BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 060635-EU

In the Matter of

PETITION FOR DETERMINATION OF NEED FOR ELECTRICAL POWER PLANT IN TAYLOR COUNTY BY FLORIDA MUNICIPAL POWER AGENCY, JEA, REEDY CREEK IMPROVEMENT DISTRICT, AND CITY OF TALLAHASSEE.
_____/

VOLUME 4

Pages 260 through 371

ELECTRONIC VERSIONS OF THIS TRANSCRIPT ARE A CONVENIENCE COPY ONLY AND ARE NOT THE OFFICIAL TRANSCRIPT OF THE HEARING, THE .PDF VERSION INCLUDES PREFILED TESTIMONY.

PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN LISA POLAK EDGAR COMMISSIONER ISILIO ARRIAGA COMMISSIONER MATTHEW M. CARTER, II COMMISSIONER KATRINA J. TEW
DATE:	Thursday, January 11, 2007
TIME:	Commenced at 10:00 a.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	LINDA BOLES, CRR, RPR JANE FAUROT, RPR Official FPSC Reporters (850) 413-6734/ (850) 413-6732
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

NAME:	PAGE NO.
MYRON R. ROLLINS	
Direct Examination by Mr. Perko	311
Prefiled Direct Testimony Inserted	315
Cross Examination by Ms. Brownless	338
Cross Examination by Mr. Jacobs	357
Redirect Examination by Mr. Perko	367

EXHIBITS

NUMBER:	ID.	ADMTD.
1		290
2		290
4		314
3, 4,and 5		370

P R O C E E D I N G S

CHAIRMAN EDGAR: I call this hearing to order. Thank you again for your patience. I have a lot of pieces of paper. I want to make sure I have them all in front of me.

I believe that where we broke last night, that the first matter we need to take up is the documents that were submitted during the public testimony portion.

Ms. Brubaker.

MS. BRUBAKER: That's right. There were, I believe, 20 items that were identified through the customer testimony portion. Those were identified as Exhibits 82 through 102. Absent objection from the parties, staff would move that those items be entered into the record.

CHAIRMAN EDGAR: Are there objections?

MS. RAEPPLE: Yes. We have objections to several of the documents.

First of all, a number of the documents contain hearsay, and I'd like to identify those for the record. 82, 83.

CHAIRMAN EDGAR: Okay. Slowly, please.

MS. RAEPPLE: Okay. Sure.

CHAIRMAN EDGAR: Okay. 82, 83.

MS. RAEPPLE: 82, 83, 85, 88, portions of 91 and 92, 93, 97, portions of 99, and then 100, 101 and portions of 102. And recognizing the ruling in, by the Prehearing Officer in the

prehearing order on hearsay I understand you may receive that into the record, but I wanted it on the record that we are objecting to those as hearsay.

Also, a number of the documents are addressing issues that are irrelevant to this proceeding, although they may be relevant in the certification proceeding, and I'd like to address those.

Exhibit 83 addresses health and environmental issues that are -- again, these are issues that are outside the jurisdiction of this Commission. Exhibit 85 addresses health and environmental issues. Exhibit 87 addresses traffic, again, an issue that will be addressed in the certification proceeding. 89 addresses health and environmental issues. Exhibit 90, portions of that addresses health and environmental issues. Exhibit 91, health and environmental issues. Exhibit 92, health issues. Exhibit 93, health and environmental issues. 94, health and environmental issues. 95, traffic and health issues. 96, environmental and traffic issues. 97, environmental issues. 98, environmental issues. 99, health issues. 100, environmental issues. 101, environmental issues. And 102, health and environmental issues.

We also would object to Exhibit 88 as lacking foundation. It contains substantial opinions for which there's been no demonstration of expertise for those opinions to be rendered. And we object to Exhibit 88 as speculation. This is

a document that has previously been stricken from the record in the prehearing order. It was attached to Daniel Lashoff's testimony marked for identification as DAL-3 and recognized in the prehearing order as there having been a failure to lack foundation, and that foundation still has not been laid.

We also object to Exhibit 88, I'm sorry, 98 as speculation and 102 as speculation. Those are documents that address the speculative nature of potential CO2 regulation, which, of course, at this point in time we don't know when, if or how CO2 would be regulated. And so those, those matters of necessity are speculative in nature.

CHAIRMAN EDGAR: Is that it?

MS. RAEPPLE: That's all.

CHAIRMAN EDGAR: Okay. Ms. Brownless.

MS. BROWNLESS: Yes, ma'am. Thank you. With regard to the hearsay objections we would argue exactly what we did previously, is that under Chapter 120 hearsay is admissible in order to corroborate other testimony or statements, and that under Chapter 120, for that reason you have to wait until the end of the proceeding to determine whether, in fact, they are corroborative of other statements appropriately introduced.

With regard to the second group of exhibits which were objected to on the grounds of irrelevancy, I think basically, and I don't mean to misstate the applicants' position, that it dealt with health issues or traffic issues

appeared to be the two main areas there. I think there are aspects of those comments that did, in fact, deal with traffic and health. Traffic is only important in this proceeding to the extent that it affects the ability of the applicants to have appropriate transportation in place to deliver the coal, which is the basis for fuel. So to that extent I think traffic is important. And the rail, the comments about the rail, railcars, bypasses, that type of thing, are important for you to assess the viability of operating a coal plant in Taylor County with the existing rail lines that are in place now.

So it's -- we used to have an issue in need determinations that specifically talked about facilities and site in terms of the viability and the deliverability. So I think that's a, that's a practical issue as to whether -- not necessarily whether the plant can be physically located somewhere, but its operation cost. You know, how viable is the use of coal there? You can't achieve fuel diversity if you can't get the coal there. So I would, on that basis I would say that those documents that deal with transportation and rail transportation are relevant to this need determination.

And finally with regard to 88, which I think is the Union of Concerned Scientists exhibit that was part of Mr., Dr. Lashoff's exhibit, as I understand the, the Commission's ruling, Commissioner Tew's ruling, that was based upon the fact that it wasn't, that article was not specifically mentioned in

his prefiled testimony, and that's a different procedural basis for excluding that article than its relevancy. Commissioner Tew has already ruled that -- and we have a specific issue dealing with CO2 emissions here. So to the extent that it deals with CO2 emissions, the impact of CO2 emissions, the likelihood of CO2 regulation, I think the Commission has already ruled that that is a relevant issue that needs to be considered, and for that reason 88, 98, and 102 should be admitted into the record.

CHAIRMAN EDGAR: Thank you.

Ms. Brubaker.

MS. BRUBAKER: Any other comments from the parties? Just double-checking.

CHAIRMAN EDGAR: Oh, I'm sorry. Mr. Jacobs.

MR. JACOBS: I would simply add not only is the issue of transportation an issue, but it is one that has been very significantly addressed in this case. Availability and adequacy of transportation to this site is absolutely a center point. And so to the extent that the parties raised existing constraints and problems that are there and the magnitude of which will have to be addressed by these applicants, I think those, those comments and those materials are absolutely relevant.

The -- I find it interesting that, that Exhibit 89 is cited for relevancy because most of that exhibit, as I recall,

is essentially a copy of the, of the promotional materials from the applicants in this -- promoting this plant. So that one -- I assume that there are other materials outside of that promotional brochure that are being cited there.

The -- and then finally the whole issue of, of those comments that had to do with CO2 regulation, the -- we will deal with this issue clearly in this docket, and to the extent that the public has focused this interest and has dealt with what some of the back economic impacts will be of that. We did hear comments about the personal health, personal health impacts of that, and I do believe that's within the scope of your jurisdiction to hear those comments and we'll talk about that later. But absolutely we didn't just hear that. We heard people talk about what some of the economic impacts were of that, and I think to that extent they bear relevance in this case.

CHAIRMAN EDGAR: Thank you, Mr. Jacobs.

Did I miss anybody else? Yes, ma'am.

MS. PABEN: Yes. Thank you, Madam Chairman.

First, I would like to echo the comments made by both of the counsels for the other intervenors with respect -- as opposed to having to repeat them.

In addition, I would say that a number of the hearsay exceptions -- hearsay objections that they've made do have exceptions. Most prominently, a number of those are public

records and reports. We can go through each of them by number, but I would ask that either you allow us time to go through each of them, because I know a number of them are public, and I've identified just a couple but I don't think I have the complete list, and we can give you a complete list, or you can just have that as a standard objection to all of the hearsay objections and the staff can evaluate it themselves for -- that that's a response to all, whichever is easiest for you. But I'm happy on a break to look through and give you exact numbers that I believe. But I do know a number of those documents, 102 most notably, is a public records exception.

I'd also like to add to the traffic discussion, specifically the reference to costs, that the, that the Commission does need to take into account whether or not the applicants have accurately and adequately evaluated the cost of this plant if they've failed to take into consideration those transportation issues.

That's all.

CHAIRMAN EDGAR: Thank you.

Ms. Brubaker.

MS. BRUBAKER: I'd be happy to comment. With regard to the objections on the grounds of hearsay, as everyone is aware, the Commission can take in hearsay evidence and give it the weight that it's accorded. Whether it's persuasive or not is another issue.

With regard to the cites of irrelevancy, I have to agree that to the extent that traffic can be shown to go to the issues of cost, that those are at issue in this procedure. Again, whether the information that's actually received is persuasive or not is up to the parties to interpret.

I would note, I just kind of quickly pulled Exhibits 92 and 99. Those were the ones that were objected to solely on the grounds of health. I do note that those exhibits also discuss need for the plant. Again, the persuasiveness statement is up for the interpretation of the parties, but they do discuss things other than health. And also I would like to point out that these, a great number of these documents do simply reiterate the comments that were made by the, the members of the public who spoke yesterday.

As far as Item 88 lacking a foundation, lack of expertise, there was no, I think, inference that the members of the public yesterday were experts. They were simply laypersons who are offering the information they saw as relevant to this proceeding. So I, I think it would probably -- you know, typically we give a little more latitude to pro se members of the public than we would expect of an expert witness who's being, who's prefiling testimony in this proceeding. I think that degree of latitude is appropriate there.

As far as speculation with Items 98 and 102, Issue 5 does, I think, allow a place for parties to address what

environmental costs are appropriate. So, you know, with, with all due respect, I'm inclined to recommend that all the exhibits be moved in without exception.

CHAIRMAN EDGAR: Thank you, Ms. Brubaker.

The objections are noted for the record and understood. However, I do concur with Ms. Brubaker's recommendation and comments. And noting that there are issues for discussion and for evaluation by this Commission related to need and to cost, I'm going to allow, and, as Ms. Brubaker has said, they will be given the weight that they are deemed to be due.

MS. RAEPPLE: Thank you, Madam Chairman. We would also ask for the opportunity to provide a small amount of additional rebuttal to address some of the public testimony that came in yesterday. The first witness, Mr. Furman, was clearly presenting testimony as an expert witness, and that was the first we had heard that he was going to be appearing. And so we have not as yet included in our rebuttal testimony directly for that. And we do have a witness that we have identified. You'll recall that Mr. Furman mentioned specifically the TECO IGCC plant. And we have an expert who is intimately familiar with that plant, and we would ask for the opportunity to put on some brief rebuttal with regard to that.

We also --

CHAIRMAN EDGAR: I'm sorry. And I do apologize for

interrupting. Is that one of the witnesses currently on the witness list?

MS. RAEPPLE: No, it is not.

CHAIRMAN EDGAR: It would be a new witness.

MS. RAEPPLE: It would be a new witness, as was Mr. Furman.

CHAIRMAN EDGAR: Ms. Brubaker.

MS. BRUBAKER: I simply note that Mr. Furman, although one may find that he has a great deal of expertise in the area, testified as a member of the public, not as an expert witness. At this stage, sponsoring additional rebuttal from a witness that no party to this matter has had a chance to vet, I'm concerned it would be procedurally inappropriate.

MS. RAEPPLE: Well, and excuse me, Madam Chairman.

CHAIRMAN EDGAR: Yes, ma'am.

MS. RAEPPLE: I would point out that Mr. Furman, while he did appear in the public hearing, spoke to you about his credentials and even attached to his exhibit his professional resume. So I do believe he's requesting you to recognize him as an expert, and he certainly offered a number of opinions during the course of his public testimony.

MS. BROWNLESS: Madam Chairman, if I may.

CHAIRMAN EDGAR: Ms. Brownless.

MS. BROWNLESS: One of the problems that the PSC inherently has in the system that's used here, prefiled

testimony, rather than coming to hearing and having the applicants put on their direct case and everyone respond is this issue of limiting both direct and rebuttal for every party based upon events that happen over which neither the applicants nor the intervenors nor the staff have any control. Mr. Furman is a perfect example.

I am torn on this issue. I certainly understand what the applicants are saying, I certainly understand what the staff is saying.

CHAIRMAN EDGAR: Ms. Brownless, I am not torn. Denied.

MS. RAEPPLE: We would also, excuse me, we would also request an opportunity to present some brief rebuttal by one of our existing witnesses to rebut some of the factual statements that were made yesterday specifically with regard to the City of Tallahassee's consideration of their participation in the Taylor Energy Center.

CHAIRMAN EDGAR: Okay. I will allow briefly at the time. We'll see where it takes us.

MS. RAEPPLE: Thank you.

CHAIRMAN EDGAR: Okay?

Ms. Brubaker.

MS. BRUBAKER: We have a certain number of other preliminary matters we need to get through before we can start the evidentiary portion. I would like to note that we have had

additional witnesses stipulate. The current witnesses who have been excused, stipulated and excused from the hearing are Witnesses Nunes, Breton, Heller and Norfolk, Pletka and Deevey. So that's just for everyone's information.

The next item I'd suggest that we take up is we have, I believe, two motions for reconsideration by NRDC. I'll let them chair up the initial discussion on that, but the first is with regard to NRDC's motion to compel. There's an order denying that. And there's also an order on the applicants' motion to strike NRDC -- I believe what was actually stricken was the exhibits, but the request was for both testimony and exhibits, so.

CHAIRMAN EDGAR: Thank you.

Ms. Brownless.

MS. BROWNLESS: Yes, ma'am. With regard to our motion for reconsideration, striking our exhibits, what we would like to do at this time, in light of the fact that we all know this is going to be a very long day, is to proffer those stricken exhibits into the record under Rule 1.450(4). And we'll just make the evidence proffer. I think everybody already has a copy of those exhibits. I don't think that would be prejudicial. That allows us to preserve the record with regard to those exhibits. And that's what we would request to do this morning.

With regard to the ruling on hearsay, we got a

specific explanation in the order regarding Ms. Bryk. We did not get an explanation regarding Dr. Lashoff. That's not -- Dr. Lashoff is not addressed in the order at all, although he was also objected to on the grounds of expertise. Since the Prehearing Officer allowed his testimony into the record and in looking at the contents of the order, I assume that his testimony is going to be in the record and considered expert testimony. And I just want to clarify that, get that clarification from the Prehearing Officer. With that clarification we would also ask that there be a specific tender, and by that I mean a statement of expertise for both Ms. Bryk and Dr. Lashoff. And we can make our statement of expertise now, if you wish us to, or we can wait.

CHAIRMAN EDGAR: Commissioner.

COMMISSIONER TEW: I apologize. I don't have the order right in front of me, but it is my recollection that the only things that were stricken with regard to testimony and exhibits were some exhibits, and the basis for all of those stricken exhibits was a lack of foundation. With respect to any testimony, there were, there were no stricken portions of the testimony.

MS. BROWNLESS: That's correct.

COMMISSIONER TEW: And with regard to hearsay, we may not have specifically mentioned Mr. Lashoff, but it would be the same as the other hearsay allegations. The ruling would,

would be the same on all of them; to the extent that, that the testimony is corroborated somewhere else and that sort of thing, that it would remain in.

MS. BROWNLESS: Yes, ma'am. And I guess our confusion was, was on the issue of expertise because the expertise of Ms. Bryk was specifically addressed but the expertise of Dr. Lashoff was not, and the expertise of both were challenged. So what we're seeking to do is, first of all, clarify with regard to Dr. Lashoff that the ruling on expertise also applies to him and, second, to have a specific tender with regard to the expertise of both.

COMMISSIONER TEW: Chairman, I might turn to Ms. Brubaker to help me.

MS. BRUBAKER: And actually I'll defer to my co-counsel.

MS. HOLLEY: I'm reading the motion to strike that was filed by the applicants, and I don't believe that Lashoff was included under the evidence that they wish to strike on the basis of expertise. I'm reading Bryk and Smith. The Smith testimony was withdrawn.

MS. BROWNLESS: Yes, ma'am.

MS. HOLLEY: But there was no objection on the basis of expertise to any of Lashoff's testimony.

MR. PERKO: Madam Commissioner.

CHAIRMAN EDGAR: Yes, sir.

MR. PERKO: Very brief, I think counsel has indicated that correctly. We have not challenged Dr. Lashoff's expertise. I'm not sure what point it would be to provide additional tender other than to supplement the record. The same with Ms. Bryk; the Prehearing Officer has already allowed her testimony to come into the record. So, again, I think it would simply be supplementing the record improperly.

MS. BROWNLESS: And all we're trying to do is clarify that they were experts in the fields in which they testify.

MS. HOLLEY: There is no basis -- there is no motion to strike Lashoff's testimony on the basis of expertise; therefore, there's no ruling necessary on that for Witness Lashoff.

CHAIRMAN EDGAR: And we have a lot to do today.

MS. BROWNLESS: I understand.

CHAIRMAN EDGAR: Okay?

MS. BROWNLESS: And, of course, you understand that what I'm trying to do, as the applicants, is make sure that my appellate record is clear. And all I need is --

CHAIRMAN EDGAR: We all have an interest in having a clear record.

MS. BROWNLESS: You know, is having a ruling that their expertise is accepted. To the extent that their testimony calls for opinion testimony, that it is being accepted as opinion and expert testimony.

CHAIRMAN EDGAR: Okay. I am going to look to our staff counsel, ma'am.

MS. HELTON: Madam Chairman, it's my understanding, and I hope that I will be corrected if I'm not stating this correctly, but it's my understanding that the applicants made no timely objection to whether someone could testify as an expert. Under our order establishing procedure, that requires parties to file in their prehearing statement whether they wish to pursue that route in a proceeding. That has not happened. So as is typical in Commission proceedings, the Commissioners should appropriately presume that the experts who appear before you are, I mean, excuse me, the witnesses who appear before you are testifying as experts. So it seems to me that we're going down a road that we don't need to go down.

CHAIRMAN EDGAR: Okay.

MS. BROWNLESS: Okay.

CHAIRMAN EDGAR: We are going to move forward.

Ms. Brubaker.

MS. BRUBAKER: Well, I suppose we need clarification then. Is the motion for reconsideration then withdrawn?

MS. BROWNLESS: We'll withdraw our motion for reconsideration. We would, however, like to proffer for official recognition Exhibits DB-1, DB-2, DAL-2 through 4, DAL-7. And that's pursuant to Rule 1.450(b) of the Florida Rules of Civil Procedure and Section 91. -- I'm sorry,

90.104(1)(b), Florida Statutes.

CHAIRMAN EDGAR: Ms. Helton.

MS. HELTON: May I ask a clarification question? When you said "proffer for official recognition," I'm not sure if I'm following what you mean.

MS. BROWNLESS: No. No. Proffer, proffer into the record.

MS. HELTON: It is consistent with Commission practice to allow a witness to proffer an exhibit for reasons of preserving for an appellate record a possible issue on appeal. However, I would note that it seems to me that the reasons why we -- the Prehearing Officer struck some of these exhibits was because of a lack of foundation. And I don't believe that by proffering today that they can cure that issue that was present when the Prehearing Officer ruled. I think that all of the parties are aware that the Commission practice is to require prefiled testimony. With that they may prefile exhibits, but it's presumed that the witness will lay a foundation in his or her testimony for those exhibits. However, I do believe that it's appropriate to do so. But I felt compelled to state that on the record.

CHAIRMAN EDGAR: Commissioner Carter.

COMMISSIONER CARTER: Madam Chairman, I just wanted to ask a procedural question from legal. I don't know, but is it appropriate for us to -- we can move to affirm the

Prehearing Officer's order? I mean, because if that's appropriate, I would move that at this point in time.

CHAIRMAN EDGAR: Ms. Brubaker, are there other matters that we need to address relevant to this before we take up the question?

MS. BRUBAKER: I guess my only other clarification needed is official recognition, if it is being proffered as official recognition.

MS. BROWNLESS: No. It's being proffered under the rule.

MS. BRUBAKER: I see. Thank you.

MS. BROWNLESS: To preserve it for evidence strictly for the appeal.

MS. BRUBAKER: Okay. That's the clarification I needed. Thank you.

CHAIRMAN EDGAR: Okay. Are we all clarified?

MR. PERKO: I think so.

CHAIRMAN EDGAR: Okay. Ms. Brubaker, what do we need to do next?

MS. BRUBAKER: I would suggest that there be a motion by all members of the panel regarding whether the motion for reconsideration should be granted or denied.

CHAIRMAN EDGAR: Okay. Commissioner Carter, I'm going to look to you to restate your motion.

COMMISSIONER CARTER: Okay.

MS. BRUBAKER: Oh, I'm sorry. I beg your pardon. I was just reminded that she actually withdrew the motion for reconsideration with the proffer of those documents. My apologies for that mistake.

With that we can move on to --

CHAIRMAN EDGAR: Okay. All right.

MS. BRUBAKER: -- excuse me, Commissioner Carter -- the motion for reconsideration with respect to the NRDC motion to compel.

MS. BROWNLESS: And basically our issue there is quite a simple one, Commissioners. The interrogatory that was stricken, both of the interrogatories that were stricken required the applicants to in one case rerun a PRISM study, which is a proprietary model that Heller & Associates has to determine CO2 emissions using the base case assumptions.

The Prehearing Officer, relying upon case law which she cited, indicated that no party could make another party prepare an exhibit for them that wasn't already in existence under discovery. And our argument is this simple: The staff does it all the time. The staff is a party to this case. The staff did it in this case. The staff did it in the same time frame and under the same conditions basically that we asked for. Neither the staff nor intervenors have access to these proprietary models. And we're simply being asked to be treated on the same footing as the staff. And specifically that staff

interrogatory, I believe, number 100, although I can't remember quite at this time, but it was exactly the same type of request for the applicants to run a sensitivity analysis using their proprietary models.

CHAIRMAN EDGAR: Ms. Helton.

MS. HELTON: Staff is in a very unique role in Commission proceedings. I don't believe that we have a stake in the outcome as do other intervenors or petitioners. Staff has historically been treated differently. Staff's role is to make sure that the record is full. And to that end, the parties are usually very helpful and courteous in providing staff with the information that it needs to ensure that the record is full. So if staff has been treated differently, I believe that there is a reason for doing so. It's -- I believe that the pleadings will show that the applicants provided that information to staff as a courtesy, which I believe is appropriate. I do believe that it is not the role of discovery to have parties create information for other parties. I believe that the ruling by the Prehearing Officer was appropriate.

MS. BRUBAKER: May I also add a few things? I'm sorry.

CHAIRMAN EDGAR: Oh, yes. Ms. Brubaker, yes.

MS. BRUBAKER: Ms. Helton is absolutely correct. Furthermore, the NRDC has failed to provide in its pleadings

why a response to one party requires a similar response due to the other party. There's no support for fairness or due process arguments there. There are many reasons why a party may respond to one interrogatory that it might otherwise object to, and it does not waive its ability to object to a similar request from another party in that process.

I'd also like to point out that these are the same arguments that were raised in the motion to compel. They've been addressed by the order. I have yet to hear anything that indicates there's been a mistake of fact or law in the Prehearing Officer's order.

CHAIRMAN EDGAR: Okay.

MR. JACOBS: Madam Chairman, I'm sorry, may I be heard just briefly?

CHAIRMAN EDGAR: You may.

MR. JACOBS: It strikes me that the discussion has evolved so much to do with rights of parties per se. And discovery is more about the pursuit of the issue. And I think there is absolute discretion on the trier of fact to exercise discretion to ensure that the record and the issues are fully engaged. And so to the extent we look at this from the perspective of one party got something that the other party didn't, I'd urge you to think of this in terms of whether or not this issue, this request is legitimate and appropriate to pursue the issue in this case.

CHAIRMAN EDGAR: I appreciate your comments.

Commissioners, we need to address the motion for reconsideration. Is there a motion to deny?

COMMISSIONER CARTER: I so move.

CHAIRMAN EDGAR: Is there a second?

COMMISSIONER ARRIAGA: Second.

CHAIRMAN EDGAR: All in favor of the motion, say aye.

(Unanimous affirmative vote.)

CHAIRMAN EDGAR: Opposed?

Ms. Brubaker.

MS. BRUBAKER: The next preliminary matter we have has to do with respect to NRDC's request for official recognition which was filed January 8th. And the respondents -- excuse me, the applicants have filed a response in opposition to.

CHAIRMAN EDGAR: Yes, ma'am. Do you want --

MS. DAILEY: Yes. We would like to explain the basis of our objections to the NRDC's motion for official recognition.

First, with respect to the DEP Draft White Paper on Climate Change, Science and Policy, and, second, to analysis or discussion papers by the Energy Information Agency, EIA, regarding Senate Bill 139 and Senate Amendment 2028.

These are -- well, first with respect to the DEP document, it states "Draft" on its face and, therefore, should

not be considered a final agency position statement.

Second, the standard for official recognition is for an official action of the government, of one of the branches of government, and none of these discussion papers constitute official action. Indeed, their language, the caveat language included on the cover pages of the federal EIA documents state that they are not positions of the agency, the EIA agency or the Department of Energy. So based on the case law before this Commission and under Florida law we believe those government discussion papers are not appropriate for official recognition.

Second, with respect to the newspaper editorial, a similar argument. By definition, an editorial is not a factual document. It's an opinion document and it is not appropriate for official recognition. And the standard for that document would be facts not in dispute under Section 90.202 of Florida Statutes. So we submit that the newspaper editorial is not appropriate for official recognition.

And finally, the NRDC has proposed, I believe, three pieces of draft legislation, draft federal legislation that are also not appropriate for official recognition. And the standard for those documents would be public statutory law. Those documents are not statutory law. They are merely drafts of legislation. So those are the basis of our objections to these documents.

CHAIRMAN EDGAR: Ms. Brownless.

MS. BROWNLESS: Yes, ma'am. First of all, I want to correct one of the entries on my request for official recognition which is under Acts of Congress. I gave an incorrect site. It's not -- it is H.R.6. That's the bill that eventually became the Energy Policy Act of 2005, which is an enacted -- has been passed by both parts of Congress and it's enacted. The cite was misleading there and I apologize for that. And I assume that because that was the Energy Policy Act of Congress, that the other side concedes that that is appropriately recognized under Section 90.

CHAIRMAN EDGAR: Yes, ma'am.

MS. BROWNLESS: With regard to the McCain-Lieberman proposed senate bills, the McCain-Lieberman Amendment 208, the official publications of EIA, which is the Energy Information Agency, it is the branch of the Department of Energy whose job it is to analyze the economic impacts of proposed legislation and, indeed, the economic impacts of past legislation as well.

What we would say is that you would be allowed to take official recognition of that on the basis that these are true and correct copies of those draft congressional proposals and of the Energy Information Agency's analysis of those proposals.

With regard to the DEP White Paper, we did submit a letter to the clerk which says that that is the true and correct copy of their paper as it exists today. Clearly it is

a draft, but it is a draft that's being prepared by DEP, worked on by DEP, and that's the most recent version of it.

The Tallahassee Democrat article, again, it's being offered not for the truth of what's in it but for the fact that here is the Democrat, it's a true and correct copy of it. Obviously, there are no objections to these official recognition documents being made on the basis of relevancy. They are all relevant. They are all discussed in the testimony of the witnesses. They're relevant to the issue of CO2 emissions directly, almost all of them, and the likelihood that the federal government and the State of Florida will regulate CO2 emission.

CHAIRMAN EDGAR: Ms. Brubaker.

MS. BRUBAKER: I think there's a distinction to be made between the authentication of the documents, which is what Ms. Brownless is referring to through the certification process, versus official recognition of the documents. Again, she said it herself, the distinction is are you offering the document for proof that such a document exists or are you intending to rely upon the information that's contained in that document? To the extent you're doing that, it is not appropriate for official recognition. The statutes, the chapter laws, EPACT as enacted, I have no issue with that, of course not. But the White Papers are opinion pieces, the Democrat piece is an opinion piece. The draft legislation is

just that, it's draft legislation. If you want to take note that there is a draft of a bill, we can certainly do that. But to the extent you intend to rely upon the information contained in those documents, it is not appropriate for official recognition.

CHAIRMAN EDGAR: And I agree and I so rule based on the explanation given by Ms. Brubaker.

MS. BROWNLESS: And so can you say specifically that what you're ruling excludes Paragraph 2 down, is that correct, on our paper?

CHAIRMAN EDGAR: That is correct.

MS. BROWNLESS: Thank you, ma'am.

CHAIRMAN EDGAR: Thank you.

Ms. Brubaker, other preliminary matters?

MS. BRUBAKER: The only other preliminary matter I am aware of at this time, I'd like to refer everyone to staff's comprehensive exhibit list.

With regard to the exhibit identified as Number 1, which is the list itself, and Number 2, which is staff's consolidated exhibit -- the consolidated exhibit has been provided to all Commissioners and parties. No objection to the entry of those documents have been noted to staff's knowledge, and with that we would recommend that Exhibits 1 and 2 be moved into the record.

CHAIRMAN EDGAR: Okay. And seeing no objection,

Exhibits 1 and 2 as marked yesterday will be moved into the record.

(Exhibits 1 and 2 admitted into the record.)

MS. BRUBAKER: And unless the parties are aware of other preliminary matters, I would recommend that we move on to the opening statement portion of the hearing.

CHAIRMAN EDGAR: Are the parties ready? Okay. Per the prehearing order, 15 minutes per side. I'll watch the clock.

For the intervenors, how would you like to apportion your 15 minutes?

MS. BROWNLESS: We have determined that I'll go first. And if there's any time left over, the other intervenors will take the balance of the time.

CHAIRMAN EDGAR: Okay. Mr. Perko, are you ready?

MR. PERKO: I am.

CHAIRMAN EDGAR: All right. We are.

MR. PERKO: Good morning, Commissioners. We're pleased to be here on behalf of the Florida Municipal Power Agency, power supply provider for 14 Florida cities stretching from Key West to Havana: JEA, Florida's largest municipal utility; Reedy Creek Improvement District, the power supply provider for one of Florida's largest attractions; and the City of Tallahassee, our capital city.

We will be presenting evidence in support of their

need for power application for the Taylor Energy Center, a 765-megawatt net supercritical pulverized coal unit to be located in Taylor County.

As you will hear, the Taylor County Energy Center represents a unique opportunity for these municipal utilities to join together to cost-effectively meet their clients' growing needs, while at the same time providing much needed fuel diversity and supply reliability to their systems and the state as a whole.

Commissioners, there's several parties in this case, and you've already heard a lot of public comment on a number of issues. And as you well know, this is one of the first steps in the lengthy process that will culminate in future proceedings to address environmental issues.

There are really two, ultimately only two questions for you to determine in this proceeding, however. First, is there a need for the Taylor Energy Center? Second, is the Taylor Energy Center the most cost-effective way to meet that need? If you answer both those questions yes, then you certify the need for the plant.

Now in answering those fundamental questions, the statute lays out specific factors you must consider. Those include the need for system integrity and reliability, the need for adequate electricity at reasonable costs, the need for fuel diversity and supply reliability, and whether conservation

measures taken by or reasonably available to the applicants might mitigate the need for the proposed plant. We will present competent, substantial evidence on each of these factors.

As to the first fundamental issue, is there a need for the Taylor Energy Center, the evidence will show that all of the applicants have need for capacity in the Year 2020 to maintain their system integrity and reliability and to provide adequate electricity to their customers at a reasonable cost. Furthermore, the evidence will show that use of demonstrated supercritical pulverized coal technology will increase system reliability.

Now if you look strictly at capacity needs and system reliability, the evidence will show that FMPA will need 230 megawatts of capacity to maintain its required reserve margin by the summer of 2012 and that FMPA's approximate 40 percent share of the Taylor Energy Center will provide the additional capacity needed to satisfy that shortfall.

The evidence also will show that JEA's capacity will fall below its required reserve margin during the summer, or the winter of 2012, and the deficit continues to increase in the winter of 2013 when the capacity shortfall will be 182 megawatts. JEA's roughly 30 percent share of the Taylor Energy Center will provide the additional generating capacity needed to satisfy that shortfall.

The evidence will show that Reedy Creek is expected to encounter a capacity shortfall in 2011, at which time approximately 134 megawatts of additional capacity will be required to maintain Reedy Creek's reserve margin. By 2025 Reedy Creek's need for additional capacity increases to approximately 185 megawatts. Reedy Creek's 9 percent share of TEC will provide some but not all of the additional generating capacity needed to satisfy that shortfall.

The evidence will show that the City of Tallahassee is expected to encounter a capacity shortfall in the summer of 2011, and the need for additional summer capacity increases to approximately 294 megawatts by 2025. As I will discuss further, Tallahassee's capacity need may be deferred until 2016 if its uniquely designed DSM portfolio achieves assumed capacity reductions. However, such a delay would not affect the city's economic need for the Taylor Energy Center.

There's an even greater need for this project when you consider fuel diversity and supply reliability as required under recent statutory amendments.

The evidence will show that the Taylor Energy Center will increase fuel diversity and supply reliability for each applicant in the state as a whole. The Taylor Energy Center will be capable of utilizing fuel sourced from multiple international and domestic supply regions with multiple transportation alternatives. This factor is particularly

important to the City of Tallahassee and Reedy Creek, whose systems currently are also completely dependent upon natural gas, fuel oil and purchased power contracts that will soon expire.

Similarly, the Taylor Energy Center will increase FMPA's fuel diversity by replacing expiring purchase contracts for natural gas-fired generation, and it will help JEA maintain its currently diverse fuel mix despite the expiration of a large purchased power contract for coal-fired generation.

In accordance with the statute, the applicants have evaluated and will demonstrate that there are no conservation measures taken or reasonably available to the applicants which may mitigate the need for the proposed unit.

For JEA, we will present the results of analyses using the Commission-approved FIRE model to evaluate the cost-effectiveness of 180 DSM measures compared to participation in the Taylor Energy Center. This is consistent with JEA's use of the FIRE model in prior need determinations, as well as the Commission's approval of JEA's conservation goals in 2004.

Now even though FMPA is a wholesale provider that does not serve end-use customers, we also will provide FIRE model results for JEA using the same methodology used in a need determination approved by this Commission only 18 months ago. None of the 180 DSM measures evaluated were shown to be

cost-effective for JEA or FMPA under the Commission's approved methodology.

Reedy Creek is a somewhat unique case given its specialized customer base which primarily consists of the Walt Disney World Resort complex. The evidence will show that Reedy Creek and its customers continually evaluate and implement opportunities for energy conservation. And Reedy Creek has assisted its customers in participating in numerous conservation and energy programs that have reduced Reedy Creek's energy load by 8 percent. However, no further significant energy conservation is feasible for Reedy Creek at this time.

The evidence will show that, as it has in the past, the City of Tallahassee used a different approach in assessing DSM and conservation measures. Using a methodology developed in internal planning efforts the City's evaluation was based on projection of, projections of maximum achievable energy and capacity reductions and their associated annual cost developed specifically for the City. Based on these evaluations, if Tallahassee's DSM measures fully achieve the assumed capacity reductions, Tallahassee's capacity need may be delayed until 2016. However, such a delay would not affect Tallahassee's economic need for the Taylor Energy Center because, when combined with the DSM portfolio, participation in the Taylor Energy Center would provide significant additional economic

savings for the City when compared to an expansion plan with the DSM portfolio that does not include the Taylor Energy Center.

Now one of the intervenors' primary issues centers on the evaluation of DSM measures. In essence, they seek to have the Commission depart from prior practice and precedent by requiring all of the applicants to adopt a new methodology for evaluating DSM. While they seem to like Tallahassee's utility-specific methodology, their testimony does not specifically identify what methodology they believe should be used.

In any event, there's no evidence to support a departure from the Commission's established precedent. Moreover, it would be inappropriate to do so in this docket because DSM evaluation methodology has ramifications statewide which cannot be addressed in a need proceeding which involves utilities over which governing boards other than this Commission have ratemaking authority rather than all affected stakeholders.

Turning to the second fundamental issue: Is the Taylor Energy Center the most cost-effective alternative for meeting the applicants' needs? The evidence will show that before selecting the self-build alternative, the applicants widely distributed a request for proposals which resulted in two bids from a single potential supplier. One bid provided

indicative pricing for a pulverized coal unit. The other provided a firmer bid for a natural gas-fired combined cycle unit. The evidence will show that even though the Commission's bidding rules do not apply to municipal utilities, the applicants went to great lengths to develop a comprehensive RFP process and to evaluate the bids fairly. In the end, the self-build alternative proved significantly more cost-effective than both of the two proposals.

The evidence will also show that following the RFP analysis comprehensive and detail economic analyses were performed for each applicant's system. These base case analyses considered numerous other potentially available supply-side alternatives including various gas-fired, coal-fired, IGCC and renewable alternatives appropriate for each applicant. All of the economic analyses considered updated capital costs for the Taylor Energy Center to reflect recent changes in market conditions which have increased original estimates by approximately 19 percent.

The economic analyses also considered transmission system costs and losses specific to each applicant, as well as the cost for compliance with existing environmental regulations, including the recently adopted Clean Air Interstate Rule and Clean Air Mercury Rule.

Based on the results of those analyses, each participant's least-cost alternative was developed by

developing two unique capacity expansion plans; one with the Taylor Energy Center and one without it. The expansion plan with the Taylor Energy Center was the least-cost alternative for each applicant and will provide combined cumulative present worth savings of approximately $899 million.

In addition to the base case analysis, we present over 70 sensitivity analyses using updated costs for the Taylor Energy Center. Among other things, the sensitivity analyses included consideration of high and low fuel costs, high and low energy growth, high and low emission allowance prices, and various supply-side alternatives including biomass and IGCC alternatives. The results of the sensitivity analyses show that participation in the Taylor Energy Center is included in each applicant's least-cost expansion plan for all but one of the applicants in one scenario. And in that one case the least-cost plan included a coal-fired CFB unit as the least-cost alternative.

The evidence will demonstrate that the capacity plan including participation in Taylor Energy is a robust plan for each applicant and is sufficient to -- is sufficiently flexible to overcome variations and deviations from base case assumptions.

Now turning to the other primary issue raised by the applicants, the intervenors -- there's been much talk about potential for CO2 regulation. However, one thing is clear:

Unless the U.S. Congress or the Florida Legislature acts, we do not know if, when or how a CO2 regulatory regime will be implemented. For that reason, we do not believe the Commission can make dispositive findings or conclusions regarding CO2 allowance or mitigation costs. Nevertheless, for the Commission's information we will present a sensitivity analysis based on one of the CO2 regulatory proposals that has been presented in Congress. That analysis, which appropriately accounts for the interrelationship between allowance costs and fuel costs, indicates that the Taylor Energy Center remains cost-effective for all applicants under the assumed CO2 regulatory environment.

Although the intervenors attempt to discredit this analysis and suggest that we should have performed numerous other sensitivity analyses based on numerous other CO2 allowance forecasts and CO2 allowance programs, their criticisms simply underscore the high degree of uncertainty inherent in developing CO2 allowance price forecasts unless and until a specific regulatory program is enacted and regulators determine how that program will be implemented.

Again, Commissioners, we appreciate this opportunity to present our case in support of this unique opportunity for municipal utilities across the state to join together, gain economic economies of scale so that they can cost-effectively meet their customers' growing needs, while at the same time

increasing fuel diversity and reliabilities for their systems and the state as a whole. We are confident that after hearing all of the evidence and considering all of the statutory factors you will agree and determine that there is both a need for the Taylor Energy Center and that the project will be the most cost-effective alternative to meet that need. Thank you.

CHAIRMAN EDGAR: Thank you.

Ms. Brownless.

MS. BROWNLESS: Yes, ma'am. First of all, I appreciate the opportunity to give a brief opening statement today.

NRDC has basically two sets off issues in this case. The first are procedural and the second are substantive. With regard to the substantive issues, our main emphasis has been the proper evaluation of demand-side management, as Mr. Perko stated. We believe that ought to be done on a dollar-per-megawatt-hour basis. Unless you do it on a dollar-per-megawatt-hour basis you cannot make an appropriate apples-to-apples comparison of demand-side management programs and their ability to mitigate the need for the proposed power plant with construction of a proposed power plant.

Where that was done, as by the City of Tallahassee, their need was moved a period of five years, so they deferred their need for capacity for five years. And we believe if that type of analysis were likewise done by the other applicants,

the need for the TEC Power Plant could either be deferred to a later point in time, at which time there would be more information about CO2 regulation and emissions, or it could be reduced in size from a 750-megawatt power plant to some type of power plant which was smaller and, therefore, affect the appropriate amount of least-cost option. Because the size of a power plant impacts the least-cost option to serve that identified capacity need.

With regard to the CO2 -- oh, and I do want to say one thing. Mr. Perko seems to tell you that if you were to agree with us that the analysis for demand-side management should be dollars per megawatt hour rather than the RIM test, the total resource test, whatever was used by the applicants in this case, that somehow that's inappropriate. Every time you make a decision in a need determination case, you make incipient policy one way or another. Not every electric utility in the state is an intervenor in this case, nor would it be appropriate for them to do so. But you should not shy away from looking critically at the demand-side management analysis used here because you fear that somehow you will be inappropriately impacting other utilities. Every time you decide anything you impact other utilities in any case that comes before you, both investor-owned and municipal.

With regard to the CO2, we believe this is a reasonably anticipated cost that must be quantified here and

taken into account here in order for you to effectively determine whether the Taylor coal plant is the least cost-effective option. And that's because the qualification and the impact of CO2 emissions costs has a tremendous effect with regard to any kind of coal plant, and certainly a supercritical pulverized coal plant as presented here. And unless you do that, you are not fulfilling your responsibility to appropriately evaluate what is an appropriately -- determine what is the least-cost option available to provide whatever need is ultimately identified.

With regard to the procedural issues, it basically boils down to this. The Commission has a rule in place for all need determinations, and that's Rule 22.080. And that says that you shall bring a power plant siting or a need determination case to hearing within 90 days and make a decision within 135. That rule -- the time line for your rule begins to run when the applicants file their need determination here. The basis for that rule is to implement the time line requirements in the larger siting certification application process, and that was originally Rule 403.507(1). Recently that statute was changed and it is now Rule 403.507(4)(a), which says that the Commission must file its report on need with the Department of Environmental Protection within 150 days after the application for site certification is filed with DEP. The applicants have yet to file their application for site

certification with DEP. That time line is not running. That statutory time line is not running. And because it is not running, the Commission has the right under Chapter 120 to modify this purely procedural rule, and it should have done so. And it was requested to do so, and it was requested to do so very early on in the process by the very first intervenor who was Rebecca Armstrong.

If you look at what's happened here, you had the petition filed on September 19th. Rebecca Armstrong petitioned to intervene on September 26th. That's seven days later. She asked for an extension of time to file her testimony on October 18th. That's basically a month later.

Because you have pushed this case into your 135-day time frame, all the times to file intervenor testimony, rebuttal testimony, to conduct discovery have been unnecessarily compressed here. That decision basically set up a time frame which is inherently prejudicial to anyone who wants to intervene in this case.

You have before you a stack of documents that are but part of the partial record here. The applicants filed five volumes of testimony with more than 2,000 pages.

What I am suggesting to you is that even if an intervenor intervened on the very first day the application was filed, and he, even if on that very first day he filed discovery, very first day without no opportunity to read the

application at all, the intervenors wouldn't be -- the applicants wouldn't have to answer that discovery at a minimum for another 20 days because that's what your prehearing order ultimately said, your procedural order. They would have only had seven days after that to file their direct intervenor testimony. Virtually every objection you will hear today to intervenor testimony will be on the basis that it's beyond the scope of direct.

So what really controls these cases under the Commission's system where you prefile both the applicants' written testimony, which, by the way, was 18 witnesses is what they prefiled on the day they filed their application, even if you do that, no one can meet those deadlines, no one can effectively develop the record.

Now I would suggest to you that in a case where the statute gives you -- is not invoked and you have the ability to waive your purely procedural rule, if you don't waive your rule, you should not require prefiled testimony. And in this case you kept the prefiled testimony and that was unduly restrictive. Unduly restrictive because everything that the intervenors, no matter when they filed for discovery, were able to discover after that cannot be presented to you as part of their direct testimony. It is exactly the dilemma that the applicants faced with regard to Mr. Furman.

So I guess what I am suggesting here is that that

decision makes for other bad decisions. It makes for admonitions that there be no friendly cross. The concept of friendly cross exists nowhere but at the Florida Public Service Commission. That's not in the Rules of Civil Procedure. But the reason that the Commission has come up with that is because you're going to limit intervenors and applicants to their direct testimony, to their filed rebuttal testimony.

Unfortunately, prefiled testimony in these cases where you're pushing everything in such a small time frame is inherently prejudicial to any intervenor that gets in. And I would point out that the applicants had virtually two and a half to three years to prepare their testimony, to prepare their direct.

MR. PERKO: Madam Chair, I hate to interrupt on opening statement, but I think this is going far beyond an opening statement and arguing a motion for reconsideration.

MS. BROWNLESS: We're not arguing a motion for reconsideration. We're merely stating --

CHAIRMAN EDGAR: I understand. I understand, Mr. Perko. I do understand. I'm going to allow each of the parties to use their opening statements as they sit fit, recognizing that it is that, an opening statement, and it is your, each of your determinations as to how to use your time within reason.

Ma'am.

MS. BROWNLESS: And so the bottom line here is this. NRDC believes that because of the shortened time frame and the Commission's prefiled testimony rule and the fact that we have a limited amount of hearing time today to go through basically 23 witnesses, that the due process rights of the intervenors have been severely compromised. And we appreciate your time. Thank you.

CHAIRMAN EDGAR: Okay. Thank you.

Mr. Jacobs, I show -- hang on just a second and I'll add for my pause. Okay. Five minutes.

MR. PABEN: Just really quickly then. We're here today representing John Whitton, Jr., a utility customer for the City of Tallahassee.

In addition to Ms. Brownless's statement, I'd just like to add that, you know, in addition to the DSM and conservation efforts of the applicants, there are other cost-effective and innovative alternatives that could have deferred the need for this $2 billion investment. The application materials before the Commission demonstrate that the applicants failed to evaluate many of these alternatives. The most obvious of these is the consideration of woody biomass generation.

Tallahassee has recently entered into a contract to purchase 35 megawatts of electricity from biomass generation. There are woody biomass resources capable of supporting

generators of up to 100 megawatts at a reasonable cost in several places in North Florida.

We believe that if the Commission makes a thorough review and takes a hard look at the record in this docket, you'll find significant deficiencies in the materials that the applicants have provided and as -- that will demonstrate the applicants have failed to meet their burden under 403.519. And given all the uncertainties surrounding this proposal, we urge the Commission to deny the application, the applicants' petition. Thank you.

CHAIRMAN EDGAR: Thank you.

Four minutes.

MR. JACOBS: Thank you, Madam Chairman. We do come to you with, we believe, some very pertinent, very realistic observations about this application. The applicants have told you that the critical issue is need. It is. But absolutely conditioned upon the idea that you must show this proposed expansion to be the most cost-effective option available to these applicants.

In addition to the comments of my colleagues, we believe that this petition fails on many levels. We believe that with regard to the -- on its, on its face the absolute costs of this, of this application are not clear. We've already seen the originally filed numbers be revised upward. This is not an isolated incident, as opposed to what you will

hear today from -- we believe that it is not the last word on what the final costs for this plant will be. We believe that in addition to that there is incredible risk that exists in the commodity markets for these fuels, in the transportation costs and logistics to get that fuel to Florida, and to the overall operating environment that this plant will face, setting aside the, what they, what the applicants would urge you to be speculation about what the regulation, the environmental regulation will be.

We believe that what really is at stake today is your voice on what real energy planning and policy for this state should be. If you accept this application in the form and manner that it's given to you today, you would ignore a whole range of options and issues and specifics that a policymaking body -- a quasi-judicial but a quasi-legislative body cannot close its eyes, cannot put on blinders and say, if we simply ignore this fact today, it doesn't exist. Even if you wanted to do that, you can't because the costs that will, that are sitting there like a big gorilla on the ledge ready to drop will have an immediate impact on this state, on this energy.

Now these -- and it's interesting in this case because these particular applicants, you may not have a prudency review, if, indeed, the costs that we're still talking about here today comes down the line. It's purely their taxpayers and their ratepayers who are going to, who are going

to hear the noise about your decision today if you choose not to look seriously at your role as a quasi-judicial and a quasi-legislative body. In that role you have precedent that shows that you looked at transition, incipient policy and transitional policy. This is not the first time that a prospect of new regulation has come at you without all the details being clear. You've handled that in the past. We urge you simply to take that role here now. Don't close your eyes to the idea, the clear idea that there is, there are ominous and very clear clouds arising.

But even more importantly, you have a great opportunity because the facts in this case show you what a nice transition policy would be. We, we recognize the City of Tallahassee and what it's done. We don't think it goes far enough, they don't stay the course. But here's an excellent opportunity. You have the facts that you can tie your, your policy, your incipient policymaking to that says here is an example of somebody who looked down the road, gave wise counsel and information to this potential decision and made some sound choices for their ratepayers and taxpayers. You don't have to close your eyes to the idea that there are challenges to the City of Tallahassee to reach those. They've already acknowledged they're there and they've already put in place things to do that. What you can do is acknowledge that all the other applicants should at least have followed suit in the

analysis, even if they didn't come to the same conclusions.

What we see here are applicants who say that was bad. They don't say that as much as you hear, but they clearly say in the data that you see that Tallahassee is on a ledge, they're going to fall off. And if you listen to them as opposed to listening to this other view, you're taking a bad choice. We think that's wholly inadequate, we think that's wrong. We think you ought to blend in that decision-making process. We think it needs to bear witness here today. And we think that if you don't do that, you run the risk of missing your role in what is absolutely going to be a dynamic and radical change in energy policy in this state and in this country. And we thank you for the time to be with you today.

CHAIRMAN EDGAR: Thank you.

Let's take five minutes and -- which will probably be seven -- let's take seven minutes, catch our breaths, switch gears. When we come back we will swear in the witnesses as a group and call your first witness.

(Recess taken.)

CHAIRMAN EDGAR: Okay. Thank you, folks. We will begin again. And before we swear in the witnesses, is there another procedural matter that we can take up and address?

MS. FLEMING: Yes, Madam Chairman. I was just informed by the parties that all parties could stipulate Witness P. G. Para. If no Commissioners have any questions for

this witness, staff would recommend that this witness be excused.

CHAIRMAN EDGAR: Okay. And from my witness list that is a witness proffered by the applicants and is the last name on my witness list. Are there any concerns or objections to that witness being stipulated? Seeing none, we will agree to do that. And I appreciate the cooperation.

Okay. We will swear in the witnesses. I need all witnesses on my witness list to please stand together as a group. Raise your right hand with me.

(Witnesses collectively sworn.)

CHAIRMAN EDGAR: Thank you. You may call your first witness.

MR. PERKO: Thank you, Madam Chair. We call Myron R. Rollins.

CHAIRMAN EDGAR: And before we begin, just a reminder to all of the witnesses and the parties that two minutes to summarize and then we will go into questioning. Thank you.

MYRON R. ROLLINS

was called as a witness on behalf of the Florida Municipal Power Agency, JEA, Reedy Creek Improvement District and the City of Tallahassee and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. PERKO:

Q Please state your name and business address.

A My name is Myron Rollins. My business address is 11401 Lamar, Overland Park, Kansas.

Q Have you been sworn, Mr. Rollins?

A Yes, I have.

Q Did you submit prefiled testimony on September 19th, 2006, in this proceeding consisting of 21 pages?

A Yes, I did.

Q Do you have any changes or additions to that testimony?

A Yes, I believe there's four changes. On Page 20, Line 24, 25.9 should change to 19.9.

On Page 21, Line 1 --

CHAIRMAN EDGAR: Just a moment.

THE WITNESS: Oh, sure. I'm sorry.

CHAIRMAN EDGAR: I need you to slow down a second. Could you repeat your first change for us?

THE WITNESS: Sure. On Page 20, Line 24, 25.9 should change to 19.9.

CHAIRMAN EDGAR: Thank you.

THE WITNESS: Then on the next page, 21, Line 1, 41.7 should change to 39.0, 25.5 should change to 24.4 and 4.4 should change to 2.1.

CHAIRMAN EDGAR: Thank you.

BY MR. PERKO:

Q Mr. Rollins, are you sponsoring any sections to the need for power application that's been identified as Exhibit TEC-1?

A Yes. I'm sponsoring the sections identified in my prefiled testimony.

Q Do you have any changes or additions to those sections of the application?

A There is one change other than the ones identified in the errata sheet which is in a composite exhibit. That's on Page D.9-1, Section D.9-1, the second to the last line, 245.4 should change to 231.2.

Q Now other than that change as well as the additional changes reflected in the composite Exhibit TEC-1, which I believe consists of the errata sheet you referenced, do you have any other changes or additions to the sections of the need for power application that you were sponsoring?

A No, I don't.

Q With regard to your testimony, if I were -- with the changes and additions you've identified today, if I were to ask you the same questions set forth in your testimony, would your answers be the same?

A Yes, they would.

Q Are you sponsoring any exhibits with your testimony?

A Yes. I have one exhibit.

Q What is that exhibit?

A That exhibit is MRR-1, which is my resume.

MR. PERKO: At this time, Madam Chair, I'd ask that Mr. Rollins testimony be read into the record as -- admitted into the record as though read and that his Exhibit MMR-1 be admitted.

CHAIRMAN EDGAR: The prefiled testimony of the witness will be entered into the record as though read. Generally -- do we need to go ahead and address the exhibit now, Ms. Brubaker?

MS. BRUBAKER: I think that would be appropriate.

CHAIRMAN EDGAR: Okay. And the exhibit will be entered as well.

MR. PERKO: Thank you.

(Exhibit 4 admitted into the record.)

(REPORTER NOTE: Page 314 inadvertently omitted from transcript.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF MYRON R. ROLLINS

ON BEHALF OF

FLORIDA MUNICIPAL POWER AGENCY

JEA

REEDY CREEK IMPROVEMENT DISTRICT

AND

CITY OF TALLAHASSEE

DOCKET NO. _____

SEPTEMBER 19, 2006

Q. Please state your name and business address.

A. My name is Myron R. Rollins. My business address is 11401 Lamar Avenue, Overland Park, Kansas 66211.

Q. By whom are you employed and in what capacity?

A. I am employed by Black & Veatch Corporation. My current position is Project Manager.

Q. Please describe your responsibilities in that position.

A. As a project manager, I am responsible for the management of various projects for utility and nonutility clients. These projects encompass a wide variety of services for the power industry. The services include load forecasts, conservation and demand-side management, reliability criteria and evaluation,

development of generating unit addition alternatives, fuel forecasts, screening evaluations, production cost simulations, optimal generation expansion modeling, economic and financial evaluation, sensitivity analysis, risk analysis, power purchase and sales evaluation, strategic considerations, analyses of the effects of environmental regulations, feasibility studies, qualifying facility and independent power producer evaluations, power market studies, and power plant financing.

Q. Please describe Black & Veatch.

A. Black & Veatch Corporation has provided comprehensive engineering, consulting, and management services to utility, industrial, and governmental clients since 1915. Black & Veatch specializes in engineering, consulting, and construction associated with utility services, including electric, gas, water, wastewater, telecommunications, and waste disposal. Service engagements consist principally of investigations and reports, design and construction, feasibility analyses, rate and financial reports, appraisals, reports on operations, management studies, and general consulting services. Present engagements include work throughout the United States and numerous foreign countries.

Q. Please state your educational background and experience.

A. I received a Bachelor of Science degree in Electrical Engineering from the University of Missouri – Columbia. I also have two years of graduate study in Nuclear Engineering at the University of Missouri – Columbia. I am a licensed

professional engineer and a Senior Member of the Institute of Electrical and Electronic Engineers.

I have over thirty years of experience in the power industry specializing in generation planning and project development. In the past ten years, I have been the project manager for over 100 projects, the vast majority of which are for Florida utilities. Florida utilities for which I have worked include Lakeland – Electric, Kissimmee Utility Authority, Florida Municipal Power Agency (FMPA), Orlando Utilities Commission (OUC), JEA, City of Tallahassee (City), Reedy Creek Improvement District (RCID), City of St. Cloud, Utilities Commission of New Smyrna Beach, Sebring Utilities Commission, City of Homestead, Florida Power Corporation, and Seminole Electric Cooperative.

I was responsible for the development of Black & Veatch's POWRPRO chronological production costing program and POWROPT optimal generation expansion program. I am also responsible for power market analysis and project feasibility studies. I have been responsible for supporting need for power petitions on a number of power plants in Florida including Stanton 1, 2, A, and B; Cedar Bay; Cane Island 3; McIntosh 5; Treasure Coast Unit 1; and the Brandy Branch Combined Cycle Conversion. I also participated in the need for power proceeding for the Hardee and Hines projects. I have presented expert testimony on several occasions before the Alaska, Indiana, Missouri, and Florida public service commissions and have presented numerous papers on strategic planning and cogeneration.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide an overview and summary of the Taylor Energy Center (TEC) Need for Power Application, Exhibit __ [TEC-1]. In addition to this general summary, I will discuss the economic parameters used to evaluate alternatives available to meet the capacity needs of FMPA, JEA, RCID, and the City of Tallahassee (collectively referred to as the Participants). I will also discuss the environmental considerations included in the analysis of TEC. I will describe the screening analyses for all supply-side alternatives. I will analyze TEC's consistency with Peninsular Florida's capacity and reliability needs. I will conclude my testimony by discussing the consequences of delaying the addition of TEC for each of the Participants.

Q. Are you sponsoring any exhibits to your testimony?

A. Yes. Exhibit __ [MRR-1] is a copy of my résumé.

Q. Are you sponsoring any sections of the Taylor Energy Center Need for Power Application, Exhibit TEC-1?

A. Yes. I am sponsoring Sections A.1.0, A.2.0, A.4.1, A.4.2, A.4.3, A.4.4, A.4.5, A.5.1, A.5.2, A.5.3, A.5.4, A.5.6, A.6.6, A.10.0, B.9.0, C.9.0, D.9.0, and E.9.0, all of which were prepared by me or under my direct supervision.

Q. Please summarize the Taylor Energy Center Need for Power Application, Exhibit __ [TEC-1].

A. The TEC Need for Power Application, Exhibit TEC-1 is submitted in support of the Site Certification Application (SCA) by the Participants for the construction of the Taylor Energy Center in accordance with the Florida Electrical Power Plant Siting Act. TEC is proposed to be a 765 MW (net) supercritical power plant that will be designed to burn a blend of pulverized coal and petroleum coke (petcoke), with commercial operation planned for May 1, 2012. TEC is proposed to be developed on a site consisting of approximately 3,000 acres located approximately 5 miles southeast of Perry, in Taylor County, Florida.

The determination of need for TEC is being sought under Section 403.519 of the Florida Statutes. The joint Taylor Energy Center Need for Power Application, Exhibit __ [TEC-1], is based upon the collective needs of the Participants. The proposed ownership percentages of TEC are as follows:

- FMPA – 38.9 percent.
- JEA – 31.5 percent.
- RCID – 9.3 percent.
- City of Tallahassee – 20.3 percent.

The Participants went through a multistage evaluation process to develop the most cost-effective generation expansion plan that would meet the corresponding need for capacity for each Participant. The first step involved developing detailed cost and performance estimates for TEC.

The second step involved the development of cost and performance estimates for numerous supply-side alternatives to TEC. Supply-side alternatives were developed in the following categories: renewable technologies, conventional technologies, advanced technologies, energy storage technologies, distributed generation, and emerging technologies. Supply-side alternatives included units that are specific to each Participant, using available existing sites as well as other joint ownership alternatives.

All supply-side alternatives were screened for economics, feasibility, and reliability for use in each Participant's system. The screening process resulted in a wide range of alternatives being selected for further detailed economic evaluations and sensitivity analyses, including simple cycle combustion turbines, combined cycle, pulverized coal (including participation in TEC), circulating fluidized bed (CFB), biomass, and integrated gasification combined cycle (IGCC).

The third step in the evaluation process to determine the most cost-effective expansion plan for each Participant involved conducting a Request for Proposal (RFP) process for purchase power in lieu of participation in TEC. The RFP requested purchase power bids from 100 to 750 MW for contract terms of 10 years or more. The Participants received two bids from one bidder. Both bids were substantially higher in cost than TEC. The RFP process is described in the testimony of Paul Arsuaga.

The fourth step in the evaluation process was to conduct a detailed system evaluation of self-build and purchase power alternatives. Economic assumptions and fuel price forecasts were developed for base case and sensitivity analyses. A chronological optimal generation expansion model was used to determine the least-cost expansion plans for the self-build and purchase power alternatives. The evaluation was conducted over a 30 year planning period from 2006 through 2035. The least-cost expansion plans for each Participant determined by the optimal generation expansion model were modeled using a detailed chronological production cost model to obtain annual production costs. Fixed costs, including fixed charges on new unit additions, purchased power capacity costs, fixed operating and maintenance (O&M) costs for new unit additions, and natural gas transportation charges for firm delivery of natural gas (for any new combined cycle alternatives), were considered in the detailed system analyses described in the testimony of Bradley Kushner. In addition, environmental considerations were factored into the analyses, including the forecast cost of emissions allowances for current and potential future regulatory requirements. Conservation and demand-side management (DSM) measures were evaluated, and cost-effective conservation and DSM measures were included in the analyses. The cumulative present worth costs (CPWC) of all of these annual costs were determined and used as the basis to compare expansion plans.

The analyses performed indicate that participation in TEC represents the least-cost capacity expansion plan for each Participant when compared to the most economical alternate self-build capacity expansion plans under base case assumptions and most of the sensitivity assumptions.

Q. Please describe the economic parameters used in the Taylor Energy Center Need for Power Application, Exhibit __ [TEC-1].

A. A 2.5 percent annual general inflation rate was used. Escalation rates of 2.5 percent annually were used for capital and O&M costs. An annual rate of 5.0 percent was used for the long-term tax-exempt bond rate, interest during construction rate, and present worth discount rate. Alternatives were evaluated over a 30 year planning period from 2006 through 2035.

The fixed charge rate (FCR) represents the sum of a project's fixed charges as a percent of the initial investment cost. When the FCR is applied to the initial investment, the product equals the revenue requirements needed to offset the fixed charges during a given year.

Simple cycle combustion turbines were assumed to have a 20 year financing term, while natural gas fired combined cycle units were assumed to be financed over 25 years. Solid fuel generating unit alternatives were assumed to have a 30 year financing term. Given the various financing terms, different levelized FCRs were developed for the alternatives considered. All levelized FCR calculations used the 5.0 percent tax exempt municipal bond interest rate, a

2.0 percent bond issuance fee, an assumed 0.50 percent annual property insurance cost, and a debt service reserve fund equal to 100 percent of the average annual debt service requirement earning interest at an interest rate equal to the bond interest rate of 5.0 percent. The resulting 20 year FCR (for simple cycle combustion turbine options) is 8.972 percent, the 25 year FCR (for combined cycle options) is 7.915 percent, and the 30 year FCR (for solid fuel options) is 7.254 percent.

Q. Why are different financing terms used for the different generating technologies when calculating the FCR?

A. The financing terms used in this analysis correspond to typical financing terms available from underwriters that issue municipal bonds. Thus, bonds issued to finance simple cycle combustion turbine units typically have shorter financing terms than those issued to finance solid fuel generating facilities. The use of a 30 year financing term for TEC is conservative given that TEC's expected actual service life is 35 to 50 years or more.

Q. Please describe how the 2.5 percent annual general inflation rate was established.

A. The 10 year historical inflation rate was reviewed when the analysis of TEC was begun, and found to average approximately 2.5 percent annually over that period.

Q. In your opinion, are these economic parameters appropriate for use in this Need for Power Application?

A. Yes. They are consistent with economic parameters that we have been using in similar evaluations before the Commission and more importantly, they are internally consistent across all the evaluations.

Q. Please describe the pending environmental regulations considered in the Taylor Energy Center Need for Power Application, Exhibit __ [TEC-1].

A. There were two pending environmental regulatory programs considered. These programs are the Environmental Protection Agency (EPA's) Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR), both finalized in 2005. CAIR and CAMR are regulatory programs designed to reduce emissions in 28 states (including Florida) and the entire US, respectively. The former will reduce nitrogen oxide (NO_x) and sulfur dioxide (SO_2) emissions, while the latter will reduce mercury (Hg) emissions. Both programs are structured to reduce emissions by imposing statewide limits or caps on the amount of pollutants that can be emitted in tons per year. It is up to each affected state to develop a method for meeting these caps, which is subject to the EPA's approval. The programs will be implemented in phases with the first phase for NO_x emission reductions under CAIR starting in 2009. The first phase for SO_2 emission reductions under CAIR and Hg emission reductions under CAMR will begin in 2010. The second phase for NO_x and SO_2 emission reductions under CAIR will start in 2015, and the second phase for Hg emission reductions under CAMR will start in 2018.

Q. Does the EPA provide any model or suggested means of meeting the statewide emission caps?

A. Yes. The EPA has developed a recommended model cap-and-trade program for meeting the emission caps for each state, which is similar to the program currently in use for meeting emission reductions in the EPA's Acid Rain Program. Under the proposed cap-and-trade program, states will receive allowances corresponding to each state's cap or emission limit. States will decide which emission sources to regulate, and distribute allowances accordingly on an annual basis. An allowance represents the ability to emit a given amount of NO_x, SO_2, or Hg. Regulated sources within the state, which are expected to consist primarily of electric generating units, will then be required to possess enough allowances to equal the amount of pollutants emitted by each regulated source every year. Under the proposed cap-and-trade program, allowances will be fully transferable and can be bought, sold, traded, or saved for future use. A utility with more than one regulated generating unit can distribute their allowances in any manner to ensure that each unit has enough allowances to cover its emissions for the year.

Q. Will the State of Florida participate in the EPA's recommended cap-and-trade program?

A. Yes, the State of Florida adopted rules to implement CAIR and CAMR using a cap-and-trade program nearly identical to EPA's recommended approach. DEP adopted its CAIR-implementation rules on August 15, 2006, and they became

effective on September 4, 2006. We are also aware that DEP received a Petition challenging portions of its CAIR-implementation rules related to the formula used to distribute allowances within the state, and that these specific portions have not been adopted and will not be effective until the rule-challenge Petition is resolved. DEP has submitted the adopted rules to EPA for approval as a revision to Florida's State Implementation Plan (SIP). Ultimately, the EPA must approve Florida's SIP for it to become completely effective. If EPA does not approve Florida's rules, EPA's Federal Implementation Plan (FIP), finalized on April 28, 2006, will apply. Regarding CAMR, DEP adopted its implementation rules on August 17, 2006, and these rules became effective on September 6, 2006. DEP must also submit its CAMR-implementation rules to EPA for approval, and this deadline is November 17, 2006. DEP's CAMR rules are also nearly identical to EPA's recommended approach, except that DEP is withholding 25 percent of the available allowances for 6 years between 2012 through 2017. Also, DEP's rules for both CAIR and CAMR set aside a certain number of allowances each year for new units, such as those at TEC.

Q. How were the effects of CAIR and CAMR incorporated into the detailed economic analysis?

A. Forecasts for emission allowances were developed by Hill & Associates to reflect the cost to reduce emissions of SO_2 and NO_x by one ton per year, and Hg emissions by one ounce per year (refer to the testimony of Matthew Preston). These costs were incorporated into the fuel prices for both existing and candidate units in the economic analysis based on the emission rates of the units.

Emission rates for units in each Participant's existing system were provided by the respective Participant. Emission rates for TEC were provided by Sargent & Lundy (refer to the testimony of Paul Hoornaert). Emission rates for candidate units were developed by Black & Veatch based on each unit's fuel, uncontrolled emission rate, emission control equipment, and best available control technology (BACT) expected emission permit limits. An individual fuel price adder was calculated and applied to existing and candidate units (including TEC) based on this information. This is discussed in more detail in the testimony of Bradley Kushner.

Q. What other environmental considerations have been included in the analysis of TEC?

A. Although regulation of carbon dioxide (CO_2) is currently not required, the Participants chose to evaluate the potential impact on the economic analysis for TEC of potential future regulation of CO_2 emissions. This discussion about the analysis is provided for information purposes only, as it does not relate to an existing legal requirement.

The Senate has considered bills requiring reductions in CO_2, which is a greenhouse gas, as well as implementation of a potential tax on carbon based emissions. Hill & Associates provided a forecast of CO_2 emissions allowance prices for use in the economic analysis based on implementation of a proposed cap-and-trade program that would regulate CO_2 emissions from utility

generating units. The forecast emissions allowance prices are discussed in the testimony of Matt Preston.

Black & Veatch included these projected CO_2 emissions allowances costs in a sensitivity case. These costs were added to the fuel price in the same manner that SO_2, NO_x, and Hg allowance costs were treated in the base case. As a result, one of the economic analyses presented in Sections B.6, C.6, D.6, and E.6 of the Taylor Energy Center Need for Power Application, Exhibit __ [TEC-1], and discussed in the testimony of Bradley Kushner, includes the costs for complying with current as well as potential future environmental programs.

Q. Were allowance allocations for existing units that will be granted to each Participant based on their existing generation resources considered in the economic analyses?

A. No. As stated above, the cost of purchasing allowances for all existing and candidate units was included in the economic analyses. Similar to the capital cost and fixed O&M costs for existing units, the value of the allowance allocations for each Participant's existing units would be the same for all plans and was therefore not included in the economic analyses.

Q. How were supply-side alternatives selected for detailed economic analysis?

A. A screening analysis was conducted for the conventional and emerging technologies as well as the renewable, advanced, energy storage, and distributed generation technologies. The supply-side screening considers each alternative's

feasibility, levelized cost, and overall reliability to meet each Participant's capacity and energy needs. The most promising technologies were selected for further economic analyses.

Q. Please describe the methodology used in the supply-side screening.

A. The supply-side screening considered both economic and non-economic aspects of each type of technology. The non-economic aspects included the technology's developmental status, fuel or resource availability, reliability, feasibility, and the technology's overall ability to meet each Participant's forecast capacity needs. Economics for the technologies were captured in the development of a range of levelized costs for each type of technology.

Q. How were the levelized costs for each supply-side alternative developed?

A. Levelized costs are representative of an all-in cost for each type of technology. The levelized cost for each alternative is determined on a dollar per MWh basis and includes capital costs, fuel costs, and O&M costs. The levelized cost is calculated to reflect an all-in cost for energy at a given capacity factor and is used to make screening level comparisons of different technologies.

Q. Why are levelized costs used in the screening analysis?

A. Levelized costs convert varying annual costs to a single, level annual cost that has the same present value as the original varying annual costs. Levelized cost comparisons of supply-side alternatives provide a good method for screening a large number of alternatives into a smaller number of supply-side alternatives

that are the most capable of providing low cost energy. The alternatives that passed the initial screening were then evaluated on a more detailed basis, as described in the testimony of Bradley Kushner.

Q. Please describe the results of the supply-side screening.

A. Before a supply-side alternative can be appropriately considered for analysis on a levelized cost basis, the technology's reliability and feasibility to meet the Participants' capacity needs must be established. Several of the renewable technologies considered are still in the research and development stage. As a result of a lack of commercial demonstration, the biomass gasification IGCC, parabolic dish, central receiver, solar chimney, ocean thermal, and marine current technologies were eliminated from further economic evaluation.

The effectiveness of renewable technologies is highly dependent on the availability and sufficiency of the various renewable resources utilized for electric power production. Based on transmission considerations, renewable technology alternatives considered in this analysis were geographically limited to the State of Florida. Therefore, wind energy, solar parabolic trough, geothermal, and hydroelectric technologies were eliminated from further economic analysis because of insufficient available resources. While landfill gas (LFG) is available at various sites throughout the state, most of the available LFG is already being utilized by other utilities, including JEA. Additionally, the amount of LFG available is not sufficient to mitigate the need for additional

capacity for any of the Participants. Thus, LFG generation was not considered for further evaluation.

Advanced technologies were screened by development status and feasibility. The advanced combustion turbine, fuel cell, and coal technologies are still considered developmental stage technologies. Due to the early developmental stages of these technologies and the uncertainty relating to reliability and cost, these advanced technologies were not considered for further evaluation.

The remaining nonconventional supply-side technologies were examined on a levelized cost basis, and were evaluated against the levelized costs of the conventional technologies. As a result of this comparison, municipal solid waste mass burn, refuse derived fuel, solar photovoltaic, pumped hydroelectric energy storage, lead-acid battery energy storage, compressed air energy storage, reciprocating engine, and microturbine technologies were eliminated from further economic analyses.

A few nonconventional supply-side technologies appeared favorable when compared to conventional alternatives on a levelized cost basis, but were eliminated from further analyses for various non-economic reasons. These technologies include co-fired biomass, anaerobic digestion, and nuclear. The anaerobic digestion alternatives would not provide sufficient capacity because of limitations on biogas fuel quantities available to the Participants to defer the

need for TEC. These projects are typically less than 1 MW in size because of biogas resource limitations.

Co-fired biomass was eliminated due to the lack of units that could be converted to biomass co-firing among the Participants. In addition, co-firing would not add to the existing capacity resources of a Participant, but would only alter the fuel sources.

The nuclear alternative is both too large for the Participants to undertake alone, and new designs are not considered available for commercial operation prior to 2021. In addition, while the capital costs for nuclear alternatives appear attractive, these are based primarily on vendor estimates. No new domestic nuclear units have been started in more than 25 years. While it may be possible to achieve the estimated costs, they represent a tremendous reduction from the costs of the most recently constructed US nuclear unit. For these reasons, nuclear alternatives were not considered available for the Participant capacity needs.

Q. What was the result of the screening analysis?

A. The overall result of the supply-side screening was that advanced, energy storage, and distributed generation technologies did not pass all of the criteria of the supply-side screening to merit further economic analysis. One renewable alternative, direct-fired biomass, warranted further consideration. Although adequate resources would need to be confirmed for a specific biomass project

and location, a sensitivity analysis was conducted to determine the cost effectiveness of a 30 MW direct-fired biomass facility. The other technologies considered in the detailed economic analyses, presented in Sections 5 and 6 of Volumes B through E of Exhibit __ [TEC-1], included all conventional technologies, IGCC, and the General Electric LMS100 combustion turbine.

Q. In general, how did the renewable technologies compare to the conventional technologies in the levelized cost comparison?

A. Although resources for most renewable technologies are not available to meet the capacity needs of the Participants in Florida, they are competitive with conventional alternatives in other areas of the country. Because of transmission import limitations, renewable generating alternatives were limited to those available within Florida. Alternatives that can be competitive in other areas of the country include wind, parabolic trough, hydroelectric, geothermal, landfill gas, and biomass. Wind energy is intermittent and therefore cannot provide firm capacity. In addition, as discussed in the testimony of Ryan Pletka, wind resources in Florida are generally insufficient for economical wind energy generation. Biomass may be competitive on a small scale, if resources can be obtained within Florida.

Q. Are there any benefits to peninsular Florida associated with the addition of TEC?

A. Yes. As a reliable and efficient supercritical pulverized coal unit, TEC will increase reliability as well as fuel diversity in peninsular Florida. TEC will help

fill Florida's need for additional generation over the next 10 years to maintain adequate reserve requirements. It will also diversify Florida's fuel mix by adding coal fired generation, and thus displace some future natural gas fired capacity, which is subject to higher price volatility than coal and potential supply disruptions. In addition, having diversity of fuel supplies can limit potential disruptions in electric service resulting from fuel supply interruptions and, thus, can increase system reliability.

Q. What are the consequences to the Participants of delaying TEC?

A. Delaying TEC would result in reduced reliability and higher costs. If TEC is delayed, the Participants' ability to meet their respective reserve margin requirements in 2012 will be affected. FMPA, JEA, RCID, and the City of Tallahassee's reserve margins will drop to approximately 2 percent, 13 percent, 15 percent, and 14 percent, respectively. RCID would need to increase their purchases under an existing contract to maintain its reserve margin. The lower reserve margins would increase the probability that each Participant would not be able to serve its member loads in the event of unforeseen circumstances.

The economic consequences of delaying TEC until May 2013 vary for each Participant. However, a 1 year delay in commercial operation of TEC will result in higher CPWCs for each Participant compared to commercial operation in May 2012. If other capacity resources were installed to meet each Participant's reserve margin, costs would increase. The economic consequences of a 1 year delay in commercial operation of TEC are approximately ~~$25.9~~ 19.9 million for

FMPA, ~~$41.7~~ 39.0 million for JEA, ~~$25.5~~ 24.4 million for RCID, and ~~$4.4~~ 2.1 million for the City of Tallahassee.

Q. Does this conclude your pre-filed testimony?

A. Yes.

BY MR. PERKO:

Q Mr. Rollins, have you prepared a summary of your testimony?

A Yes, I have.

Q Would you please provide that now?

A Yes, I would. First though I would just like to say a week ago I had, last week I had eye surgery for my retina, and so if I close one eye, that's what's, that's what's going on.

But good morning, Commissioners. I've been working in Florida for utilities since the late '70s. During that time I've prepared need for power applications for seven coal units and five combined cycle units, and this application you have before you today is by far the most detailed and comprehensive I've ever prepared.

In preparing the need for power applications we're careful to address the requirements of Section 403.519 of the Florida Statutes and your applicable Commission rule. In preparing this application, we have addressed those requirements for each of the four joint applicants, which are Florida Municipal Power Agency, JEA, Reedy Creek Improvement District and the City of Tallahassee.

In demonstrating the statutory requirements we strive to use the most reasonable and consistent assumptions and forecasts available in conjunction with reasonable and

appropriate evaluation techniques. In addition to conducting base case evaluations, we have conducted approximately 18 sensitivity analyses for each of the four participants. We have evaluated 66 supply-side alternatives, including IGCC and numerous renewable technologies, as well as nearly 200 demand-side measures. We have explicitly evaluated the costs under the recently enacted CAIR and CAMR regulatory programs for all existing and planned generating units. We have even provided a sensitivity analysis for CO2 even though it was not a regulated pollutant and is outside of the statutory criteria.

Taylor Energy Center was the least-cost alternative for each of the four participants in the base cases and virtually all the sensitivity analyses. A one-year delay in commercial operation of the Taylor Energy Center will collectively cost the participants approximately $85 million. And the remainder of our witnesses will, will go into every detail of our evaluation. That concludes my summary.

MR. PERKO: Madam Chair, just one housekeeping matter. I'm not sure how to go about this, but the sections of the applications that the witnesses are sponsoring, should we enter those into the record at this time or --

MS. BRUBAKER: Frankly, it's a matter of appearance. I suppose we should be consistent; either go ahead and move all exhibits relative to a particular witness either prior to their

being cross-examined or after. We've done it both ways. I would recommend we be consistent. Perhaps move all exhibits in after the witness is finished cross-examination.

CHAIRMAN EDGAR: Which is generally the way I handle it, and so let's, let's do it that way.

MR. PERKO: That's fine.

CHAIRMAN EDGAR: And thank you for asking.

Okay. Ms. Brownless.

cross EXAMINATION

BY MS. BROWNLESS:

Q Good morning, Mr. Rollins. How are you?

A I'm fine.

Q When we were at your deposition we discussed the evaluation of IGCC units by the TEC applicants. And is it true that you assumed that IGCC units would be available for commercial operation in 2018 and thereafter?

A Yes, ma'am.

Q Okay. And that the reason you picked 2018 was because you believed that the new version of IGCCs would not be commercially demonstrated, commercially demonstrated, I guess, until that time?

A Yes, ma'am. We characterized IGCC in our economic evaluations as an emerging technology. We thought that given the size of the municipal utilities and the potential risk of a, of an alternative not performing, that we needed to wait

until 2018 to ensure that the IGCC would be a reliable alternative. And how we, how we got to that 2018 is there are some IGCC units being planned. I don't know if there's any new ones under construction yet. But the OUC unit will be under construction shortly. It's scheduled for a 2010 commercial operation date. We thought it would be prudent to have three years of demonstrated performance, so that would be three years there, and it takes a couple of years to permit and license an IGCC unit and then probably about three years to construct it. So that's how we got to the 2018 as the first year that we thought an IGCC unit could be reliably counted on for commercial operation for applicants or utilities such as the applicants.

Q And because you did not consider IGCC a viable technology into 2018, did you prepare any analysis in which, a base case analysis in which an IGCC -- in which the TEC unit was considered to be an IGCC unit of that size rather than a supercritical pulverized coal plant?

A I wouldn't characterize it as a base case analysis, but that may be semantics. We did do an evaluation regardless of the commercial status of the IGCC as a three-block IGCC unit in operation in 2012 at the Taylor Energy site as a direct comparison to Taylor Energy Center, and the Taylor Energy Center was lower in cost than the IGCC unit.

Q Now in your analysis of that IGCC unit did you

include any subsidies from DOE?

A No, we didn't.

Q You spoke about the Orlando gasification LLC, the Southern Company OUC IGCC project, and that's a 283-megawatt project; is that correct?

A Yes, ma'am.

Q Okay. And I believe you also -- did you work on that project as well, Mr. Rollins?

A Yes, ma'am.

Q Okay. Now that received a subsidy from the Department of Energy of $12.9 million -- I mean, of $235 million; is that right?

A Yes, ma'am.

Q And had the TEC applicants wished to pursue an IGCC in 2012, would they also have been able to get a DOE demonstration grant?

A No, ma'am.

Q Why?

A The DOE demonstration grant money is available in rounds, what they call rounds from the Department of Energy. They make a chunk of money available and take requests for proposals or ask for proposals for that. To my knowledge there's been no round of DOE money that was available in the time frame that the participants could have taken advantage of it.

Q Okay. Did you make a written, or anyone from the TEC partners make a written request of DOE requesting such funds?

A I did not make a request. But you should talk to our witness Mike Lawson. He's, he's the person who is the project manager for the project and pursued any opportunities for financing from the DOE.

Q Okay. The DOE grant, the $235 million Clean Coal Power Initiative Grant that was given to OUC allowed that IGCC unit to be cost-effective, did it not?

A Yes, ma'am.

Q Do IGCC units allow the ability to capture CO2 emissions and sequester them?

A I think the capture and sequestering of CO2 is, is something that's even further out than emerging. But like pulverized coal units, I believe that, that technology is at least theorized for the, for the capture of CO2.

Q Okay.

A From IGCCs as well as pulverized coal units.

Q So the technology is available today to capture CO2 from IGCC units and sequester it?

A I don't believe the technology is available today, but you should address that question to our IGCC witness, Chris Klausner.

Q There was testimony yesterday given about the Tampa Electric IGCC unit that was permitted by the Commission in

1992 and went into commercial operation in July of 1996. Did the applicants make any effort to talk to TEC with regard to that unit, I mean talk to Tampa Electric Company with regard to the operation and viability of that unit?

A I don't know if, if the applicants talked to Tampa Electric Company. I know that I personally went to see that site when, during -- when we were preparing the need for power application for the OUC IGCC unit.

Q Okay. Do you know the capacity factor for that plant?

A I don't know the capacity factor for that plant, but I know that the lifetime availability for it's been about 74 percent.

Q And that plant burns a variety of fuels, does it not?

A I believe it does.

Q So in that sense it has dual fuel capability?

A I think it burns a variety of solid fuels. If you, if your definition of dual fuel capability is burning different types of coal or petroleum coke, then I guess that would be true.

Q Okay. Hasn't it also burned diesel and biomass at some points in its operation?

A I don't know if it has or it hasn't.

Q Can you tell how, us how a supercritical pulverized coal plant compares with regard to an IGCC with regard to SO2

emissions? Are they similar? Is it greater or lesser?

A Generally the IGCC unit will be, will have lower emissions on SO2.

Q NOx?

A Generally IGCC units and pulverized coal units are comparable on emissions of NOx.

Q Mercury?

A I don't recall the comparison on mercury.

Q Okay. CO2 emissions?

A Generally the CO2 emissions are comparable between an IGCC unit and a pulverized coal unit, supercritical pulverized coal unit.

Q And that's true notwithstanding the fact that you're basically in an integrated -- in a gasified combined cycle creating synthetic gas and burning the synthetic gas?

A Yes, ma'am. That's true.

Q You participated in the Treasure Coast need determination, and that is also a recent need determination; is that correct?

A Yes, ma'am.

Q Okay. And in that one FMPA was the sole owner; right?

A Yes, ma'am.

Q Okay. And that's a 300-megawatt natural gas-fired combined cycle unit?

A Yes, ma'am.

Q And that comes online in the summer of 2008?

A Yes, ma'am.

Q Okay. At the time that the Treasure Coast unit was being evaluated as the least-cost alternative for FMPA did the integrated resource plan in that evaluation include the Taylor Energy Center as a coal unit in 2012?

A It included it as a coal unit. I don't recall if it was 2012. It might have been 2011. But it included it.

Q Okay.

A Or what is now it.

Q Was the combined cycle unit in 2008 the most cost-effective option for FMPA at that time because the TEC unit was included in its IRP?

A Yes, ma'am. The combined cycle was the least-cost alternative.

Q Had some other technology been included in 2011 and 2012 would the combined cycle unit, natural gas-fired unit have been the most cost-effective for FMPA at that time?

A It was, the combined cycle was the most cost-effective unit for FMPA of all the alternatives that we evaluated, and we evaluated several.

Q Okay. Did the approval of natural gas for Treasure Coast in the summer of 2008, was it in part based upon an understanding that FMPA would construct a coal plant in

2011 or 2012?

A At that time FMPA was planning on constructing the Taylor Energy Center. Yes.

Q In your testimony you give some analysis of what's a one-year delay analysis; is that correct?

A Yes, ma'am.

Q Okay. And that was on Page 20 of your direct testimony. And I think you also gave some revised numbers for this analysis at your deposition. Do those revised numbers, are they based on the higher capital costs of TEC?

A Yes, ma'am. It's due to the higher capital cost.

Q And do these revised numbers take into account Tallahassee's delay in need for capacity to 2016 due to its revised DSM portfolio?

A The revised numbers are based on a one-year delay in the base case analysis, which did not include the, the DSM portfolio. The DSM portfolio was evaluated separately in Tallahassee's evaluation for the application.

Q Okay. So the numbers that you have, the revised numbers take into effect the higher cost of TEC but do not take into effect the City of Tallahassee's revised portfolio DSM numbers?

A I think that's true. Yes.

Q Okay. I believe you provided answers to staff interrogatory number 76; is that correct?

A Yes, ma'am.

Q Let me find mine. Hold on a second.

And if I understand your response, the modeling done in this case was based upon federal implementation or federal assumptions regarding the Clean Air Interstate Rule for NOx and SOx regulation; is that right?

A Yes, ma'am. Let me explain a little bit on that.

Matt Preston of Hill & Associates developed our projections of allowance cost for SO2, NOx and mercury. We modeled those allowance costs in our economic evaluation. And his development of those, which you'll need to ask him about for the details, included or were based on the federal cap-and-trade program.

Q Okay. Now as I understand it, the Florida Department of Environmental Protection is tasked with having a state implementation plan for that federal program; is that correct?

A That's how I understand it, too.

Q Okay. And they had made proposals in September of last year with regard to how they intended to specifically implement that federal program; right?

A That's how I understand it. Yes.

Q Okay. Now I also understand that those, and we'll refer to them as CAIR rules, have been challenged; is that right?

A That's my understanding as well.

Q So at this time there is no final DEP or state implementation plan with regard to SO2 or NOx emissions; correct?

A I don't believe that's particularly the case, as my understanding of the process is that portions of the CAIR rule were challenged. The DEP is required to submit their state implementation plan to the EPA for approval. They have not done that in agreement with the EPA pending resolution of its challenge. But until a state implementation plan is approved by the EPA, the federal implementation plan will govern.

Q Okay. But there is no final state law, no final state rule?

A At this time, there is not.

Q I think you also answered Staff Interrogatory Number 63, is that right?

A Yes, ma'am.

CHAIRMAN EDGAR: I'm sorry, could I interject? I'm not sure I understood the question. And since I didn't understand the question, that means I'm not sure I understand the response.

The question, I think you said, is that there is no final state law?

MS. BROWNLESS: There is no final state standard for SO2 emissions and NOX emissions.

CHAIRMAN EDGAR: As the SIP has not been approved by

EPA, therefore we have a FIP?

THE WITNESS: Right. But the federal implementation plan governs until a state implementation plan is approved.

CHAIRMAN EDGAR: Thank you.

MS. BROWNLESS: Yes, ma'am.

BY MS. BROWNLESS:

Q With regard to Staff Interrogatory Number 63, this deals with the Clean Air Mercury Rule which everybody refers to as CAMR, is that correct?

A Yes, ma'am.

Q And has the Florida Department of Environmental Protection sent out the administrative order that will quantify the initial mercury allowance under the CAMR program?

A I believe they have, but I have not seen that order.

Q Okay. Would affected persons have the right to challenge that initial allocation, as well?

A That's beyond my expertise; it sounds like a legal issue.

Q Okay. The initial administrative order was part of the Florida Department of Environmental Protection's State Implementation Plan for CAMR, is that right?

A Could you repeat that question? I got lost in it, I'm sorry.

Q Just like for CAIR, the CAMR rule, the federal CAMR rule has to have a state implementation plan here, right?

A Yes, ma'am.

Q Okay. And the Florida Department of Environmental Protection is responsible for that, right?

A Yes, ma'am.

Q And their state implementation plan requires them to allocate a certain amount of mercury allowance to each qualifying entity, is that right?

A Yes, ma'am.

Q So to the extent that that decision can be challenged, that allocation can be challenged by interested parties, the state implementation plan for CAMR is not complete at this time?

A I do not know the legal statutory times, or whatever, for challenges, if they have run, or what the exact status is on that.

Q But you don't have to know and you don't have to be a legal witness to answer the question. Simply, a preliminary allocation has been made. And to the extent that it's preliminary and not final, then there has been no final implementation of mercury rules by the Florida Department of Environmental Protection, isn't that true?

A Again, I think that's outside my detailed expertise on what happens with -- if it has been finalized or not like that. And, in any event, it has no bearing on the evaluations we did in our application.

Q And you know that, even though you don't know the final implication of the DEP rule?

A Yes, ma'am, and let me explain if I can. We modeled all the emissions, we applied the projected allowance prices to all the emissions. So whether there has been allocation or that allocation has been revised for all existing and future units, we costed their actual emissions with the projected allowance pricing.

Q And you costed it based upon federal regulation, not state regulation.

A We costed it based on the allowance price projections that Hill & Associates developed.

Q And those were based upon federal regulations, correct?

A You'll need to ask Matt Preston for sure, but I believe they were.

Q Thank you. I believe in your opening statement you indicated that you had been working in the State of Florida approximately 29 years, is that correct?

A Since the late '70s, yes, ma'am.

Q And during that time, I know you have had an opportunity to consistently review the annual growth rate for electric demand in the state, is that true?

A Yes, ma'am.

Q Has Florida's annual electric demand growth rate ever

been one percent or less in the 29 years you've been working in this state?

A Well, I would like to clarify that I don't every year look at what the exact growth is, and there may have been a year that it wasn't as high as one percent, but generally it has always exceeded one percent.

Q And is it true that over the last ten years the annual growth rate has been approximately two percent?

A I would guess that would be the case, but I have not checked it.

Q With the exception of Florida Progress' request to expand its nuclear plant, which I believe is pending with the Commission at this time, how many nuclear power plants have either been permitted or expanded in the past ten years in Florida?

A In general, there aren't any, although it is not uncommon. It may have happened that St. Lucie, Turkey Point, or Crystal River 3 had some small upratings that incurred during that time. I don't know for sure, but that happens frequently.

Q And those would have been small upgrades that would not have triggered their coming before the Florida Public Service Commission under the Power Plant Siting Act?

A They didn't come before the Florida Public Service Commission under the Power Plant Siting Act, and I think that

is another legal question about what capacity threshold is required to go under the Florida Power Plant Siting Act, and that's probably beyond my expertise.

Q Well, I think the Siting Act says if its 75 megawatts or more, one has to come to the Florida Public Service Commission. So accepting that as true, then is it your testimony that there are no nuclear power plants in Florida that have been expanded beyond 75 megawatts in their capacity in the last ten years?

A Certainly that is true, that there have been no nuclear power plants in Florida that have been expanded beyond 75 megawatts in the last ten years.

Q Have there been any nuclear power plants, brand new nuclear power plants sited in Florida in the past ten years?

A No, ma'am.

MS. BROWNLESS: Thank you. Originally we agreed that direct and rebuttal would be kept separate, and are we still moving along that path?

MR. PERKO: I think it would be more orderly, Commissioner. At this point we have gotten two rebuttal witnesses that have already been stipulated, so I don't think rebuttal is going to take too long, in any event.

CHAIRMAN EDGAR: Okay.

MS. BROWNLESS: Thank you. That's all I have.

CHAIRMAN EDGAR: Commissioner.

COMMISSIONER ARRIAGA: Thank you, Madam Chairman.

Before we move on, I think I heard you say that allocation of funds for IGCC plants is a process that is handled by the Department of Energy and that you were not aware that there had been a similar process recently. But I think I understood from TECO Energy that they were just allocated some funds from a similar process.

THE WITNESS: I believe that's a different process. I believe that they got some tax credits, and that is different from -- I think those were probably a part of the 2005 Energy Policy Act, and that is a different thing than the DOE clean coal funding rounds that OUC received their grant or cost sharing from. And these are municipal utilities, so they can't take advantage of tax credits.

COMMISSIONER ARRIAGA: Okay. That was going to be my next question, if you had considered this possibility in your financial analysis. But you are telling me that municipal utilities cannot take advantage of that possibility.

THE WITNESS: Right. They are tax exempt.

COMMISSIONER ARRIAGA: Thank you.

CHAIRMAN EDGAR: Commissioner Carter.

COMMISSIONER CARTER: Thank you, Madam Chair. Possibly a couple of questions.

Do you know how many IGCC units operate in the United States currently?

THE WITNESS: I believe there are two that generate electricity.

COMMISSIONER CARTER: Just two?

THE WITNESS: Yes, sir.

COMMISSIONER CARTER: Madam Chairman?

CHAIRMAN EDGAR: Uh-huh.

COMMISSIONER CARTER: And you are saying that you chose the 2018 date because of the possible plant that will be here in Florida, permitting, siting, getting up and running, and then maybe a three-year time to evaluate it to see what the results are. Did I hear you say that?

THE WITNESS: Correct. And that's also in conjunction with the applicants being relatively small utilities have to have a reliable or dependable alternative, you know, something. If it doesn't perform, it's a big problem if you are a little utility; it may be a different story if you're a great big utility, it's not as bad or not as big a percentage of your system.

COMMISSIONER CARTER: Just a few seemingly innocuous questions.

Does an IGCC plant require a larger footprint than just a pulverized coal plant, just generally speaking?

THE WITNESS: I don't believe it does.

COMMISSIONER CARTER: And we're just talking about the need determination on this plant, right? Were you guys

ever -- Madam Chairman?

CHAIRMAN EDGAR: Yes.

COMMISSIONER CARTER: Were you guys able to determine whether or not it would require more to operate over a period of time, more cost to operate an IGCC plant versus a pulverized coal plant over the life of the plant?

THE WITNESS: I believe the O&M costs are higher for an IGCC unit. We have a witness, Chris Klausner, that can address that in specifics for you.

COMMISSIONER CARTER: And you said, again, how many were operating in the United States?

THE WITNESS: I believe there's two that generate electricity in the United States, that burn solid fuel and generate electricity.

COMMISSIONER CARTER: Madam Chairman, just one final question. Thank you for your indulgence.

Do you know if there is a difference in the rates that the consumers are paying, the ratepayers, in an IGCC unit versus a pulverized coal plant?

THE WITNESS: Well, our evaluation indicated that the IGCC plant, or plans with the IGCC plant were more expensive than plans with the pulverized coal unit. And so since the costs are more, you would expect that the rates are more. Now, I don't know the details of, you know, any of the operating IGCC units, if they are more or less expensive given they all

had government funding. You know, what their effect on the rates to their individual utilities are, but they all had government funding to -- or subsidization as part of being built.

COMMISSIONER CARTER: You do understand that part of what we are doing in our process, we always -- this Commission always keeps an eye to the forefront of the person at the end of the change, which is the consumers.

THE WITNESS: Right.

COMMISSIONER CARTER: That was the nature of my questions. I was just trying to see if there is a higher cost for the ratepayers, a lower cost, and if so what is that percentage. I'm just trying to get my head around that. If you could help me, please.

THE WITNESS: Our plans showed higher cost. I don't have before me -- the numbers are in our application with a plan with, say, the IGCC unit that we assumed irregardless of technical reliability or availability or commercial availability, we did a case where we assumed one in 2012 compared to Taylor Energy Center in 2012. We have the numbers on, you know, a total basis. We could compare those on a percentage basis if you like.

COMMISSIONER CARTER: Madam Chairman, I don't want to tie up the time, maybe we can get it later, but that would be interesting, I would like to see that. Thank you, Madam Chair.

CHAIRMAN EDGAR: Thank you.

Mr. Paben.

MR. PABEN: No further questions.

CHAIRMAN EDGAR: Mr. Jacobs.

MR. JACOBS: Thank you, Madam Chairman.

CROSS EXAMINATION

BY MR. JACOBS:

Q Good morning, Mr. Rollins.

As you indicated earlier, you have had a good bit of experience working both generally in the electric design and construction of electric plants in the country and in Florida, is that correct?

A That's correct. I do most of my work in Florida, and I do most of my work in the planning area as opposed to specific design and construction, but --

Q Okay. Have you worked on projects which planned for supercritical pulverized coal plants before?

A I have, but it has been a long time ago.

Q In fact, there's kind of been a lapse in the construction of supercritical plants, have there not?

A There has been a lapse in the United States until recently of supercritical units, but there has been quite a bit of activity on supercritical units being built in Europe and Japan.

Q Have you worked on a supercritical plant in Florida

prior to this one?

A A supercritical plant in Florida prior to this one?

Q Yes.

A No, sir.

Q Are you aware of any supercritical plants that are operational in Florida now?

A I don't believe there are any.

Q Are you aware of any design or technological issues that have been addressed generally in the industry with regard to supercritical plants?

A I believe concerns on technological issues on supercritical plants have been addressed by the industry.

Q Okay. And just to go back briefly to our discussions about IGCC, and there was a discussion of some technological issues that are being raised that will prevent its being implemented as a production plant at this point in time. And the question I want to get at is that there obviously is a planning cycle within which the industry and researchers are looking to address those design considerations for IGCC, is that correct, as was done for supercritical plants?

A Yes, I believe that the industry is trying to address the technical problems that have occurred with IGCCs.

Q And so what we are really seeing are two emerging technologies in electric energy production and both of them have had to address fundamental technological issues, is that

correct?

A I don't characterize supercritical pulverized coal as an emerging technology. I characterize IGCC as an emerging technology.

Q And what is the basis of that distinction?

A The distinction there is that there are significant numbers of supercritical pulverized coal units that are performing very well in both Europe and Japan. There are very few integrated coal gasification plants that are performing anywhere that generate electricity and burn solid fuel, and especially the ones in the United States have had problems getting to be reliable to a level and actually have not reached a reliability level comparable to a supercritical unit.

Q And I assume your statements discount the information that we heard about IGCC plants that are operating in Europe as well, are you aware of those?

A I'm aware to some extent. I would not consider that I'm aware of all of them, but I know the information you heard yesterday a lot of that is not supported by some of the facts.

Q Okay. One of the big issues in any planning process is the issue of the risk. And in your planning for electric plants, I'm sure you have to deal with a whole range of risk; is that a fair statement?

A Yes, sir.

Q And in your testimony you have addressed that. And I

believe basically you have identified a risk management technique that has been adopted in this process whereby you undertake a range of sensitivity analysis, is that correct?

A We have conducted numerous sensitivity analysis for this project, yes.

Q And please correct me if I misstate this. A risk that will be identified for the building of this plant, and in this instance let's look at the risk of high capital costs, okay, whereby -- and the way that the planning process in here would address that, and let's walk through that process as I understand it. You took a base case of estimated costs, and then you did a projection for a certain percentage above those base case costs, in this instance I believe it was 20 percent, and then you ran a sensitivity analysis which looked at the whole range of inputs and costs for this plant and how they would play out against that increase in capital costs. And I probably have grossly misstated, but is that a fair concept?

A It is pretty close. What we did is we did a sensitivity analysis of a 20 percent increase in capital costs.

Q Now, that analysis, it holds constant a whole range of other assumptions does it not, but for that one variable, and in our scenario it would be the capital costs?

A Yes, that's true. We increased the capital costs holding the other variables stable or whatever.

Q So as long as that sensitivity analysis holding these

other factors constant shows that with capital costs increasing 20 percent, shows the -- and forgive me, I can't remember the term that you used, but the ultimate return, the ultimate cost-effectiveness for the applicant -- CWTC, I can remember the acronym, but I can't remember what it stands for -- but as long as that value remains positive, we'll call it, over that analysis, then your assumption is that that risk is not pertinent to the applicants' decision on this plant. Is that a fair statement?

A Well, I don't know if I would characterize it as not pertinent. The purpose of doing a sensitivity analysis is to look at the effect of the increased capital costs. And if a plan with Taylor Energy Center with an increased capital cost compared to plans with increased capital costs for other units such as combined cycle, and looking at the economic comparison between those two, and if the plant at Taylor Energy Center was still lower in cost, it would give comfort to the applicants and the Commission and whoever that even if capital costs go up, the Taylor Energy Center still will remain the least-cost alternative for the applicants.

Q Now, let me be a bit more specific. I know that you did an analysis of where you escalated the capital costs. There are a range of elements of those costs. And what I would like to understand is to what extent these elements were wrapped up in your 20 percent increased projection. And the

first one I would ask about would be transmission costs. Are you aware of whether or not there was a sensitivity analysis which varied upward your transmission costs for this plant?

A We did an analysis, and I don't know if it was in the application, it might have been in an interrogatory response, where we looked at the cost of transmission interconnection being added to the Taylor Energy Center costs. And under that evaluation or scenario, Taylor Energy Center was still least cost.

Q Okay. And you looked at a scenario where -- well, let my digress for a moment. One of the key inputs for this proposal and its viability as a fuel diversity option was that the spot market cost of natural gas would exist at a certain level within a certain range and the spot market price of your proposed coal fuel would exist at a certain range, okay, is that a fair statement?

A We used three -- well, actually four sets of fuel cost projections in our evaluation. We used the base case in which Hill & Associates developed consistent fuel price projections for coal and gas. We had a low-fuel forecast scenario in which they did the same thing, the only thing consistently lower fuel prices. We did the same thing for higher fuel prices. And then we had a sensitivity case in which they developed fuel price projections under an assumed CO2 regulation case.

Q Now, do you know, or did you track, or I know there is a witness from Hill & Associates, maybe we should ask them, but to your knowledge, what was the -- how recent was the data with regard to -- and specifically natural gas spot market prices, how recent was that data that was included in your model and in your trending?

A I think you probably ought to ask Matt Preston that question because --

Q Okay. One other, we can move on then to another issue. There has been some discussions about the whole idea of IGCC plants. You're aware that the Commission recently approved an IGCC plant for Florida, are you not?

A Yes.

Q And do you have an opinion as to the operational prospects of that plant, whether or not the technology is appropriate and whether or not it can be relied upon to operate?

A Well, it's a demonstration plant, so certainly there's, you know, concerns about the technology operating in the manner in which they would like it to, but that is why the DOE funds these demonstration plants to bring them from a demonstration stage into a commercial operation or commercial reliability stage.

Q Okay. But the Commission approved it in a certificate of need proceeding, did it not?

A Yes, they did.

Q Which meant that it was designed and implemented to address a real need for that utility, correct?

A Yes.

Q And so we would expect that it would not have been improved with a level -- let me ask my question this way. We would expect that that approval would have been attached to some manner of assurance that it would be available when that need presented itself, correct?

A Well, I'm sure that the Commission considered all the aspects of that project, all of its costs and especially including the $235 million cost sharing grant as well as all the other operation and maintenance and reliability issues associated with that plant.

Q Okay. Are you aware, and I guess -- let me come back now to the TEC planning process rather than that prior approval. Are you aware whether in your analysis of IGCC of whether or not the projected operation of that plant in your analysis assumed petcoke as an input fuel or not?

A Are you asking whether we assumed petcoke as the fuel for our IGCC unit that we evaluated?

Q Right.

A I don't recall. Brad Kushner can answer that question for sure.

Q Okay. And, finally, there was some earlier

discussion about mercury regulations, and I believe you said you weren't clear on what the final regulations are now in Florida with regard to mercury regulation?

A I believe that the state implementation plan was submitted for the CAMR rule, and --

Q Okay. And so -- I'm sorry.

A And I think EPA -- well, I don't know the status of EPA's approval of it.

Q Now, I asked that question because I believe we have testimony that the costs for the Taylor Energy Center were directly affected by the status of mercury regulations in the state, is that your understanding?

A We evaluated the cost of Taylor Energy Center based on its mercury emissions and our projections of mercury allowance prices.

Q I'm referring specifically, and we may need to speak to Mr. Hoornaert more directly about this, but in Mr. Hoornaert's rebuttal testimony he indicates that a $40 million item was added to the construction cost for Taylor Energy directly in response to mercury regulatory provisions, is that your understanding?

A My understanding of that is that that $40 million capital cost addition, which we have included in your capital costs, will be used, if necessary, to get the required level of mercury reduction. I believe that the applicants believe that

it likely might not have to be used. Some cheaper manner may be used. But in an abundance of caution we included that $40 million capital cost.

MR. JACOBS: Very well. Just one moment, I think I may be done.

BY MR. JACOBS:

Q One final point. There was earlier testimony about, I think it was in your testimony where you indicate that the applicants will incur -- in the event that an applicant would defer building, the applicants would defer building Taylor Energy Center, a one-year deferral would -- and there were some projections about what the cost impact would be to the applicants. I'm not so much focused on that particular level of cost. My question is in that deferral year, was there any analysis done that indicated whether or not those applicants would introduce alternatives to supply sources, and specifically I'm looking at energy efficiency, conservation, or DSM measures. Did your analysis of that deferral undertake any assessment of what they were doing or could do with regard to those resources?

A We separately evaluated the demand-side management measures, and that was a separate evaluation from our evaluation of a one-year deferral or one-year delay in the installation of Taylor Energy Center.

Q My point is this: In your estimation of the cost

impact to the Taylor Energy Center applicants if they were to delay building the complex, did you do any analysis as to how they could manage that cost by introducing DSM, energy efficiency, or other measures such as those?

A We did not directly connect those two.

MR. JACOBS: Thank you very much. I'm done.

MS. BROWNLESS: Madam Chairman, may I ask two small questions quickly? Just two. I promise. Real quick.

CHAIRMAN EDGAR: Ms. Brownless, I'm sorry, and I am sorry to say this, but I'm going to deny because that is my practice.

MS. BROWNLESS: Thank you, Madam Chairman.

MR. PERKO: Just very briefly, Your Honor. Commissioner. Ms. Chairman.

REDIRECT EXAMINATION

BY MR. PERKO:

Q Following up on some questions regarding IGCC, Mr. Rollins, just very briefly. In response to Ms. Brownless's questions you mentioned that the long-term availability rates for the TECO Polk IGCC unit was in the range of 74 percent, is that correct?

A That's correct.

Q And you had some questions from Mr. Jacobs regarding supercritical pulverized units. What kind of availability factors are those units achieving at this time?

A Generally a 90 percent availability factor is achievable.

Q And I wanted to make sure that your answer to one question I believe Mr. Jacobs asked, was petcoke used for the joint development IGCC option in lieu of TEC in the analyses?

A I don't recall. It is in the application.

Q Would that be a question for Mr. Kushner?

A Mr. Kushner can answer that for sure.

Q And finally with regard to CAIR, if we could just try to put that to bed, as I understand your testimony, the Florida Department of Environmental Regulation has adopted a CAIR implementation rule, is that correct?

A Yes.

Q And that CAIR implementation rule calls for the state of Florida to join the Federal Cap and Trade Program?

A That is correct.

Q And I understand from your testimony that certain provisions of that rule have been challenged, and as a result, Florida has not been able to submit a SIP provision. But if I understand your testimony correctly, unless and until that SIP provision is submitted and approved, Florida will be subject to the federal implementation plan, is that correct?

MS. BROWNLESS: Objection, Your Honor. Mr. Perko is leading his own witness.

BY MR. PERKO:

Q Unless and until that SIP is approved, how will Florida be governed for CAIR purposes?

A They will be governed under the federal implementation plan. I think that is what I said before.

Q And is that federal implementation plan a final rule?

A Yes.

Q And with regard to the Clean Air Mercury Rule, has Florida adopted a clean air mercury rule implementation rule?

A Yes.

Q And how does that rule address whether Florida will participate in the federal cap and trade program for mercury?

A Florida will participate in the federal cap and trade program under that rule.

MR. PERKO: Thank you. Nothing further.

CHAIRMAN EDGAR: Exhibits. Do we take up exhibits?

MR. PERKO: Yes. We would move exhibit number, I believe it is 4.

CHAIRMAN EDGAR: Four and 5 I think is what we have.

MS. BRUBAKER: Madam Chairman, if I may.

CHAIRMAN EDGAR: Ms. Brubaker.

MS. BRUBAKER: Madam Chair, if I may, there is also an Exhibit 3, I would like to point out. It's identified as TEC-1E. It is an errata sheet which updates figures for various sections in the need application. Various witnesses do

sponsor those different sections. As a matter of expediency, I would suggest we also -- as long as there is no objection, go ahead and move that into the record, as well.

CHAIRMAN EDGAR: And I was going to ask about that, so thank you for the reminder. And seeing no objection to moving the exhibit marked as 3 into the record, we will do so. Four and 5? Seeing no objection. We will move Exhibits 4 and 5 into the record, as well.

(Exhibits 3, 4, and 5 admitted into the record.)

CHAIRMAN EDGAR: Seeing no further questions, the witness may be excused. Thank you very much. And it is about that time, so we are going to break for lunch. Slow going. I will look at scheduling and calendar considerations at lunch, and perhaps we can discuss that when we come back.

So, 12:35, we will aim to come back at 1:30.

(Lunch recess.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTERS
COUNTY OF LEON)

WE, JANE FAUROT, RPR, and LINDA BOLES, RPR, CRR, Official Commission Reporters, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that we stenographically reported the said proceedings; that the same has been transcribed under our direct supervision; and that this transcript constitutes a true transcription of our notes of said proceedings.

WE FURTHER CERTIFY that we are not a relative, employee, attorney or counsel of any of the parties, nor are we a relative or employee of any of the parties' attorneys or counsel connected with the action, nor are we financially interested in the action.

DATED THIS 12th DAY OF JANUARY, 2007.

JANE FAUROT, RPR
FPSC Official Commission Reporter
(850) 413-6732

LINDA BOLES, RPR, CRR
FPSC Official Commission Reporter
(850) 413-6734