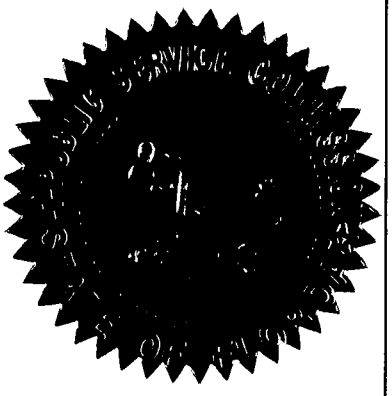
BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 070650-EI

In the Matter of:

PETITION TO DETERMINE NEED FOR TURKEY POINT NUCLEAR UNITS 6 AND 7 ELECTRICAL POWER PLANT, BY FLORIDA POWER & LIGHT COMPANY.

_____/



VOLUME 3

Pages 215 through 390

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PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN MATTHEW M. CARTER, II COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. McMURRIAN COMMISSIONER NANCY ARGENZIANO COMMISSIONER NATHAN A. SKOP
DATE:	Wednesday, January 30, 2008
TIME:	Commenced at 9:30 a.m. Concluded at 5:00 p.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	MARY ALLEN NEEL, RPR, FPR
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

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P R O C E E D I N G S

(Transcript follows in sequence from Volume 2.)

CHAIRMAN CARTER: Okay. We are back on the record. And when we left, Mr. Stall was coming to the stand. And I don't think you've been sworn yet, have you? Have you been sworn in?

THE WITNESS: No, I have not.

CHAIRMAN CARTER: Okay. Would you please stand and raise your right hand.

(Witness sworn.)

CHAIRMAN CARTER: Please be seated.

Thereupon,

J. A. (ART) STALL

was called as a witness on behalf of Florida Power & Light Company and, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ROSS:

Q. Good afternoon. Would you please state your name and your business address?

A. My name is Art Stall.

CHAIRMAN CARTER: Oh, we can't hear. Is your little green button pushed there?

THE WITNESS: It's on.

CHAIRMAN CARTER: Okay.

THE WITNESS: My name is Art Stall, 700 Universe Boulevard, Juno Beach, Florida.

BY MR. ROSS:

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

A. I'm employed by FPL Group, and I am the Senior Vice President - Nuclear, Chief Nuclear Officer.

Q. Have you prepared and caused to be filed 11 pages of prefiled direct testimony in this proceeding on October 16, 2007?

A. I have.

Q. Do you have any changes or revisions to your prefiled direct testimony?

A. I do have one change on page 6 of my prefiled testimony. Line 7 regarding the reporting relationship of the Site Vice President should read, "to a Site Vice President, who reports to the Nuclear Chief Operating Officer," in lieu of Vice President of Operations.

Q. Do you have any other changes or revisions to your testimony?

A. No, I do not.

Q. With those changes, if I asked you the same questions contained in your prefiled direct testimony, would your answers be the same?

A. Yes, they would.

MR. ROSS: Mr. Chairman, FPL requests that the prefiled direct testimony of Art Stall be inserted into the record as if read.

CHAIRMAN CARTER: The prefiled testimony will be inserted into the record as though read.

BY MR. ROSS:

Q. Are you also sponsoring any exhibits to your testimony?

A. I am.

Q. Do the exhibits consist of a single-page document marked JAS-1 and a single-page document marked JAS-2?

A. Yes, they do.

MR. ROSS: Mr. Chairman, I would note that Mr. Stall's exhibits have been marked for identification as Exhibits 21 and 22.

CHAIRMAN CARTER: Commissioners, on your list, 21 and 22 for identification.

(Exhibit Numbers 21 and 22 were marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF J.A. STALL

DOCKET NO. 07____-EI

OCTOBER 16, 2007

Q. Please state your name and business address.

A. My name is J.A. (Art) Stall. My business address is 700 Universe Boulevard, Juno Beach, Florida, 33408.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company (FPL or the Company) as Senior Vice President - Nuclear Operations, and Chief Nuclear Officer.

Q. Please describe your duties and responsibilities in that position.

A. I am responsible for the safe operation of all of FPL Group, Inc.'s (FPL Group) nuclear assets, consisting of four nuclear units in Florida – two at Turkey Point Nuclear Plant (Turkey Point) (of about 1,400 MW) and two at St. Lucie Nuclear Plant (St. Lucie) (of about 1,680 MW), one in New Hampshire – Seabrook Station (of about 1,300 MW), and one in Iowa – Duane Arnold Energy Center (of about 600 MW). Additionally, I am responsible for the safe operation of two nuclear units in Wisconsin – Point Beach Nuclear Plant (1,036 MW) FPL Energy, LLC completed its acquisition of Point Beach on September 28, 2007.

Q. Please describe your educational background and business experience.

A. I earned my Bachelor of Science degree in Nuclear Engineering from the University of Florida in 1977. I also earned a Master of Business Administration from Virginia Commonwealth University in 1983. I am a career nuclear energy generation professional with more than 25 years of nuclear generation operating experience. I joined Virginia Power Company in 1977, where I held various positions of increasing responsibility, including superintendent of operations, assistant station manager for safety and licensing, superintendent of technical services, and plant manager. I also held a senior nuclear reactor operator license from the U.S. Nuclear Regulatory Commission (NRC) while working at Virginia Power Company's nuclear plants. In 1996, I joined FPL Group as the Site Vice President at the St. Lucie Nuclear Plant. From 2000 to 2001, I was Vice President for Nuclear Engineering at FPL Group. I have been Senior Vice President, Nuclear Operations, and Chief Nuclear Officer at FPL Group since June 2001.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits JAS-1 and JAS-2, which are attached to my direct testimony.

Exhibit JAS-1	World Association Nuclear Operators (WANO) Indices.
Exhibit JAS-2	NRC Performance Indicators.

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

A. The purpose of my testimony is to describe objective indicators of FPL Group's nuclear power plant performance in support of FPL's efforts to pursue new nuclear generating capacity.

Q. Please summarize your testimony.

A. FPL Group's nuclear power plants are a source of reliable, safe, and cost effective energy for FPL Group's customers. FPL Group's technical expertise and organizational strength in safely operating and maintaining its existing fleet of nuclear power plants will enable FPL to pursue new nuclear generating capacity in a safe, reliable, and cost effective manner. The proposed Turkey Point 6 & 7 will enable FPL to develop an option to deliver safe, reliable, and cost effective power to customers at reasonable cost. Given FPL's current fuel mix, the addition of non-fossil fuel, non-greenhouse gas (GHG) emitting sources for generation is necessary to maintain system reliability, increase fuel diversity and allow progress toward meaningful GHG reductions.

BACKGROUND ON FPL GROUP'S NUCLEAR DIVISION

Q. Please describe FPL Group's nuclear plants.

A. FPL Group's long and successful involvement with nuclear power started in the mid-1960s with the first order for nuclear generation in the South. FPL's plans to build nuclear units at the Turkey Point site were announced in 1965,

and the first nuclear unit achieved commercial operation in 1972. FPL is currently licensed by the NRC to operate Turkey Point Units 3 and 4, and St. Lucie Units 1 and 2. Turkey Point Units 3 and 4 are pressurized water reactors designed by Westinghouse. Unit 3 commenced commercial operation in 1972, and Unit 4 did so in 1973. St. Lucie Units 1 and 2 are pressurized water reactors designed by Combustion Engineering (now owned by Westinghouse). Unit 1 went into commercial operation in 1976, and Unit 2 did so in 1983.

FPL Group's affiliate FPL Energy also owns and operates nuclear plants outside of Florida. FPL Energy Seabrook, LLC (FPLE Seabrook), an indirect subsidiary of FPL Energy, owns 88.23% of and operates Seabrook Station, a Westinghouse pressurized water reactor facility, located in New Hampshire. FPLE Seabrook acquired its share of Seabrook Station in 2002.

FPL Energy Duane Arnold, LLC (FPLE Duane Arnold), an indirect subsidiary of FPL Energy, owns 70% of and operates the Duane Arnold Energy Center (Duane Arnold), a General Electric boiling water reactor facility located in Iowa. FPLE Duane Arnold acquired its share of Duane Arnold in January 2006.

FPL Group and its affiliates have successfully operated six nuclear units at four nuclear generating stations for 130 total combined years of safe, electric

generation. During that time FPL Group's nuclear generating units have produced approximately 593 million MWh of electricity, which taken altogether is enough electricity to serve the needs of all of FPL's 4 million-plus customers for five years. The high availability rate of these nuclear units and the fact that the FPL units currently represent approximately 14% of the capacity and 20% of the energy output on FPL's system makes nuclear generation a substantial contributor to FPL's system.

Q. Describe the ownership structure for FPL Group's nuclear units.

A. FPL owns 100% of Turkey Point Units 3 and 4 and St. Lucie Unit 1. FPL owns 85.10449% of St. Lucie Unit 2. The balance of St. Lucie Unit 2 is owned by the Florida Municipal Power Agency, which owns 8.806%, and the Orlando Utilities Commission, which owns 6.08951%. FPLE Seabrook owns 88.23% of and operates Seabrook Station, FPLE Duane Arnold owns 70% of and operates Duane Arnold, and FPLE Point Beach owns 100% of and operates Point Beach.

Q. How long are FPL Group's nuclear units currently licensed to operate?

A. In June 2002, FPL received renewed operating licenses from the NRC for Turkey Point Units 3 and 4, and in October 2003, FPL received renewed operating licenses from the NRC for St. Lucie Units 1 and 2. The renewed licenses give FPL the authority to operate each unit for 20 years past the original license expiration date should FPL choose to do so. Accordingly, the current license expiration dates are as follows: for Turkey Point Unit 3, 2032; for Turkey Point Unit 4, 2033; for St. Lucie Unit 1, 2036; and for St. Lucie

Unit 2, 2043. The current operating license expiration date for Point Beach is 2030 for Unit 1 and 2033 for Unit 2, Seabrook is 2030, and the Duane Arnold operating license (which has not yet been renewed) expires in 2014.

Q. Please describe the organization of FPL Group's Nuclear Division.

A. FPL Group's Nuclear Division currently employs approximately 2,800 employees. The management team at each site reports to a Site Vice President, who reports to the Vice President of Operations, who reports directly to me. Additionally, the Vice Presidents of Nuclear Technical Services, Plant Support, and Nuclear Training and Performance Improvement, as well as an independent quality oversight organization, headed by the Director of Nuclear Assurance, also report directly to me.

FPL GROUP'S NUCLEAR PLANT PERFORMANCE

Q. What metrics are used by FPL Group to measure the performance of FPL Group's nuclear plants?

A. FPL Group uses two basic metrics to measure the performance of our nuclear plants. Overall plant performance as measured by an objective numerical index and nuclear safety and reliability performance as measured by objective indicators published by the NRC.

Q. Please describe the overall quality of performance of FPL Group's nuclear operations.

A. FPL Group's nuclear plant performance, from both a safety and production perspective, ranks among the best in the United States. This record is confirmed by a variety of objective indicators used to measure plant performance, including personnel safety, nuclear safety, operating reliability, and cost. These objective performance indicators, known as the WANO index, confirm that our plants are operating safely and reliably.

The WANO index is an internationally recognized metric of nuclear plant safety and reliability. The WANO index is calculated by summing weighted values of the following key indicators: (1) Unit Capability Factor; (2) Forced Loss Rate; (3) Unavailability of High Pressure Safety Injection System; (4) Unavailability of Auxiliary Feedwater System; (5) Unavailability of Emergency AC Power System (Site Average); (6) Unplanned Automatic Reactor Trips; (7) Collective Radiation Exposure; (8) Nuclear Fuel Reliability; and (9) Quality of Secondary Water Chemistry. Exhibit JAS-1 shows the FPL nuclear fleet performance based on the WANO index for the last ten years (1997-2006). This exhibit demonstrates that FPL Group's nuclear fleet outperformed the industry throughout most of this period. The performance of FPL's nuclear fleet in 2005 was affected primarily by issues at a single plant, Turkey Point. Turkey Point performance, as shown by the WANO indicators, was affected by major component replacements, vendor

performance issues, and by the manual shutdown of both Turkey Point units because of Hurricane Wilma. FPL's actions to replace major components at Turkey Point will lead to long-term plant performance improvements and support the long-term operation of the plant into its renewed license terms.

FPL Group's exemplary nuclear plant performance has been achieved while maintaining excellent capacity factors (including refueling outages) at its nuclear plants over the last several years. Moreover, FPL Group's nuclear refueling outages are well planned and executed. Some of our refueling outages have been the shortest achieved for similar units in the industry. Our employees continuously critique our refueling outage performance, and lessons learned are implemented across our nuclear fleet at the next refueling outages to further improve our performance.

Q. Please Describe the Performance of the Nuclear Plants Acquired by FPL Energy.

A. Since FPLE Seabrook's acquisition of Seabrook Station in 2002, that plant has operated very well. In 2003-2006, the average capacity factor at Seabrook Station with FPLE Seabrook as the operator was 92.4%, as compared with 84.8% under the previous operator for the 1998-2002 time frame. Since the 2002 acquisition, FPLE Seabrook has completed an uprate that increased the plant's capacity by approximately 6.9%. From an environmental standpoint, Seabrook Station has received the highest rating from the New Hampshire Department of Environmental Services (NHDES) in the last five periods it has

been evaluated. This inspection is typically performed annually and evaluates Seabrook Station's ability to self-monitor and comply with the effluent limits and compliance schedules in its NHDES Permit. The most recent inspection by NHDES, conducted in October 2005, resulted in the top rating of "5" being assigned to the Seabrook Station program.

Since FPL Group acquired Duane Arnold in 2006, it has operated at a 97.3% capacity factor, which is significantly higher than the average annual capacity factor of 92.8% during the 2000-2005 time frame.

Q. How does the NRC rate FPL Group's nuclear safety record?

A. The nuclear safety aspects of FPL Group's nuclear operations are comprehensively regulated by the NRC. The NRC maintains and tracks a set of performance indicators as objective measures of nuclear safety performance. These indicators monitor performance in initiating events, performance of safety systems, maintenance of fission product barrier integrity, emergency preparedness, occupational and public radiation safety, and physical protection. As shown in Exhibit JAS-2, all of FPL Group's units are in the "green" band of all NRC Performance Indicators, indicating good nuclear safety performance.

COMBINED OPERATING LICENSE (COL) PROJECT

Q. What is the Combined Operating License Project?

A. As described in greater detail in the testimony of FPL witness Scroggs, the Combined Operating License project is FPL's effort to file an application with the NRC to obtain combined operating licenses that authorize construction and conditional operation of new nuclear power plants.

Q. Why is FPL pursuing Combined Operating Licenses from the NRC at this time?

A. FPL periodically evaluates alternatives to meet the growing power needs of Florida. Based on FPL Group's successful track record in operating its existing fleet of nuclear plants, FPL has determined that pursuing future new nuclear capacity will create a low cost, reliable, and an environmentally attractive option to generate electricity. Pursuing this option provides fuel diversity and does not contribute greenhouse gases to the environment. FPL's process of assessing the feasibility of pursuing a Combined Operating License is described in more detail in the testimony of FPL witness Scroggs.

Q. Will FPL be able to leverage its track record and experience in operating and licensing its nuclear fleet into pursuing a combined operating license for Turkey Point 6 & 7?

A. Yes. Our track record in nuclear licensing and operations demonstrates the capability of FPL to successfully pursue a Combined Operating License (COL) in an efficient and cost effective manner, thereby preserving the option

of new nuclear generation. FPL's last major licensing project, executed under my supervision and direction, was the successful effort to renew the licenses of Turkey Point and St. Lucie for an additional 20-year term. Both high quality licensing efforts were successfully completed within the projected schedule and under budget. FPL's execution of the license renewal projects demonstrates its capability to undertake, manage, and successfully complete a significant NRC licensing effort.

Q. Does this conclude your direct testimony?

A. Yes.

BY MR. ROSS:

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

A. I have.

Q. Would you please provide your summary to the Commission?

A. I would. Thank you.

Good afternoon, Chairman Carter and Commissioners. Thank you for this opportunity to spend some time with you today to discuss our nuclear program at FPL.

I'm very proud of our employees and our long-term track record at FPL in safe, reliable operation of our nuclear power plants. Our performance over the long run ranks amongst the best in the industry. We're quite proud of that. This performance has been verified by a variety of objective indicators that take into account nuclear safety, personnel safety, production, efficiency, reliability, and equally important, regulatory performance as graded by the Nuclear Regulatory Commission.

FPL Group and its affiliates have successfully operated nuclear power plants for over 130 combined reactor operating years. During that period of time, our plants have produced reliable power and have helped

to save lots of greenhouse gas emissions as well as fuel savings costs for our customers and have contributed to a diverse fuel supply for our system. The high availability rate of our nuclear units and the fact that they currently represent about 14 percent of the capacity of our system, yet generate over 20 percent of our energy needs, testifies to the substantial contribution these units make to our existing system mix.

Based on this track record, the company has determined that pursuing future nuclear capability will create an attractive option to generate electricity well into the future. Again, pursuing this option provides fuel diversity and will not contribute greenhouse gases to the environment. I do expect that this project will be executed successfully based on our track record of other large, complex projects, specifically in the nuclear program, most recently, our license renewal efforts and approvals for all four of our units here in Florida.

And that concludes my summary testimony. Thank you.

MR. ROSS: Mr. Stall is available for cross-examination.

CHAIRMAN CARTER: Mr. Beck.

MR. BECK: No questions.

CHAIRMAN CARTER: Mr. Krasowski.

MR. KRASOWSKI: Yes, thank you.

CROSS-EXAMINATION

BY MR. KRASOWSKI:

Q. Good afternoon, Mr. Stall. My name is Bob Krasowski, and I'm an intervenor, a resident of Florida, very interested in your project, very much impressed with your testimony and the things you do.

I have a couple of questions. I have a couple of questions for clarification. I hope you can help me out. This is pretty complicated stuff, so I hope you can clarify it for me.

Just to start off, in your remarks, you mentioned that moving forward with this project will not contribute to greenhouse gases. Now, are you saying that the entire project won't contribute to greenhouse gases or just the location of the facility, the operational Turkey Point 6 and 7 facility?

A. When we describe the fact that this plant will not contribute greenhouse gases, we're talking about the physical production of electricity on that site. I recall your questions earlier regarding the fuel cycle, and witness Villard will be able to speak to the contributions to greenhouse gases from the mining and

milling portion of the operation, which I might add are quite minuscule.

Q. Yes. Well, so -- okay. You just said you believe they're quite minuscule. Okay. But they do exist? There are greenhouse gas emissions associated with a nuclear power project?

A. Yes, and witness Villard will speak to that in detail.

Q. I'm sorry to persist on this, but I really have a problem with someone testifying that there are no greenhouse gases associated with the project, and this is incorrect in terms of the project does involve creation of greenhouse gases to supply fuel and other needs of the project.

MR. ROSS: I'm sorry. Is there a question?

BY MR. KRASOWSKI:

Q. Can you understand how somebody might have concerns with the accuracy of the statement that there are no greenhouse gases associated with this project?

A. Well, I think I can understand the nature of your question, but I think that again, witness Villard will be able to place that in a broader context of how the greenhouse gas emissions from the front end of the process that you refer to compare to greenhouse gas emissions from other sources of generation.

Q. Thank you. I'll pursue it with Mr. Villard. I appreciate your answer.

On the back of your testimony or your -- there's an exhibit attached to your testimony on the very back. If you flip over to the back, I believe --

CHAIRMAN CARTER: What exhibit number are you referring to?

MR. KRASOWSKI: It's Exhibit JAS-2.

CHAIRMAN CARTER: Okay.

MR. KRASOWSKI: Page 1 of 1.

BY MR. KRASOWSKI:

Q. This relates to questions I have about emissions. I would really like to understand the emissions issue.

Now, it has been stated by a number of other people in their testimony that there are no emissions associated with this project, so I would really appreciate your help in getting me to understand exactly what we're talking about in terms of emissions. I see here kind of towards the bottom under Public Radiation Safety Cornerstone, RETS and ODCM Radiological Effluent Occurrence. What is a radiological effluent occurrence?

A. The answer to that question lies in the inherent design of these plants. I think that witness Silva did a good job of characterizing the emissions as

they relate to the typical air emissions that we normally think about when we talk about operating power plants.

However, at the nuclear plants, there are small radioactive emissions that occur from time to time in the form of a batch release. These emissions are very closely regulated and monitored by the Nuclear Regulatory Commission, as well as our own folks on-site. We have extensive monitoring on-site and off-site, and even the Florida Department of Environmental Protection oversees this operation.

As you can see, our performance is all green, which means that we are performing well within all regulatory limits at all of our plants, and that's the case at all eight of our operating reactors.

Just to provide a little bit of context around that, as I indicated earlier, by design, these plants do have small amounts of releases. We live in a radioactive world. All of us are in fact radioactive ourselves. These emissions that we have are of such a small magnitude. Even in relation to what the federal limits are, we emit a small fraction of those limits, as do other operating nuclear plants.

So to your questions earlier, there are these emissions that come from these plants, but they're

monitored, they're well understood, and they're reported each quarter, or semiannually, excuse me, to the Nuclear Regulatory Commission. And these records are public, publicly available, totally transparent. And I think that our track record speaks for itself. Our indicators are all green. We haven't had any abnormal radiological releases, and we're proud of our performance in this area.

Q. So to say that these facilities don't have emissions is not accurate; is that correct?

A. Well, I think that the context that all of this was presented in was in terms of air quality emissions as it relates to greenhouse gases, sulfur dioxides, those types of emissions. And it's absolutely accurate to state that a nuclear power plant is a zero emission source of energy in the context of this broader discussion that we have been having, not only in this state, but in the country, regarding greenhouse gas emissions and air quality issues.

Q. And that kind of goes to the point I'm trying to make, but let me ask you it this way. So in order for someone to say that there are no emissions associated with a plant like this, they would have to be making a comment that is narrowly focused. Would you agree with that?

A. No. I stand by not only what I just said here a moment ago, but also all of our previous witnesses. I think in the broader context of the societal issues that we're facing today with emissions of greenhouse gases and other pollutants to the atmosphere, I absolutely believe that nuclear energy is the most benign source of emissions that you can have on a large scale generating plant.

Q. Are you aware of studies that show radiation concentrated in the teeth of children around nuclear power plants, including the one at Turkey Point?

A. I'm very much aware of that. And I might add that those cases have been large dismissed, and they're based on poor science, and that has been generally accepted in the scientific community.

Q. I would like to ask you, you're the safety officer at the Turkey Point facilities?

A. I'm the Chief Nuclear Officer. I'm responsible for the entire nuclear program at FPL Group.

Q. Okay. Not to exaggerate something out of proportion, but are you aware of the sleeping guards incident as far as the safety over at Turkey Point?

A. I'm absolutely aware of that.

Q. Okay. Do you feel any concern about the ability to protect the facilities at Turkey Point?

A. No, I have no concern at all about the ability to protect the facilities. But let me comment on that briefly, if I may, for the benefit of the Commissioners and the staff, as well as the public that may be listening here today. We absolutely do not tolerate it, and we do not accept any sleeping officers. But to place this in a little bit of context, we have in our eight operating reactors perhaps anywhere from 600 to 800 security officers, and the vast majority of those security officers are highly trained, dedicated professionals. We're talking about an small number of security officers several years ago who did not meet our standards, and none of those officers are on our payroll or Wackenhut's payroll today.

We have taken significant steps to improve the performance of the security organization not just at Turkey Point, but across our fleet, and we've worked collaboratively with the industry to help to improve performance across the industry. For example, we have significantly improved the hiring standards of incoming officers that we might hire, or Wackenhut, I should say, hires onto their payroll on our behalf. We have improved the training programs for those officers. We have added additional FPL oversight around the clock, 24 hours a day, seven days a week, to ensure that all of

these officers maintain full awareness. And we've done some things that can also help them, because some of these jobs can be quite tedious for these officers sitting out there in their guard posts, so we rotate them more frequently. We try to give them opportunities to stay mentally alert.

I think those things are being successful. We haven't had any events in the last two years. And we're quite proud of the overall performance of our security officers. And I feel embarrassed that we would have anybody who would sleep, but at the same time, I want to stand up and I want to make sure that we acknowledge the vast majority of these officers who are doing a fine job day in and day out at our nuclear plants, not just here in Florida, but across the country in this industry.

Q. I appreciate your comments and agree that it's only a, you know, very small, remote group of people. I don't want to cast aspersions on the working man, so I appreciate your explaining that.

A. And I wanted to also just mention -- I forgot, I'm sorry, briefly to mention. The NRC, as well as our own folks -- never was our security compromised at our plant. The NRC sent in inspectors, looked at it, and said we have enough redundancy in these security plans. I can't really speak to the details of it today, but we

are not vulnerable to any number of officers who may doze off like these officers did compromising the security of our plant. It's a comprehensive, well integrated plan, and it's designed with defense and depth to protect against these very sorts of things from happening.

Q. I appreciate that. Could you explain the situation that occurred where a worker in the plant drilled a hole in one of the pipes? I mean, some moron did that. How did that happen, being that there's such a complex integrated system of protection?

A. Well, that happened during one of our refueling outages at our Turkey Point unit as well. We do have a large number of contractors who come in during these refueling outages when we shut these plants down every 18 months to do work. And in this particular case, this individual did in fact willfully drill a hole in a pipe that was part of the reactive coolant system boundary. In this particular case, and in any other case like this that could happen in our industry, not just at our plants, we have any time we come out of these refueling outages a comprehensive test and inspection program that's designed to make sure that all of these systems are functionally tested before we would return a unit to service. And in this particular case,

our engineers doing inspections before we ever started up the plant determined that this had happened, and we were able to obviously come in and fix it.

Now, the Nuclear Regulatory Commission in response to that sent an inspection team into Turkey Point to do a detailed inspection of, frankly, our literal compliance, did we meet all the regulations, did we comply with our security plan. And after an extensive inspection by the NRC, they came to the conclusion that we did everything humanly possible to prevent that event from occurring.

And many of you probably are aware that the investigation that was subsequently turned over to the FBI has been investigated, and the NRC has come back recently and said that they don't believe that there's, or the FBI as well, sufficient evidence to continue to pursue this particular individual.

Now, I will tell that you we, FPL, have asked for that set of documents from the NRC and the FBI, and when we get that, we will do our own assessment of it, and we will determine whether or not there is an avenue for to us pursue that individual.

Q. Thank you again. So you know who this person is?

A. We have a good idea who this individual is,

and we know that this individual can no longer be admitted not only to any of our nuclear plants or any of our company facilities, but any other nuclear plant in this country.

Q. Thank you. I feel safer now.

Let's see. Where is this person? Do you know if they're still in this country or --

A. I'm not certain that I should comment any further on the details of that.

Q. Okay. That's adequate. I just made my point.

Now, you're also responsible for the protection of the cooling pools that have the spent rods in them?

A. That is correct.

Q. Okay. What type of risk do you perceive there in terms of another idiot maybe doing something to drop a helicopter, a plane, or a bomb, or a truck, or a car into the pool as a dirty bomb type of thing?

A. There has actually been a lot of work done in this area since 9/11. The Nuclear Regulatory Commission as well as the industry have studied this extensively and looked into modeling various scenarios of sabotage, if you will, or terrorism around these spent fuel pools. And I think the broad conclusion there is that there is sufficient redundancy and safety built into the existing

plant designs that that would not cause any sort of impact to the health and safety of the public.

Be that as it may, the industry, not just ourselves, have taken some additional steps to install some additional backup systems beyond what we even have today in the unlikely event that something like that was to occur, all designed around being able to assure that we can maintain inventory in these spent fuel pools, which is really what you're concerned about when you're trying to protect this used fuel as it's discharged from the reactor. So I'm very confident as I sit here today that this threat, while we believe that it is relatively small, is one that could be very safety managed if it was to happen at any of our plants in this country.

Q. Would you consider the drilling of the hole in the pipe as being something that was unanticipated or a risk associated with a future problem? Well, let me just -- one thing at a time. Mr. Olivera described the fact, mentioned the fact that in assessing risk, as we move forward when analyzing this whole situation, that there would certainly be some unanticipated events. Would that drilling a hole in a pipe be unanticipated when it happened?

A. No, not unanticipated at all. Our whole security plans, our whole -- as I said earlier, we have

an integrated security and operational strategy that's designed around these very sorts of low probability events. If an individual like this drills a hole in a pipe, the rest of our plan is, what do we do to make sure that before we return that unit to service that our inspection and test program would reveal that and we would fix that before we returned it to service. So I would have to say that that was not unanticipated. And while it's a very unfortunate event that it happened, it once again to me demonstrates the validity of having an integrated security and operational strategy in place.

Q. So you have redundancy set up in your security system that protects against certain things from happening.

A. And that redundancy overlaps into our operational and maintenance strategies as well. It's an integrated strategy. There is -- you can't look at security in isolation. You have to look at the operational aspects and the maintenance aspects, and even the engineering controls that we put in place to make sure that all of these things work together to minimize risk. And I think we've done a very good job in this industry, as well as at FPL, of managing that risk.

Q. So, Mr. Stall, would you liken the redundancy

strategy that you've developed to protect these plants to maybe the redundance in strategy in the space shuttle program?

A. I would not be qualified to draw any direct comparisons between, you know, the nuclear industry and the space shuttle program.

Q. Just in terms of trying to plan for unforeseen risks?

A. Well, I think in a broad sort of way, both us and the aviation or space industry are in the risk mitigation business, and we all contemplate risk and we manage risk in our operations.

Q. I'm going to wrap it up pretty soon. I appreciate your honest answers to all these questions.

I have in front me -- and I'll just use this as a reference. I don't think I'll have to share it. But it's a data -- well, maybe I should show it to you. It's an effluent database for nuclear power plants, and it identifies the gaseous ground level releases for Turkey Point 4 in the year 2004 and then effluent liquid releases, and it just -- it has a list of specific radioactive things that come out of there. I don't know what amounts. You've addressed this earlier and said they're minuscule. But I would like to ask you, based on what you've told me already, are there emissions from

the pools that contain the spent rods occasionally, any emissions? Are there any emissions?

MR. ROSS: Mr. Chairman, if he's asking about a particular document, out of fairness, the document should be furnished to the witness and also to counsel. If he's moving on from the document he was going discuss, then he can ask his next question.

CHAIRMAN CARTER: Are you just going to ask a question, or do you have --

MR. KRASOWSKI: Well, Mr. Chairman, I have six copies of this document. I'll be glad to distribute it.

CHAIRMAN CARTER: Well, before you ask him any questions, let him see it, and then --

MR. KRASOWSKI: Okay.

CHAIRMAN CARTER: Give a copy to his lawyer, and then you can ask him a question. Okay? Why don't we do that?

MR. KRASOWSKI: Okay. And I'll give a copy to -- okay. And we would like to enter this as an exhibit then if we're presenting it to him.

CHAIRMAN CARTER: Well, let's not do that right now. We're a long, long way from that, Mr. Krasowski.

MR. KRASOWSKI: Oh, okay. Sorry.

CHAIRMAN CARTER: I mean, you may be able to

use it to ask him some questions, but that's a whole 'nother Encyclopedia Britannica about getting it in.

MR. KRASOWSKI: Well, maybe we'll figure that out by tomorrow. But for the moment, I hope --

CHAIRMAN CARTER: Maybe, the 12th of never.

MR. KRASOWSKI: Okay. I did refer to the document, but I would like to have my question based on his previous comments outside of the range of what the document says.

CHAIRMAN CARTER: Okay. Great. Sure.

MR. KRASOWSKI: I just mentioned that I'm looking at this document, but my question is a general question as it relates to Mr. Stall's comments earlier about emissions. And so I'm asking, regardless of this document, whether or not there are emissions that he is aware of that are associated with the storage of the spent fuel as it sits in the pool.

BY MR. KRASOWSKI:

Q. Are there emissions?

A. It's an interesting academic question. I would have to say sitting here today that the answer to that in general is no. These spent fuel pools are encapsulated in buildings at all of the plants across this country, and in these buildings there are filter systems, and there are radiation monitors in case there

was a release. But those are designed primarily for what we call a fuel handling accident. When you're offloading this fuel or you're handling it in the spent fuel pool, if you were to have some sort of an accident with that spent fuel assembly, which really hasn't happened, you could have some releases, and the filtration system is designed to filter those releases and monitor those releases. So we haven't had that happen, and we don't have any ongoing emissions coming out of these pools as they sit there today. So the answer would be no to that.

Q. Okay. Good. Thank you. Being that you're involved with the security at these facilities, is it correct for me to -- my understanding is that these nuclear power plants require external sources of power to back up their safe operation.

A. We have multiple diverse power supplies not only for our safety systems at these reactors, but also for our security systems. We have off-site power supplies that come in through the normal transmission switch yard. We have emergency diesel generators in case we were to lose that source of power which would start up and supply not only our security equipment, but our safety systems, and we also have batteries that supply key instrumentation associated with these

critical systems as well. So there are multiple diverse power supplies that I might add are frequently tested to make sure that they're in a ready state to operate if called upon.

Q. And do they give off any greenhouse gas emissions?

A. To the extent -- no more than I would say your automobile does driving here today. And they're exercised on a periodic basis, infrequently, but frequently enough to ensure that they're going to perform their intended function if called upon.

Q. Are there any -- back to another point. Are there any plants that haven't been rated green?

A. Well, on average, in this industry, at any given point in time, about 25 percent of the plants will move into what we call the column 2 or the white area. And these thresholds are set at extremely low levels for the NRC. And in fact, yes, we've had several of our plants that have moved into the white category in a given performance indicator or based on an inspection finding for a transitory period of time.

But in general, the way that we manage our program is, we look at these NRC performance indicators which have a green band associated with them, and we draw a line basically at the midpoint of that, and we

maintain our business to maintain a clear margin between the white band and the green band. And we manage our business to stay in the top half of that green band, because we don't want to just meet the minimum compliance regulations or requirements. We want to be the very best we can in any of these areas.

Q. So are there any plants that haven't been rated green in the United States this year?

A. At any given point in time, again --

MR. ROSS: Mr. Chairman -- wait one second. Mr. Chairman, we're getting a little far afield from Mr. Stall's testimony, which is about FPL's program, not about the rest of the industry, so I would object to this line of questions.

MR. KRASOWSKI: I'll rephrase my question. I respect the position.

BY MR. KRASOWSKI:

Q. Are there any FP&L plants that have been rated other than green this year?

A. Well, no, not this year. But in '06 we had -- in '07, I think early '07, we had one of our plants that went into the white in regard to a performance indicator, or excuse me, an inspection finding for a period of time.

Q. And was that a Turkey Point or a St. Lucie

plant?

A. We had an event at Turkey Point several years ago where we had what's called a white finding associated with an inspection that the NRC did at one of our plants; that's correct.

Again, these NRC performance indicators and inspection findings are set with a very low threshold to ratchet up, if you will, the NRC intrusiveness and involvement with any particular licensee, depending on how these indicators fluctuate. And I think that's a good thing, because it holds the industry to a very high standard to make certain that these plants are all operated at the highest levels of safety. So I think this is a good regulatory scheme.

And someone should not draw a conclusion simply because a plant would move into what is called the white zone, or even the yellow zone, column 2 or column 3 in regulatory lingo, that that signals some sort of a problem with the operation or the safety of the plant. I can assure you, based on my 30 years of experience in this industry, that the NRC will not tolerate an unsafe plant, and they will shut that plant down, and they have exercised that authority on many, many occasions. So just because these plants transitorily move into a column 2 or even a 3 or 4

situation does not imply that there's some level of concern with the ability to operate that plant safely. That's not tolerated in this country.

Q. Mr. Stall, are NRC overseers at the site all the time?

A. We have -- at all of these sites, not just the FPL sites, but across the country, the NRC has what they call resident inspectors, and typically they use a protocol of what they call N plus one. If there's one reactor at that site, there's two inspectors. If there's two reactors, there's two plus one, typically three inspectors. And they are there. They are stationed there. They're there 40 hours a week. They come in on weekends, work back shifts.

In addition to that, the NRC sends inspectors through that specialize in various functional areas of the plant that do specific inspections, for example, the security we talked about earlier.

But our policy at FPL is and has always been one of total transparency with the regulators. If we make a mistake in our operation, if we do something wrong, we're the first ones to go down and tell the NRC ourselves. If we have a meeting at one of our sites that we think is important that the NRC might want to participate in, we make it a point to go find the NRC

and ask them to come attend the meeting. We believe total transparency, total openness is the only way to deal with these regulators. And I think that over time, that has proven to be, not only for us, but this industry, the only way to operate these plants, is total transparency.

Q. Do you have that same total transparency position when it comes to the public?

A. Absolutely.

Q. So am I correct when I say that these nuclear plants may not emit CO_2 on-site, but there are greenhouse gases, emissions associated with nuclear operations and radiological emissions at every plant?

A. Yes. And we've discussed over the last 30 minutes or so, I think, you know, we've covered that subject in depth.

MR. KRASOWSKI: Well, thank you for your candor. I appreciate the conversation and the answers. I think that's all we have for today.

THE WITNESS: You're quite welcome. Thank you.

CHAIRMAN CARTER: Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chairman. Just a quick follow-up on a question that Mr. Krasowski

asked to Mr. Stall.

Mr. Stall, with respect to spent fuel pool storage, would it be correct say that water is utilized as a shielding medium?

THE WITNESS: That's correct. We're required to maintain a minimum of 23 feet of water over the top of all fuel assemblies by federal law, and typically we maintain substantially more inventory than that over the top of the fuel assemblies.

COMMISSIONER SKOP: And also, would it be also correct to say that a person can stand directly next to the pool without donning any protective gear?

THE WITNESS: That is correct. I've done that many times in my career, absolutely.

COMMISSIONER SKOP: Thank you. No further questions.

THE WITNESS: And received no dose, I might add.

CHAIRMAN CARTER: Staff?

MS. FLEMING: No questions.

CHAIRMAN CARTER: Commissioners? Redirect?

MR. ROSS: FPL has no redirect.

CHAIRMAN CARTER: No redirect?

MR. ROSS: No. At this time, we would move admission of Exhibits 21 and 22.

CHAIRMAN CARTER: Exhibits 21 and 22, any objections? Hearing none. Show it done.

(Exhibit Numbers 21 and 22 were admitted into the record.)

CHAIRMAN CARTER: Let's do this. As we get ready for our next witness, let's take about seven minutes, and then we'll pick up with our next witness.

COMMISSIONER EDGAR: Could I --

CHAIRMAN CARTER: Wait one second. Hold on, everybody. Hold it.

COMMISSIONER EDGAR: I apologize. You went real fast there. I do have a procedural question for staff that I would like to have answered before the break, if I may have leave to do so.

CHAIRMAN CARTER: Absolutely. You're recognized.

COMMISSIONER EDGAR: Thank you, Mr. Chairman.

Earlier Commissioner Skop pointed out for my edification that the prefiled testimony came in prior to the issuance of the Prehearing Order, which is, of course, a necessity, realizing that the Prehearing Order was issued four working days ago. I do have some questions for some of the later witnesses based on my reading of some of the prefiled testimony, and it was my understanding that all of this was available for

questions. I'm not aware of any motion or request being made to strike some of this prefiled testimony. So my question is, is this available, the prefiled testimony with future witnesses available for questions?

MS. BRUBAKER: Commissioner, it's my understanding at this time that the testimony has not been stricken with respect to what portions go to those issues. I think they were 11 and 12. It's my experience that Commissioners have a broad range of discretion to ask what questions they deem appropriate and relevant, and I don't believe that there are actually any limitations with respect to that. I suppose the question is just -- it's a question of what you interpret as relevant to the proceedings.

COMMISSIONER EDGAR: All right. It's just that Mr. Olivera was listed as -- well, obviously, I have some questions, and clearly, if I'm not going to have the opportunity to ask them because they pertained to issues that were excluded, then I don't want to spend my time on those points, so I just want to clarify that this is available to me.

MS. BRUBAKER: (Nodding head affirmatively.)

COMMISSIONER EDGAR: All right. Thank you very much.

CHAIRMAN CARTER: Any further questions before

we take a break, Commissioners? Okay. We're on recess as you get your next witness ready. Let's do that.

(Short recess.)

CHAIRMAN CARTER: We are back on the record. And the last time when we left, we were getting ready to call the next witness. Mr. Butler.

MR. BUTLER: Yes. It would be Mr. Scroggs. And Mr. Scroggs has not been previously sworn.

CHAIRMAN CARTER: Mr. Scroggs, will you please stand raise your right hand.

(Witness sworn.)

CHAIRMAN CARTER: Thank you. You may be seated.

Thereupon,

STEVEN D. SCROGGS

was called as a witness on behalf of Florida Power & Light Company and, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUTLER:

Q. Would you please state your name and business address for the record?

A. Yes. My name is Steven Scroggs. I work at 700 Universe Boulevard in Juno Beach, Florida.

Q. And by whom are you employed and in what

capacity?

A. I'm employed by Florida Power & Light Company as Senior Director of Project Development.

Q. Thank you. Have you prepared and caused to be filed 67 pages of prefiled direct testimony in this proceeding on October 16, 2007?

A. I have.

Q. Did you also cause to be filed errata to your testimony on January 25, 2008?

A. I have.

Q. Do you have any further changes or revisions to your prefiled direct testimony other than the errata sheet that has been submitted?

A. I do have one minor change. On page 42 of my testimony, line number 19, the sentence ends, "and the associated." The words "economies" should follow "and the associated."

Q. Thank you. With that change, if I asked you the questions contained in your prefiled direct testimony, would your answers be the same?

A. Yes, they would.

MR. BUTLER: Chairman Carter, FPL requests that the prefiled direct testimony of Mr. Scroggs as corrected be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony will

be accepted into the record as though read.

BY MR. BUTLER:

Q. Now, are you also sponsoring Exhibits SDS-1 to SDS-9 which are attached to your prefiled testimony?

A. That's correct.

MR. BUTLER: Chairman Carter, I would note that these exhibits have been premarked for identification as Exhibits 23 through 31.

CHAIRMAN CARTER: They'll be marked for identification. Show it done.

(Exhibit Numbers 23 through 31 were marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company's Petition to Determine Need for Determine Need for Turkey Point Nuclear Units 6 and 7 Electrical Power Plant	Docket No: 070650-EI Filed: January 25, 2008

ERRATA SHEET

DIRECT TESTIMONY OF STEVEN D. SCROGGS

PAGE #	LINE #	CORRECTION
46	8	Insert ", Capital Replacement costs or fuel surcharges" after "Operations and Maintenance costs"
46	9	Insert "Specifically, decommissioning costs are included as Fixed Operations and Maintenance charges, Dry Cask Storage costs are included within the Capital Replacement charges and handling of spent fuel is included as a surcharge in the fuel cost forecast." after "discussed by FPL witness Sim."

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF STEVEN D. SCROGGS

DOCKET NO. 07____-EI

OCTOBER 16, 2007

Q. Please state your name and business address.

A. My name is Steven D. Scroggs. My business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company (FPL or the Company) as Senior Director of Project Development. In this position at FPL, I have responsibility for the development of power generation projects to meet the needs of FPL's customers.

Q. Please describe your duties and responsibilities with regard to the development of new nuclear generation to meet FPL customer needs.

A. Commencing in the summer of 2006, I was assigned the responsibility for leading the investigation into the potential of adding new nuclear generation to FPL's system, and the subsequent development of new nuclear generation additions to FPL's power generation fleet. I lead the development and permitting team for FPL's Turkey Point Nuclear Units 6 and 7 (Turkey Point 6 & 7 or the Project).

Q. Please describe your education and professional experience.

A. I graduated from the University of Missouri – Columbia in 1984 with a Bachelor of Science Degree in Mechanical Engineering. From 1984 until 1994, I served in the United States Navy as a Nuclear Submarine Officer. From 1994 to 1996, I was a research associate at The Pennsylvania State University, where I earned a Masters Degree in Mechanical Engineering. I provided consulting and management services to the power generation industry through a number of positions until 2003, when I joined FPL as Manager, Resource Assessment and Planning. In July 2006, I was assigned to my current role as a Senior Director, Project Development.

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

A. The purpose of my testimony is to provide an overview of the proposed Project. Specifically, I will discuss the four specific phases in the deployment process for new nuclear generation, which are: the Exploratory phase; Licensing phase; Preparation phase; and Construction phase. I will describe how FPL developed its cost estimate range and provide estimates of when key expenditures are expected to occur. I will also describe how the deployment of new nuclear generation differs from fossil and renewable project development, and discuss how the new nuclear deployment process should proceed under the Florida Public Service Commission's (FPSC or Commission) Nuclear Power Plant Cost Recovery Rule (NPPCR Rule or Rule 25-6.0423). Additionally, I will discuss the factors related to managing and executing the Project and how those factors may impact the estimated cost and

earliest practical deployment schedule of the proposed Project. I will conclude by discussing financial considerations and the potential for ownership participation by interested Florida utilities.

Q. Please summarize your testimony.

A. FPL proposes to pursue the option of up to 3,040 megawatts (MW) of highly reliable, Greenhouse Gas (GHG) emission-free new nuclear generation for our customers. The total capacity for the two-unit project will be based on the design selected. The project FPL is proposing to undertake will be a long-term investment of resources and require significant regulatory support throughout all stages. New nuclear generation offers great promise as well as unanswered questions. As further described by FPL witness Kosky, it is also the only baseload generation alternative available in Florida that produces no GHG emissions, a resource that is critical to achieving meaningful CO_2 reductions in the future. However, new nuclear licensing and construction is just now emerging from a hiatus of 30 years presenting unique risks and uncertainties. FPL and the Commission will need to work together in an unprecedented collaborative process to successfully develop this alternative for the benefit of customers.

FPL's proposal is consistent with recent state and federal actions taken to promote the renewed deployment of nuclear generation. FPL's proposal is also consistent with meeting the growing electrical needs of our customers with an electric generation alternative that can provide cost-effective, reliable,

fuel-diverse, non GHG emitting generation on a full-time (or baseload) basis. As I discuss the different phases of the Project, I indicate how the Project relates to the Rule 25-6.0423 annual review process. This newly revised approach allows the deployment process for new nuclear to proceed in a deliberate stepwise fashion, equivalent to purchasing a series of options for future nuclear generation, with periodic feasibility reviews to ascertain the continued viability of the project.

New nuclear generation, in combination with conservation, renewables and other forms of clean energy, can be a key contributor to reducing emissions, enhancing fuel diversity, increasing system reliability and energy independence. But action is required now to create that option. FPL's non-binding construction cost estimate range compares favorably to the economically feasible cost range for alternatives on FPL's system, illustrating that moving forward with the Project is not only vital to achieving Florida's goals for clean reliable energy, but is very attractive from an economic perspective based on the best information available today.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits SDS-1 through SDS-9, which are attached to my direct testimony.

Exhibit SDS-1 Illustrative Deployment Process Timeline

Exhibit SDS-2 Site Selection Study Report

Exhibit SDS-3 FPL Technology Review

Exhibit SDS-4	Combined License Application (COLA) Content
Exhibit SDS-5	Estimated Project Milestones
Exhibit SDS-6	Overnight Cost Estimate Range ($/kW, 2007$)
Exhibit SDS-7	Comparison to Breakeven Range
Exhibit SDS-8	Project Total Cost Estimate Range (Year Spent $)
Exhibit SDS-9	Project Expenditure Estimate

Q. Are you sponsoring any sections in the Need Study?

A. Yes. I am sponsoring Sections II.A, IV.A-D, V.A.5, VI, VII.A and Appendix J of the Need Study.

FEDERAL AND STATE SUPPORT OF NEW NUCLEAR GENERATION

Q. Is there a need for continued regulatory and governmental support for pursuing nuclear generation technology that can meet demand growth, maintain reliability, provide fuel diversity and contribute to meaningful GHG reductions?

A. Yes. Strong regulatory and governmental policy support is critical throughout all stages of the process. Obtaining the appropriate state and federal approvals will take several years, but once obtained will provide the option to construct the facility for some considerable time following approval. Once the decision to construct is made, new nuclear generation is a long-term investment with an initial licensed operating life of forty years and the potential to renew the

operating license for another twenty years. It would be regrettable if erratic levels of support in the early stages, created for example by short term fluctuations in energy fuel market prices, were to change the course of efforts to create the option for new nuclear. The qualities of energy independence and the lack of GHG emissions were the driving characteristics behind the renewed desire to support the re-emergence of nuclear generation and were the forces that drove the development of recent federal and state legislation.

FPL is one of an early group of utilities responding to the call made by federal and state legislators to actively pursue new nuclear as a vital source of clean, safe and reliable energy generation. As FPL witness Olivera testifies, and as more fully described later in my testimony, the initiative to deploy new nuclear generation will be a lengthy process that will require continuous cooperation between industry and government, and strong and constant support from all levels of government.

Q. What federal legislation has been enacted recently to support the development of new nuclear generation capacity in the United States?

A. Federal legislation enacted in 2005 signaled the renewal of the importance of nuclear generation as a national resource and the increasing public acceptance of new nuclear generation as a credible alternative that should be pursued. The Energy Policy Act of 2005 (EPAct 2005) recognizes the need to assist potential nuclear plant owners by providing incentives and tools to help manage the risks of undertaking nuclear development activities. EPAct 2005

provided three proposed programs that are designed to benefit up to six new nuclear plants developed in the US that meet specific development and construction milestones: a form of "risk insurance" designed to cover costs incurred by an owner as a result of delays created in the commercial operation of a new nuclear plant by the Nuclear Regulatory Commission's (NRC) failure to act in a timely manner; a Loan Guarantee program intended to reduce the lending costs associated with a new nuclear project; and production tax credits that would come into effect when operational. These programs are promising, but limited in their ability to materially offset deployment risks. However, this legislation was important as an early signal to FPL and other utilities that support for new nuclear generation was re-emerging. Moreover, it served to motivate state level activities that are encouraging the deployment of new nuclear generation resources in Florida.

Q. What State legislation has been enacted recently to provide incentives for the development of new nuclear generation capacity in Florida?

A. The Florida Energy Act of 2006 (FEAct 2006) provided important legislative direction to remove some of the barriers impeding the active consideration and pursuit of new nuclear generation as a resource option. Recognizing the uncertain and developing status of new nuclear development, the Florida legislature directed the Commission to modify the rules associated with power plant need determinations to allow for the initial investigative steps to be undertaken now, in parallel with the rapidly maturing deployment effort. Additionally, the FEAct 2006 facilitated the institution of a mechanism by

which the Commission could oversee the progress and expenditures of a nuclear project on an annual basis while allowing utilities interim cost recovery of development costs, a feature that lowers the overall costs customers will pay. This legislation was implemented through rulemaking by the Commission that resulted in Rule 25-6.0423. Taken together, the revised need determination statute and implementation rule, and the statute and implementation rule for cost recovery for new nuclear plants (Rule 25-6.0423) combine to provide a clear process of initial authorization and ongoing oversight to effectively approach the unique challenges of deploying new nuclear generation.

Q. Recent actions addressing GHG emissions place an increasing importance of deploying new nuclear generation resources in Florida?

A. Yes. Recent GHG policy actions at the state level are illustrative of a strong trend at both state and federal levels to take aggressive steps toward reducing GHG emissions. Additional nuclear generation resources will be extremely valuable in helping to meet the expectation that meaningful GHG emissions reductions can be achieved. For example, as discussed by FPL witness Reed in his testimony, achieving the targets identified in Governor Crist's recent Executive Order 07-127 cannot be accomplished without new GHG emission-free generation resources like Turkey Point 6 & 7.

PROJECT OVERVIEW

Q. How is the recently instituted need determination and cost recovery process for new nuclear different than that employed in recent fossil fuel generation processes?

A. The revised need determination process for new nuclear explicitly acknowledges that the approach required to deploy new nuclear generation must be unique. The approach allows the developer to move forward with a stepwise, transparent decision making process that seeks out and incorporates new information allowing for adjustments to be made as the project unfolds. This flexibility is particularly valuable with new nuclear generation which is experiencing rapid development and change. A determination of need in response to this filing is therefore not an irreversible commitment to a project or a specific development path. To the contrary, a determination of need simply represents the first, crucial step in a process that is economically equivalent to purchasing an option to maintain the possibility of new nuclear capacity joining the FPL generating fleet by 2018. FPL will have substantial flexibility to adjust the actual development and construction path in light of additional information likely to be learned in future years; and the Commission will have the ability to review and evaluate future decisions contemporaneously, thus ensuring that the final result is prudent and in customers' long-term best interests.

FPL submits this Need Filing with the recognition that in order to provide substantial GHG emission-free, fuel diverse generation to FPL customers as soon as practical, FPL and the Commission must take concrete steps now in a collaborative process to create the opportunity to deploy a new nuclear project. FPL is confident that the information provided in this Need Filing provides the Commission with a sufficient basis to issue an affirmative Need Order. That Need Order will allow FPL to pursue the opportunity for new nuclear generation for our customers.

Q. Please describe some of the key aspects in the development of a new nuclear resource option as they relate to this Need Filing.

A. As later explained in my testimony, the deployment process for a new nuclear generation project is lengthy. Following the Need Order, regulatory licenses and approvals will be sought at the state and federal level over a five to six year period. Concurrently, and in order to maintain the earliest practical deployment schedule, FPL is recommending significant investments in preparation steps prior to the point when licenses and approvals will be finalized. Assuming these preparation activities are undertaken, a construction period of approximately five years will follow. This results in a minimum span of ten to eleven years, following Commission approval, before new nuclear generation can be placed into service. Moreover, uncertainties regarding cost and schedule that limit our knowledge from today's perspective will not be resolved without a concerted effort by industry participants such as FPL. The active pursuit and resolution of these uncertainties will be

necessary to put FPL in a strong position to bring new generation to our customers as soon as possible within an acceptable risk profile.

Q. Please provide a summary of the overall deployment process for nuclear generation.

A. Exhibit SDS–1 provides an overview of the nuclear deployment process. In summary, the process can be divided into four key phases that entail incrementally increasing commitment and corresponding investment in the Project. The first period is the Exploratory phase, followed by the Licensing, Preparation and Construction phases.

The Exploratory and Licensing phases are characterized by information gathering and development. The processes are collaborative, involving local, state and federal agencies and they include multiple opportunities for public involvement. These phases are not cost-intensive in comparison to the overall Project cost, but are pivotal in order to create the option, hold the earliest practical deployment schedule and obtain the information necessary to make a well-informed decision as to whether the Project should proceed to the Construction phase.

The Preparation phase involves a series of preliminary activities that determine the timing of the Construction phase schedule. As it relates to FPL's proposed Project, the Preparation phase includes expenditures to maintain progress towards a 2018 commercial operating date (COD) for the

first unit. Each year, as FPL provides its filing of projected costs, the Commission will be able to monitor the Project as it moves through these phases and to review and determine the reasonableness of the decisions made to enable future steps.

Q. How do these development phases correspond to the cost recovery categories described in Rule 25-6.0423?

A. The Exploratory phase includes all the costs up to filing for a Need Order, thereby meeting the Rule 25-6.0423 definition of "Site Selection costs." Costs incurred in the Licensing phase would qualify for recovery as "Pre-Construction Costs." Some costs in the Preparation phase (such as permitting, long lead procurement, site-clearing and engineering expenditures) would qualify for recovery as "Pre-Construction Costs" while others (such as site preparation and non-nuclear construction activities) would qualify for recovery as "Construction Costs," depending on their nature. All costs incurred during the Construction phase would be considered "Construction Costs." FPL witness Ousdahl presents a more complete discussion of the regulatory accounting for the Project.

EXPLORATORY PHASE

Q. Please describe the steps taken in the Exploratory phase.

A. The Exploratory phase began with FPL's normal resource planning process of investigating different generation alternatives, and then proceeds to more

specific project-related investigations. In the case of the Turkey Point 6 & 7, FPL monitored the developments in new nuclear generation at the Nuclear Regulatory Commission (NRC) earlier this decade and began to seriously consider new nuclear as a possibility in 2005 as support began to materialize. Through 2006, FPL took steps involving increasing levels of detail and commitment to determine the viability and timing of a potential new nuclear project. A detailed engineering evaluation of design options was conducted, along with an extensive study of site alternatives. The final steps in the phase include developing and filing an Application for Public Hearing with Miami-Dade County to obtain zoning approvals and the filing of a Need Petition at the Commission.

Q. What is FPL's estimated investment in order to conduct the activities in the Exploratory phase?

A. FPL expects to have spent approximately $8 to $9 million in Exploratory phase activities. These costs are Site Selection costs under Rule 25-6.0423, assuming an affirmative need determination is granted.

Q. How did FPL select the site for its proposed Project?

A. FPL conducted a detailed Site Selection Study, provided as Exhibit SDS-2. This study employed the principles of the Electric Power Research Institute (EPRI) siting guidelines and is modeled upon applicable NRC site suitability and National Environmental Policy Act (NEPA) criteria regarding the consideration of alternative sites. The study convened a group of industry and FPL subject matter experts to develop and assign weighting factors to a broad

range of site selection criteria. Twenty-three candidate sites were then ranked using the siting criteria. This review allowed the list of candidates to be reduced. More detailed reviews were conducted on the remaining sites, including successive rounds of rating and elimination. In parallel, a more free-form process was conducted, whereby site suitability criteria were entered into a database that conducted a search for viable locations within FPL's service territory that could potentially support new nuclear. This process allowed FPL to canvass all regions to ensure credible candidate areas were not overlooked through the site-specific approach.

Q. What were the results of this site selection process?

A. Turkey Point was identified as the site that, on balance, provided the most favorable location for developing new nuclear generation to serve FPL's customers.

Turkey Point, as an existing site, allows FPL to add new generation with minimal impact on land resources and leverages existing infrastructure and opportunities for synergies with the existing units at the site. Key issues contributing to the selection of Turkey Point include the existing transmission and transportation infrastructure to support new generation, the large size and seclusion of the site while being relatively close to the load center, and the long-standing record of safe and secure operation of nuclear generation at the site since the early 1970s. Turkey Point will also support the earliest practical deployment schedule, in contrast to use of an undeveloped site.

Q. What activities has FPL undertaken regarding the selection of a specific nuclear design?

A. FPL conducted a detailed engineering evaluation that has been provided as Exhibit SDS-3. In this review, FPL canvassed the range of possible designs and then solicited specific design, construction and operation information from the vendors of the designs that were deemed viable for commercial utility application in the U.S. The results found that the five specific designs considered in detail are safe, reliable and either have or are capable of obtaining the necessary Design Certification from the NRC. Operating performance, capability and operating costs are expected to be broadly within the same range for all designs and were not a distinguishing factor. Transmission related costs are expected to be higher for larger units, but the difference is not expected to be significant in the overall economic evaluation of the design alternatives. In short, the engineering evaluation validated each design as a safe and capable candidate for FPL's consideration from a technical, safety and security perspective.

Q. What designs were reviewed and what are the general features of these designs?

A. FPL reviewed the Westinghouse AP1000 (1,100 MW net), General Electric's Advanced Boiling Water Reactor (ABWR, 1,350 MW net) and the Economic Simplified Boiling Water Reactor (ESBWR, 1,520 MW net) designs, Mitsubishi's Advanced Pressurized Water Reactor (APWR, 1,560 MW net) and the Areva U.S. Evolutionary Pressurized Reactor (US EPR, 1,580 MW

net). A summary of each design is provided in Exhibit SDS-3, as well as the Need Study. The AP1000 and ABWR designs have received Design Certification from the NRC, while the other designs are in the process of developing and submitting Design Certification Documents to the NRC for review.

Existing nuclear generation designs are referred to as second generation designs, while the new designs represent the third generation of design evolution. Third generation nuclear designs can be grouped into two general categories based on the type of reactor system and the type of safety systems used. Those that are based on current designs are called evolutionary and employ active safety systems. Active safety systems, like those in operating reactors, require the action of external systems to maintain the safety and protection of the reactor core during a design basis event. The ABWR, APWR and US EPR are evolutionary designs.

The second category of designs differs from evolutionary designs or incorporate passive safety systems. Passive systems use natural forces, such as gravity and natural circulation, to provide protection for the reactor core during design basis events. The AP1000 and ESBWR fall into this second category of designs.

Q. Is FPL affiliated with any industry groups that are exploring the deployment of new nuclear designs?

A. Yes. FPL is a member of NuStart, a consortium of ten power companies formed in 2004 with the purpose of obtaining a combined Construction and Operating License (COL), and completing the design engineering for the selected reactor designs. Currently NuStart is in the process of jointly developing two COL Applications (COLAs) that may be used as reference designs. These reference designs include the General Electric ESBWR and the Westinghouse AP1000 designs. Participation in NuStart has allowed FPL to better understand each reference design technology and the COLA development process itself. Additionally, FPL will have access to the information developed for the reference COLA and detailed design engineering, should FPL go forward with either of the two reference designs.

Q. What are the issues that influence FPL's design selection for the COLA?

A. Recognizing that all the candidate designs are safe and suitable from a technical perspective, the selection process focuses on the issues that will influence the cost-effectiveness and overall success of the new nuclear deployment process. Having been satisfied with the safety and technical soundness of the designs, and recognizing the similarity of projected operational cost and performance, the three principal commercial issues relevant to FPL's design selection for the Project are: 1) the estimated capital cost of the total construction Project, 2) the ability to manage cost and schedule risk throughout the Project, and 3) the execution capabilities of the

team of Design Vendor, Engineer and Constructor that will design, construct and commission the Project.

Q. Given the above issues, has FPL been able to narrow the list of competing designs to be considered as candidates for the Project?

A. Yes. FPL has determined that the General Electric ESBWR and Westinghouse AP1000 designs are in the best position to address the three principal commercial issues for the Project. FPL will be able to leverage the combined experience of the NuStart consortium to the benefit of our customers with a selection of either design. The large industry commitment to these two designs should provide strong opportunity for cost, schedule and risk management. The involvements of engineering and construction firms in the development of the reference COLA will further increase the readiness of these contributors to the overall engineering and construction process. Six COLAs for the AP1000 and three COLAs for the ESBWR are expected to be submitted in the next 18 months, in advance of FPL's planned March 2009 COLA target date. This will allow FPL to learn from the common body of review material generated by these first wave COLAs and develop teams composed of firms with direct and current experience in COLA development, utilizing the NRC's Design Centered Review approach for effective and efficient processing of the application. Additionally, it is likely that there will be projects involving these designs under construction in advance of the Project, which will provide important information on steps FPL can take to reduce cost and risk.

Q. How will FPL complete the process of design selection?

A. FPL is currently engaged in discussions with General Electric and Westinghouse that will result in a defined project scope, schedule and structure for each of the two designs. Associated with this defined project scope will be a set of commercial terms and pricing estimates. Once this information is obtained and analyzed, and due diligence is completed, FPL will have the necessary basis to make the final selection. From that point, FPL will enter into dedicated commercial negotiations with the selected vendor that will result in the terms of the purchase and construction contract. This process is expected to require an additional 18 to 24 months following design selection.

Q. FPL has submitted an Application for Public Hearing with Miami-Dade County to address zoning issues; what is the status of the Application?

A. FPL has submitted an Application for Public Hearing with Miami-Dade County for Public Hearing before the Board of County Commissioners on its requested Unusual Use variances that will, in aggregate, support the Project and associated facilities. This application is under formal review by the County's Development Impact Review Committee (DIC). The DIC provides a review and recommendation to the Board of County Commissioners. A Public Hearing on FPL's application is expected in late 2007 or early 2008.

Q. Please describe some of the issues that FPL has identified during the Exploratory phase.

A. Many of the issues are related to potential associated facilities surrounding the Turkey Point site that will be needed to support the new nuclear Project. These include potential sources of fill for developing the construction site and infrastructure that may be needed to deliver water to the facility. Turkey Point 6 & 7 offers ample opportunities to team with local, state and federal agencies to develop creative solutions that meet multiple objectives. These issues will be addressed in detail in the federal COLA and state Site Certification Application (SCA) proceedings which are part of the Licensing phase. FPL expects, and the regulatory processes require, that these solutions will be developed in coordination with interested parties and will comply with the substantive requirements of applicable regulations.

Q. What are the development challenges associated with transmission integration for a large electric generation unit?

A. Transmission integration of a large generating unit requires specific consideration in the transmission system reliability arena. Selection of either design will result in the addition of the largest, or one of the largest, single generation sources on the FPL, Florida Reliability Coordinating Council (FRCC) and Southeast Electric Reliability Council (SERC) systems. In order to comply with FRCC and SERC planning requirements, the instantaneous loss of such a large single source of generation must be accommodated through a combination of physical system capabilities and specific operational

procedures. Successful integration of large generation units may require the cooperation of other system entities in reviewing technical studies, commercial negotiations and regulatory approvals. FPL witness Sanchez provides a more detailed discussion of the considerations related to transmission facilities needed to support the proposed Project.

Q. Are there other potential associated facilities that may be required to support Turkey Point 6 & 7?

A. Yes. In addition to the transmission facilities identified by FPL witness Sanchez, other infrastructure may be required to support the construction and operation of the Project. For example, as with all generation, nuclear technology requires a dedicated water source for facility personnel, process use and cooling. Turkey Point 6 & 7 will utilize mechanical draft cooling towers which help to conserve water. These towers will be separate from the existing closed loop cooling canal system. Multiple alternatives, including reuse water, will be evaluated in the Licensing phase.

Also, site improvements will be required to establish an engineered foundation to support the building structures. Identification of the optimal source and delivery methods for this fill will be determined in the Licensing phase, with the potential that certain additional associated facilities would result.

Construction of such a large project may also require the development of temporary facilities near the site for equipment laydown and field fabrication of modular components.

Q. What are the results to date of FPL's efforts under the Exploratory phase?

A. FPL has selected a site and is making progress towards the selection of a nuclear design. The Exploratory phase has not identified any insurmountable obstacles at this time to developing either of the candidate designs at the selected site.

LICENSING PHASE

Q. Please describe the steps in the Licensing phase and discuss how these steps will need to be coordinated.

A. Florida's Power Plant Siting Act (PPSA) and the NRC's COL process are the formal processes to obtain the necessary licenses, authorizations and approvals to construct and operate a new nuclear generation project in Florida. These processes have similar objectives and therefore have some complementary content. Each process will involve a period of data collection and study to provide the required information. However, each process will have specific areas of concentration and unique perspectives. As the applications are being prepared it will be important to ensure that the information in each application is complete, consistent and meets the

submittal requirements of each reviewing body. As the applications are being reviewed, each governmental review team will develop requests for additional information and potentially seek modifications to the proposed plans. As a matter of process, there will be issues identified at all levels that require further review once the project plan is developed in the Licensing phase. The review of these issues, within the PPSA process, will allow FPL to demonstrate that the Project is fully consistent with the substantive requirements of applicable law and regulation. FPL's efforts will be focused on addressing all relevant issues within the regulatory processes in a consistent manner so as to avoid delays or confusion as the process move forward to final approvals.

Q. What are the specific steps within the COL process?

A. FPL will submit a COLA for a nuclear power facility, pursuant to 10 CFR Part 52. The required content of a COLA is summarized in Exhibit SDS-4.

The COLA is the first formal step for conducting the license application review at the federal level, in conformance with all applicable laws and regulations. The COLA review includes the NRC staff Safety Review, the independent review by the Advisory Committee on Reactor Safeguards, the final environmental review, public involvement, contested hearings and a mandatory hearing. The COLA FPL would submit would reference a specific standardized design and describe those portions of the design which are site specific.

The NRC safety and environmental analyses that are performed in response to a COLA result in the staff's issuance of a Safety Evaluation Report (SER) and an Environmental Impact Statement (EIS), which contain recommendations to the Atomic Safety and Licensing Board Panel (ASLBP). The ASLBP has the responsibility to open the proceedings for contested hearings and a final mandatory hearing, in accordance with the amended Part 2 of CFR Title 10, and recommend the granting of the license if safety, security and environmental requirements are found to be in compliance with pertinent laws and regulations, including NEPA. The NRC, as the appellate body, retains final authority in the licensing process.

Finally, once a license is granted, construction is commenced in accordance with the COL. When construction is complete, the licensee submits the Inspections, Tests, Analysis and Acceptance Criteria (ITAAC) collected during the Construction Phase. The NRC reviews the ITAAC and will confirm that the facility is constructed according to the license and acceptance criteria, and that there is reasonable assurance of adequate protection of public health and safety, the environment and national security for its operation. The owner is then authorized to load fuel and operate the facility. Intervention or litigation during the contested hearing process or the ITAAC review could create delays that would impact the project cost and schedule.

Q. What are the expected milestones related to the COL process in the Project schedule?

A. The COLA will be initiated in early 2008 and is expected to be filed with the NRC in the first half of 2009. The NRC reviews are expected to be complete by the end of 2011, with the ASLBP hearings to follow in 2012. A COL would be expected in late 2012.

Q. How does this timeline compare to the requirements necessary for a project to compete with other projects for the proposed benefits in the EPAct 2005 legislation?

A. The EPAct 2005 legislation set out an aggressive timeline for projects to qualify for the proposed benefits. The first milestone requires candidate projects to have filed a COLA with the NRC before January 1, 2009. In order to meet this requirement, FPL would have had to greatly accelerate the Exploratory and Licensing phase activities and begin expenditures towards completing the COLA in early 2007 – as the revisions to 25-22.081 and the development of Rule 25-6.0423 were being completed, and in advance of a Need Determination. The risk insurance, loan guarantee and production tax credit programs currently envision support for up to six new units. Units that follow these first six may or may not obtain any benefits, even if they would meet the COLA filing deadline. Therefore, the actual value that would accrue to a proposed project from the EPAct 2005 programs is uncertain, unfunded and does very little to alleviate the early stage risks to the project. Because the value of the benefits is uncertain and the timeline necessary to compete for

some portion of the benefits is so aggressive, FPL could not justify the added risk.

Q. What risks are presented to the Project in the Licensing phase?

A. During this phase, there are a number of risks that can affect cost and schedule. As the license applications are developed or during the review process, additional investigations or data collection concerning specific issues may be required. The cost to conduct these activities and the additional time necessary to complete them can impact the overall project cost and the earliest practical deployment schedule. Additionally, the Licensing phase provides opportunities for public interaction and ends in a hearing process that is open to interested parties. Although FPL's schedule accommodates reasonable time spans based on input from industry groups and reviewing agencies, the overall project cost and schedule will be affected by the level of intervention and pace of the license review processes at the state and federal levels. Additionally, there is the overall risk of failing to obtain the necessary state or federal approvals.

Q. What is the incremental investment estimated for completion of activities in the Licensing phase?

A. The development and review of a COLA and an SCA will require up to five years of technical, environmental, regulatory and legal work. The cost estimated to develop the applications and support them through the review process is approximately $155 million and would be qualified for recovery as Pre-Construction costs in the Rule 25-6.0423 proceeding. The Licensing

phase costs can be estimated with a higher degree of certainty than costs in the subsequent Preparation and Construction phases because they are defined in scope, near in term and involve engineering services for which a developed and competitive market exists.

The end result of the Licensing phase is the authorization to build a plant of a specific design at Turkey Point. That authorization is valid for some considerable period into the future. In this way, even if circumstances do not support an immediate construction effort, the asset would retain its value as an option into the future.

PREPARATION PHASE

Q. What are the key steps within the Preparation phase?

A. Several key activities must be taken prior to actually beginning construction on a nuclear project. These steps and the associated investment are necessary for FPL to maintain its proposed schedule for commercial operation of the first unit by 2018. These activities can be grouped into three categories: long lead procurement, detailed engineering, and site preparation.

Long lead procurement involves reserving manufacturing space and executing the design, purchase and delivery of special heavy forgings and equipment so that they will be prepared and ready to be placed at the appropriate time

during the complex construction process. For example, the reactor pressure vessel must be in place very early in the construction schedule as the physical plant is constructed around it. The unique nature (e.g., size, shape, quality requirements) of these forgings requires several years to design, fabricate and deliver them to the site. Procurement of an option for certain long lead items will be required within the first year following an affirmative Need Order to preserve a target COD of 2018 for the first unit. The current demand for manufacturing capability of this type drives the need to reserve a position to ensure the forgings will be available when the schedule requires. Based on the current international market for these heavy forgings, and the number of additional projects in the planning stages, these advance purchase options may retain a certain remarket value. In the event that Turkey Point 6 & 7 were delayed or cancelled, these manufacturing space reservations possibly could be resold for use in other projects. As the Construction period draws closer, an increasing number of key components and materials will need to be purchased in order to enable an expeditious and cost-effective construction schedule. Similarly, these items may be expected to have a remarket value, providing some risk mitigation in the event of a change.

Detailed engineering is the process of completing the plant-specific design and converting it into a set of engineered drawings suitable for constructors and craftsmen to actually build the design on a specific site. This process involves a team of engineers of every specialty working several years in

advance of construction start to ensure the design is complete and ready to execute. These activities would not have a remarket value.

Site preparation refers to the specific steps necessary to convert the designated land into a site that is suitable for the major construction effort. For a nuclear project this will involve a site clearing excavation followed by an engineered fill to establish specific foundation features to support the proposed plant. This process is estimated to take 24-36 months, and must be initiated no later than 18 months prior to the initiation of major construction activities to prevent an impact to the subsequent construction schedule. Site preparation activities would also have no remarket value.

Q. What specific long lead procurement is FPL considering and what would be the timing and range of potential costs for such activity?

A. Obtaining a commitment for manufacturing capability of ultra-heavy forgings for the Reactor Pressure Vessels and other necessary items that would support the earliest practical deployment schedule is a long lead procurement item FPL will pursue immediately. This commitment may be obtained by making advance payments that have the effect of reserving manufacturing space at a capable facility within a given time frame. The details regarding expenditures and contractual terms have yet to be developed; however these "reservations" may retain value (for FPL or others) and be potentially tradable in the event that the Project does not move forward, allowing recovery of at least a portion of the advance payments. The advance-payment expenditures would begin in

2008, in order to maintain the earliest practical deployment schedule with a 2018 COD for Unit 6. Current estimates indicate that long lead expenditures for ultra-heavy forgings could be on the order of $100 MM.

Another long lead item is the design, procurement and construction of a computer-based training simulator that would be built in advance of the actual Project to allow for the comprehensive training and licensing of the operation staff in accordance with NRC requirements. This facility, similar to the training simulators used for existing nuclear facilities, is vital to the successful and safe operation of the new nuclear units. FPL will investigate the opportunity to coordinate with other owners of the selected design to determine the possibility to share training facilities to address this issue.

Q. What is the key strategic decision considered during the Preparation phase?

A. The key decision is how much should be spent at each step of the process to maintain the earliest practical deployment schedule prior to receiving the Licensing phase approvals.

The question of "when" to start individual steps within the Preparation phase is based on the overall project schedule. The project schedule will identify a specific lead time to start these activities based on the projected COD. If the long lead items and preparations cannot be started far enough in advance, a delay in the schedule and/or an increase to construction costs would be the

likely result. A delay at this stage of the process may have a disproportionate result in delaying the COD of the units.

Q. Please describe the site-related activities that would be initiated during the Preparation phase.

A. Activities up to and including site-clearing operations are conducted during the Preparation phase and would qualify for recovery as Pre-Construction costs as defined by Rule 25-6.0423. Necessarily, there are a number of activities that need to occur between the time that site-clearing operations are complete and the beginning of plant construction. These activities include civil engineering work to build the site to grade. Installation of underground utilities and infrastructure, and the construction of non-nuclear safety-related buildings and associated facilities are required to be accomplished in advance of the main construction to support the overall schedule. Expenditures for activities that follow site-clearing would therefore be defined as Construction costs per Rule 25-6.0423.

Q. What is the range of incremental investment that would be required to accomplish the activities within the Preparation phase?

A. The scope of appropriate activities will depend on the pace of the Licensing phase activities and the continued demonstration of project feasibility. Expenditures necessary to procure long lead components, conduct site preparation, complete the detailed design engineering and construct any support facilities such as the training simulator, would be determined based on the desired construction schedule. Therefore the Preparation phase costs are

currently estimated to be $163 million, if only Exploratory and Licensing phase expenditures are pursued, to $523 million once certain preparation activities are undertaken. Of course, these expenditures could be higher or lower as the stepwise review process unfolds and lessons learned in other projects are incorporated. The amount of preparation, including advanced construction which is deemed appropriate, will be based on the information available at the time and the activities that are allowed by licensing authorities. Preparation phase costs are necessary to obtain the earliest practical deployment schedule. Spending this money earlier in the overall schedule may well decrease the overall project cost by reducing the impact of cost escalation and conducting some construction activities early. This will allow for more efficient logistics and construction scheduling in the Construction phase and increase the certainty of obtaining the scheduled COD.

Q. How do the costs incurred during the Preparation phase relate to the cost categories described within Rule 25-6.0423?

A. Preparation phase costs will include costs in the Pre-Construction and Construction categories. Pre-Construction costs will be reviewed in the annual filing process and, if authorized, recovered via the Capacity Cost Recovery Clause. Construction costs incurred during the Preparation or Construction phase will be reviewed annually for prudence in the Rule 25-6.0423 filing and held in account for eventual incorporation into base rates. Construction carrying costs will be recovered via the Capacity Cost Recovery

Clause for Construction costs as they are incurred based on the values approved in the annual Rule 25-6.0423 filing.

Q. Exhibit SDS-1 indicates that commercial negotiations are conducted during the Preparation phase. What is involved in this process and why is it sequenced at this point in time?

A. FPL anticipates that commercial negotiations for a new nuclear plant will be complex and require a considerable period of time. The COLA, SCA and some long lead procurement must be developed without having a complete construction contract in place in order to maintain the earliest practical deployment schedule. However detailed engineering, construction planning and construction itself cannot proceed without benefit of a contract that defines the terms, responsibilities and schedule requirements for project execution. Therefore, FPL and other utilities are choosing to select a nuclear design to use as the basis for a COLA and engage in limited contracts for long lead procurement in advance of developing a complete construction contract to enable the earliest practical deployment schedule.

Commercial terms for a new nuclear project will include risk management mechanisms and involve a significant level of support from technical, financial, legal, regulatory and commercial experts. The overall commercial arrangement will involve the considerable commitment of resources from multiple key contractors. Ensuring that these individual contracts fully protect

the interests of FPL and its customers will require a lengthy and involved negotiation and review process.

Q. What forms of risk management will be used to manage the execution of the Project?

A. Risk management will be pervasive throughout the process. Reviews will be conducted through regulatory oversight, internal FPL management and risk control processes and within the execution of specific contracts by the accountable parties.

The stepwise decision making process that will govern the pace and execution of the Project, and in which the Commission will participate through the annual Rule 25-6.0423 review process, is a significant form of risk management for Project costs. The concurrent review of planned expenditures and activities will ensure that all perspectives are considered and addressed prior to making critical commitments.

Additionally, FPL will develop contract terms that will include cost control features and involve contractors in risk sharing for areas within their control. For example, a construction contractor may not be able to estimate with certainty the hourly cost of certain skilled labor classifications required for the construction program. However, that provider should be able to accurately estimate and stand behind the number of man-hours required and the level of productivity that can be achieved during construction. FPL will seek to

develop contract terms that hold that provider accountable for the man-hour and productivity estimates relied upon when establishing the Project schedule and cost estimate.

CONSTRUCTION PHASE

Q. What considerations must be taken into account prior to initiating the Construction phase?

A. The Construction phase can begin once the necessary approvals are obtained from Florida's Siting Board and the NRC, respectively. The Construction phase should not begin without a complete and verifiable road map to commercial operation and confidence in the final feasibility of the Project. Verifying a complete roadmap will require that components, materials, labor and engineering services will be available and dedicated in the qualities and quantities necessary to execute the construction schedule. Finally, FPL will annually submit its proposed expenditures for the coming year and an updated feasibility analysis in the Rule 25-6.0423 process. The Commission will review and determine the reasonableness of the proposed expenditures and whether or not continuation of the Project is in the customer's best interest.

Q. What are the key milestones with respect to the execution of the Construction phase?

A. Exhibit SDS-5 provides a listing of major activities and milestones in each year of the Project. At the beginning of the Construction stage, preparation

activities such as site-clearing, grading, utility installations and support facility construction are accomplished if they have not already been accomplished in the Preparation phase. The first major step in the construction process is the pouring of concrete over which the NRC has safety-related jurisdiction to establish the foundation for the Reactor Island and Turbine Island. Approximately 12 to 18 months after the first safety-related concrete is poured, the Reactor Pressure Vessel will be delivered to the site and set in place within the foundation structure. The Reactor Island and Turbine Island systems and subsystems will be assembled through modular construction techniques over the next several years. Once the construction of the physical facility is substantially complete the unit will be ready to receive its first fuel load. The ITAAC will have been documented throughout the construction process. At this stage, the ITAAC are reviewed and affirmed by the NRC prior to the first fuel load. Following fuel load, the unit is thoroughly tested prior to commercial operation.

Q. What forms of risk are associated with the Construction phase?

A. Risks in regulatory, legal, economic and project management areas are present throughout the Construction phase. Stability of the state and federal regulatory environments are critical to obtaining the most favorable cost and earliest practical deployment schedule for the Project. Actual or perceived weakness in regulatory support for the Project, or unfavorable modifications to regulatory requirements governing the Project, would create difficulty in

obtaining or maintaining the access to capital markets that will be necessary to execute the proposed Project.

Legal challenges may be presented through regulatory proceedings or other forms of intervention. These challenges may create delays and will increase the cost of executing the Project, directly and indirectly.

Economic markets, particularly in fuel prices or emission compliance costs, may shift during the Construction phase, changing the expected economic benefits to be derived from the Project for better or worse. It is important to maintain a long-term view of all the benefits offered by the Project, including system reliability and material progress in achieving GHG reductions. Temporal shifts in fuel and emission compliance cost markets almost certainly will occur, but should be reviewed in the proper perspective for their long-term implications.

Execution of a design and construction project of this magnitude and complexity will require state-of-the art project management and logistical planning. During the course of the lengthy development process there will be project management challenges in obtaining, scheduling, delivering and maintaining cost control over the resources required to execute the construction plan. The project will require a labor force with specific training and skills, both in the professional and craft classifications. The resources

needed to supply and construct the facility are part of the global economy and FPL and its construction team will be competing with other national and international infrastructure projects for these resources. FPL and its selected team of design vendor, engineer and constructor will coordinate from the early stages through project completion to mitigate these risks.

Q. What are examples of delays that may impact the Project schedule and how are these delays, or their impact, managed?

A. Regulatory issues at the local, state or federal level may be presented that delay the Project. For example, delays could result from the development of information associated with other non-FPL projects, existing facilities or development projects, during licensing or construction that would impact Turkey Point 6 & 7 directly or indirectly. The potential for regulatory delays at the federal level have been addressed by the redesigned and streamlined NRC COL process emphasizing a standardized design. The positioning of FPL's Project - approximately 18 months behind the initial round of COLAs, and selection of a reference COLA design - should allow monitoring of the first wave of applications and construction projects. FPL would incorporate lessons learned from these projects to minimize impact to Turkey Point 6 & 7. Regulatory delays at the state and local level will be addressed within the PPSA process, which coordinates the procedural review of the SCA and will precede major construction and expenditure.

Delays related to material, labor or equipment availability may impact the Project. The potential for delay is managed by a detailed integrated supply chain and construction planning process. The process will track needed materials and components so that they are available with lead time to minimize impact on the overall project schedule. Critical path components will be tracked. A cadre of skilled labor crafts will be required to support the design and construction of the proposed facility. Industry and government groups are working on programs today to develop the staff to meet production schedules as those schedules become more certain.

Severe weather always has the potential to produce construction delays at critical points in the process. FPL will be coordinating with the Vendor/Engineer/Constructor team during the planning phases to ensure that appropriate measures and schedule flexibility are incorporated to anticipate and mitigate the potential impact of severe weather.

Finally, the support for new nuclear generation is linked to the safety and operating record of existing facilities. Should something occur at an existing nuclear facility, nationally or internationally, unanticipated delays may occur while issues are resolved to allow resumed activities.

NON-BINDING COST ESTIMATE RANGE

Q. Please describe the development of FPL's non-binding cost estimate range.

A. The process for creating a new nuclear project cost estimate differs from fossil or renewable generation projects due to a lack of a similar level of relevant market-based information and recent experience base. For example, the detailed site-specific design, firm schedule and negotiated supply contracts usually developed prior to the need filing for fossil units, will not be available for several years after the need determination process for new nuclear. Because the commencement of construction is four to five years from the Need Order, the impact to final cost of market variations in materials, equipment and labor is difficult to predict. Therefore, it was necessary for FPL to survey current studies to identify a body of work that could be adapted into a cost estimating process for new nuclear in Florida. The primary source of FPL's non-binding cost estimate is an interagency study conducted by an industry consortium, led by the Tennessee Valley Authority (TVA) in coordination with the U.S. Department of Energy, and published in August of 2005 (the TVA Study).

Q. What does the TVA Study provide and what additional information or experience was applied to develop FPL's cost estimate range?

A. The study provided a detailed construction schedule and cost evaluation for the construction of a General Electric ABWR design reactor unit at TVA's

Bellefonte Site. Industry experts, such as Bechtel Power Corporation, a contributor to the study, were consulted. The TVA Study provides a current evaluation of new nuclear generation construction in the United States under expected regulatory, design, logistic and labor conditions. The study provides a detailed and well-researched basis for new nuclear construction costs for the General Electric ESBWR and Westinghouse AP1000 because the construction methods, materials and schedules are similar. Additionally, FPL discussed design specific construction schedules with General Electric and Westinghouse to confirm that the assumptions used in the TVA Study would be generally consistent with construction of a GE ESBWR or Westinghouse AP1000 design unit. The study provided the information that allowed FPL to develop an applicable cost estimate range on a dollars-per-installed-kilowatt ($/kW) basis.

As a leader in nuclear power generation in the United States, FPL has maintained continuous involvement in a variety of industry forums and working groups. Participation through these industry outlets and direct participation in the NuStart consortium has allowed FPL to keep current with the status of new nuclear generation and to understand the issues surrounding the project construction schedule and costs associated with new nuclear project designs. This involvement allows FPL to critically evaluate available information and develop an opinion as to its applicability. FPL also brings to bear a significant amount of nuclear engineering maintenance and operational

knowledge that is specifically applicable to this task. FPL maintains one of the most active and current utility construction programs in the U.S., providing in-house expertise and access to industry experts in all disciplines.

Q. What steps did FPL take to modify the TVA Study into an FPL-specific nuclear cost estimate range?

A. In late 2005 and early 2006, FPL conducted a detailed review of the TVA Study. The underlying costs, material amounts and labor man-hour estimates were reviewed to understand the assumptions upon which they were based and the level of certainty that might be applied to each estimate. Costs were reviewed and adjusted to account for the impact of escalation that has occurred since the study was published. All costs were brought to current values in 2007, resulting in an overnight construction cost estimate in 2007 dollars (2007$). The overnight cost estimate does not include the time-related effects of escalation or interest costs that occur during pre-construction and construction. The FPL estimate includes the FPL specific costs projected for the Exploratory and Licensing phases.

Q. Does the cost estimate apply to a single unit or a two unit project?

A. The assumptions used to develop the FPL cost estimate range assume a two unit project, and the associated. Those economies are considerable, and they occur throughout every step of the deployment process. The COLA process provides for the licensing of up to two units of the same design for each application submitted, effectively cutting the per-unit licensing costs in half for a two unit project. Similarly, management costs, mobilization and

demobilization costs and certain administrative, training and support facilities would be shared equally between two units. The incremental resources necessary to prepare a site and conduct the detailed design engineering for the second unit of a two unit project are relatively small. The extension of workforce by 18 to 24 months can be managed effectively through the scheduling process to minimize the manpower costs associated with a second unit. Procurement efficiency and bargaining leverage is facilitated by the increased scale of a two unit project. Finally, the operational synergies associated with multiple units keep fuel and operating costs low.

Q. Please summarize FPL's non-binding construction cost estimate range.

A. Exhibit SDS-6 provides a summary of the non-binding cost estimate range for the proposed Project. The Power Island costs are those related to the major equipment, buildings and systems necessary to generate electricity and maintain the plant. Owner's costs include site-related costs not a part of the Power Island scope, such as staffing, project management, site security, and supporting infrastructure. Finally, transmission costs to integrate the facility to the FPL system are added.

Several key areas were reviewed to understand the effect these assumptions have on the overall estimate. Different assumptions for these areas were developed and then applied to create a cost estimate range. The areas that influence the cost estimate range developed from the TVA Study are: 1) the recent and significant escalation of material, equipment and labor indices seen

between 2004 and 2007, 2) the items included in Owner's scope which can vary among designs, 3) the accuracy of the Owner's scope estimate and 4) the cost estimate range of the transmission integration proposed for Turkey Point 6 & 7.

Cost Escalation - Between 2004 and 2007, two key materials escalators increased by 54% to 63%, respectively. A simple application of these escalators to the 2005 study cost estimate would provide an estimate of the 2007 overnight costs, as if all of the material and equipment was procured at today's indexed costs. In reality, the procurement of these items will actually occur over the span of many years during the Preparation and Construction phases. So a simplistic approach would result in a singular estimate that could be high or low when compared to the actual cost the Project will experience. As a means of capturing the significance of this assumption, and the "net escalation" experienced over the procurement process, the cost estimate range is developed recognizing three potential escalation assumptions applied to the 2005 TVA study. Case A applies the 2007 index values without modification, while reduced escalation is shown in Case B (reflecting 27% and 32% for the two key material escalators) followed by an increased material escalation (reflecting 81% and 95% for the two key material escalators) and increased labor costs in Case C.

Owner's Scope –Additional scope areas, such as cooling towers and auxiliary boilers, were identified. Discussions with the vendors have indicated that they may be included in some vendor's scope estimates and excluded in others. These scope items were removed for Case B, and included in Cases A and C.

Owner's Cost Estimate – The Owner's cost could also vary based on the design selected, as well as the conditions placed on the Project in the Licensing phase by the COL or Site Certification process. A base cost estimate was developed for Case A, with a 10% reduction applied in Case B. A 10% premium was applied to all costs, with an additional 30% premium applied to labor items in Case C.

Transmission Integration – The costs to integrate the selected design will be the result of a series of transmission studies that are just now beginning. A cost estimate range has been developed based on preliminary information covering the range of the two designs under consideration. The average of the cost estimate range is used in Case A, while the low end of the range is applied in Case B and the high end of the range in Case C.

Exhibit SDS-6 provides a summary of the three cases developed for the overnight construction cost estimate range, including a line item summary of the cost components as divided between Power Island scope, Owners cost and transmission integration costs. Developing and applying a reasonable range

of potential factors results in an overnight capital cost range that can vary between $3,108 and $4,540 per kW.

Q. Does the above overnight construction cost range include the cost of decommissioning and an allowance for the costs associated with handling spent fuel?

A. No. Those costs were explicitly considered as costs that are accrued for or expended during facility operation, and are therefore included as Fixed Operations and Maintenance costs in the system based cost comparisons discussed by FPL witness Sim.

Q. How does FPL's construction cost estimate compare to industry expectations for new nuclear construction costs?

A. The estimate is consistent, but slightly higher than estimates available in the industry. In early 2007, the Nuclear Energy Institute (NEI) estimated Power Island (or Engineering, Procurement and Construction or EPC) costs to range between $1,800 and $2,400 per kW. Overnight plant costs were estimated to be between $1,950 and $2,800 per kW in 2007 dollars including a modest range of $150 to $400 per kW for Owner's costs. When this range is adjusted for FPL's estimate of Owner's costs and transmission costs of $664 to $959 per kW, the NEI range would be between $2,614 and $3,759 per kW. The Power island costs from the TVA Study, escalated to mid 2007 values are approximately $400 to $700 per kW higher than the NEI values, an amount equal to the difference between FPL's estimate and NEI's adjusted estimate.

Q. How does FPL's construction cost estimate compare to recent media reports regarding the cost of new nuclear generation?

A. There is a range of figures, commonly from $2,000 to $3,000 per kW, that have been cited in the press from time to time when describing the potential construction cost range of new nuclear projects across the country. I stand by FPL's values because they are traceable to the TVA Study, which was not associated with promotion of any particular commercial interests and hence is less likely to be affected by bias than vendor-specific estimates that might be relayed in media reports. I note that Moody's Investors Service recently issued a "special comment" report questioning whether some of the industry estimates that are being reported in the press are too low.

It is also important to recognize that the direct comparability of values quoted in the press to specific cost estimates is always in question, because generally less is known regarding the scope or age of those estimates or the specific commercial terms associated with them. In FPL's experience, the figures quoted in the press typically are current year, overnight costs for the vendor scope (or Power Island) costs only. As seen in Exhibit SDS-6, FPL's range for only the Power Island costs (2007$, overnight) starts at $2,444 and ranges up to $3,582 per kW.

Q. Would FPL expect its cost estimate range to change over the course of the Project?

A. Yes. FPL's cost estimate range is a means of bracketing the potential expected range of costs based on what is currently known and knowable. It is important to note that the estimate has been developed in advance of being able to complete a review with a selected vendor/engineer/constructor team in a manner that is more in keeping with FPL's common practice. As FPL begins to work with the selected vendor/engineer/constructor team the cost estimates will become increasingly firm and will likely change from the estimate that can be provided at this point in time.

Q. Has FPL concluded that new nuclear generation could be cost competitive with other generation alternatives?

A. Yes. FPL compared the construction cost estimate range developed above to an economically feasible range developed by the Resource Assessment and Planning department using a system cost-based analysis. FPL witness Sim describes the process developing the range, which is presented as the nuclear capital cost that would be economically equivalent (or "break-even") with alternative technologies.

As seen in Exhibit SDS-7, FPL's cost estimate range is below all but one of the break-even nuclear capital costs developed by the system cost-based analysis when comparing the plan with nuclear to the plan that substitutes combined cycle units for nuclear. The cost estimate range is below all break-

even capital cost estimates developed in comparison to Integrated Gasification Combined Cycle (IGCC). This signifies that, based on information available at this time, a new nuclear plant could be cost-effective in comparison to other generation alternatives when considering construction, operating and emission compliance costs in potential future markets. This analysis substantially affirms and supports the continued pursuit of new nuclear generation. Moving forward, this type of review can be refined as more is learned with respect to construction cost and schedule and how those refinements compare to the, then current fuel and emission cost forecasts.

Q. How are time-related costs, such as escalation and interest during construction, included to develop a total Project delivered cost estimate range?

A. A set of assumptions are made that allow the overnight costs estimate range to be translated over time through the construction period to develop a total Project delivered cost estimate range. The key assumptions required are a construction schedule, the allocation of the overnight costs to four major cost categories, annual expenditure estimates for each category and the escalation rate(s) that would be applied. Exhibit SDS-8 identifies the assumptions used in developing the cost estimate range and the major components of cost for the overall Project. A calculation is first made to bring the overnight capital cost range (2007$) to the value expected at the commencement of construction. The overnight cost at the beginning of construction is then split into four cost categories: material (11%), equipment (46%), labor (32%), and

miscellaneous (11%). The costs are then spread across the construction period based on the expected timing of annual expenditures in each category. The annual costs are then escalated and totaled to provide the estimated annual nominal expenditures. In this analysis FPL assumed a simple 2.5 percent annual escalation for all categories. Allowance for Funds Used During Construction (AFUDC) is applied to develop the interest costs for each year of construction. The nominal costs are combined with the annual interest costs to develop the total Project estimated cost range.

The results of this analysis are shown on Exhibit SDS-8. The total Project cost estimate range varies from approximately $5,492 per kW for Case B to over $8,071 per kW for Case C in year spent dollars for a 2,200 MW project. The terms "year spent dollars," recognizes that the expenditures occur over a period of years and is cumulative for the Project including the time-related effects of escalation and interest during construction. Exhibit SDS-9 provides an estimate of the project cost separated into Rule 25-6.0423 categories for a 2,200 MW project for each of the cases discussed.

Q. What are the critical decisions based on the estimated range of Project expenditures?

A. The early years of the Project are characterized by a series of incremental investment decisions. Each decision can be reviewed in the context of its influence on overall project schedule, the supporting information that justifies the expenditure, and the relative investment necessary to take the specific

step. As shown in the scenario illustrated in SDS-9, the Project would be able to proceed through the bulk of the Exploratory and Licensing phases with expenditures on the order of $8 million and $155 million, respectively. An additional $360 million would be spent on Preparation phase activities, for a total expenditure of $523 million in order to maintain the earliest practical deployment schedule. The amounts incurred during these phases may actually be higher or lower based on the results of the stepwise decision process as the project proceeds. These preliminary expenditures will lead to the most critical decision point, expected to occur in 2011, when FPL will determine if the project should proceed to the Construction phase.

The investments made in the early years may retain value, to varying degrees. The potential remarket value of long lead items has been previously discussed and may mitigate risks associated with those expenditures. The COL also has a value as a future option. While no precise time period is specified in the Code of Federal Regulations, it is expected that the ability to commence construction under the COL would remain valid for some considerable time into the future, subject to continued demonstration of the original licensing design basis. This would allow FPL to exercise the option at some point in the future, even if factors indicate a delay prior to beginning construction.

COST ESTIMATE RANGE SENSITIVITIES

Q. Does the Project cost estimate range represent a bounding set of values for the cost of constructing the Project?

A. No. The range of the Project cost estimate reflects the best information available at this stage of project planning. It was created by applying potential changes to certain assumptions to illustrate how costs may vary with these areas of uncertainty. Other factors in the licensing, design, procurement and construction aspects of the Project will have the potential to impact the cost and schedule. As FPL proceeds through the Project, the cost estimate range will be refined and compared to the most current information for the economically feasible range to determine the ongoing feasibility of continuing the Project.

Q. What would be the range of potential cost impact of a hypothetical delay of six months?

A. The annual AFUDC cost grows throughout the Project reaching a peak in the final year of the Construction phase. The annual AFUDC cost in the last stages of the Project could range from $800 million to over $1.2 billion per year. A six-month delay at this late stage of the Project would result in the addition of $400 to $600 million in interest costs along with any other project related costs that may be incurred.

Q. What would be the potential cost impact of a one percent variation in each of the cost escalators for materials, vendor equipment and labor and services categories?

A. If escalation rates were uniformly one percent higher than those used in the cost estimate range, the total project costs would increase by approximately $415 million in Case A for 2,200 MW project. A one-percent decrease in all escalators would result in a decrease of $380 million for Case A for a 2,200 MW project.

Q. What factors may change that would improve the relative economics of nuclear generation over the course of the deployment process?

A. Many factors could result in improved economics: factors related to nuclear unit construction cost and factors related to the energy generation market in which new nuclear facilities will operate.

Construction costs are uncertain, in part, because it is not known how many U.S. projects will proceed from the Licensing Phase to the Construction Phase, or on what schedule they will proceed. This will influence the total market created for equipment fabrication, labor and engineering services to build the new reactors. A healthy number of projects will create a balanced supply and demand relationship for these services, maintaining or lowering costs. A predictable licensing and approval process will increase the ability to plan procurement and resources, minimizing costs.

Externally, the economic factors created by tightening world energy supplies and increased emission control legislation will affect the electric generation market as a whole – establishing a new market price range in the future. Carbon costs will add directly and indirectly to the cost to generate electricity. The cost to emit CO_2 will be a direct charge to technologies that produce the greenhouse gas and will indirectly affect the market price of fuels, resulting in a likely premium to low-CO_2 fuels, like natural gas. Likewise, proposed requirements to change the future energy mix will have an economic impact on the alternatives against which nuclear generation competes compared to the current scenarios. For example, increasing the amount of renewable generation can help achieve meaningful GHG reductions, but may increase the overall cost of electric generation supply because of the high capital costs for these technologies and the low capacity factors that can be realized in Florida.

NUCLEAR POWER PLANT COST RECOVERY FILING PROCESS

Q. How will the costs associated with Turkey Point 6 & 7 be presented to the Commission within the Rule 25-6.0423 process?

A. Expenditures will be presented for cost recovery to the Commission annually in the Rule 25-6.0423 process. The initial filing, expected to be in May of 2008, will include the actual/estimated costs for 2008 and the projected costs for 2009. The costs will include costs associated with the Licensing phase as

well as Preparation phase steps that FPL recommends be undertaken to maintain the earliest practical deployment schedule, specifically long lead procurement. Filings in following years will provide a true-up of prior year actual expenditures, actuals/estimates of costs in the current year and a projection of the subsequent year costs. Major contracts will be enumerated to allow an understanding of the structure and allocation of costs across the involved parties.

Q. How does the Rule 25-6.0423 annual review process provide assurance to FPL customers that pursuing new nuclear generation remains prudent and that the costs associated with doing so are reasonable?

A. The process requires that FPL provide a complete description of expenditures to be incurred in the current and subsequent year of the Project. Interested parties will have the opportunity to review these projections and the Commission must be satisfied that they are prudent and reasonable. Each year FPL will also include a feasibility report, in which the ongoing economic viability of the Project will be reviewed. Recognizing that the factors that impact the cost-effectiveness of the Project change over time, this process ensures that a continuing review will be made with current information and will allow the Commission to determine that it is reasonable to expect that the Project will maintain, in aggregate, the combination of benefits upon which the Need Order is based.

COMPARISON OF THE DEPLOYMENT OF NUCLEAR GENERATION VERSUS OTHER GENERATING RESOURCES

Q. What are the key differences and similarities in the deployment of new nuclear generation compared to the deployment of existing forms of renewable resources (whether GHG emission-free or not) or fossil fuel generation?

A. The key differences pertain to the relative strength of the regulatory, economic and industrial framework necessary to support deployment of the different technologies. The challenges of deploying new nuclear generation can be demonstrated by comparing to deploying existing fossil or renewable generation technologies (such as natural gas combined cycle or wind turbines). In general, much more is known and knowable about existing fossil and renewable generation deployment because there is current experience regarding the recent deployment of these resources in the U.S. generally and Florida specifically. Regulatory authorities have had recent experience reviewing the issues related to these projects. Additionally, there is an active and competitive market for conventional generation equipment, engineering and construction services that support cost and schedule estimates for existing fossil and renewable technology construction efforts.

In contrast, nuclear generation deployment in the U.S. is just now resuming with the licensing and construction of proposed new nuclear plants, after a

hiatus of over 30 years. The differences in the regulatory approval processes for new nuclear versus existing fossil and renewable generation create uncertainty. The uncertainty with the new nuclear regulatory paradigm may cause unexpected delays, particularly as the federal regulatory oversight provided by the NRC interacts with state and local processes. Nuclear generation is a high capital cost technology. Therefore there are additional challenges in the area of financing projects, and ramifications of delays can be financially significant. Meanwhile, increased demand relative to a limited supply of nuclear material and equipment providers will affect the certainty of construction costs and schedules. Therefore, a delay in approving the pursuit of a nuclear project now may have a disproportionate impact on the costs and timeline to deliver new nuclear generation to customers. FPL believes that these uncertainties will begin to be resolved over time for re-emerging nuclear generation as the currently proposed 19 U.S. projects, representing 29 units, move forward.

There are also similarities in the deployment of new nuclear generation when compared to the deployment of existing fossil and renewable resources as well. These technologies (nuclear, natural gas combined cycle, wind) use known and mature designs that have predictable operational characteristics and performance expectations.

Q. How does the deployment of new nuclear generation differ from the development and deployment of IGCC?

A. New nuclear generation deployment is an evolving process built on the foundation of a well understood technology and supported by an established and stable nuclear generation industry. The nuclear industry in the U.S. is taking the logical next steps to build on the design improvements that have occurred internationally in the past 20 years, and deploy these refined nuclear designs to meet the U.S. need for energy security and reduced GHG emissions.

In contrast, IGCC is an emerging technology that has not achieved the status of a mature generation technology at utility scale. Much is to be learned about the reliable operation of IGCC facilities and significant development is required to provide a coal-fueled technology that can match the reliability and greenhouse gas emission profile of nuclear generation. Small-scale IGCC demonstration facilities have been constructed and operated without Carbon Capture and Sequestration (CCS). CCS, itself, is an emerging technology with a number of preliminary design concepts that have yet to be engineered, constructed and tested. To offer a truly comparable alternative to nuclear generation, IGCC will not only need to develop higher capacity designs with increased reliability and cost-effectiveness, but will need to demonstrate the stability and cost-effectiveness of operations with CCS.

Q. Has FPL considered the possibility that emerging technologies may develop over the next ten to fifteen years?

A. Yes. FPL routinely monitors developments in new generation technologies. There are promising emerging technologies in various stages of research and development, as noted by FPL witness McBee. For example, ocean-current driven turbine technology offers some promise of high capacity factor generation that is uniquely suited to application in Florida given the proximity of population centers on the east coast to the Gulf Stream current. However, ocean-current technology has not been demonstrated to be technically feasible at a commercial scale in the open marine operating environment. Moreover, the environmental issues related to its wide scale deployment have not been reviewed. This is one example of a promising technology that FPL is exploring, but in its current state presents an unknown risk profile, an undefined environmental impact, and an undeveloped cost structure and development timeline.

In FPL's view, it would not be prudent to forego taking the early enabling steps towards deploying new nuclear generation while searching for undeveloped alternatives with unknown deployment timelines. Rather, FPL advocates a parallel path, whereby it will take the steps to create a viable nuclear alternative while continuing to pursue the development of emerging technologies through partnerships and offers to purchase the capacity and energy produced from these facilities.

Q. What are the key differences in the deployment of new nuclear generation compared to the development and deployment of emerging renewable resources (whether GHG emission-free or not) or fossil fuel generation?

A. As compared to emerging fossil and renewable technologies, nuclear generation deployment involves the siting and construction of a proven technology with a strong operational history of safety and reliability whose operational costs are largely known and knowable. Further the nuclear industry is thriving with a continued record of delivering low cost generation with high reliability and safety. Nuclear generation is also a baseload capacity option, available at all hours, unlike many renewable resources. For these reasons, new nuclear generation is better positioned than developing technologies to make the successful transition to deployment and should be able to resolve uncertainties as they are presented. FPL concludes that the pursuit of new nuclear generation now is prudent and should not be postponed merely because of the undefined potential and uncertain development timeline of emerging technologies.

MANAGING THE OPTION FOR NEW NUCLEAR

Q. Previously you referred to the early stage investments in the Licensing and Preparation phase activities as equivalent to buying an "option" to develop new nuclear in the future. Please expand on this concept.

A. In order to be in a position to actually deploy new nuclear generation by the end of the next decade FPL and the Commission must make some decisions, and consequently must authorize some expenditure to move the process forward. The ultimate benefit of these investments include the economic savings of choosing nuclear generation over an alternative technology as well as the qualitative system benefits of improved fuel diversity, reduced dependence on fossil fuels, reduced GHG emissions and improved system reliability. Based on current analysis the savings appears to be significant in most scenarios, but these benefits are not without risk.

The expenditures fit the definition of "option" payments. An option payment is an investment or series of investments made in order to keep the path open to achieving an ultimate benefit at a future time. The Licensing and Preparatory activities are the series of investments, and the ultimate benefit to FPL customers is the potential future value of the investment (e.g., cost savings relative to alternatives, increased fuel diversity, energy independence).

The investments are managed to develop additional information that will enable continued refinement of the estimated ultimate economic benefit. The Nuclear Power Plant Cost Recovery Rule process allows precisely this disciplined logical approach. The uncertainty associated with the ultimate economic benefit is large at first. Correspondingly, the incremental

investments in the early stage are low in comparison to the total investment required to obtain the ultimate economic benefit. As the project proceeds, the uncertainty reduces and both the magnitude and the likelihood of obtaining the ultimate economic benefit become more certain. The judgment of prudency must therefore be made at the point of expenditure, recognizing that it is based on the best information available to the decision makers at the time the expenditure is authorized.

Q. How is the ultimate set of benefits determined?

A. The ultimate economic benefit is the product of detailed economic modeling of the relative lifecycle costs of various generation alternatives. By analyzing the cost effectiveness of several generation alternatives against a range of economic scenarios (including variations in fuel price forecasts and emission compliance costs), FPL develops an understanding of the potential ultimate economic benefit outcomes. As illustrated in Exhibit SDS-7, most scenarios analyzed show that new nuclear generation can demonstrate economic benefit when compared to alternative technologies under a range of fuel and emission compliance scenarios.

Additionally, the Commission must consider the qualitative system benefits provided by diversifying the portfolio and reducing GHG emissions with the addition of more nuclear generation. The range of economic benefit identified by the current analysis strongly supports the incremental option investments that are described in the Licensing and Preparation phases. The potential

qualitative system benefits further reinforce these incremental investments. The only way to initiate this process is through an affirmative determination of need. Such a decision on the part of the Commission is by no means the last word on the deployment of new nuclear generation.

Q. What benefits does this option approach provide FPL customers in contrast to the approach that Florida Administrative Code requires for non-nuclear generation?

A. Primarily this allows the pace of development to be managed in direct proportion to the confidence that can be placed in each incremental investment step of the process. As I have described, non-nuclear generation is generally able to be developed on a much shorter time frame and within a more defined commercial market framework. Nuclear generation deployment, re-emerging after a thirty year hiatus, entails a significant licensing process and construction cycle. These combined timeframes, resulting in a minimum of ten years, make it impractical to approach the decision in the same method as a project that can be designed, built and brought into commercial operation within three or four years.

Q. What are some of the potential scenarios that might convince FPL to suspend or terminate developing an option for new nuclear generation?

A. There are several possible scenarios that could result in a suspension or termination of the Project. Failure to obtain the required licensing approvals would halt the process. The opportunity to dispose of assets developed to that point would be dependent on the overall demand in the resale market.

Alternatively, the long-term economics could change (although it would need to be a dramatic change) that would no longer justify incremental investments in the deployment process. In that instance, expenditures made towards Licensing and Preparation phase activities would not be entirely lost, but transform into a long-term investment that could benefit customers if and when a re-institution of the process where economically justified. If this deferral or termination occurred due to changing project economics once the Licensing approvals were obtained, or nearly so, this outcome would retain substantial future option value as the COL would be valid for some time into the future.

The approach required by the Rule 25-6.0423 review process enables the pursuit of new nuclear generation and ensures that the process be conducted in a reasonable and prudent manner. The process limits the potential for the project to create undesirable expenditures. In short, the down-side is significantly limited and under the direct control of the Commission and FPL.

POTENTIAL FOR OWNERSHIP PARTICIPATION

Q. Has FPL held discussions with other Florida utilities regarding potential ownership participation in the proposed Project?

A. Yes. FPL has discussed, in general terms, the potential for ownership participation with utilities who have expressed interest. As FPL proceeds

through the process of developing the project plan and the associated contracts necessary to execute the Project, FPL will engage interested parties to determine the potential for mutually beneficial ownership participation by other utilities.

FINANCIAL ISSUES

Q. Given the magnitude of the total project cost, what financial challenges are presented to FPL to raise the funding necessary to finance the Project?

A. The two factors that most influence the ability to finance a new nuclear project will be continued demonstration of state and federal support and timely, stable regulatory action in support of licensing and cost recovery for the projects.

The EPAct 2005 legislation has provided promising programs to support new nuclear deployment. I understand that extensions of the timeframes associated with the original legislation are being considered by Congress. Such extensions would provide for further federal support in a tangible way that would help mitigate a portion of the financing risk. Continued support at the state level in the area of cost recovery will also be critical to maintaining the confidence of the investment community, thereby keeping the cost of capital as low as possible.

Access to capital markets will be dependent on several factors related to the regulatory experience for the initial wave of nuclear projects. Particularly, the ability of the first several nuclear projects to achieve licensing and pre-construction milestones per plan will set the tone for projects that follow. The markets will also be looking for a demonstrated stability in the actions and decisions of regulators as the projects move through the early steps. Demonstrating that the industry-government relationship is working will be instrumental.

Q. What specific economic impacts are of concern for a project of this magnitude?

A. The risk of delays over a long approval and construction process is the primary concern created by a project of this magnitude. However, this risk is partly offset by the regulatory rules that have been established in Florida to ensure interim recovery of prudently incurred pre-construction and carrying costs on construction work-in-process. This regulatory framework is a step toward ensuring that the utility will have adequate cash generation throughout the construction process. Continued regulatory support for the interim recovery framework is needed to ease concerns in this area.

Q. What are the rating agencies' views on new nuclear construction?

A. In general, the rating agencies (such as Moody's Investor Services) view new nuclear construction as a higher risk than other technologies. This view is primarily driven by the long approval and construction process associated with new nuclear construction as well as the size of the capital requirements in

relation to the utility as compared to capital requirements for other generation technologies. Rating agencies also recall the difficulties of the 1970's and 1980's. That said, the rating agencies recognize that interim recovery of prudently incurred costs can help to mitigate that risk. They also recognize the need for fuel diversity in the FPL portfolio, given the increasing reliance on natural gas.

Q. How would you summarize the impact of financial issues on this proposed Project?

A. We believe FPL's strong financial position coupled with continued legislative and regulatory support for the role new nuclear generation resources can play in addressing Florida's increasing generation requirements and energy policy vision, as outlined in Governor Crist's recent Executive Orders, should support pursuit of this Project.

Q. Does this conclude your direct testimony?

A. Yes.

BY MR. BUTLER:

Q. Mr. Scroggs, would you please summarize your direct testimony for the Commission?

A. Yes, I will. Thank you.

Mr. Chairman and Commissioners, I appreciate the opportunity to come before you today. The purpose of my testimony is to describe the steps that FPL has taken and with your approval will take to develop the proposed Turkey Point 6 and 7 project. My testimony describes FPL's cost estimate for the project and highlights the really unique and challenging aspects of deploying new nuclear generation today. I also explain how these aspects will be managed by FPL and overseen by the Commission through the nuclear power plant cost recovery rule.

The Turkey Point 6 and 7 project proposed in this proceeding is a unique undertaking in almost every aspect, yet the foundation work for this proposal has been under way for many years. Industry and government at all levels have collaborated diligently to retool the process for deploying new nuclear generation.

In the State of Florida, the pathway leading to this specific petition was carefully laid by the State Legislature with the passage of the Florida Energy Act in 2006. Subsequently, this Commission accomplished

a significant amount of detailed work to develop the rules that will allow for such an important project to move forward, in full recognition for the benefits that it offers and the unknowns that must be resolved. The forethought that has preceded this project and the specific petition is unparalleled. That is only fitting, as the benefits offered by the project, increased energy independence, increased fuel supply reliability, stability of electric generation costs, and reduced greenhouse gas emissions, are all vital contributors to the continued health and well-being of all Floridians.

Specifically, FPL is proposing to license, design, construct, and operate a two-unit nuclear project at our Turkey Point site in southern Miami-Dade County. New nuclear generation at Turkey Point makes sense. It makes sense for customers that it will utilize an existing site and existing infrastructure that has successfully filled this role for over 30 years. It also makes sense for the environment to add generation without greenhouse gases at a site that is already designed for this purpose.

Further, the project is based on known, safe, and reliable technology that can help us reduce greenhouse gas emissions systemwide. The project will

increase our energy independence, reduce our reliance on fossil fuels and the exposure to the rising costs of emissions and potential fuel supply disruption.

Finally, nuclear generation is available 24 hours a day, seven days a week. It's important to understand that this type of baseload resource is necessary if we're going to make increased use of conservation and renewable energy programs that are not always available to us.

The project we are discussing today is unlike other projects that FPL has brought to you in the past. As envisioned by the legislation, the proposal is brought to you early in the process, before designs are complete, before regulatory approvals have been secured, and before commercial terms have been negotiated. While this leaves some questions unanswered, we know enough to take the important steps forward to bring the project benefits to our customers. We know that the capacity will be needed even with extraordinary effort in the areas of renewables and conservation. We know that the life cycle costs of available alternatives, as shown by our economic analysis, is projected to be more uncertain, and higher in many cases than that projected for nuclear. We know that the regulatory approval process at the state and federal levels will ensure our

customers and our environment are protected. And we know that failing to act now will defer meaningful progress in reducing greenhouse gas emissions and will not address fuel diversity in the state.

That concludes my summary.

MR. BUTLER: Thank you, Mr. Scroggs. Chairman Carter, I tender the witness for cross-examination.

CHAIRMAN CARTER: Before we do that, Commissioners, obviously, at any point during the process -- I know we'll do our cross-examination, but if you have a question at that point in time about an issue raised, we'll stop and do that. And I say to the parties, let's just -- we want to kind of -- sometimes you may ask a question that a Commissioner has an issue about, and we'll just kind of interrupt you and do that, but we'll go back on with that. I just want to kind of let everybody know so we're all on the same page. Okay?

Mr. Beck, you're recognized.

MR. BECK: Thank you, Mr. Chairman.

CROSS-EXAMINATION

BY MR. BECK:

Q. Good afternoon, Mr. Scroggs.

A. Good afternoon, sir.

Q. Could you tell me how much water will be required to cool your proposed Units 6 and 7?

A. The actual final amount of water will be a result of the detailed design process that will be under way following this need determination. Our preliminary estimates are a range of 60 to 90 million gallons per day necessary for the operation of the plant.

Q. Will the amount change depending on which of the projects you go forward with, which of the designs?

A. It will change based on the design, and it will change based on the source of water, yes, sir.

Q. Okay. Which design requires more water?

A. The larger design, the GE design, would require more water.

Q. Do you have a basis to compare, relatively compare to the other design, how much difference is there?

A. On a per megawatt basis, it would be essentially the same. It's a scaler to the total number megawatts.

Q. Okay. FPL has not made a final decision on the source of the water for the cooling, has it?

A. That's correct. That will be a part of the site certification application process to develop those alternatives and identify which is the best option for the facility.

Q. Would you describe some of the sources that

FPL is looking at?

A. Yes, sir. There's actually three sources that FPL is looking at. One source is reclaimed water from the Miami-Dade Water and Sewer Department. Currently, the Miami-Dade Water and Sewer Department has an abundance of treated water that could be cleaned up and used in -- reclaimed water in the facility. The other sources are groundwater and surface water. Groundwater would come from two potential sources, the Lower Floridan aquifer, which is a very deep aquifer, saline content water, or below the lower Floridan, there's an aquifer identified as the Boulder Zone. That's 2,800 plus feet deep, and that would be -- yes, sir.

CHAIRMAN CARTER: I'm sorry, Mr. Beck. You said the Boulder?

THE WITNESS: Boulder Zone.

CHAIRMAN CARTER: The Boulder Zone. Thank you.

THE WITNESS: Those would both be considered groundwater sources.

We're also looking at sources from marine water or seawater that could be used to provide cooling water. The methods of bringing that in would be a currently unused remnant canal that's at the south end of the cooling canal system that currently has no use,

or a subocean floor well system that would draw water through the sand and provide it to the facility.

BY MR. BECK:

Q. I understand your cost studies have included capital costs of approximately 250 to $300 million for water, cooling water.

A. That's correct. In developing our cost estimate, we relied on FPL's experience in siting facilities in Florida to develop a reasonable cost estimate that covers the water requirements for this facility.

Q. If you haven't determined precisely what the source of the water is going to be, how did you determine the cost estimates for the cost studies?

A. We have extensive knowledge of different opportunities. We based the cost estimate that is in our cost estimate range on groundwater. So the groundwater source from the Lower Floridan or the Boulder Zone would be directly relevant specific to our cost estimate. However, we feel in looking at the other alternatives that the cost estimate range that we provided would be sufficient to cover costs reasonably expected for any of the other alternatives.

Q. If you were to use reclaimed water, do you believe the cost would be greater or lesser than the use

of groundwater?

A. Again, I believe that our cost estimate range is sufficiently covering the range of costs that would be required for FPL to pay in association with the use of reclaimed water.

Q. Okay. But would it -- let me ask it again. Would the cost of -- if you were to go with reclaimed water, would that be more or less than the use of groundwater as far as FPL's costs go?

A. Again, we feel it's within the same range. It would be essentially within the 250 to $300 million cost range.

Q. And have you done studies of that specifically?

A. We have not done detailed engineering studies. That will be a focus of the work in the application process for both the federal and state license applications.

Q. What's the basis for your statement that the cost for the reclaimed water would be approximately the same as the groundwater?

A. We have had discussions with the Water and Sewer Department, and our understanding of the facilities that would be required include the fact that the reclaimed water would be a very clean source. It

would not contain a lot of chlorides or other mineral content that groundwater would require, and therefore would not requirement treatment systems that are expensive and are a big part of the costs associated with groundwater. So we feel that we've appropriately bracketed the cost range that would be required or expected of any of these resources.

Q. Do your estimates for the cost of reclaimed water include the cost of pipelines to connect the source of the reclaimed water to the plants?

A. The estimate for reclaimed -- again, we have used a groundwater source as the specific basis for our cost estimate. In looking at the cost of reclaimed water, in our discussions with the Water and Sewer Department, we feel that the all-in cost to FPL for the use of reclaimed water are sufficiently covered by that 250 to $300 million.

Q. And that includes then the cost for the pipes that would connect the source of the water to Florida Power & Light's plants?

A. Yes.

Q. The costs that you include for water are incorporated into your Exhibit SDS-6, is that correct, there in some of the lines?

A. SDS-6 provides a line item breakdown of cost

categories for our cost estimate, some of which are specific to cooling water, some of which are general to a broader range, but encompass some costs for cooling water.

Q. Would you please turn to your Exhibit SDS-6 and tell me where the 250 to $300 million estimates can be found in that exhibit?

A. Yes. Costs that are specific to cooling water would be the costs associated with additional required scope under the first category of Power Plant Island and Supporting Construction. The second line item associated with cooling water supply would be cooling towers, which is the second line item in the Owners Costs category. There would be additional costs in the site work that would be related to water infrastructure on-site. There would be some amount of the permits and licensing costs that would be dedicated to the permits for water supply. And then in the allowance for cost risk, that would entail -- some amount of that would be related to water supply costs.

MR. BECK: Thank you, Mr. Scroggs. That's all I have.

CHAIRMAN CARTER: Thank you.

COMMISSIONER ARGENZIANO: Mr. Chair?

CHAIRMAN CARTER: Commissioner Argenziano,

you're recognized.

COMMISSIONER ARGENZIANO: Yes. May I ask Mr. Scroggs a couple of questions?

CHAIRMAN CARTER: You're recognized.

COMMISSIONER ARGENZIANO: Thank you.

Mr. Scroggs, in the last question, I think Mr. Beck asked you if included in your costs were the pipeline itself. Did you answer yes, they were included?

THE WITNESS: Yes, ma'am. We believe that the overall cost estimate of 250 to $300 million associated with water infrastructure would cover the cost of the pipe.

COMMISSIONER ARGENZIANO: And do you need any land purchasing? Do you have to buy any land to accommodate the pipeline?

THE WITNESS: The details of that would be related to the final design. Our current understanding in our discussions with the Water and Sewer Department, we would look at using existing FPL transmission easements and rights-of-way for the conveyance of pipeline from any treatment facilities to FPL. So largely, our objective is to maximize the use of land that FPL or the County of Miami-Dade would have for that. So at this point in time, I can't answer

specifically.

COMMISSIONER ARGENZIANO: Okay. Well, if you could use your own land, that would, of course, not include any -- incur any other cost in purchasing land.

THE WITNESS: That's correct, ma'am.

COMMISSIONER ARGENZIANO: Okay. And there are energy costs involved in pumping water also through a pipeline, and I guess the farther, the more expensive it is. Is that included, or that cannot be included at this time?

THE WITNESS: The two areas of costs that we would be discussing are the capital costs to build the infrastructure necessary to deliver the water, and then there are operating costs that would be incurred during the operation. The cost for pumping the water, the electricity cost to convey the water would be something we would consider an operational cost. And we feel that in our cost estimates for fixed O&M, we have adequately included an amount that would necessary to cover the cost of pumping the water.

COMMISSIONER ARGENZIANO: Okay. So that is included. And my last question for now, you had mentioned that the Miami-Dade sewer -- you might be able to get reclaimed water from Miami-Dade. How far away would the nearest station be?

THE WITNESS: The current nearest treatment station is the South Water Treatment Plant, and that's approximately nine miles from the Turkey Point site. However, we have talked about using water from either Virginia Key or using the existing water and sewer infrastructure to deliver raw water to a yet to be determined site that would be closer to the plant that would treat the water and then send the finished water product to Turkey Point.

COMMISSIONER ARGENZIANO: Okay. And I'm sorry. Just one last question. Depending on where you get the water from, the Boulder Zone or wherever you get it from, is going to depend on the amount of treatment that's needed. Do you have different cost scenarios for each one of those areas?

THE WITNESS: We believe that the cost estimates that we've included, meaning 250 to $300 million of capital costs and then an allowance within the fixed O&M costs for operational costs, would cover the range of costs that we would see with any of these alternatives. For example, the reclaimed water, coming to us rather clean, would require less capital in terms of developing a pretreatment facility on-site, so some of that capital might be used to pay a tariff or some form of water supply agreement with Miami-Dade

County as an operational cost. So we believe our costs are fully encompassing of all these options.

COMMISSIONER ARGENZIANO: Thank you. Thank you, Mr. Chair.

CHAIRMAN CARTER: Thank you, Commissioner Argenziano. Commissioners, any other questions before we -- Commissioner Edgar.

COMMISSIONER EDGAR: Thank you. I do have just a couple of questions for this witness. Good afternoon.

THE WITNESS: Good afternoon.

COMMISSIONER EDGAR: In your testimony, you described to us that in order to meet production dates that it is necessary for the reactor pressure vessel to be in place early in the construction process, and for that to take place, that it takes many years to go from order to design to delivery. So that brings me back to a point I was trying to get at earlier, which is, if it is necessary to make advance reservation years in advance, then why is it necessary for this Commission to approve or direct advance payment?

THE WITNESS: I can speak to your question from the perspective of a project developer, my discussions with the vendors and my knowledge of the market and my knowledge of the construction schedule and

what items are critical path. It's imperative that we make our reservation as early as possible in the process to assure that we can maintain the earliest deployment schedule. So from that aspect, I can tell you there is a schedule imperative, and there's market forces that really make it important for us to make those expenditures earlier.

In the process of the nuclear power plant cost recovery rule, we'll not be able to put those before the Commission and have those formally decided upon until sometime in late September, or by October 1st, is my understanding. We are being advised that we would want to do this earlier than that.

So in wanting to do this earlier, we want to be again transparent in the decisions that were being suggested that we should be making, the commitments that we would be making on behalf of the project. So we want to have that up front, that discussion, and disclose that up front with you now. And that's our impetus to bring that before you now and ask that you recognize, with all the information that we have, that it's a prudent thing to do, and you understand that in the dynamics of the market forces and the schedule, that in order to bring the benefits of the project per the schedule, it's a prudent thing for us to do.

COMMISSIONER EDGAR: And I do have --

CHAIRMAN CARTER: Go ahead.

COMMISSIONER EDGAR: Thank you, Mr. Chairman.

And that does help me get to -- and I'm not trying to be argumentative. I'm truly trying to understand and think this through in my own mind.

But when I read Issue 9, it does not say finding of prudence. It says the Commission -- it says should FPL commit advance payment. In my mind, if this Commission agrees with Issue 9, then we are approving or directing that advance payment. It does not say prudence. But to me, if we were to direct or approve, that would be making a finding of prudence, but yet it doesn't say making a finding of prudence.

And I realize that may be more a question for the lawyers and for briefs, and I will look forward to seeing that point fleshed out in briefs. But it does -- you are listed as one of the witnesses on this issue, and so that's why I'm posing the questions to you.

So I recognize that there will be, as you pointed out, critical paths and critical decision-making points, but that brings me back to my other point. If a need determination is granted in this, then it is the responsibility of the utility to make your expert business decisions as to what you need to do in order to

meet those future dates. And I'm just not understanding why this particular one -- it's a significant amount, absolutely, and I recognize a critical point in the construction process, but why this one piece of that whole process requires a direction from this Commission that, as you have described, would be a finding of prudence, and I believe as Mr. Olivera said, would be a finding of prudence.

And there actually was a question in there. Could you maybe help me understand why this particular piece of this process is so important to step out of the process that has been laid out and that we are just beginning to embark upon as far as cost recovery approvals?

THE WITNESS: Yes, ma'am. In terms of why this specific item, this specific item we know will fall out of sequence of the normal prescribed cost recovery process. In other words, we will have to expend this reservation fee in advance of the full nuclear power plant cost recovery rule process and hearing. So we wanted to say, you know, we're going to need to move before that process has a chance to complete, so we wanted -- that's why this specific area has been brought up. From my way --

COMMISSIONER EDGAR: And I don't want to -- I

am interrupting, and I apologize for interrupting, and if you have more that you think would help me for me to hear, I want to hear it. But cost recovery is by nature cost recovery, I mean, recovery after the fact. And the way I read this issue, it's asking for approval in advance of incurring the costs. And again, I'm not arguing with whether this is a very important piece of the process. I'm just not understanding why it is so important that advance approval be given rather than a cost recovery review.

MR. BUTLER: Commissioner Edgar, if I may --

COMMISSIONER EDGAR: Please.

MR. BUTLER: -- distinguish something here to be sure that you understand what we are asking for and not asking for here. Our position on Issue 9 tries to make it clear that we are not trying to take off the table for review in the cost recovery proceeding the specifics about the amount that we would end up paying, the terms, you know, what we would get for the payment that we would make, those sorts of details, because we recognize that's something that does need to be explored in the cost recovery proceeding, and properly it should be. What we're really looking for here and included in --

COMMISSIONER EDGAR: Again, I want to keep

with my own track, and then I'm glad to hear the rest of what you're saying. But I have reviewed the filed positions, and I look forward to reading the briefs and hearing more. And in this instance, I actually mean that. I do look forward to reading them more.

But yet the way the issue is worded and the way it will come before us with a staff recommendation and an order is, should FPL commit to the advance payment. And in a question to Mr. Olivera and in a question to this witness, I think I have heard them -- and I'll go back over the transcript, but I think I have heard them say that they would view that as us saying that it's a prudent decision for them to go ahead and do it.

And therefore, in a later procedure that goes through prudence, I think that it would be very difficult for this Commission to find -- I think it's limiting our options if witnesses have told us that they would deem it as a finding of prudence, and then after the fact, FPL were to present testimony and records and our staff were to review it and we were to have some questions as to prudence. And I have the strong concern that then we would be accused of regulatory uncertainty if we even asked a question during that prudence review after already directing the payment.

And there is not a question there, but I welcome your response.

MR. BUTLER: Thank you. Let me try what I tried in distinguishing what we were asking for and not with the Prehearing Officer when we were going through what the appropriate -- you know, whether this was properly an issue here and see if that helps.

COMMISSIONER EDGAR: You know, it really actually isn't. I would rather that you responded to my question than to what other discussions went on.

MR. BUTLER: I'm just alluding to the fact that some people may have already been through this, but I'm certainly happy and want to --

COMMISSIONER EDGAR: You know, I understand what other people have already been through. I have read the transcript. I have read all of the information.

MR. BUTLER: Okay. Well, then you know what --

COMMISSIONER EDGAR: And I have asked for your response.

MR. BUTLER: Okay. Fair enough. What I am -- what I want to distinguish between is that what we don't want to come back to in September or late August, whenever the hearing would be held in the cost recovery

proceeding, is someone raising the position or taking the position that all things considered, even though we realize that you probably would have lost your spot in the queue and it would have an adverse impact on the schedule, that would have been better than to have made some sort of advance payment to keep that spot in the queue.

COMMISSIONER EDGAR: But, Mr. Butler, there isn't -- I'm not -- nobody has raised the question of you losing the spot in the queue. What I'm trying to pin down -- and I feel like you're dancing around my point. What I'm trying to pin down is why this particular, critical albeit, piece of the process requires advance specific direction from this Commission.

MR. BUTLER: I think there's two pieces to it. The first piece to that is because of the timing, this kind of awkwardness of a decision probably being needed to be made to go ahead and pay this forging reservation fee in the early summer of 2008, which means that we would actually be paying it before the cost recovery proceeding --

COMMISSIONER EDGAR: But again, my point, it's a cost recovery procedure. And so what you're telling is that for the future years -- and again, we're looking

forward to annual proceedings. That is what the rule lays out, and we spent a lot of time trying to get the rule in the best shape we could. But it is a cost recovery procedure, and I feel like what I'm hearing you say is that if indeed -- that what we will being seeing is more and more and more use of the cost recovery annual proceedings to direct advance cost direction.

MR. BUTLER: Here's what I had in mind with it. Let's just -- maybe I can illustrate the point effectively this way. Let's say that this cost instead had to be incurred in the early summer of 2009.

COMMISSIONER EDGAR: I don't feel like you're being responsive to me. I really don't. I don't think you're being responsive to me. Okay. So let me try again. From your previous response, I think what I can infer from it is that annual cost recovery proceedings will be used by this utility for this project to ask this Commission for additional advance approvals, not cost recovery approvals, advance approvals.

MR. BUTLER: We would intend to file projections each year, and one of the things that we envisioned that the projections would do would be to give everyone, including the Commission, an idea of what we plan to do in the following year. And I guess our model for this, as we envision it at least, is the

adjustment clause proceedings where we bring each year what we plan to do, there is review of that, and typically, if somebody thinks that what we plan to do is way off base, they will say something about it.

COMMISSIONER EDGAR: Well, in that case, then why aren't the other expenditures that this utility will be making that they will deem to be reasonable and necessary, why aren't those included in this need determination?

MR. BUTLER: That was going to be the second thing I was raising as a distinction, which was that there's the timing, and the other is that, frankly, this struck us as being pretty unusual, pretty distinct. It's the type of thing that a lot of projects wouldn't have a counterpart to it. It's, in our mind, unusual.

COMMISSIONER EDGAR: But there are a lot of things in this that other projects would not have a counter -- I mean, that has been the whole point of a separate and unique need determination statute and a separate and unique cost recovery process, is because projects -- this project is the first one to come before us in -- well, come before me, but come before the Commission in 30 some years, or whatever it is. Much of this project is unique. And I've read the testimony, I've listened very carefully to each of the witnesses

and look forward to the other ones, and I have yet to hear anything that tells me why this particular advance purchase is sufficiently unique from all of the other very important financial pieces of this project.

MR. BUTLER: For right or wrong --

COMMISSIONER EDGAR: For regulatory -- excuse me. I'm sorry. For regulatory treatment.

MR. BUTLER: Right or wrong, our assessment of this particular item was really driven by those two facts, that it's kind of an unusual thing of having to make this reservation fee payment simply to get a spot in line to be able to later buy the forging from this facility. That seemed unusual. And the timing of it was something that, unlike other later payments of a similar nature that will occur at a point when we could raise them as projections for later cost recovery periods, this one we didn't have the chance to raise it as a projection. And those two factors together are really what made it, in our mind, distinct.

COMMISSIONER EDGAR: Okay. I'm not agreeing with you, but I think I'm understanding what you're saying. But I don't see this as -- the way this issue is framed, as we are letting the Commission know that there's a cost projection for advance payment of 16 million next year. I see it as a request for this

Commission to approve and direct.

MR. BUTLER: I don't know that I would go so far as direct. I would agree with approve. We are asking that you look at this and say, "Yes, we agree. It would be a good thing, good idea, preserve the schedule, make this sort of payment." The exact dollar amount, the terms you have for it, et cetera, will be subject to later prudence review, but we are asking you now, because we're going to have to make it in the early summer before the first cycle of the cost recovery, to approve that issue.

COMMISSIONER EDGAR: So are you telling me that if Issue 9 is not approved as worded as a part of this proceeding that FPL will not get in line, although I'm hearing from witnesses and reading that that is best deal for the state?

MR. BUTLER: No, I'm not telling you that. This is one of those places where we were really in a new process, embarking in kind of a different direction that we or you have been in a long time, as you suggested, looking for getting a little bit more sense that we were on the same page going forward. But we're going to do what's the right thing for this project to protect the opportunity it presents for FPL and the customers as we normally would.

COMMISSIONER EDGAR: As I would expect.

I am very uncomfortable with -- I'm going to be kind when I say the inference that if this Commission does not fall in line with this issue, that we will be accused of creating an environment of regulatory uncertainty, because I think that that is a mischaracterization. And I have numerous comments on that point, and I'll reserve them for whatever may be a more appropriate time, but I will throw that out so that there will maybe be the opportunity for a response.

Mr. Butler, I would like to come back, because I have one or two more questions for the witness, and if that triggers something that you would like to say to me, I'll be glad to hear it.

MR. BUTLER: Fair enough.

COMMISSIONER EDGAR: In the testimony, it says that these items may be expected to have a certain remarket value, which would be risk mitigation. So in that case, why again is it necessary for this Commission to approve or direct the advance payment if it's a risk mitigation and there is, as it says, certain remarket value?

THE WITNESS: Again, I would say that we're trying to highlight that this is the right thing to do, and we want to be open with the Commission as to the

fact that it's going to be a little bit out of sequence, and that we want to --

COMMISSIONER EDGAR: But it's not out of sequence. I'm sorry. It's not out of sequence. You're saying this is the sequence that it needs to occur in. I hate ending things with a preposition. But you're telling us that it's the appropriate sequence, so what is out of sequence?

THE WITNESS: I'm sorry if I confused you. I was referring to out of the --

COMMISSIONER EDGAR: Actually, I think I understood.

THE WITNESS: Out of the nuclear power plant cost recovery cycle. In other words, the decision would be made for us to make the expenditure in advance of a PSC, Commission judgment on our initial filing of May 1 for costs.

COMMISSIONER EDGAR: But then again, why do we have an issue before us asking the Commission to direct you -- I mean, it says should FPL commit; to me, if we say yes, that's a direction for you to do so -- if indeed you're saying it's what you need to do to keep this project on line, and if, as it says in here, it's a risk mitigation step and there's remarket value should something happen down the road that would have nothing

to do with me?

THE WITNESS: We wanted to amplify all the issues surrounding it as to why it's a good step to take and why, if we were to decide after the expenditure to not go forward or to delay the project, that there would be a potential, as with any option, to find another purchaser for that option. So we were simply trying to illuminate the specific issues surrounding this payment.

COMMISSIONER EDGAR: I'm not sure I get the reasoning, but I do understand what you're saying, and I thank you for your responses. And I think I only have one more question at this point.

In testimony earlier today, Mr. Olivera asked that this Commission not tie the utility's hands by directing a specific technology or specific engineering. And I understand that, because again, you all are the experts. But then why would you ask the Commission to direct a specific payment at a specific time to a specific vendor?

THE WITNESS: I believe what we've identified is a specific payment at a specific time that would be applicable to either vendor. We have provided you an estimate that is based on information provided to us from a specific vendor to give you a cost estimate, a range of costs, but --

COMMISSIONER EDGAR: Okay. Now I'm going to stop you there, and I'm going to come back to Mr. Butler.

Mr. Butler, my reading of this issue is, should -- and I'm going to leave out a few words, but basically, should FPL commit to make advance payments to Japan Steel Works. And now I'm hearing from your witness that actually it could be this vendor or a different vendor that we would be --

MR. BUTLER: I think the distinction there, Commissioner Edgar, is that Japan Steel Works is really kind of like a subcontractor for making these forgings, and they would end up being used, they, Japan Steel Works, by either Westinghouse or GE. And we know what Westinghouse has advised that the payment to Japan Steel Works would require would be, which is in the range of 16 million. Probably it would be a very similar figure from GE. But in both instances, there are large forgings they will have to look to Japan Steel Works to make, so that particular choice actually will have to be made regardless of which of the two suppliers we end up ultimately going with.

COMMISSIONER EDGAR: Okay. But to the witness, I ask the question why do we have one specific vendor in this, and I think I heard him say, well,

really there are two, and --

MR. BUTLER: I think that may have been a misunderstanding between him and you. There are two vendors we are considering for the supply of the nuclear reactor, basically, and both of them need large forgings that neither of them has itself the facilities to fabricate. They both would be looking to Japan Steel Works to make that piece of equipment. And I'm suspecting there may have been a misunderstanding about what you were referring to as supplier and what he was answering.

COMMISSIONER EDGAR: Then I will leave it with this larger point. I am still befuddled as to why the utility would ask us in so many different dockets and so many different instances and issues not to micromanage, and I have yet to hear an answer that I find compelling as to why this specific issue rises to a level to ask us to do something that is, in my opinion, micromanaging and limiting this Commission's ability to do any future prudence review. And I'll leave it at that. And thank you all for your indulgence.

CHAIRMAN CARTER: Thank you, Commissioner Edgar. Again, Commissioners --

COMMISSIONER ARGENZIANO: Mr. Chair?

CHAIRMAN CARTER: Commissioner Argenziano,

you're recognized.

COMMISSIONER ARGENZIANO: Yes. I'm having some difficulty with this, and I think I've heard some concerns that are now concerning me that I would like to have more information on. And I'm never afraid to ask something that I may not know, because that gives me power in learning. So I need to know, number one, are we advance directing -- excuse me. I'm sorry. The minute I start to talk -- excuse me. I probably need to know more information on this issue that Commissioner Edgar brings up.

Are we doing something differently than we normally would do? Where is OPC on this issue? I would like to hear from them. And maybe staff could clarify some of the questions that Commissioner Edgar brought up.

CHAIRMAN CARTER: Okay. Commissioner Argenziano, who would you like to hear from first?

COMMISSIONER ARGENZIANO: Is it possible to hear from OPC?

CHAIRMAN CARTER: One second.

COMMISSIONER ARGENZIANO: Even if it's at the proper time? It doesn't have to be now, Mr. Chair. I understand we have a witness on the deck.

CHAIRMAN CARTER: Not a problem. You're in

order. Let me ask you this. Would you yield for a moment for Commissioner Skop before we go to OPC and staff?

COMMISSIONER ARGENZIANO: Yes, absolutely. Thank you.

CHAIRMAN CARTER: Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chairman. Again, I also would like to hear from OPC, and I was just wondering if Mr. Beck would happen to have a copy of the prehearing transcript on page 82, and if not, I would happy to provide it to him, with respect to this issue.

MR. BECK: I don't have it with me.

COMMISSIONER SKOP: Would the parties object or the Commission object if I gave Mr. Beck my copy?

You may approach. Thank you.

(Pause in the proceedings.)

CHAIRMAN CARTER: Do you have a question of Mr. Beck, Commissioner?

COMMISSIONER SKOP: No. I just wanted to be aware if Mr. Beck had a copy of the prehearing transcript on page 82.

CHAIRMAN CARTER: Okay. Mr. Beck, then staff, to Commissioner Argenziano's questions.

MR. BECK: Commissioner Skop has referred me to comments I had made at the prehearing conference, which I do recall.

Commissioner Argenziano, we have not taken a final position on Issue 9. We reserved our position on that. I will say the same thing I said at the prehearing conference, in that we take some comfort from the fact, if you look at the second half of the position of Florida Power & Light, that the terms of any contract and the amount of the payment are all subject to the ongoing cost recovery proceeding which hasn't been filed yet, and that Florida Power & Light is asking solely for a decision by the Commission on the decision to enter into the advance payment, not the terms, not the price, not anything else. All those things will be reviewed later. But we are still considering it. We've not taken a final position on Issue 9.

CHAIRMAN CARTER: Staff?

MS. BRUBAKER: Staff is in the same position as OPC, in that we have not yet taken any final position on this.

I note from FPL's position on Issue 9 that they used the word "prudence" several times, and it seems to me that they are at least asking for a determination as to the prudence of committing to making

those payments. So that word would lead me to question whether that is something that would otherwise -- had they not brought this issue forward, would otherwise not be dealt with in the cost recovery process. At the same time, if FPL wishes to put this issue forward, I would, of course, expect them to put forth sufficient evidence to prove up the issue, as we would with any other issue that's put forward in a docket. But at this time, staff has not made any sort of final statement of position on the issue.

CHAIRMAN CARTER: Commissioner Argenziano, are you there?

COMMISSIONER ARGENZIANO: Yes, Mr. Chairman.

CHAIRMAN CARTER: Were you able to hear Mr. Beck and staff's --

COMMISSIONER ARGENZIANO: Yes. But with all due respect, nobody is telling me anything. Nobody is willing to commit to anything, and I guess I'm going to have to make up my own mind at some point. If OPC is not opposed to it or doesn't have a position, I don't know at what point when they will have one. And staff, everything sounds like, well, it could be this or it could be that. I don't hear anything. And I guess coming from the legislative realm, it's quite different there. It's either this or that.

I guess, Mr. Chairman, what I have concerns over is -- I mean, I understand prudence sometimes. If we are changing the course of the way we ordinarily do things -- and it may be for a good reason; I don't know -- I would like some kind of a backup as to why we're doing that. And I guess at this point, I'm so confused now that I'm not sure what to think of it. I just don't know.

Commissioner Edgar brings up some points. Commissioner Skop, I really didn't hear much from him at this point other than directing OPC to look at the page number. And maybe Commissioner Skop could address it or somebody else give me a little bit more information to go on here as to why we're directing this now. And maybe I'm just not hearing it right.

But I guess, Mr. Chair, that's about all I can say until I sit down and really go over it many more times and figure it out myself, because nobody is willing to commit an answer.

CHAIRMAN CARTER: Okay. Commissioner, Commissioner Skop will yield for a moment. Commissioner Skop.

COMMISSIONER ARGENZIANO: Thank you.

COMMISSIONER SKOP: Thank you, Mr. Chair, and thank you, Commissioner Argenziano, and also,

Commissioner Edgar, for raising the issue. Again, if I could be indulged for a second to ask Mr. Butler one question, and then I'll explain my rationale for why this is in here.

CHAIRMAN CARTER: You're recognized.

COMMISSIONER SKOP: Thank you.

With respect to my understanding of this issue, it is necessary to reserve a spot in the queue, and that's something that perhaps one may or may not have to do on their on, but -- is that correct?

MR. BUTLER: That is correct.

COMMISSIONER SKOP: Okay. And that's to preserve the in-service date; correct?

MR. BUTLER: That's right. To be able to sort of keep the opportunity for those in-service dates, we really need to be sure that we have the ability to get those forgings made in a timely fashion.

COMMISSIONER SKOP: And also, too, we're in the face of an untested cost recovery statute; is that correct also?

MR. BUTLER: That is correct.

COMMISSIONER SKOP: And failing to reserve a spot in the queue also would subject the ratepayers to cost escalation risk if such a spot was not reserved and you had to reserve it potentially later; is that

correct?

MR. BUTLER: That's right. If it has to be built later, you not only have the escalation risk, but as you mentioned earlier, you have the potential of losing the opportunity bring them in at the scheduled in-service dates.

COMMISSIONER SKOP: Mr. Chair, just a few more questions, and then I'll give you my rationale.

CHAIRMAN CARTER: Sure.

COMMISSIONER SKOP: Essentially, I think it's also important to lend some perspective to this to the extent that we've looked at the decline of the domestic nuclear manufacturing capability, and I think that it would important to flesh that part out. The reason why Japan Steel Works is involved in this is, strictly speaking, they're the only one in the world that can do these type of forgings, ultra-heavy forgings? There's no U.S. provider that exists today?

MR. BUTLER: That's my understanding. Not only no U.S.; I don't believe there is another facility elsewhere in the world that is fully capable of making these sorts of components.

COMMISSIONER SKOP: Thank you.

Okay. Based on the above, again, you know, as always, I appreciate and welcome hearing the perspective

of my colleagues and certainly respect alternate viewpoints. You know, as Prehearing Officer, this fell squarely on my shoulders. I certainly could have deferred to the entire Commission to do that, but I stepped up to the plate and made a difficult decision, which is typically afforded great deference by the Commission.

But with respect to my specific rationale, although I do stand by the decision I made -- and certainly we can tee this up and vote it out of here if we need to. But basically, in the face of uncertainty, of an untested statute that was enacted by the Florida Legislature, there is substantial uncertainty, and it's important to have a stable regulatory environmental for nuclear construction in Florida.

This issue was pled by FPL. There was a substantial nexus in relation to the need determination. I think legal staff would agree with both of these issues. The decision is predicated upon a condition precedent, i.e., an affirmative finding of need by this Commission, and we would never get to this issue until we addressed the issue of need. And again, it's not predisposed one way or another. It's just this is a collateral issue with supplemental jurisdiction. I used my discretion as the Prehearing Officer to address it,

again, in the public interest.

To the extent -- and there have been some points raised. But again, you're trying to do a multitude of things here. You're trying to avoid cost escalation risk, you're trying to provide a stable regulatory environment, and you're trying to constrain costs. And again, it was a judgment call on my part, and I stand by my decision.

And based on the aforementioned and the fact that OPC at the prehearing conference -- and again, Mr. Beck, I don't want to put words in our mouth, but I think the position of OPC at the prehearing conference was that OPC was not opposed to Issue -- then numbered as Issue 10 coming in, and they were comfortable with the revised language for the reasons that you suggested, to the extent that it was only an affirmation that they should commit to making a payment without a full-blown prudency determination. And my understanding of the prudency process before the Commission is that the Commission will not render a prudency decision until it has all facts before it.

Again, I sufficiently narrowed the issue. When it was under consideration, it was in broad terms. We discussed this at length with the parties and OPC, and we got it down to a discrete one-time payment to a

specific vendor for a specific purpose that should be readily discernible as to what it is for. It's not nebulous. Again, I'm not in the process of writing blank checks. I would not put this Commission in that position.

But again, what I attempted to do is definitize the issue to a discrete issue that my colleagues could consider. And again, I thought it was important enough to bring in as a collateral issue under supplemental jurisdiction. Again, predicated upon a condition precedent of an affirmative finding of need by this Commission, again, you will never you get to this issue until there's need. But again, that nexus is so strong, again, it's a decision I made. I stand by the decision. I have no regrets, and I'll leave it in the hands of the Commission. Thank you.

COMMISSIONER ARGENZIANO: Mr. Chair.

CHAIRMAN CARTER: Commissioner Argenziano, you're recognized.

COMMISSIONER ARGENZIANO: This has nothing to do with the Prehearing Officer or any of you. The Prehearing Officer made a decision, and that's fine. That's what you do. That is not the purpose of me asking the questions. Asking the questions is because I heard no responses to the questions that Commissioner

Edgar was bringing up. The points that she was making are valid concerns. And I didn't hear any response other than, you know -- and you never have to defend your position, Commissioner Skop. It was your decision. I'm just trying to understand what was taking place.

What I was hearing for one instance was we're possibly directing to one entity for procurement. I understand now, since somebody has described what the answer was, that there aren't any other entities that can do this. But it wasn't mentioned prior, so you can understand the vacancy in my mind not knowing the answer to that procurement issue. That's gone. That's off the table for me. I understand that.

And not understanding the importance -- I guess what I'm hearing is that things need to be done in a timely manner or this can't be done. Is that what I'm hearing? Mr. Chair, if I may have that answered one more time, because it seems like I have to extract information. And I don't know if everybody is tip-toeing around or whatever. And I'm not trying to play politics or anything else. I just want the facts. And it seems to me the hardest thing is to get the facts, and that's what I'm trying to get. And once people start talking about the issues instead of skirting around them, I get it, and then I can make my

own decision.

So, you know, to respect of the Prehearing Officer, nothing meaning in any sense of the way of your decisions you made at that time. That's not even where I'm going. I just want the information to make my decisions. And maybe, you know, if it's a timely thing that needs to be done, if it could have been recovered after, as we normally would do, I guess, that's fine with me, if I just have the answers to the questions instead of having to -- and excuse me. I'm not an attorney. I just speak plain old English, and that's the way I want to hear it so I can better understand it to make my decisions.

CHAIRMAN CARTER: Commissioner Argenziano, I think where you are is where Commissioner Edgar was. I think it's substantially the same question. Of course, she's ready to ask for further illumination, and I'm about to recognize her for some questions kind of further, because I think what you're asking goes to what's so unique about this and whether or not we're doing a prior approval or dealing with prudency and those matters, and you're probably where she is. And so I'm going to recognize Commissioner Edgar, and maybe you can kind of listen in, and this may help also to illuminate the question further. If we still --

Commissioner, if we're still at the question and don't get there, we'll have to decide on where we go from there.

So at this point in time, Commissioner Edgar, you're recognized.

COMMISSIONER EDGAR: Thank you. I do have one or two questions, and maybe a couple of brief comments.

First off, Commissioner Skop, I find it very interesting to hear you talk about deference to other members. But more importantly, I think that I have heard FPL testify today that approval of Issue 9 is not required to reserve a spot in the queue, and I think I have also heard you say that approval of Issue 9 is required, and so I would like clarification on that point.

MR. BUTLER: What I had said earlier in response to a question from you whether, if the Commission did not reach a conclusion on Issue 9, you know, would we nonetheless go forward and make the payment, was that, you know, we would obviously have to do the right thing to preserve for the customers and our shareholders the sort of appropriate decisions on proceeding with the plant. I'm not sure what the other part, the sort of other side of the answer you're referring to.

COMMISSIONER EDGAR: I thought it was in response one of the questions just a few moments ago from Commissioner Skop.

MR. BUTLER: Well, if I -- what I was trying to answer there, what I thought the question was is actually whether the payment itself, whether one would have to make the payment to Japan Steel Works in order to get the spot in the queue, and I was saying yes, you would have to do that. And if you didn't --

COMMISSIONER EDGAR: But for us to direct that payment is not determinative of the utility's evaluation of whether that is the best step to take at whatever time for this project to move forward if the project is granted the need determination?

MR. BUTLER: Obviously, we're going to have to decide, with whatever the decision is by Commission, what is the appropriate thing to do. You know, if the guidance was, "Gosh, this is a terrible idea," I suppose we would certainly have to take that into account. But I don't think there is a direct connection there. I was not trying to suggest that it's kind of you make the decision and we make the advance payment, you don't make the decision and we don't. That's something -- obviously, I'm the attorney for the company. You know, our company's management would have to take whatever

decision you reached and account and decide what was the appropriate course of action.

What I was trying to respond to Commissioner Skop was really I guess one step further up line from that, which is just if you don't make the payment to Japan Steel Works, then I think it's pretty clear you don't get the spot in line, and there are negative consequences to it. That was the question I was trying the answer for Commissioner Skop.

COMMISSIONER EDGAR: If you don't pay for fuel that's required, do you receive fuel?

MR. BUTLER: No.

COMMISSIONER EDGAR: Why is this different? I mean, we don't preapprove the -- I'm just not understanding. And again, I am not trying to be argumentative. It has nothing to do with the discussion at the prehearing conference. I've read the transcript. I've read the positions. I am just not hearing anything that tells me why this particular item is so special and so unique. And it may be. I'm just not hearing it as to why a direction from this Commission for one financial piece of this project, albeit critical, is necessary at this time. I'm just not hearing the answer to that, or not a convincing one.

MR. BUTLER: Okay. Well, I was going to say.

I think that the best I can do -- let me try pretty much again, but hopefully provide a little bit more clarifying direction to it. When FPL was looking at putting together the petition and was looking at, you know, where it was in this new distinct process, a couple of things that are significant. One, it is a project that is -- you know, we are seeking a need determination for it much, much earlier than you would normally be seeking. And that obviously doesn't lead to you say that this particular item is unusual or distinct.

But then when you couple that with the fact that there is an extraordinary, if not completely unique, lead time for these items, what we saw and what led to a concern is that, gosh, we were going to be making payments for pieces of equipment, or in this instance, really just for the opportunity to use a facility to make the piece of equipment many years in advance of when we would need that piece of equipment, when it would be delivered, and then when it would ultimately be incorporated into this plant.

COMMISSIONER EDGAR: But, Mr. Butler, it says in the testimony that there is a remarket value to that equipment, and it says that to do it at this point in time is a risk mitigation step.

MR. BUTLER: That is our view, and that's what we are asking you to agree with us is the case. That's probably in some ways the easiest way to say it, because otherwise, one could look at this and say, "Well, no, maybe that's not the right way of looking at it. Maybe you ought to play your cards closer to your vest, not make any of these payments in advance, wait till you're further down the road, wait till you have more certainty on the licensing issues, et cetera, and then start making payments."

What we're saying here is that because of the long lead, because of the need to get in the queue, there is an opportunity. You have pay for it. It gives you benefits in terms of the risk mitigation you just mentioned. But it has the downside that you're putting money on the table for something that -- sure, you may be able to resell it. It's by no means clear you could resell it for as much as you paid for it, whatever it is you that you buy as an advance pavement. You know, obviously, that will just depend on what the market is at the time that there is an attempt to resell it.

COMMISSIONER EDGAR: Okay. Let me come back to that point. By no means you could resell the entire equipment for the amount of an advance payment, by no means, realizing what we keep hearing is how long in

advance you have to get in line for it?

MR. BUTLER: What I meant is any particular option, any particular element of payment that has been made, if you turned around and said, "I no longer need the option that I have bought for the money that I paid," or, "I no longer need the piece of equipment for which I have partially paid through some sort of advance payments," and you turn around and say, "Okay. Who else would be willing to step into my position here?"

It just depends on what the market was at that time for those particular services. You may find that it's extremely valuable, and I suppose in theory you could end up having something that was more valuable than what you had paid for it. But it might very well also be the case that the market has diminished, that people decide they're not going to be building the plants they thought they were going to, there's no particular rush to get into the queue, and just looking at this particular payment, it wouldn't worth much at all. I mean, that's something one can't tell at this point in time.

COMMISSIONER EDGAR: But that's not the same thing as by no means.

MR. BUTLER: Then my apologies for the choice of words. There is uncertainty about what level of

repayment one could get. Even with the opportunity to repay, there is certainly the possibility that FPL would have made a net out-of-pocket payment for something it turns out it doesn't use because of subsequent decisions about licensing problems or other problems of that nature, and that -- in our mind, that put this into an unusual circumstance.

I would agree with you, it's not a unique circumstance. I would still, though, strongly suggest it is a highly unusual circumstance, very distinct to this project. And it seemed to us, because it put us in this unusual position of putting money on the table well in advance of some of the types of steps where you would normally wait until those had already occurred, that it was appropriate to bring it to you, bring it to you for your attention and hopefully have your concurrence that we were taking the right step to go ahead and make those payments.

COMMISSIONER EDGAR: Okay. Mr. Chairman, again, thank you all for your indulgence. Just a few, I hope, brief comments to kind of wrap up. I would like to reserve the right to maybe ask questions related to this issue with future witnesses. I think there's at least one more witness later in the proceeding that is listed as a witness for this issue.

I agree with Commissioner Argenziano. It seems like we're dancing around a lot of things. I've heard that if Issue 9 is approved, it is not a finding of prudence. I've heard that if Issue 9 is approved, it is not a finding of prudence. I would be shocked, shocked if when we got to the prudence review forum that if this Commission looked like it might be leading to a later decision to not approve prudence, if we would not hear that we had directed you to make the payment, and that is a box that I have some concerns about being put in. So I'm just going to lay that out. And again, I do recognize that some of this is more of a legal issue than necessarily a question of fact perhaps, and so I look forward to reading the nexus to the statute on this in the briefs.

I have -- I believe that the phrase regulatory certainty and/or regulatory uncertainty has been given a lot of lip service in this room and in other forums lately, and I personally do not believe that if Issue 9 were to not go forward -- and I have no idea. I haven't even made up my mind. That's why I'm asking the questions. But if it were to not go forward and it were to be characterized as a lack of support for this project, I think that that would be a gross mischaracterization, and I will reserve the right to

comment on that at some point in the future. Thank you.

CHAIRMAN CARTER: Commissioner Skop. Commissioner Argenziano, I haven't forgotten you. I'm going to Commissioner Skop, unless you want to be heard before I do that.

COMMISSIONER ARGENZIANO: No, no. Thank you, Mr. Chair. That's fine.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chair, and thank you, Commissioner Argenziano for deferring.

Again, I wanted to add one more additional point. Maybe I didn't make it clear, but I do think the rationale -- I know this isn't about the rationale of why this is here. It's about getting to the heart of the matter and justifications. But putting that into a little bit more perspective, notwithstanding the need to reserve the queue, the cost escalation risk, the fact that the industrial base for long lead -- I mean heavy forging has deteriorated substantially in the United States, the fact that we're in the midst of what some have framed as being called a nuclear renaissance, where everyone is trying to get into the queue to prevent cost escalation risk -- and I think that we've clearly seen in public comment testimony that some of the public comment has provided illustrative examples of how

quickly costs have risen in such a short period of time. But nevertheless, beyond all that, recognizing we're also in the face of an untested statute, and certainly, rightfully or wrongfully, there's apprehension on the part of regulated utilities, and accordingly, you know, it seems maybe they are seeking assurances. But again, addressing this issue sooner rather than later perhaps provides assurance in the face of a yet untested statute lending itself to the stable regulatory environment that we all hope to attain.

And again, I think it's definitely a judgment call on the merits, but I think it boils down to what type of message do we want to send for the right reasons, knowing that we have some discrete facts to consider. Again, it's not a blank check. We know where the payment is going. We know its purpose. We know the pro and con of not reserving a position in the queue.

So again, I would have never let the issue before this Commission come before us that was not sufficiently definitized. And we spent considerable length at the prehearing on drafting that language very, very narrowly, so I would hope that it would have been palatable to the Commission. But again, that's some of the thought process that went into that, right or wrong.

But again, I stand by the decision I made. I

do think that there is some compelling public interest reasons to take a strong look at this. Again, it's predicated upon a finding of need. We'll never get to it until and unless we find a need. But again, it's a question, a timing question that is extremely relevant, has a strong nexus to -- if need were determined, it should be logical to say, you know, this is kind of the right thing to do, even if perhaps they should be doing that on their own. I mean, apprehension when you're dealing with billion-dollar projects is part of the corporate mantra. And again, I'm not -- I'm just trying to do the right things to protect the consumers.

And I'll leave it at that. But again, I think it's important to try and explain some of my rationale to the colleagues and also try and put it in perspective, not only with the declining nuclear base -- again, the nuclear base has eroded because there has been no nuclear construction in the past 30 years, as correctly pointed out by some of the witnesses. Again, OPC was not adamantly opposed to this. They have not taken a position. So that all came into the process. But I do appreciate the discussion and debate and vetting of this issue, because it is an important issue for this Commission to consider. Thank you.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you, Mr. Chair. I appreciate the discussion also, because it helps me to better understand. Rather than just beating around the bush, sometimes it just takes, you know, an explanation, simply, you know, is time critical, is the procurement going to one company. I mean, those things -- that has been answered quite simply. It just took forever to get there, because no one said, "Hey, there's only one company that can do this," until 20 minutes after, you know, the discussion.

And I guess maybe if I can ask Commissioner Skop a question. I guess I'm not certain how to phrase the question.

Let's say the company doesn't need the option and they're worried that if they don't really need the option, we would -- let's say later down the line we would say you shouldn't have spent the money. I mean, can you give to me just -- and I'll ask you to do this real concisely if you can. If time is of the essence, because I heard you say something, and I heard it a few times, but for some reason, I couldn't extract the real reason. And if you can make it as clear and as down to earth as you can as to why we would change positions and how I guess the Commission has done it in the past. And I understand the importance of getting these things

on-line. I'm just trying to extract the information.

COMMISSIONER EDGAR: Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank, Commissioner Edgar. And thank you, Commissioner Argenziano. Again, I don't view it as necessarily departing from the core issues in the need determination. Again, the need determination is a condition precedent to reaching this issue as a collateral issue under supplemental jurisdiction. But again, it has been prominently pointing out that people are trying to get in the queue. There is cost escalation risk. Time is of the essence. There is only one source to go to. It would be a different story if you could go to multiple sources.

But to be concise, again, the statute -- and I would defer to staff. There are a lot of decision points, and the statute strives to adequately protect investments that are being made. But again, the statute is not tested yet, and I think that's where perhaps the apprehension lies.

And again, the payment amount is discrete. It's for a discrete purpose. You know, if it has intrinsic value to be wheeled and dealed later if the project did not go forward, then, you know, it's a mitigation measure.

But at the end of the day, it's something I clearly felt that the Commission could consider, and I do think that there is some substantial compelling public interest reasons for taking a strong look at this, primarily due to meeting the in-service date and the inherent cost escalation risk if this is not done.

Again, could the utility do this on their own? Absolutely. I think Commissioner Edgar has duly pointed that out. But again, I think that perhaps they need -- they have apprehension, and maybe they're seeking some certainty, and I can understand that certainly in the face of an untested statute when you're being asked to commit money up front without any certainty on how the statute and the cost recovery rule may or may not be interpreted.

So hopefully that was discrete enough, and I apologize if it wasn't, but I tried to encompass everything you asked. Thank you.

COMMISSIONER ARGENZIANO: Yes. Mr. Chair.

COMMISSIONER EDGAR: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: That gave me more information than I heard you say before when you were speaking. I understand. I heard several different points there that helped answer some of my questions, so thank you.

COMMISSIONER SKOP: You're welcome.

COMMISSIONER EDGAR: Thank you. Chairman Carter had to step away. He had pointed out or had told us that he had planned to go until about five o'clock, so he has asked me to continue and see if we can continue and wrap up this round with this witness, and then we will break for the evening.

Commissioners, any other questions for this witness?

COMMISSIONER SKOP: I have one, Commissioner.

COMMISSIONER EDGAR: Commissioner Skop.

COMMISSIONER SKOP: Thank you.

Good afternoon, Mr. Scroggs.

THE WITNESS: Good afternoon, sir.

COMMISSIONER SKOP: Just one quick question, just as a point of information. I saw this in response to a question that was posed by Mr. Krasowski.

MR. KRASOWSKI: Excuse me, Commissioners. And, please, I apologize for interrupting, but we have not had an opportunity to cross-examine this witness, and we have quite an extensive -- may I go on?

COMMISSIONER EDGAR: You may now, yes.

MR. KRASOWSKI: Thank you. And we have quite an extensive list of questions, which you might understand, because this witness represents so many

issues.

COMMISSIONER EDGAR: That's fine, Mr. Krasowski. I did not realize that you had questions for this witness. So what I would ask is that we will go ahead and see if there are other questions from Commissioners for this witness, and then realizing the time, we will then break, and we will start up -- well, I will let Chairman Carter figure out where we will start, but I'm sure he will give you the time to ask your questions on cross.

MR. KRASOWSKI: Tomorrow morning?

COMMISSIONER EDGAR: Tomorrow.

MR. KRASOWSKI: Wonderful.

COMMISSIONER EDGAR: Okay?

MR. KRASOWSKI: Thank you, ma'am.

COMMISSIONER EDGAR: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Commissioner Edgar. Just one quick question. And there may be some time for cross. I know we've got about three minutes left. But on Exhibit -- I want to make sure I'm on the right tab. SDS-2, I believe it is, on page 6 of 174.

THE WITNESS: Yes, sir.

COMMISSIONER SKOP: Just as a point ever information, I notice that they looked at potential site selection, and they also identified mid-page potential

greenfield sites that were developed, or considered, and one of those was Glades. And just as a point of information, I was wondering whether that was the same property as was considered for the Glades power plant project.

THE WITNESS: It's actually a property that's in the same area, but it's not the specific parcel.

COMMISSIONER SKOP: Thank you. That's all the questions I have.

COMMISSIONER EDGAR: Any other questions for this witness? No. Okay. And so -- excuse me. Mr. Beck, had you completed your questioning?

MR. BECK: Yes, I had. Thank you, Commissioner.

COMMISSIONER EDGAR: So where we are, we will ask you to come back in the morning, and we will pick up with this witness. Before we break for the evening, are there any other matters that we should raise or address? No?

COMMISSIONER SKOP: I don't think so.

COMMISSIONER EDGAR: Staff?

MS. FLEMING: We're not aware of any other matters at this time.

COMMISSIONER EDGAR: Okay. Then thank you all. We look forward to seeing you all again tomorrow.

We will pick up at 9:30, and we are on break for the evening.

(Proceedings recessed at 5:00 p.m.)

CERTIFICATE OF REPORTER

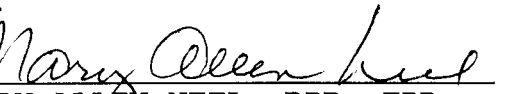
STATE OF FLORIDA:

COUNTY OF LEON:

I, MARY ALLEN NEEL, Registered Professional Reporter, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages numbered 215 through 389 are a true and correct record of the aforesaid proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor relative or employee of such attorney or counsel, or financially interested in the foregoing action.

DATED THIS 31st day of January, 2008.



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