

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Fuel and Purchased Power)	DOCKET NO. 130001-EI
Cost Recovery Clause with)	FILED: November 15, 2013
Generating Performance Incentive)	
Factor)	
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**CITIZENS' POST-HEARING STATEMENT
OF POSITIONS AND POST-HEARING BRIEF**

The Citizens of the State of Florida, through the Office of Public Counsel, pursuant to the Order Establishing Procedure in this docket, Order No. PSC-13-0069-PCO-EI, issued February 4, 2013 and the direction from the Commission at Hearing, submit this Post-hearing Statement of Positions and Post-Hearing Brief.

ISSUES

ISSUE 25B: Are costs (O&M and Capital Costs) related to Nuclear Regulatory Commission requirements stemming from the Fukushima incident that exceed the levels of such costs that FPL included in its 2013 test year in Docket No. 120015-EI eligible for recovery through the capacity cost recovery clause?

OPC: No. FPL's attempt to increase customers' bills by equating costs of NRC's Fukushima-related evaluations with the extraordinary, unique clause treatment of post-9/11 security costs should be rejected. FPL's claim that it would otherwise have no opportunity to recover such base rate-related costs above MFR-projected levels is untrue. Further, whereas the immediate threat of additional terrorist attacks precipitated emergency wartime measures, FPL emphasizes that Fukushima-related initiatives present no safety emergency. FPL's rationale that such costs are eligible because they are necessary and uncertain would absurdly qualify every compliance measure and even equipment replacements for clause recovery.

ARGUMENT

Background

This background section will be familiar territory, but it will provide the context in which the Commission should consider FPL's request to pass indisputably base rate-related costs of

complying with the NRC's Fukushima-related evaluations through the capacity cost recovery clause.

To survive and thrive in a competitive marketplace, unregulated corporations must concern themselves with keeping and increasing their share of the market. A regulated utility that possesses a monopoly on retail electric service has no such worries. Its profits are constrained, not by its competitors, but by the regulatory framework within which it operates. Just as unregulated companies have an incentive to increase profits by competing for market share, a regulated utility has an incentive to increase its earnings by loosening the regulatory restrictions that constrain it.

One such constraint is that the utility must charge only rates established by the Commission. It must recover its costs of providing service through "base rates" unless and until the Commission determines that the base rates in effect do not produce revenues that cover the utility's prudent, reasonable costs and provide a return on its investment that the Commission has deemed to be fair. Between rate cases, numerous cost items increase or decrease in amount; others are incurred for the first time or disappear completely. Cost items that increase in amount have the effect of reducing net income; items that decrease have the effect of increasing net income. Similarly, revenues almost certainly will vary above or below the amount projected at the time base rates were established. However, as long as the base rates generate earnings that are sufficient in the aggregate to produce a fair return on the utility's investment, the rates do not change.

Special cost recovery clauses are the limited exceptions to base rates. Cost recovery clauses operate outside base rates. Unlike base rates, a cost recovery clause is designed to track and recover specific cost items. The Legislature has, by statute, authorized recovery of

qualifying environmental compliance costs and approved conservation measures through cost recovery clauses. For decades, the Commission has had in place a fuel and purchased power cost recovery clause. Each special cost recovery clause is governed by eligibility criteria that each cost must meet.

Costs that are recovered through base rates rather than cost recovery clauses are categorized as “base rate-related.”

If a utility can persuade the Commission to authorize it to flow an increase in a cost that is built into base rates through a cost recovery clause between rate cases, it can avoid the reduction in earnings that would otherwise result from the increased cost – but customers’ total bills will increase by the amount of the migrated cost, even though base rates have not changed.

(Just as certain base rate-related costs can increase after base rates are set, other costs may decrease or terminate. A decrease in costs has the effect of increasing earnings. If a utility can persuade the Commission to reflect a reduction in a cost item or category that is normally collected through base rates through a credit to a cost recovery clause between rate cases, it will forgo the enhancement to earnings that the reduced cost would otherwise engender – and customers’ bills will go down by the amount of the savings migrated from the Company’s books. However, this is a rhetorical observation, as the utility has no incentive to do so!)

The utility’s incentive to increase earnings by passing costs through a cost recovery clause instead of absorbing them in base rate-generated revenues is not theoretical or academic. For example, see Order No. PSC-11-0080-PAA-EI, issued in Docket No. 100404-EI on January 31, 2011. In that docket, FPL requested the Commission to authorize recovery of the costs of Scherer Unit 4 turbine upgrades through *either* the fuel cost recovery clause *or* the environmental cost recovery clause – FPL was not particular, as long as it could move the costs from base rates

into a clause and avoid absorbing those costs in base revenues. Applying a rigorous analysis and established criteria to each proffered alternative, the Commission determined that the costs were not eligible for either clause. Order No. PSC-11-0080-PAA-EI is an effective reminder of the utilities' pecuniary motivations and the need for the Commission to vigilantly protect utility customers' pocketbooks by applying the proper criteria to such requests.

Analysis

The Fukushima-related NRC compliance costs are base rate-related. The first step of the analysis of FPL's request is to determine whether the costs in question are base rate-related. The answer is easy: there is no controversy here. NRC compliance costs are among the many types of costs that are embedded in base rates. FPL witness Terry Keith testified that FPL included \$10 million of capital investment and \$144,000 of O&M expense associated with its response to NRC-initiatives stemming from the Fukushima incident in the MFRs that it submitted to the Commission in Docket No. 120015-EI. (TR-403-404) The projected test year that was the subject of those MFRs was calendar year 2013; the subject of FPL's projections in Docket No. 130001-EI is also calendar year 2013. Pending before the Commission, then, is a request to modify or "true up," in a cost recovery clause proceeding, a projection made for a base rate case during the very period on which the MFRs were based! Rather than a separate clause operating outside of base rates, by its request FPL has imaginatively, but improperly, converted Docket No. 130001-EI into a second bite at the rate case apple.

That the most recent projection of Fukushima-related NRC costs exceeds the amount projected in MFRs does not mean that FPL will be unable to collect the higher amount through base rates. If over time the changing mix of investment, base rate-related costs, and

revenues becomes such that base rates do not produce an overall fair return (whether too low or too high), the remedy is a base rate proceeding. The next step of the analysis is to consider FPL's claim that, unless the Commission authorizes it to pass the Fukushima-related costs that exceed the amount of the test year projection through the clause, it will have no opportunity to recover the increased level of expenditures through base rates. (TR-404) The claim is patently false. It flies in the face of the most basic ratemaking principles. There is no separate charge for Fukushima-related costs in the design of base rates. (TR-431) The base rates are designed to recover all base rate-related costs of providing service, including, but not limited to, Fukushima-related costs. (TR-433) As long as base rates generate revenues that are sufficient in the aggregate to recover the cost of service (including increments of Fukushima-related costs that exceed the amount of the test year projection) and provide a fair return, FPL will have recovered all such NRC-mandated costs. As FPL witness Keith stated during cross-examination:

Q. (Mr. McGlothlin): My question assumes there is no recovery of Fukushima-related costs through the capacity cost-recovery clause. It assumes that base rates are set that are based on the assumptions built into the test year at the time the test year was fashioned. It further assumes that Fukushima-related costs are greater than the amount involved in the setting of the test year. But by virtue of the many variations and departures from the assumptions, changes in revenues, changes in costs other than Fukushima, FPL recovers through base rates revenues sufficient to pay all of its costs and a fair rate of return. All of its costs including the increased level of Fukushima costs.

In that situation, has FPL recovered all of its Fukushima costs?

A. (Mr. Keith) Again, I'm having difficulty agreeing with the assumptions there. But I will say this, if the Commission denied FPL's request to recover the Fukushima costs through the capacity clause, and FPL still earned within its range, *then they would be considered recovered.*

(TR-434-435) (emphasis provided)

Just as the Fukushima-related costs may vary from the amount projected in MFRs, so too are the myriad of other components of the ratemaking formula subject to variances above and below the projections. There is no way of knowing now whether FPL's base rates will produce a return within FPL's authorized range, or a return that falls above or below that range in the future. The uncertainty is reflected in FPL's authorized return on equity. Further, if base rates prove to be inadequate in the future, FPL has the statutory right to seek an adjustment in rates.

The unique treatment of post-9/11 security costs does not provide a basis for granting FPL's request. The Commission would be on firm ground if it determined to deny FPL's request on the above factors. A consideration of FPL's efforts to qualify the incremental Fukushima-related costs for clause recovery only underscores the conclusion that the Commission should deny the request. In support of its proposal, FPL invokes the Commission's decision to authorize FPL to collect the costs of post-9/11 security costs through, first, the fuel cost recovery clause and, subsequently, the capacity cost recovery clause. FPL argues that the situations are comparable, in that a disaster was the origin of each. (TR-455-456; 486) However, for the purpose of determining the eligibility of Fukushima-related costs for the capacity cost recovery clause, the two situations are fundamentally dissimilar. The terrorists' attack in 2001 exposed an immediate threat to the safety of all Americans that led to the equivalent of emergency wartime measures – ranging from airport security screenings to the Patriot Act. In the order authorizing recovery of incremental security costs through the fuel clause, the Commission referred to the “. . .extraordinary, emergency conditions as currently exist.” (Order No. PSC-01-2516-FOF-EI, at page 4). Indeed, in Order No. PSC-05-0748-FOF-EI, the Commission said its decision to permit FPL to pass incremental security costs through a cost recovery clause was its response to “an immediate need to protect the health, safety and

welfare of the utility and its customers.” (Order No. PSC-05-0748-FOF-EI, at page 38). However, in the course of supporting its new, “analogous” request, FPL did not characterize the NRC’s initiatives relative to the Fukushima incident as an emergency or an immediate danger. Contrast the 2001 terrorist attacks with FPL’s descriptions of the impact of the Fukushima incident. FPL’s consistent message to the Commission and the public has been that its nuclear units are safe. (TR-455) FPL bases its request for authority to flow Fukushima-related NRC compliance costs on markedly different rationales:

Q. (Mr. McGlothlin): Well, you say that – you refer to FPL’s exposure to response costs, do you not?

A. (Mr. Grissette) Okay. Our, our, our response to the Fukushima events is similar to the response associated with the 9/11 event *in that both are external and outside of our control.* (emphasis supplied)

Q. But you are not describing either your position or the NRC’s position with respect to the likelihood of FPL exposure to events similar to what occurred at Fukushima, are you?

A. I’m not saying that we are subject to the same conditions that were experienced at Fukushima.

(TR-488)

Relatedly, in its communications and pronouncements relative to the Fukushima incident, FPL has emphasized its lower seismic risk rating as compared to that of Japan, as well as advantages in design features and vintage that provide FPL’s nuclear units with greater margins of safety that clearly differentiate them from the affected Japanese units. (TR-489-490) (See also Exhibit 102, the “Fact Sheets” prepared by FPL to illustrate the differences between the Fukushima circumstances and FPL’s units, which are attached as Exhibit A to this Brief.)

The standard for eligibility proffered by FPL is absurdly open-ended, and conflicts with the limited purpose of the cost recovery clause. In support of its request, FPL also points out that the Fukushima-related NRC costs are necessary to continue operating the units, and that their amounts are uncertain. These characteristics would be true of any compliance costs (TR-430-431), as well as any replacement of necessary parts, for that matter. The argument represents an interesting “stacking” of efforts: If FPL were to prevail in the instant request, the extraordinary, unique, and emergency-based treatment of post-9/11 security costs would become a precedent for non-emergency, years-in-the-making¹ Fukushima related costs, and the clause treatment of those costs would become a precedent for any cost that is necessary and uncertain in amount (and incremental to amounts projected in MFRs!). Thus would the utility camel push, not only its nose, but also its forelegs and hump, under the customers’ wallet-shaped tent.

The Commission should reject FPL’s request to pass incremental, Fukushima-related NRC compliance costs through the capacity cost recovery clause. By doing so, the Commission will not prejudice FPL in any way. FPL will collect all base rate-related costs through base rates, and those rates can be adjusted (higher or lower, as circumstances warrant) in the event they do not recover prudently incurred costs and produce a fair return. On the other hand, to allow FPL to pass the base rate-related costs through a cost recovery clause would have the effect of increasing customers’ bills through what would effectively be a “back door base rate increase,” in the absence of any showing that current base rates are inadequate for the purpose.

ISSUE 18B: Should FPL be excluded from the GPIF program for the duration of its pilot Asset Optimization program?

¹ The NRC’s Fukushima-related orders and requests for information contemplate evaluations, analyses and upgrades, the responses to and implementation of which will extend to and possibly beyond 2017. (TR-460; 484)

OPC: (Subject to the disposition of OPC's appeal of Order No. PSC-13-0023-S-EI). No. OPC supports excluding FPL from the GPIF during the "asset optimization" pilot program. The programs are designed to instill the same incentive to operate efficiently. Customers should not bear the risks and potential costs of duplicative financial incentives.

ARGUMENT

During this proceeding, the Commission Staff identified what is now Issue 18B. While OPC did not originate the issue, OPC believes that the concept of a "time out" for FPL from the GPIF program during its pilot optimization program has merit. The GPIF program provides a financial incentive for utilities to improve their generating units' heat rate and availability. FPL's "asset optimization" program rewards FPL for increasing wholesale sales. An improvement in either heat rate or availability, of the type that would help FPL earn a GPIF incentive payment, would also render a generating unit more competitive in the wholesale market, thereby also enhancing its ability to keep a portion of wholesale gains under the "optimization program." (TR-535; EXH 56, Answer to Staff Interrogatory No. 24) Thus, absent the GPIF "time out," two separate mechanisms will be operating to provide the same incentive to operate more efficiently. While FPL witness Rote maintained that the GPIF is intended to apply to a utility's base load units, he could not say categorically that the units selected for the GPIF program would never participate in wholesale transactions:

COMMISSIONER BALBIS: Okay. But if, from a systemwide basis if you were able to pursue more purchases or sales, then what would be the net effect of that? I mean, wouldn't you realize an additional reward, if you, through the pilot program, or no?

THE WITNESS: Well, certainly we would get closer to our threshold if we were to make more sales, wholesale sales or purchases or participate more in

the asset optimization program. But that generation that's providing those sales, if you will, *those aren't necessarily GPIF units.*

(TR-556) (emphasis provided)

Moreover, as approved by the Commission, the "asset optimization" program enables FPL to nominate measures during the year and present both the initiative and calculated monetary incentives to the Commission for consideration after the fact. (TR-536; 538) Accordingly, the Commission cannot ascertain now, at the outset of another GPIF cycle, all of the potential "optimization measures" in which FPL may engage at the same time that the GPIF program is under way.

The money associated with GPIF activities is not insignificant. During 2013, FPL will collect a 2012-based GPIF reward of \$23 million. As long as the possibility of overlapping programs exists, customers should not be exposed to the possibility of paying twice for the same "improvement."


During the hearing, the Staff suggested that the Commission permit FPL to participate in the GPIF program during the coming year, and gather data with which to assess the manner in which the programs relate. At this point, the nature of such data has not been defined; nor has it been established that the data would enable the Commission or parties to determine whether an overlap exists. For that reason, OPC has reservations about the suggestion that was being considered at the time the Commission expressed a desire for post-hearing briefs. However, in view of the fact that OPC did not originate the issue, OPC will not object if the Commission entertains the proposal that was presented shortly before the evidentiary hearing was adjourned.

CONCLUSION

For the reasons stated above, OPC opposes FPL's request to pass Fukushima-related NRC compliance costs through the capacity cost recovery clause.

While OPC did not originate Issue 18B, OPC asks the Commission to consider its arguments and observations when determining whether to permit FPL to seek a GPIF reward while its pilot "asset optimization" program is in effect.

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Attorneys for the Citizens
of the State of Florida

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and foregoing **CITIZENS' POST-HEARING STATEMENT OF POSITIONS AND POST-HEARING BRIEF** has been furnished by electronic mail on this 15th day of November, 2013, to the following:

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EXHIBIT NO. 102

DOCKET NO: 130001-EI

WITNESS: Grissette

PARTY: FPL

DESCRIPTION: FPL's Fukushima "Fact Sheets"

DOCUMENTS:

PROFFERED BY: OFFICE OF PUBLIC COUNSEL

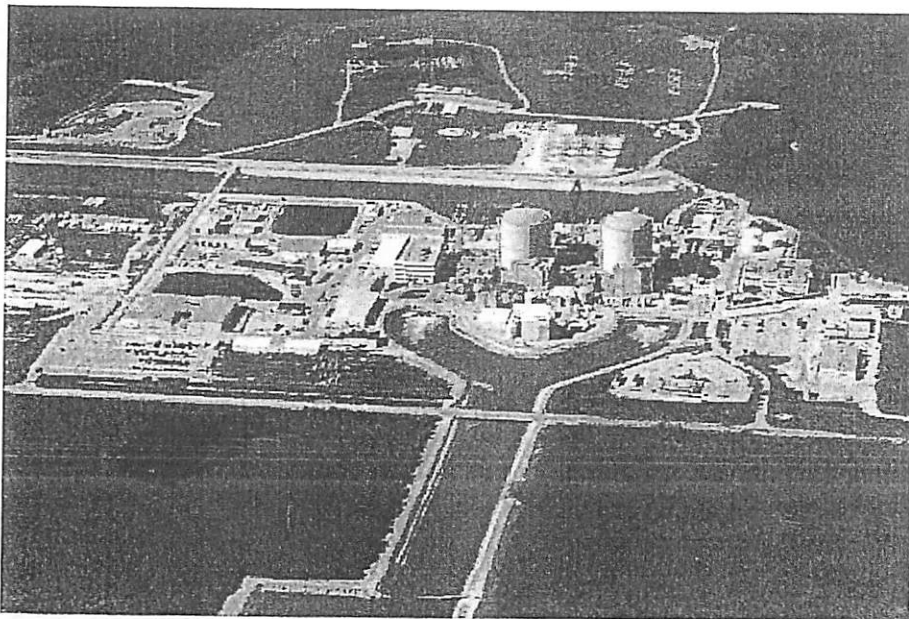
EXHIBIT A



FPL

Fact Sheet

St. Lucie



Site Vice President
Joe Jensen

Site Communications Manager
Doug Andrews
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Jensen Beach, FL 34957

Corporate Media Line
(305) 552-3888

The St. Lucie Nuclear Power Plant is designed with multiple, redundant safety systems.

Enhancing Nuclear Plant Safety after Fukushima



Since the devastating earthquake and tsunami in Japan, Florida Power & Light has taken a highly proactive approach to revalidating the safety of our nuclear plants. In addition, we have devoted significant time and focused attention to help make our facilities even safer.

Using scenarios more extreme than the Fukushima event, FPL has:

Revalidated plant safety:

Dedicated thousands of hours to revalidating safety systems: Since the Fukushima event St. Lucie members have spent thousands of hours performing additional safety inspections to revalidate the readiness of all critical systems, procedures, and emergency training programs.

Reconfirmed the health of emergency equipment: Immediately following the Japanese emergency, we re-examined our extensive emergency procedures and tested emergency response equipment put in place after 9-11 to verify St. Lucie could respond to extreme events.

Ensured the availability of emergency power: St. Lucie conducted detailed evaluations to ensure that emergency power for redundant safety systems is fully available in the case of a Fukushima-like emergency.

Confirmed the ability to withstand extreme natural events: The St. Lucie team reconfirmed the plant's ability to withstand severe natural events including earthquakes, flooding and fires.

Added additional layers of safety:

Enhanced core and spent fuel cooling capability: A St. Lucie specific strategy has been developed, procedures implemented and equipment purchased to ensure that core and spent fuel cooling could be maintained and the impact of extreme events like Fukushima could be effectively mitigated.



High-pressure water cannons are tested as part of plant emergency readiness.

Invested nearly a million dollars in upgrades: We have invested nearly a million dollars to add additional layers of safety at St. Lucie. For example, we have ordered additional:

- » High-capacity pumps that run on diesel fuel (which is already safely stored on site) in order to provide additional backup cooling water for plant safety systems.
- » Diesel-powered generators capable of providing additional emergency power to monitoring, emergency lighting and communications systems.

Enhanced communication capabilities: St. Lucie is upgrading emergency communications equipment, including modernizing satellite phones, to ensure that communications can be maintained even if all power is lost for an extended period of time.

Updated operator training programs: FPL has included lessons-learned from the Fukushima event in all plant operator and emergency responder training programs.

Full-time event response team: To effectively oversee our company's response and integrate lessons learned from the Fukushima event into plant activities going forward, FPL continues to maintain a full-time nuclear Fleet response team. This team is responsible for implementing all policy changes in a uniform way across all of our nuclear plants.

Safety Confirmed by Independent Experts

"The Nuclear Regulatory Commission continues to determine that US nuclear plants are safe."

- NRC Frequently Asked Questions, February 2012

St. Lucie built-in safety features:

Built in a low-risk seismic zone: St. Lucie is located in the lowest hazard zone for earthquakes according to the U.S. Geological Survey.

- » **Constructed to withstand earthquakes:** The plant is designed to withstand earthquakes and other natural events stronger than ever recorded in the region.
- » **Protected from flooding:** The plant is elevated 20 feet above sea level to protect against flooding and extreme storm surges.

Designed with multiple safety systems:

Redundant safety systems built into the plant design include:

- » Four diesel generators that are protected by a concrete and steel-reinforced building.
- » Additional reactor cooling system powered by steam generated by the plant itself.
- » Back-up batteries for critical safety systems are stored on-site.
- » External cooling options (i.e. injection and fire pumps) are pre-staged onsite; can use ocean water for cooling.
- » Seven-day power supply: Safety and cooling systems can be powered for seven days without requiring any offsite power or additional fuel.
- » Highly trained plant operators: For one full week out of every six weeks, plant operators must prove their ability to safely operate the plant in a variety of worst-case scenarios that include earthquakes, severe storms, flooding, loss-of-power, and loss of reactor core cooling.

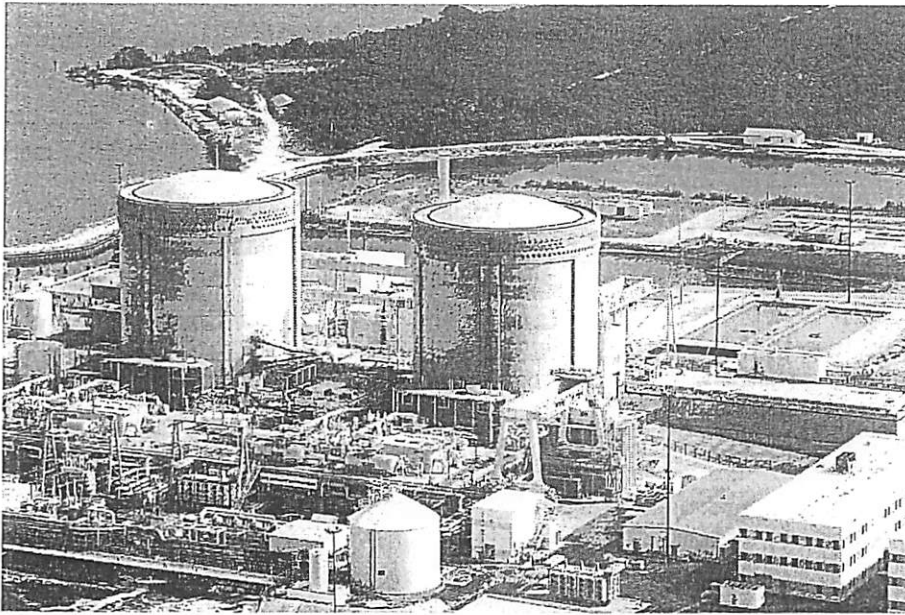




FPL

Fact Sheet

Turkey Point



Site Vice President
Mike Kiley

Site Communications Manager
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Florida City, FL 33035

The Turkey Point Nuclear Power Plant is designed with multiple, redundant safety systems.

Enhancing Nuclear Plant Safety after Fukushima



Since the devastating earthquake and tsunami in Japan, Florida Power & Light has taken a highly proactive approach to revalidating the safety of our nuclear plants. In addition, we have devoted significant time and focused attention to help make our facilities even safer.

Using scenarios more extreme than the Fukushima event, FPL has:

Revalidated plant safety:

Dedicated thousands of hours to revalidating safety systems:

Since the Fukushima event Turkey Point members have spent thousands of hours performing additional safety inspections to revalidate the readiness of all critical systems, procedures and emergency training programs.

Reconfirmed the health of emergency equipment:

Immediately following the Japanese emergency, we re-examined our extensive emergency procedures and tested emergency response equipment put in place after 9-11 to verify Turkey Point could respond to extreme events.

Ensured the availability of emergency power: Turkey Point conducted detailed evaluations to ensure that emergency power for redundant safety systems is fully available in the case of a Fukushima-like emergency.

Confirmed the ability to withstand extreme natural events: The Turkey Point team reconfirmed the plant's ability to withstand severe natural events including earthquakes, flooding and fires.

Added additional layers of safety:

Enhanced core and spent fuel cooling capability: A Turkey Point specific strategy has been developed, procedures implemented and equipment purchased to ensure that core and spent fuel cooling could be maintained and the impact of extreme events like Fukushima could be effectively mitigated.



High-pressure water cannons are tested as part of plant emergency readiness.

Invested nearly a million dollars in upgrades: We have invested nearly a million dollars to add additional layers of safety at Turkey Point. For example, we have ordered additional:

- » High-capacity pumps that run on diesel fuel (which is already safely stored on site) in order to provide additional backup cooling water for plant safety systems.
- » Diesel-powered generators capable of providing additional emergency power to monitoring, emergency lighting and communications systems.

Enhanced communication capabilities: Turkey Point is upgrading emergency communications equipment, including modernizing satellite phones, to ensure that communications can be maintained even if all power is lost for an extended period of time.

Updated operator training programs: FPL has included lessons-learned from the Fukushima event in all plant operator and emergency responder training programs.

Full-time event response team: To effectively oversee our company's response and integrate lessons learned from the Fukushima event into plant activities going forward, FPL continues to maintain a full-time nuclear Fleet response team. This team is responsible for implementing all policy changes in a uniform way across all of our nuclear plants.

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- » Additional reactor cooling system powered by steam generated by the plant itself.
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- » External cooling options (i.e. injection and fire pumps) are pre-staged onsite; can use ocean water for cooling.
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- » Highly trained plant operators: For one full week out of every six weeks, plant operators must prove their ability to safely operate the plant in a variety of worst-case scenarios that include earthquakes, severe storms, flooding, loss-of-power, and loss of reactor core cooling.



On March 11, 2011 at 2:45pm Japan Standard Time (JST) a 9.0 magnitude earthquake hit Japan. This earthquake caused a Tsunami to hit Japan. Due to the earthquake, 11 nuclear reactors in Japan went into "scram" or automatic shutdown.

There are significant differences between the affected Japanese reactors and FP&L's St. Lucie plant:

- The Japanese nuclear plants are a Boiled Water Reactor (BWR) designs. The St. Lucie plant is a Pressurized Water Reactor (PWR) design.
- PWR reactors have more redundancy on all safety systems and dual emergency generators for each reactor.
- PWR reactors have a separate steam-driven cooling pump system that can run the plant's cooling pumps without depending on offsite power or the diesel generator, BWR reactors do not.
- BWRs control rods are hydraulic driven and are inserted from the bottom of the reactor. PWR reactors control rods are held in place electro-magnetically and are inserted from the top. A loss of power would release the rods. The control rods end the fission process.
- The Japanese reactors are a much older design than the St. Lucie Plant and do not have the quantity of emergency core cooling water on hand.
- In a PWR the radioactive materials are contained in one location of the system where as a BWR the radioactive materials are located throughout the system.
- Another critical safety component in PWR reactors is the hydrogen recombiner. This system takes atmospheric hydrogen inside containment and converts it into water. The Japanese BWRs involved (1st generation GE design) do not.
- The explosions in the 2 Japanese units occurred during the venting of the secondary containments pressure. The explosions were not caused by a hydrogen bubble but the atmospheric hydrogen compounded the explosion.
- Given the difference in design and FP&L's robust high water emergency plan and the plants design to withstand earthquakes (even though there is little chance of seismic activity in St. Lucie County) a similar accident here is highly unlikely.

From FPL: FACT SHEET ON FLORIDA POWER & LIGHT NUCLEAR PLANTS

Florida Power & Light is closely monitoring the situation in Japan.

Since the earthquake and subsequent tsunami, FPL executives have been coordinating with the Nuclear Energy Institute, the Institute of Nuclear Power Operations and the World Association of Nuclear Operators with regard to the impact of these events on the operation of the Fukushima Daiichi nuclear plant in Japan.

- At this time, all of the facts are not fully known. This is further complicated by the fact that emergency response officials in Japan are dealing with the situation at the Fukushima Daiichi nuclear plant in addition to the overall tsunami recovery efforts.
- It is important to note that because of location, the seismic activity in Japan is of a greater magnitude than what could likely happen in Florida.

As compared to Fukushima Daiichi, Florida's reactors are of a newer design and have additional safety systems as a result.

- The World Association of Nuclear Operators reports that the Unit 1 TEPCO Daiichi unit is an older Boiling Water Reactor (Florida has Pressurized Water Reactors only). Relative to the Japanese plant, FPL's Florida nuclear plants have additional safety systems because of their more recent design.
- The issue in Japan deals with the complete loss of power to run decay heat removal pumps (the pumps that circulate water in order to cool the reactor core). Both of our Florida plants only require one diesel generator to fully supply the power required to meet core cooling needs. Each station has four diesel generators installed for redundancy (four at Turkey Point; Four at St. Lucie).
- In addition, unlike the Japanese plant, FPL plants have an additional, separate steam-driven cooling pump system. This steam-driven cooling system can run the plant's cooling pumps without depending on any offsite power or the diesel generators.
- In essence this means that the FPL plants at St. Lucie and Turkey Point have multiple redundancies relative to the Fukushima Daiichi facility.

St. Lucie and Turkey Point are designed for severe events that could impact our state.

- FPL's nuclear power plants at Turkey Point and St. Lucie are outside of known "high hazard" earthquake zones (as defined by United States Geological Society and the Nuclear Regulatory Commission).
- Each plant has been specially designed to withstand a variety of natural events such as earthquakes, storm surges and flooding associated with hurricanes, tornadoes and high winds without losing capability to perform their safety functions. Both are elevated to deal with the storm surge of a Category 5 hurricane (20 feet above sea level).
- Even though an event like the Japanese earthquake is unlikely, all FPL plants have had additional safety margin added to the "worst case" scenario to ensure the plants can withstand events beyond their licensing basis.

Our nuclear plants have extensive emergency plans and rigorous operator training programs.

- All nuclear power plants are designed for and have emergency operating procedures to address worst-case scenarios, including earthquakes, loss of core cooling, and loss of all onsite and offsite power.
- The procedures used in emergencies are part of plant operator training. Plant Operators are required to undergo knowledge and performance testing one week out of every six weeks. That training involves the use of real life responses on a plant simulator.
- For conditions warranting public evacuation, dedicated communications systems linking emergency operations centers are in place; public alert systems (sirens) are in place; and, local emergency facilities that are staffed by state and local government emergency response agencies would be fully manned.
- The plant emergency response is tested quarterly via emergency drills involving both onsite and offsite emergency response teams.
- Even though an event of this nature is unlikely in Florida, similar natural emergency conditions are routinely exercised by reactor operators and emergency response agencies in Florida.