ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. _____-EI
FLORIDA POWER & LIGHT COMPANY

IN RE: FLORIDA POWER & LIGHT COMPANY'S PETITION FOR ISSUANCE OF A STORM RECOVERY FINANCING ORDER

CMP _____
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SEC _____
OTH _____

JANUARY 13, 2006

DIRECT TESTIMONY & EXHIBITS OF:

MARK WARNER

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF MARK WARNER

DOCKET NO. XXXXXX-EI

JANUARY 13, 2006

Q. Please state your name and business address.

A. My name is Mark Warner. My business address is 700 Universe Blvd., Juno Beach, FL 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 Vice President, Nuclear Operations Support.

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

A. As Vice President of Nuclear Operations Support, I am responsible for the following functional areas: business services, information technology, emergency preparedness, training, security, nuclear regulatory affairs and turbine generator overhauls. I oversee the integration and standardization of the operational programs and processes for FPL's nuclear plant sites.

Q. Please describe your educational background and professional experience.

A. I earned my Bachelor of Science degree in Mechanical Engineering from Villanova University in 1986. In 1991, I received a Senior Reactor Operator Certification. I attended the Advanced Management Program at Duke University's Fuqua School of Business in 1996.

Prior to working in the electric power industry, I served in the U.S. Marine Corps from 1974 to 1981. I am an 18-year veteran in the electric power industry, serving in positions of increasing responsibility in operations, maintenance, work control outage management, and engineering. Before becoming Vice President of Nuclear Operations Support I was the site vice president of FPL Energy's Seabrook nuclear power plant. Before that I served as site vice president of Nuclear Management Company's Point Beach and Kewaunee nuclear power plants. From June 2000 to January 2002, I was vice president of Three Mile Island Nuclear Plant for Exelon Corp.

Q. Are you sponsoring an exhibit in this case?

A. Yes, I am sponsoring an exhibit consisting of one document, Document No. MW-1, 2005 Nuclear Storm Costs, which is attached to my direct testimony.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to discuss the impact of the 2005 storm season on FPL's St. Lucie and Turkey Point nuclear plant sites. I address the preparation required for the potential onset of hurricanes and tropical storms at the St. Lucie and Turkey Point nuclear sites, and the damage sustained from Hurricane Wilma at these two nuclear sites. I also discuss the cost and expected insurance recovery associated with the hurricane-related damage.

STORM PREPARATION

Q. Please provide an overview of FPL's nuclear operations in Florida.

A. FPL has four nuclear units in Florida – two at the Turkey Point Nuclear Plant (1,386 MW) and two at the St. Lucie Nuclear Plant (1,677 MW). The Turkey

Point site is located on the shore of Biscayne Bay, east of Florida City in Dade County. The St. Lucie site is located near Jensen Beach on the east coast of Florida in St. Lucie County.

Q. What procedures does the Nuclear Division have in place to ensure that it is prepared for hurricanes or tropical storms that may affect its plant sites in Florida?

A. Our nuclear units begin preparing for hurricanes and tropical storms at the beginning of hurricane season each June. The sites perform walk-downs to identify areas and equipment that are vulnerable to storm damage, and take necessary steps to secure material that is stored outside. In addition, during the walk down, the employees verify operability of emergency communication equipment. This is important because the plant must be able to communicate its status in the event of an emergency and be able to notify state and local government officials. Also, the employees prepare an inventory of necessary hurricane supplies and secure needed equipment and material. These preparation activities are not charged to the Reserve.

Q. Does the nuclear division train its employees to respond to storms?

A. Yes. Under federal regulations, nuclear plants are required to periodically train individuals who are expected to respond to emergencies which include natural disasters such as hurricanes. FPL trains responders once each calendar year. In addition, the emergency response organization conducts periodic drills and exercises throughout the year to maintain proficiency. These activities also are not charged to the Reserve.

Q. What procedures are in place when a tropical storm or hurricane threatens a nuclear plant site?

Each of the plants has an emergency plan that is used as the basis of the storm response. A key to execution of the emergency plan is that an emergency crew is stationed to ride out a storm, recognizing that staffing an emergency organization that would travel to the plant site during a storm would not be safe. During the storm, crews (emergency personnel and other station staff) are housed in safe areas throughout the plant including a team in the Emergency Diesel Generator building. If the storm impacts the station, to the extent it is safe to do so, emergency crews would respond to start, repair or troubleshoot any plant equipment. However, emergency crews would not be placed in unsafe conditions. More extensive repairs would be deferred until after the wind subsides, when outside travel would be possible.

Q. What other actions are taken when there is an imminent threat of hurricane force winds at a nuclear site?

A. When a hurricane watch or warning is given by the National Hurricane Center, the nuclear plant site fills all necessary fuel and water tanks, completes all scheduled maintenance activities and conducts any necessary training for the operating crew to ensure they are prepared for potential circumstances they could face in a hurricane. All these actions are designed to support the placement of the nuclear unit in a safe condition prior to being impacted by hurricane force winds.

Pursuant to its Station Blackout requirements, the Nuclear Regulatory Commission (NRC) requires FPL to commence a shutdown of its nuclear units two hours prior to the onset of hurricane force winds at the site. FPL has procedures at the nuclear sites that start implementing plant shutdown activities as early as 72 hours prior to projected landfall and require the nuclear units to actually be shutdown two hours prior to the onset of hurricane force winds at the site.

2005 STORM SEASON

Q. Which storms impacted the operation of FPL's nuclear sites during the 2005 storm season?

A. Hurricane Wilma affected the operation of both the St. Lucie and Turkey Point nuclear plant sites resulting in Turkey Point nuclear units 3 and 4 and St. Lucie nuclear Unit 2 being taken off line. St. Lucie nuclear Unit 1 was already off line for a planned refueling outage when Hurricane Wilma threatened the plant site.

Hurricanes Katrina and Rita impacted the Turkey Point nuclear plant site, but the units at the site were not required to be taken off line during the storm. The Turkey Point nuclear plant site performed storm preparation and restoration activities in response to Hurricanes Katrina and Rita.

Q. What was the intensity of Hurricane Wilma when it reached the Turkey Point plant site?

A. As addressed in the testimony of Ms. Williams, Hurricane Wilma made landfall on the southwest coast of Florida on October 24, 2005, as a Category 3 hurricane. Based on the track of Hurricane Wilma, the Turkey Point nuclear plant site began to experience tropical storm force winds from Hurricane Wilma in the early morning of October 24 and began to experience hurricane force winds early in the day. Due to the speed of Hurricane Wilma, hurricane winds were only on the site for a brief period of time (less than 1 hour). The winds subsided to tropical storm force winds that morning and below tropical storm force by the early afternoon. The most intense winds recorded at the Turkey Point nuclear plant site were 76 mph, which rates as Category 1 force winds on the Saffir-Simpson Intensity Scale (SSI Scale). Category 1 force winds are between 74 and 95 miles per hour (mph) sustained for one minute.

Q. What was the intensity of Hurricane Wilma when it reached the St. Lucie nuclear plant site?

A. The St. Lucie nuclear plant site began to experience tropical storm force winds on the morning of October 24 and hurricane force winds that afternoon. The most intense winds at the St. Lucie nuclear plant site were experienced at approximately noon. The onsite meteorological tower failed but the National Hurricane Center reported St. Lucie experiencing Category 2 force winds on the SSI Scale. Category 2 force winds are winds between 96 and 110 mph sustained for at least 1-minute.

Q. Please describe the shutdown of FPL's nuclear units due to Hurricane Wilma.

A. St. Lucie Unit 2 and Turkey Point Units 3 and 4 were brought off-line in the early morning on October 24 before the sites began experiencing hurricane-force winds.

Q. Were there any circumstances that extended the time to prepare for Hurricane Wilma?

A. Yes. Due to a refueling outage at St. Lucie Unit 1, additional time was necessary to demobilize plant equipment and material staged for outage support to safely secure the unit before the storm made landfall. For example, large cranes were dismantled and heavy equipment was required to be moved and secured. Numerous site personnel were involved in completing these tasks in the short-time frame before the storm arrived.

Q. Please explain the regulatory requirement for the restart of a nuclear unit following a natural disaster.

A. The criteria for restarting the nuclear units following a hurricane are based on reviews performed by the NRC and the Federal Emergency Management Agency (FEMA) regarding the ability of FPL, the State of Florida, and local governments to effectively implement their emergency plans. The standard used by the NRC and FEMA to evaluate the ability to restart the plant following an event such as a hurricane is whether there is reasonable assurance that both FPL and the state and local government can protect the health and welfare of the public in the event of a nuclear power plant accident.

Q. Please provide examples of necessary preconditions to restart the nuclear units.

A. The plant systems required for operation must be able to perform their intended function; the plant has technical specifications that describe what equipment must be operable. In the community surrounding the plant site, the Alert and Notification System (sirens) must be operable and the local government must be able to support the implementation of public protective actions such as shelter, evacuation and monitoring of evacuees. Additionally, the local government must have the essential personnel and equipment in place for emergency operations.

Q. Did the effects of Hurricane Wilma delay the restart of any of the nuclear units?

A. Yes. Turkey Point Unit 4 did not return to service until November 13. The unit restart delays were due to grid instability issues, grass intrusion into secondary plant systems, salt water intrusion due to a tube sheet plug failure as an indirect result of grass removal and loss of offsite power due to salt contamination in the plant switch yard. The other nuclear units returned to service within 4-9 days after Hurricane Wilma struck.

STORM-RELATED COSTS

Q. Did the St. Lucie and Turkey Point sites incur costs resulting from the 2005 Hurricanes?

A. Yes. Both the St. Lucie and Turkey Point plant sites incurred costs from the 2005 Hurricanes.

Q. Please describe the type of costs incurred due to the 2005 Hurricanes.

A. The costs incurred by the nuclear sites due to the 2005 Hurricanes are primarily in two categories: 1) storm preparation and unit restoration costs; and 2) storm damage costs. Storm preparation and unit restoration costs are primarily labor costs associated with demobilizing the plant to safely secure the site before the storms made landfall and to restart the unit back to full power. Storm damage costs are physical damage to the plant infrastructure and surrounding property.

Q. What is the estimated total cost for the nuclear division storm preparation and unit restoration and storm damage to the nuclear sites?

A. The estimated total cost for hurricane-related unit preparation/restoration and damage is $40.9 million for the St. Lucie and Turkey Point nuclear sites.

Q. Please quantify the storm preparation and unit restoration costs for the St. Lucie and Turkey Point plant sites.

A. FPL estimates storm preparation and unit restart costs for the St. Lucie of $6.8 million and the Turkey Point Site of $2.8 million.

Q. Why are the storm preparation and unit restart costs for the St. Lucie site substantially greater than that for the Turkey Point site?

A. As addressed above, because St. Lucie Unit 1 was in the middle of its refueling outage prior to Hurricane Wilma, additional time and labor costs were required to secure the site before the storm made landfall.

Q. Please describe the storm damage from Hurricane Wilma sustained at the St. Lucie nuclear site.

A. St. Lucie performed a preliminary inspection and assessment of the site and identified damage to various buildings, several power block systems, the intake canal and dunes and inventory. Ther e was roof, ceiling and wall damage to several buildings due to water intrusion. Also, the Quality Control Test Facility was completely demolished and the South Service Building, which is the primary work location for site departments, sustained roof damage. The power block damage consists of water intrusion to motors and air conditioning units, wind and water damage to protective insulation, and damage to corrosion protective plant coatings on the power block structure. The dunes adjacent to the plant site suffered substantial beach erosion, and the intake and discharge canals sustained damage to the side walls.

Q. What is the estimated total cost for Hurricane Wilma storm damage sustained at the St. Lucie site?

A. The estimated total cost for storm damage to the St. Lucie site is $10.6 million. Document No. MW-1 includes a breakdown of St. Lucie storm damage by category of cost.

Q. What effect did Hurricane Wilma have on the St. Lucie Unit 1 refueling outage?

A. A refueling outage commenced at St. Lucie Unit 1 on October 16. On October 20, the refueling outage was suspended to prepare the site for Hurricane Wilma.

Due to preparations for and the effects of Hurricane Wilma, the refueling outage was delayed approximately one week.

Q. How was storm activity for St. Lucie Unit 1 segregated from outage activity?

A. Each functional area was instructed to segregate storm-related preparation from outage-related activity. The storm preparation activities were captured under storm work orders and outage-related work was captured under the outage O&M work orders.

Q. You mentioned that there was damage to the dunes. Could you please describe what you mean by the dunes and how they affect the operation of the St. Lucie Nuclear Plant?

A. The dunes are a berm of natural sand and foliage at the beachfront that protect the plant from hurricane force waves and storm surge. Without the protection afforded by the dunes, FPL's infrastructure, canal dikes, head walls, access roads and bridges would absorb the main force of the waves, causing significant damage. If the dunes are not in place, the restart of the St. Lucie Nuclear Plant may be substantially delayed due to increased damage to the plant and its infrastructure.

Q. Did the dunes serve their purpose during Hurricane Wilma?

A. Yes. The dunes absorbed the brunt of the wave and storm surge from Hurricane Wilma, which helped the St. Lucie Nuclear Plant to return to operation in a timely manner.

Q. Please describe the effect of Hurricane Wilma on the dunes and the need to repair damage to the dunes.

A. The wave and storm surge from Hurricane Wilma significantly eroded the height and width of the dunes and damaged the vegetation that protects the dunes. The dunes must be repaired for the St. Lucie Nuclear Plant to be protected during future storms and to comply with the site licensing requirements. The ability of the dune line to absorb the force of hurricane force waves is credited in the NRC evaluation of the hurricane and associated flood protection for the St. Lucie Plant. The configuration of the dunes at the time of the NRC evaluation is described in our plant design basis and plant licensing documents. In order to maintain the design assumptions, the topographic features credited for protection of the plant are required to be maintained by FPL as part of FPL's license to operate the St. Lucie Nuclear Plant. Technical Specifications have been issued to ensure that plant design requirements are not violated. These Technical Specifications require, as a minimum, that after each hurricane, a visual inspection of the dunes be performed to ensure the dunes are not breeched, potentially violating the basis for the design of the plant.

Q. Is the damage to the dunes covered by insurance?

A. No. The beach dunes at the St. Lucie site are outside the insurance coverage boundary.

Q. Approximately how much will it cost to repair the dunes?

A. FPL estimates it will cost approximately $3.2 million to restore the dunes to their original configuration.

Q. Please describe the storm damage sustained at the Turkey Point nuclear site.

A. There was damage to various buildings, power block systems, security lighting and fencing at the Turkey Point site. The power block damage consists of water intrusion to motors and air conditioning units, as well as damage to corrosion protective plant coatings on the power block structure.

Q. What is the estimated cost for storm damage sustained at the Turkey Point nuclear site?

A. The estimated cost for storm damage to the Turkey Point nuclear site is $20.8 million. Document No. MW-1 includes a summary of Turkey Point storm damage by category of cost.

NUCLEAR INSURANCE

Q. Does FPL have insurance coverage to pay for damage to the nuclear sites?

A. Yes, but the insurance will not pay for all the storm damage.

Q. Please describe FPL's insurance coverage for its nuclear plant sites.

A. The nuclear plants are insured by Nuclear Electric Insurance Limited (NEIL). NEIL insures domestic and international nuclear utilities for the costs associated with interruptions, damages, decontaminations and related nuclear risks.

NEIL established an in surable property boundary that includes the plant and surrounding facilities. This boundary is not the same as FPL property line, so there are facilities and property outside of the line that are not covered by NEIL.

Q. What costs does FPL expect to recover from NEIL?

A. As stated above, FPL has estimated $40.9 million in total storm-related costs for the nuclear plant sites affected by the 2005 Hurricane Season. The majority of the costs are attributed to Hurricane Wilma with the exception of $538,000 in storm preparation costs at the Turkey Point nuclear plant site for Hurricanes Katrina and Rita. Of this, FPL expects to recover $23 million from insurance, but this number may be adjusted as additional inspections or work is performed.

Q. What types of costs are not covered by the NEIL policy?

A. In addition to the insurance deductible of $1 million per site, FPL anticipates the storm preparation and unit restoration costs and any property damages outside the NEIL boundary line will not be recovered by insurance. This property would include the dunes. FPL expects that through the NEIL review process, additional costs will be determined to not be covered by the insurance policy.

Q. What is the total amount of nuclear storm-related costs that FPL seeks to recover in this proceeding?

A. The total net of insurance nuclear storm-related costs being requested is $17.9 million. This includes a deductible of $1 million per site, and $15.9 million of estimated uninsured costs. To the extent more costs are recovered from insurance than FPL anticipates, FPL would contribute that amount to the balance of the reserve to pay for future storm costs. If fewer costs are recovered from insurance

than anticipated, or FPL's costs are underestimated, FPL would charge the additional costs to the Reserve.

SUMMARY

Q. Please summarize your testimony.

A. FPL's Turkey Point and St. Lucie nuclear power plant sites incurred approximately $40.9 million in total costs from the 2005 Hurricane Season, approximately $23 million of which FPL expects to recover from its NEIL insurance policy. The majority of the costs are attributed to Hurricane Wilma, with the exception of $538,000 in storm preparation costs at the Turkey Point nuclear plant site for Hurricanes Katrina and Rita. The total amount of costs FPL seeks to recover in this proceeding is $17.9 million. Nuclear storm-related costs were exacerbated because St. Lucie Unit 1 was in the middle of a refueling outage when Hurricane Wilma threatened that site. Therefore, FPL had to take extensive measures to secure the Unit in anticipation of the hurricane. In addition, there was damage to the beach dunes that are critical to the safe operation of the St. Lucie plant site, which also increased the amount of storm-related costs.

Q. Does this conclude your direct testimony?

A. Yes.

Description	Hurricane Wilma Turkey Point	Hurricane Wilma St. Lucie	Hurricane Wilma Total	Total Nuclear (1)
Storm Preparation and Restoration	2,251	6,828	9,078	9,616
Property Damage Assessment:				
Buildings and Facility Repairs	10,000	3,227	13,227	13,227
Dunes	-	3,200	3,200	3,200
Power Block Repairs	10,000	2,454	12,454	12,454
Damaged Inventory	-	1,672	1,672	1,672
Security Repairs	750	-	750	750
Estimated Damage Assessment and Repairs	**20,750**	**10,553**	**31,303**	**31,303**
Total Estimated Hurricane Wilma Cost	**23,001**	**17,381**	**40,381**	**40,919**
Estimated Insurance Recovery	18,179	4,803	22,981	22,981
Estimated Cost to FPL	**4,822**	**12,578**	**17,400**	**17,938.3**

(1) The total nuclear estimate of $17,938 million includes $538.3 thousand in Turkey Point storm preparation and restoration costs from Hurricanes Rita and Katrina

Nuclear
2005 Storm Costs*
($000's)

	Dennis	Katrina	Rita	Wilma	Total
Payroll					
Regular			$ 2,398	$ 4,191,055	$ 4,193,453
Overtime			75,079	1,601,983	1,677,062
Contractor & Line Clearing					
External Line & Contractor			104,203	30,909,501	31,013,704
Line Clearing					
Vehicle & Fuel					
Vehicles & Equipment					
Fuel					
Material					
Material & Supplies			190	3,039,731	3,039,921
Reserve Equipment					
Logistics					
Lodging				25,208	25,208
Equipment Rentals					
Meals			1,970	729	2,699
Busing & Vehicle Rental					
Other		348,024	6,439	612,793	967,256
TOTAL	**$ -**	**$ 348,024**	**$ 190,279**	**$ 40,381,000**	**$ 40,919,303**

Actual Costs	0	339,045	191,123	6,354,805	6,884,973
Estimated Costs	0	8,979	(844)	34,026,195	34,034,330
TOTAL	**$ -**	**$ 348,024**	**$ 190,279**	**$ 40,381,000**	**$ 40,919,303**

*Actual and estimated costs are based on a financial close date as of November 30, 2005, except for certain estimate updates received on or about December 15, 2005.