you actually ask the customers to pay for programs that would improve their reliability such that these numbers would imply cost-effective program, that very few customers would actually stand by the numbers that they report in the survey, and this includes industrial customers as well.
I have many stories of utilities going to customers with reliability problems using actual costs of loss production numbers, and you offer to perform reliability work that would, presumably based on these factories' numbers, would have a payback of six months or nine months. And almost always the factories will refuse to pay for those reliability improvements. So I really personally don't place a lot of value in all of these customer surveys that have been done.

Q. With that understanding, do you have a corresponding number or typical number or range of values for commercial and industrial customers?

A. Maybe $30 per kilowatt hour.

Q. Thank you. Am I correct that your study, the KEMA study, did not evaluate conductor failures but only pole failures?

A. Correct.

Q. Thank you. Following up on a couple of questions that Mr. McGlothlin asked you, I believe that in discussing the entry of data regarding bolts and things like that into transmission management database things, I wrote down that you said most utilities do not have such information; is that accurate?

A. That's right. Most utilities, their systems, their maintenance management systems, would not be able
to have things down to the bolt level.

Q. Thank you. And my question is, then, do some utilities have the information down to that level?

A. I am not aware of any.

Q. Okay. In response to some questioning by Mr. McGlothlin, I believe you made the statement that FPL's reliability trended well over the last few years. Is that an accurate characterization so far?

A. Yes.

Q. Was that excluding the hurricanes?

A. Excluding the hurricanes.

Q. You also discussed briefly with Mr. McGlothlin issues relating to spending on reliability programs. Do you know FPL's total spending on all of its distribution reliability programs, say, during any time period ending in 2005?

A. No. The KEMA engagement did not look at any budgetary figures.

Q. Thank you. I think that I have one more question and it is this: You've conducted a survey of utilities as part of your study?

A. Yes.

Q. And I think you addressed -- you surveyed nine utilities -- you sent a bunch of surveys and got responses from nine; is that right?
Q. And my final question for you then is, do you endeavor to survey any public service commissions or utilities commissions or similar agencies within the same variables?

A. No.

MR. WRIGHT: Thank you, that's all I have.

Thank you, Mr. Wright.

Mr. Kise?

MR. KISE: Thank you, Madam Chair. I think I can be done in the 15 minutes that we have left. I was hoping that that was the case.

MR. KISE: I think I can do it.

CROSS-EXAMINATION

BY MR. KISE:

Q. Good afternoon, almost good evening, Dr. Brown. I just have a few questions.

First let me direct you to page 3. It's just a clarification on your report, page 3 of the KEMA report in the beginning of the first full paragraph there. KEMA -- you see where I'm reading, "KEMA's investigation concludes" in the beginning of that first full paragraph on that page, executive summary. Do you see where I am?

A. Yes.
Q. "KEMA's investigation concludes transmission substations, et cetera, during Wilma performed as expected and in accordance with FPL standards."

First, when you say as expected, as expected by whom?

A. This is expected -- as expected based on how they performed based on prior hurricanes. And so we were able to again, based on the data that FPL has collected as far back as Andrew, the exposed area, the number of poles that were exposed to hurricane force winds and the hurricane category in this case, and then we were able to look at the relationship of -- for Florida Power & Light damaged poles versus hurricane size and strength. And if we had used all of the data points without Wilma in it predicted how many poles would have failed during Wilma, it would have been pretty much dead-on.

Q. And that was based, if I'm understanding your answer, that was based on data that FPL provided to you, correct?

A. Correct.

Q. Okay. And the last part of the sentence, "In accordance with FPL standards," that -- that is as it says, just in accordance with the way FPL has adopted its own standards, not in accordance with any other
A. Exactly. FPL, as I mentioned before, they build their system much stronger than most utilities in the U.S. And so if they actually built their system to standards that most utilities build to in the U.S., then you would have expected many more pole failures during Hurricane Wilma. So it was as expected given their design standards, but if they had design standards that were typical, failures would have been much more.

Q. Typical of utilities throughout the U.S.?
A. Correct.

Q. Okay. But you would agree with me that most utilities throughout the U.S. are not in Florida? Simple proposition, they're not in Florida, right?
A. Correct.

Q. They're not in a state as prone to hurricanes as Florida, right?
A. Correct. However, in our survey we asked utilities that are in hurricane-prone areas what design standards they build to. Of the nine respondents, only one other utility's also built to stronger standards than required by safety standards. So even in Florida, most build to the minimum safety standards.

Q. And -- I'm sorry.
A. I'm done.
Q. And that one was located where?
A. In Florida.
Q. The one you referred to that builds to higher standards was actually located in Florida?
A. Also in Florida.
Q. Also in Florida. Was it an investor-owned utility to your knowledge?
A. I do not recall who --
Q. Do you know the name of --
A. -- the utility.
Q. Do you know the name of that utility?
A. The survey -- we did the survey under a confidentiality agreement.
Q. Fair enough. Fair enough.

On that same page moving down towards the section on transmission performance, just another point of clarification. Do you see where I am on transmission performance on page 3?
A. Yes.
Q. The second full sentence there, "These facilities met the required design codes at the time of installation." Do you see where I'm reading?
A. Yes.
Q. Okay. "These facilities met the required design codes at the time of installation but different
from current designs in place now at FPL. This was the primary contributing factor for these failures."

My question is -- or a couple of questions on that. At the time of installation, do you know what the time of installation was? At what time are you referring to, meaning the time of installation? What year?

A. I would have to defer that to witness Jaindi. She'll know the answer to all of those questions.

Q. Fair enough. And "differ from current designs in place now at FPL," when you say now, you mean as of essentially as we're sitting here today?

A. Roughly at least in the last decade. They don't put any single wood pole unguide structures in the ground at lower setting depths than they currently do now. So it is true that it is not the design standard now, but it hasn't been the design standard for many years as well.

Q. But was it the design standard in 2004?

A. In 2004?

Q. Was -- in other words, the current designs in place at FPL, would that encompass 2004?

A. I don't know.

Q. Okay. Do you know --

A. It's likely that the current design standards
were -- are similar today to what they were in 2004.

Q. Okay. And those would be different than from the ones that you're referring to that met the required design codes at time of installation in that sentence?
A. Correct. These would have been installed 20 years ago or more.

Q. Okay. And that was, in fact, as you say here, the primary contributing factor for those failures?
A. Correct.

Q. So then had they been updated as of 2004 to meet the then current standards, it's likely that they wouldn't have failed, correct?
A. That's correct.

Q. Okay. Moving over to page 4 of the report under distribution performance, in the first full sentence there you reference "FPL gathered extensive forensic data on Wilma pole failures." Do you see where I'm reading?
A. Yes.

Q. And then your conclusions are drawn there, "based on this data." Do you see that?
A. Yes.

Q. Now, is it fair to say that your entire study with respect to distribution performance, pole maintenance, transmission performance and substation
performance, quality processes and distribution
standards, all of that is based on data provided to you
or conclusions drawn from data provided to you by FPL,
right?

A. Most of it.

Q. Okay. What would be the exceptions to that?

A. We did audits to vendors that provide material
to FPL; we did site inspections where we gathered
firsthand information; we inspected the pole retention
yard to verify whether the statistics that were provided
were congruent with what we saw in the pole graveyard.

But in terms of the statistical analysis, the
analyses that are based on numbers, those numbers were
provided to us exclusively by FPL.

Q. Okay. And the site inspections, let me just
ask you one follow-up on that. The site inspections,
what are you referring to? Looking at actual poles,
looking at actual transmission facilities, looking at
bolts? What type of site inspection are you talking
about?

A. Yes, all of that.

Q. All of the above?

A. Yes.

Q. And all of that was conducted

post-Hurricane Wilma?
A. Correct.

Q. Okay. None of the information in your study -- or nothing that you did -- strike all of that. You didn't undertake any study prior to the start of the 2004 hurricane season, correct?

A. Correct.

Q. You did not undertake any study prior to the start of the 2005 hurricane season, correct?

A. Correct.

Q. You did not undertake any analysis of the infrastructure status, meaning poles, transmission facilities, et cetera, prior to the start of the 2004 hurricane season, correct?

A. Correct.

Q. You did not undertake any such analysis of infrastructure prior to the start of the 2005 hurricane season, correct?

A. You mean were we engaged with Florida Power & Light prior to these dates?

Q. Were you engaged to undertake an analysis of these things that are included in your report, distribution performance, transmission performance, pole maintenance, et cetera, prior to the start of the 2005 hurricane season which would have been June 1, 2005?

A. No.
Q. Okay. So then you have no way sitting here to
determine the exact state of repair, the exact
conditions that existed prior to the start of the 2004
hurricane season, correct?

A. Correct.

Q. And you have no way to do that with respect to
prior to the start of the 2005 hurricane season,
correct?

A. Correct.

Q. Your study is drawing conclusions based on
data provided to you all done post-Hurricane Wilma,
correct?

A. All of our analysis was done
post-Hurricane Wilma. The data that was collected by
FPL, a lot of it was collected prior to Wilma.

Q. Certainly. But it was data collected by FPL,
correct?

A. Correct, yes.

Q. And you do not know whether FPL undertook any
additional preventative measures, preventative
maintenance measures prior to the start of the 2004
hurricane season, right?

A. Correct.

Q. And you don't know -- the same would be true
prior to the start of the 2005 hurricane season, right?
A. Correct.

Q. One thing I want to clarify in your prior testimony, if I could, earlier in response to a question. I think you stated at least in sum and substance that you had a high degree of confidence that there was not a loose bolt problem in 2003; is that right?

A. That's correct.

Q. Okay. And that was based on FPL data, correct?

A. Correct. Data that we did not have, that KEMA did not have when we wrote this report.

Q. Okay. And that was also based obviously, responding to the other question, that's all based on post-Wilma inspections?

A. Correct.

Q. Okay. But now I think you also agreed with the examiner that there were, I think, 30 failed transmission facilities and there were loose bolts found; is that right?

A. Post-Wilma?

Q. Post-Wilma.

A. Correct.

Q. Okay. Now, if you had a high degree of confidence there wasn't a loose bolt problem in 2003,
how do you explain all of those loose bolts that were found?

A. My best guess, I don't know is the quick -- is the question.

Q. That will do.

A. That will do?

Q. Unless the chair wants to indulge your answer.

A. Shall I speculate?

Q. No, I would not. I'm not asking for speculation.

I think you've answered the question. Thank you.

Q. I don't know.

A. Correct.

Q. And that was information relative to bolt failures?

A. A variety of things. I went through the KEMA report and all of the documents that I was probably going to be asked about and I took notes for additional clarification and information that I wanted FPL to
provide me, and part of this resulted in information about bolts that were found, bolt issues that were found post-Wilma.

Q. Okay. And you asked other questions during the preparation for your testimony, is that what I'm understanding you to be saying?
A. I -- yes, yes.
Q. Okay. And what types of things were you asking about?
A. Just very specific questions such as if we knew that 31 towers had failed post-Wilma. A follow-up question would be what was the breakdown for new design versus old design. These types of deeper questions than I was able to glean from re-reading the KEMA report.
Q. And did FPL provide responses to all of your questions?
A. Yes.
Q. And did they provide those responses in writing?
A. No.
Q. It was all verbal?
A. Verbal. I wrote them down as we gathered the information.
Q. You wrote them down?
A. Yes.
Q. You kept notes as to the responses to all your questions?

A. Yes.

Q. You kept notes to all of FPL's responses to your questions, right?

A. No, not all of them.

Q. Okay. How many of them?

A. I'm not certain.

Q. Do you have those notes?

A. I have these notes right here.

Q. And are those notes indicative of the responses that FPL gave to your questions?

A. These notes include my notes going through the report that I wanted to be able to quickly review, and then some of their responses are included on there.

Q. Okay. And they only provided you information that you requested, right?

A. Correct.

Q. You don't know what information FPL has not provided you, right?

A. Correct.

Q. You have not, yourself, searched all available information in FPL in performing your analysis, right?

A. Correct.

Q. You obviously had to rely on them to answer
your questions with data that they provided to you, right?

A. Correct. However, I will say -- and I said this in my deposition -- FPL was very forthcoming with the data. We would continually ask for additional data where we felt there were gaps, and they were quite accommodating. The amount and quality of data that they had was very good. And from my perspective as a consultant, I would say that they were about as helpful as they could be with providing good data and complete data to us.

Q. But I think you just said there's no way for you to know -- it's impossible for you to know what information they did not give you?

A. Correct.

Q. Okay. Turning briefly to page 31 of your report, down at the bottom there it references this Osmose inspection plan. The last -- the second to the last paragraph beginning in August of 2005; do you see where I'm referring?

A. Yes.

Q. Okay. And it indicates in sum and substance the conclusion to be drawn from that is there was a substantially higher than industry average failure rate based on that -- those inspections, right?
A. For this particular area?
Q. Right, for that particular area.
A. Correct.
Q. Okay. And you do not know if, in fact, the poles that failed in Wilma, for example, were subjected to this Osmose testing prior to Hurricane Wilma, do you?
A. No.
Q. Okay. And this indicates that FPL here was specifically targeting areas with older pole population; is that right?
A. Yes. And in those areas only looking at the creosote poles.
Q. Right. And do you know how it is that FPL went about identifying which populations -- which poles were older as opposed to the newer ones? How they went about determining -- if they're targeting areas with older pole population, how did they go about doing that?
A. I could speculate but I don't want to.
Q. I don't want you to do that.
Moving over quickly to page 34 of your resource -- well, let me ask you one question on the older pole. Is it fair to say FPL based on the conclusion that they were targeting older pole populations, is it fair to conclude at least based on information you've been given that they had some manner
of determining which poles were older as opposed to which ones were newer, right?

A. Yes.

Q. Okay. Turning to page 34 again. I'm sorry.

Mr. Kise, I'm going to break in. I had said earlier that we would be breaking for the day at -- let me finish -- at 5:15, and we will be in a few minutes.

So I will give you the option of stopping at this point and beginning in the morning or two to three more minutes.

MR. KISE: I think I can do it in two or three more minutes.

BY MR. KISE:

Q. Just on page 4 there, Dr. Brown, the inability to make conclusions on the condition of different types of poles at the bottom there, do you see that?

A. Yes.

Q. And it indicates that the current inspection program is not designed to collect data on the entire population of poles. Do you see where I'm reading?

A. Yes.

Q. But it would be possible to collect that data, right?

A. Yes.
Q. But they just haven't done it, right?
A. Recently they've made requests to augment the Osmose program to collect this type of data. So not only is it possible, but FPL is pursuing that.
Q. Now?
A. Now.
Q. Okay. The last question I have for you, Dr. Brown, is how much money have you been paid by FPL for all of your work?
A. Me personally?
Q. Your firm. I don't know how you -- I don't know how you -- you bill them. How much -- I don't want to ask all the foundational questions. How much money have you or entities connected with you collected for --
A. I'm paid on salary by KEMA.
Q. Do you know how much KEMA has been paid for this?
A. And I know that the -- for this report, the not to exceed contract value for this report was $170,000 for labor. I'm not sure how much of that not to exceed value was billed to FPL. And then as an additional item on that contract was my expert witness testimony which is time and material basis.
Q. Based on an hourly rate?
A. Based on an hourly rate.
Q. Which is?

A. I believe it's 290 an hour. I'm not sure.

MR. KISE: Thank you, Dr. Brown.

Thank you, Mr. Kise. For my organizational purposes, can you tell me, Captain Williams, will you have questions on cross for this witness?

CAPTAIN WILLIAMS: We will not, Madam Chairman.

Thank you, sir. And Mr. Twomey?

MR. TWOMEY: Do not.

You do not? Thank you very much.

Okay. Will Staff have questions on --

MS. BRUBAKER: Staff will have just one or two very brief questions.

Okay. Then we will pick up tomorrow with the Staff questions on cross. We will begin with you again, Dr. Brown, in the morning and then of course we will go to redirect.

We will begin tomorrow morning at 9:00 a.m. here in this room. I do intend to go later tomorrow, so please plan accordingly.

And with that, we are in break until nine o'clock tomorrow morning. Thank you all.

* * *

FLORIDA PUBLIC SERVICE COMMISSION
CERTIFICATE OF REPORTER

STATE OF FLORIDA        )
COUNTY OF LEON          )

I, LORI DEZELL, RPR, CCR, certify that I was authorized to and did stenographically report the proceedings herein, and that the transcript is a true and complete record of my stenographic notes.

I further certify that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

WITNESS my hand and official seal this 20th day of April, 2006.

LORI DEZELL, RPR, CCR

FLORIDA PUBLIC SERVICE COMMISSION