

ATTACHMENT 1

**Table of Contents**

Executive Summary .....	2
Summary of LAR Changes .....	3
Technical Discussion .....	3
Comparison of PTN System Design to the ISTS System Design.....	4
Emergency Core Cooling System (ECCS) .....	4
Auxiliary Feedwater (AFW) System.....	4
Control Emergency Ventilation System (CREVS) and Control Room Emergency Air Temperature Control System (CREATCS).....	5
AC Electrical Power System .....	5
AC Electrical Power Distribution System .....	6
Component Cooling Water (CCW) System .....	7
Intake Cooling Water (ICW) System.....	8
Current Licensing Basis and Accident Analysis .....	8
ECCS.....	8
AFW System.....	9
CCW System .....	10
ICW System.....	10
CREVS .....	11
CREATCS.....	11
References.....	12

## **CONTENTS OF THE TURKEY POINT NUCLEAR PLANT, UNITS 3 AND 4, IMPROVED TECHNICAL SPECIFICATIONS (ITS) REVISION 1 SUBMITTAL**

### **Executive Summary**

By letter dated September 22, 2021 (Reference 1), Florida Power & Light Company (FPL) requested a license amendment to convert Turkey Point Nuclear Generating Units 3 and 4 (PTN) current Technical Specifications (CTS) to a version based on U.S. NRC NUREG 1431, "Standard Technical Specifications - Westinghouse Plants," Revision 5.0 (ISTS) (Reference 2) designated as PTN's improved Technical Specifications (ITS). On December 21, 2021 (Reference 3), the NRC provided a request for supplemental information (RSI) to support the NRC staff's acceptance review. The supplemental information requested by the NRC was provided by FPL by letter dated January 19, 2022 (Reference 4).

As stated in the abstract accompanying NUREG-1431, Revision 5, licensees are encouraged to upgrade their technical specifications consistent with those criteria and conforming, to the practical extent, to Revision 5 to the improved STS. The Commission continues to place the highest priority on requests for complete conversions to the improved STS. Licensees adopting portions of the ISTS to existing technical specifications should adopt all related requirements, as applicable, to achieve a high degree of standardization and consistency.

During FPL's review of the supplemental information requested, FPL staff determined that PTN's CTS could be simplified, and additional clarity added to PTN's ITS. Because of the unique shared system design at PTN and because the PTN CTS is a common shared document for Unit 3 and Unit 4, the formatting of the shared system Specifications in the PTN CTS are presented on a facility basis instead of a unit basis which resulted in unnecessary deviation from the ISTS. During the NRC acceptance review of the ITS conversion license amendment request (LAR), FPL took the opportunity to incorporate these enhancements to align the PTN plant specific ITS closer to the ISTS. The enhancements include making changes to the ITS following the application of single failure criteria to the Limiting Conditions for Operation and electrical system precedent set by previous ITS conversion submittals (References 4 and 5). These enhancements support the goal of conforming, to the extent practical, to Revision 5 of the ISTS, which is presented on a unit basis. The ITS of several multi-unit plants with shared systems were used as guidance in the reformatting and revisions to achieve this goal. These ITS examples are identified in the technical discussion, where appropriate.

## Summary of LAR Changes

Revision 1 to the PTN ITS LAR includes:

1. Editorial and typographical corrections self identified post ITS LAR submittal and as identified by the NRC staff during acceptance review of the ITS application (Reference 3);
2. Changes made to simplify and align the PTN ITS closer to the ISTS; and
3. Incorporation of information stated, as applicable, in the responses to the NRC RSI (Reference 4). Where RSI responses are superseded by this ITS LAR revision, revised RSI responses are provided in Attachment 2, "Revisions to the Florida Power & Light Company (FPL) Responses to NRC's Request for Supplemental Information (RSI)."

Revision to Enclosures 1, 3, 4, 5, and 6 of the original ITS submittal are provided with revision bars annotating the changes.

Due to the number of revisions made, Enclosure 2 provided herein replaces Enclosure 2 of the original ITS submittal with no revision bars included denoting changes. A summary of the revisions, other than editorial and typographical corrections, is provided in Table 1 of this attachment. The revision also includes a number of self-identified editorial and typographical corrections and NRC identified editorial and typographical corrections identified during the NRC's acceptance review of the ITS Conversion License Amendment Request (LAR) (NRC ADAMS Accession No. ML21342A293).

Proposed changes that may require NRC technical branch review are included in ITS Conversion LAR Enclosure 3. Regulatory commitments are provided in ITS Conversion LAR Enclosure 5.

## Technical Discussion

To assist the NRC staff's review of this ITS LAR revision, a technical discussion is provided herein for the following systems summarizing the difference between the plant specific system design and the system design configuration associated with the ISTS:

- Emergency Core Cooling System (ECCS),
- Auxiliary Feedwater (AFW) System,
- Control Emergency Ventilation System (CREVS) and Control Room Emergency Air Temperature Control System (CREATCS),
- AC Electrical Power System,
- AC Electrical Power Distribution System,
- Component Cooling Water (CCW) System, and
- Intake Cooling Water (ICW) System.

Appendix A of the Updated Final Safety Analysis Report (UFSAR) provides additional discussion related to the systems shared by PTN Unit 3 and Unit 4.

## **Comparison of PTN System Design to the ISTS System Design**

### Emergency Core Cooling System (ECCS)

The ISTS is based on a single plant design with two redundant 100% capacity ECCS trains/subsystems. Due to the shared high head safety injection (HHSI) subsystem design between the PTN units, the current ECCS Specification is presented on a facility basis instead of a unit basis. Although sharing ECCS systems between units is an uncommon design, the proposed changes are similar to the ITS presentation of multi-unit sites with other shared systems and are made to align the PTN Technical Specifications, to the practical extent, with the ISTS.

The PTN design consists of four HHSI subsystems shared between both units, and two unit specific residual heat removal (RHR) subsystems. The four shared HHSI subsystems take suction from their respective unit's RWST and discharge to a common header with redundant ECCS injection valves on each unit. The HHSI suction headers can be cross-tied between units to allow the HHSI subsystem to take suction from the opposite unit's RWST. Additionally, two motor operated cross tie valves provide capability to isolate the HHSI pump common discharge header between the units. These valves are normally open and, if required, closed to separate the units. The two unit specific RHR subsystems take suction from the associated unit's RWST via a common header and discharge to a common header with redundant RHR injection valves. The common HHSI and RHR discharge headers supply ECCS flow to all three RCS loops via redundant headers.

### Auxiliary Feedwater (AFW) System

The ISTS is based on a standard Westinghouse AFW System design with two 100% capacity motor driven AFW trains and one 200% capacity turbine driven AFW train with two redundant steam supplies from the steam generators. Several Westinghouse plants are designed with two 100% capacity motor driven AFW trains and one 100% capacity turbine driven AFW train. The motor driven AFW trains provide specific steam generators but have the capability to supply the other train's steam generators, as needed. The turbine driven AFW train provides flow to all the steam generators with DC powered control valves to support loss of AC power. The turbine driven AFW train is required to ensure diversity of pump motive power ensuring AFW System capability to support a station blackout (SBO). The design basis of the standard AFW System is to mitigate the consequences of any event with loss of normal feedwater (e.g., feedwater line break accident and loss of main feedwater) and is a consideration in the analysis of a small break loss of coolant accident (LOCA).

The PTN design consists of three 100% capacity steam driven AFW pumps shared between two units. Steam supply to the three pumps is supplied from each unit's steam generator via redundant steam supply headers. Each pump turbine can be manually aligned to either steam supply header. The steam supply line from each steam generator to both steam headers consist of a check valve and motor operated steam supply valve. The three pumps discharge through check valves to two redundant discharge headers for each unit. The AFW System is normally configured with one turbine drive pump aligned to Train 1 steam and feedwater headers and two

turbine drive pumps aligned to Train 2 steam and feedwater headers. The safety analysis requires only one turbine driven AFW train to support the safety function. In addition, PTN is designed with a non safety related Standby Feedwater System. This system consists of one motor driven feedwater pump and one diesel driven feedwater pump. The Standby Feedwater System provides defense-in-depth and requirements associated with this system are provided in UFSAR subsection 12.12.3.

The proposed changes in this revision are made to align the PTN Technical Specifications, to the practical extent, with the ISTS to meet the intent of the ISTS requirements of mitigating the consequences of any event with loss of normal feedwater (e.g., feedwater line break accident and loss of main feedwater) and a small break LOCA.

#### Control Emergency Ventilation System (CREVS) and Control Room Emergency Air Temperature Control System (CREATCS)

The ISTS separates the control room filtration function and control room cooling function into two Specifications: Control Room Emergency Filtration System and CREATCS. These Specifications are based on a single plant design with two redundant 100% capacity CREVS and CREATCS trains/subsystems. Several multi-unit sites utilize a single shared control room design. PTN Units 3 and 4 also utilize a shared common control room design with a shared CREVS.

The CREVS is designed with two redundant 100% capacity CREVS supply fans and one common filter unit. Redundant dampers are provided in the control room normal and emergency intake and recirculation ducts to support a single active failure.

In addition to the CREVS filter unit, a compensatory filtration unit is provided as a manual, safety-related, Seismic Class I backup to the installed CREVS System with the same functional and operational capabilities as the installed CREVS filter train.

Cooling of the control room is provided by three 100% capacity heating, ventilation, and air conditioning (HVAC) units each consisting of an air handling unit (AHU) and a condensing unit. In addition to providing support for the CREATCS, the AHU fans support the CREVS by maintaining proper air flow and a positive pressure in the control room during the CREVS recirculation mode of operation. A single AHU fan cannot provide 100% capacity to support the required air flow distribution in the CREVS recirculation mode. Therefore, a least two AHU fans are required to support the CREVS control room filtration function.

A further description of the CREVS and CREATCS is provided in UFSAR Section 9.9.

#### AC Electrical Power System

The ISTS is based on a single plant design with two redundant Class 1E electrical power trains/subsystems with two independent circuits between the offsite transmission network and the Class 1E Electrical Power System and two independent emergency diesel generators. This design supports 10 CFR 50, Appendix A, General Design Criterion (GDC) 17. Units 3 and 4 were designed prior to the implementation of

10 CFR 50, Appendix A, General Design Criteria (GDC) for Nuclear Power Plants, and utilized the criteria of 1967 AEC proposed GDC 39, "Emergency Power for Engineered Safety Features," in the design of the site electric power systems.

The normal power source to the Class 1E AC Electrical Power Distribution System is the respective unit auxiliary transformers and associated circuits to the Train A and B 4.16 kV buses. The preferred offsite power source is the unit startup transformer and associated circuit to the Train A and B 4.16 kV buses. One offsite circuit for each unit is supplied via the unit's start-up transformer. The alternate offsite circuit (i.e., delayed circuit) is supplied by the opposite unit's start-up transformer to the Train A 4.16 kV bus. Manual operator action is required to align the opposite unit's startup transformer to the Train A 4.16 kV bus.

To preclude inadvertent connecting of both startup transformers, the unit tie breaker to the respective Train A 4.16 kV bus does not include automatic transfer capability and is normally racked out and locked open. Upon a loss of the main generator and the preferred offsite circuit, the alternate offsite circuit is connected to the Train A bus by unlocking, racking in, and closing the unit tie breaker to restore offsite power to the unit Train A 4.16 kV bus.

The PTN emergency diesel generator design is similar to the ISTS diesel generator design and consists of two emergency diesel generators per unit.

Due to the shared systems between the units, the current PTN Specification is presented on a facility basis instead of a unit basis and requires opposite unit AC sources to support the shared systems (e.g., Control Room Emergency Ventilation System and safety related battery chargers). Therefore, changes are made (additions, deletions, and/or changes) to the ISTS presentation that reflect the plant-specific multi-unit and shared systems design on a unit basis. The changes do not represent a change to the plant design or safety analysis basis.

#### AC Electrical Power Distribution System

The ISTS is based on a single plant design with two redundant Class 1E electrical power distribution trains/subsystems with each train consisting of 4.16 kV buses, 480 V load center (LC) and motor control center (MCC) buses, two 125 V DC buses, and four 120 V vital AC buses (two per train). The PTN Class 1E AC Electrical Power Distribution System also consists of 4.16 kV buses, 480V LC and MCC buses, 120V Instrument (Vital) AC subsystems, and 125V DC buses. For each unit there are three safety related 4.16 kV switchgear, two of which are fed separately from the double secondary windings of its unit auxiliary transformer under normal operating conditions. At any time when power from the auxiliary transformer is not available, these buses are energized from the double ("X" and "Y") secondary windings of the startup transformer. Two of the 4.16 kV switchgear, labeled as "A" and "B", provide power to the A and B trains of Engineered Safety Features (ESF), respectively, in each unit. The third safety related 4.16 kV switchgear, labeled as the "D" switchgear, is utilized as a swing bus. The 4.16 kV swing bus can be manually aligned to either the Train A or Train B 4.16 kV bus of its respective unit and powers swing equipment (e.g., swing CCW pump and swing ICW pump). Interlocks ensure that the swing switchgear can only be connected

to one 4.16 kV bus at a time. When the 4.16 kV swing switchgear is connected to either of the 4.16 kV supply buses, it is considered an extension of that power supply bus.

The 480V LC buses are arranged in the same manner for Units 3 and 4. For each unit there are five safety related 480V LC buses, four of which are energized from different 4.16 kV busses (LCs A and C are fed from Train A and LCs B and D are fed from Train B). This arrangement ensures the availability of equipment associated with a particular function in the event of loss of one 4.16 kV bus. The fifth safety related 480V LC in each unit is a swing LC, which can swing between Train A and B of its associated unit. The swing LC bus can be aligned to either train (Train A or Train B) of the respective unit AC Electrical Power Distribution System. These swing LCs are labeled as 3H for Unit 3 and 4H for Unit 4. When the 480V swing LC is connected to either 480V supply bus, it is considered to be an extension of that 480V supply bus. The swing LCs are used to supply shared system and cross-unit loads. Upon loss of normal power to the swing LC bus, the bus will automatically transfer to the redundant AC electrical power distribution train, if available, to maintain continuity of power to the loads.

The 480V system includes MCCs powered from the LCs and are arranged in a similar manner for Units 3 and 4. Eight MCCs per unit are powered by safety related LCs with four per unit considered vital and two per unit supplying the emergency diesel generator (EDG) support systems. Three of the eight safety related MCC have a vital and a non-vital section, MCCs A, B, and C. The fourth vital MCC (MCC D) is connected to the unit swing LC, and thus, is considered a swing MCC.

#### Component Cooling Water (CCW) System

The ISTS is based on a single plant design with the CCW System arranged as two redundant, full capacity cooling loops, and has isolatable nonsafety related components. Each safety related train includes a full capacity pump, surge tank, heat exchanger, piping, valves, and instrumentation. Each safety related train is powered from a separate bus. A number of Westinghouse plants are designed with an additional CCW pump that can be aligned to either electrical train, with interlocks to ensure the swing pump can serve as a backup pump to either CCW train.

The PTN design is also arranged as two redundant full capacity cooling loops similar to the ISTS design. In addition, the PTN CCW System design includes an additional CCW pump and heat exchanger. The pumps and heat exchangers are arranged such that any combination of pumps and heat exchangers can supply either CCW train. The CCW trains are normally cross-tied at common suction and discharge headers and can be separated by closing crosstie valves between headers. The swing CCW pump can be aligned to either electrical train, with interlocks to ensure the swing pump can serve as a backup to either CCW train. One CCW pump and two of three CCW heat exchangers accommodate the accident heat removal loads. Each of the two standby pumps provides 100% backup.

### Intake Cooling Water (ICW) System

The ISTS is based on a single plant design with the Service Water System (SWS) arranged as two redundant, full capacity cooling headers, and has isolatable nonsafety related components. Each safety related train is powered from a separate bus.

The PTN ICW System design is also arranged as two redundant full capacity cooling headers similar to the ISTS SWS design. In addition, the PTN ICW System design includes an additional ICW pump. The pumps are arranged such that any combination of pumps can supply either ICW train. The ICW trains are normally cross-tied at the common pump discharge header and can be separated by closing crosstie valves between headers. The swing ICW pump can be aligned to either electrical train, with interlocks to ensure the swing pump can serve as a backup to either ICW train.

### **Current Licensing Basis and Accident Analysis**

A summary discussion of the current licensing basis and accident analysis of the following systems is provided herein to aid in the understanding of the minimum PTN requirements defining the lowest functional capability or performance levels of equipment required for safe operation of the facility as defined in 10 CFR 50.36(c)(2)(i):

- ECCS,
- AFW System,
- CREVS and CREATCS,
- Component Cooling Water (CCW) System, and
- Intake Cooling Water (ICW) System.

### ECCS

The ECCS is designed to limit the cladding temperature to 2200°F in accordance with 10CFR50.46. In addition, the core metal-water reaction is limited to less than 1% of the available Zircaloy, and the oxidation to less than 17% of the cladding thickness.

As stated in UFSAR Section 6.2.1, the primary purpose of the ECCS is to automatically deliver cooling water to the reactor core in the event of a loss-of-coolant accident. This limits the fuel clad temperature and thereby ensures that the core will remain intact and in place, with its heat transfer geometry preserved. Adequate emergency core cooling is provided by the ECCS whose components operate in three modes: (1) the passive accumulators; (2) the low head safety injection (RHR) system; and (3) the HHSI system.

A comprehensive safety analysis of postulated pipe ruptures within the Reactor Coolant System (RCS) boundary has been performed as summarized in UFSAR Section 14.3. This analysis has included cases of the LOCA resulting from a broad spectrum of small and large pipe ruptures including the Maximum Hypothetical Accident (MHA) case of the double ended break of the largest RCS pipe.

Additionally, the NRC staff reviewed the LOCA analysis for extended power uprate (EPU) conditions as summarized in the PTN EPU safety evaluation (SE) and determined the analysis was acceptable for EPU operation (Section 2.8.5.6.3 (pgs. 334 through 348) of the PTN EPU SE, NRC ADAMS Accession No. ML11293A365). The NRC staff evaluated the large and small break LOCA analyses and post-LOCA long term cooling analyses for the PTN Units 3 and 4. The NRC staff evaluation also included an audit of Westinghouse calculations pertaining to boric acid precipitation analyses and timing for the switch to hot leg injection. The NRC staff concluded that the LOCA analysis demonstrates acceptable performance relative to the 10 CFR 50.46 acceptance criteria at uprated conditions.

For the large break analysis, one ECCS train, including two HHSI pumps and one RHR (low-head) pump, starts and delivers flow through the injection lines (one for each loop) with one branch injection line spilling to the containment backpressure.

Based on the analysis results, it is concluded that PTN Units 3 and 4 maintain a margin of safety to the limits prescribed by 10 CFR 50.46.

The most limiting single active failure assumed for a small break LOCA is that of an emergency power train failure which results in the loss of one complete train of ECCS components. In addition, a loss-of-offsite power is assumed to occur coincident with reactor trip. This means that credit may be taken for, at most, two HHSI pumps and one RHR pump.

To summarize, the analysis presented in the UFSAR and the EPU license amendment requires two of three unit specific ECCS accumulators, two of four shared unit HHSI subsystems, and one of two unit specific RHR subsystems to support the worst case event. The limiting single failure and the total ECCS capacity have not changed in the analyses of record since the implementation of the EPU at PTN.

#### AFW System

The limiting single unit event associated with the AFW System is the loss of normal feedwater flow event. This event is described in UFSAR Section 14.1.11 and concludes that the capacity of one AFW pump is such that the water level in the steam generators does not recede below the level at which sufficient heat transfer area is available to dissipate core residual heat and reactor coolant pump heat without water relief from the RCS pressurizer relief or safety valves. The limiting dual unit transient for the AFW System is a dual unit loss of offsite power event. As stated in the NRC SE associated with Unit 3 and Unit 4 EPU, the limiting event in terms of total flow from a single AFW pump is a dual unit loss of offsite power event and assumes the active single failure of one AFW pump concurrent with one additional AFW pump out-of-service (Section 2.5.4 (pgs. 186 through 188) of the PTN EPU SE, NRC ADAMS Accession No. ML11293A365). Thus, the limiting design basis event analysis assumes only two AFW pumps are available at event initiation with one failing to start at the onset of the event resulting in one AFW train available for event mitigation. Therefore, the PTN AFW System effectively consists of an installed spare turbine driven AFW pump. The NRC staff concluded in the SE associated with PTN Unit 3 and Unit 4 EPU that there is reasonable assurance the AFW System would remain capable of

performing its licensing basis functions following EPU implementation because the design operation of the AFW pumps would remain within existing bounds and the inventory remains adequate to support natural circulation cooldown to RHR entry conditions. To summarize, the current safety analysis basis regarding the limiting single and dual unit events and the total AFW pump capacity, as shown for EPU, requires one of three shared unit turbine drive AFW pumps to support the worst case accident. The limiting single failure and the total AFW pump capacity have not changed in the analyses of record since the implementation of the EPU at PTN.

### CCW System

The safety analysis basis of the CCW System is to provide sufficient heat removal from the engineered safety features to the ultimate heat sink (ICW System), post accident. The system is designed with sufficient capability to accommodate the failure of any single, active component without resulting in undue risk to the health and safety of the public following a MHA. The most limiting single active failure considered is the loss of one emergency diesel, which results in only one CCW pump starting automatically to mitigate the consequences of the MHA. This assumed single failure also results in the loss of a complete train of engineered safety features, including the inability to open the CCW isolation valve associated with one RHR heat exchanger and one emergency containment cooler (ECC).

In support of the EPU project, detailed CCW System thermal analyses were performed to evaluate overall performance following worst-case design basis accidents. Maximum expected system operating temperatures were calculated for both the double-ended primary system pipe break and secondary (steam) pipe failure. In the thermal analyses, a consistent set of conservative cooling system operating parameters were defined for several analyzed single failure conditions. These included the failure of a diesel generator, a containment spray pump and ICW pump. To restrict CCW System post-accident operating temperatures to within acceptable ranges, the maximum number of ECCs automatically starting is two.

The PTN analysis presented in the EPU license amendment (Section 2.5.4 (pgs. 180 through 183) of the PTN EPU SE, NRC ADAMS Accession No. ML11293A365) modeled operation of one CCW pump and two CCW heat exchangers to accommodate the accident heat removal loads. The analysis demonstrated that containment heat removal requirements through the CCW System were satisfied with respect to post-accident containment temperature and pressure.

To summarize, the current safety analysis basis, as shown for EPU, requires one of three CCW pumps and two of three CCW heat exchangers to support the worst case accident. The limiting single failure and the required CCW pump and heat exchanger capacity have not changed in the analyses of record since the implementation of the EPU at PTN.

### ICW System

A summary of the PTN analysis is presented in the SE of the EPU license amendment (Section 2.5.4 (pgs. 177 through 179, NRC ADAMS Accession No. ML11293A365).

The ICW System provides sufficient redundancy so that at least one ICW pump will continue to operate to handle heat loads from design basis accidents following a postulated single active failure. Accident analysis has determined that the minimum required ICW System flow rate to the CCW heat exchangers is acceptable for removal of postulated accident heat loads at EPU operating conditions. Therefore, the ICW System is capable of providing adequate cooling flow with the most limiting single failure scenario of one pump supplying two CCW heat exchangers, and the system operating pressure is adequate to deliver the required flow.

To summarize, the current safety analysis basis, as shown for EPU, requires one of three ICW pumps to support the worst case accident. The limiting single failure and the required ICW pump capacity have not changed in the analyses of record since the implementation of the EPU at PTN.

### CREVS

As described in UFSAR Section 9.9, the design basis of the CREVS with respect to radiological emergencies is to be capable of automatically starting under accident conditions to initiate emergency control room pressurization and filtration, assuming the occurrence of a single active damper or supply fan failure.

The CREVS assumptions are summarized in Section 3.1 of the NRC SE associated with the PTN license amendments regarding the adoption of alternative source term (AST) and it was concluded that, for each analyzed accident, the dose estimates complied with the requirements of 10 CFR 50.67 and the guidelines of RG 1.183, and are therefore acceptable (NRC ADAMS Accession No. ML110800666). The control room air flow assumed for accidents and transients crediting CREVS was 1000 cfm considering an air flow distribution of 525 cfm of filtered makeup flow from the more limiting of the two emergency outside air intakes, 100 cfm of assumed unfiltered inleakage, and 375 cfm of filtered recirculation flow.

At least one CREVS supply fan and two AHU fans are required to ensure at least 1000 cfm air flow is provided and distributed to support emergency control room pressurization and filtration.

A summary of the PTN analysis is presented in the SE of the EPU license amendment (Section 2.7.3 (pgs. 222 through 224, NRC ADAMS Accession No. ML11293A365). The limiting single failure and the required control room air flow capacity and distribution have not changed in the analyses of record since the adoption of AST and implementation of EPU at PTN.

### CREATCS

UFSAR Section 9.9 states that the electrical configuration of the three HVAC units precludes the loss of more than one HVAC unit for any postulated single failure. Control room equipment is designed to operate in an environment of 120°F and 95% relative humidity. If two of three units were inoperative, the third would maintain the control room environment within these limits (only one required to maintain CR habitability).

A summary of the PTN analysis is presented in the SE of the EPU license amendment (Section 2.7.3 (pgs. 222 through 224, NRC ADAMS Accession No. ML11293A365). As stated in the EPU SE, the cooling and circulating portions of the system consists of air circulating ducts, three 100% capacity AHUs and associated condensing units. One unit can maintain the control room environment within the design limits of the equipment located in the control room. Therefore, only one of three HVAC units (i.e., AHU and condensing unit) is required to provide adequate control room cooling.

The limiting single failure and the control room cooling capacity have not changed in the analyses of record since the implementation of EPU at PTN.

### References

1. Florida Power & Light Company (FPL) Letter L-2021-158 dated September 22, 2021, License Amendment Request for the Technical Specifications Conversion to NUREG-1431 Revision 5 (ADAMS Accession No. ML21265A371)
2. U.S. NRC NUREG-1431 Volume 1, Revision 5.0, "Standard Technical Specifications - Westinghouse Plants." (ADAMS Accession No. ML21259A155)
3. NRC letter dated December 21, 2021, Turkey Point Nuclear Plant, Units 3 and 4 – Supplemental Information Needed for Acceptance of Requested License Amendment Request Concerning Technical Specification Conversion to NUREG-1431, Revision 5 (EPID L-2021-LLI-0002) (ADAMS Accession Nos. ML21342A293)
4. Catawba Nuclear Station, Units 1 and 2 Renewed Facility Operating License (ADAMS Accession No. ML052990150).
5. Calvert Cliffs Nuclear Power Plant, Units 1 and 2 Renewed Facility Operating License (ADAMS Accession No. ML052720231)

Table 1  
Summary of Turkey Point Units 3 and 4 ITS LAR Revision 1 Non-Editorial Changes

ITS Section Package	Title	Summary of Non-Editorial Changes
Split Report		<ul style="list-style-type: none"> <li>• Revised relocation Table and added discussion related to Post Accident Monitoring non-Type 1, non-Category A instruments removed from the TS and relocated to the TRM.</li> <li>• CTS 3.9.13, Containment Radiation Monitors, removed from being relocated and added to ITS 3.3.6.</li> </ul>
1.0	Use and Applications	
1.1	Definitions	
1.2	Logical Connectors	
1.3	Completion Times	
1.4	Frequency	
2.0	NA	
2.1	Safety Limits (SL)	
2.2	SL Violations	
3.0	LCO Applicability	
3.0	SR Applicability	
3.1	Reactivity Control Systems	
3.1.1	SDM	

ITS Section Package	Title	Summary of Non-Editorial Changes
3.1.2	Reactivity Balance	
3.1.3	MTC	Revised ITS LCO 3.1.3 to streamline maximum upper MTC limit as a single value. Other values relocated to the COLR. DOC A05 added.
3.1.4	Rod Group Alignment Limits	
3.1.5	Shutdown Bank Insertion Limits	
3.1.6	Control Bank Insertion Limits	
3.1.7	Rod Position Indication	<ul style="list-style-type: none"> <li>• Revised acceptance criteria of ITS SR 3.1.7.1; verifying RPI within 12 steps of group demand counter at 20 and 215 steps consistent with Sequoyah Nuclear Plant (ADAMS Accession No. ML15176A718).</li> <li>• Relocate CTS 4.1.3.2.2 to the TRM versus deleting it (originally deleted because it was thought to be performed with another SR). New DOC LA02.</li> </ul>
3.1.8	Physics Tests Exceptions	
3.2	Power distribution Limits	
3.2.1	Heat Flux Hot Channel Factor	<ul style="list-style-type: none"> <li>• Added DOCS A03 through A07.</li> <li>• Modified Insert 2 (proposed addition of ITS 3.2.1, Required Actions B.2, B.3, and B.4. Added DOC M02.</li> <li>• Power reduction time of CTS 4.2.2.2.a.2 increased from "immediately" to "15 minutes." DOC L02 added.</li> <li>• DOC L03 created to support deletion of CTS 4.2.2.5.</li> <li>• Added JFD 2, renumbered subsequent JFDs, and modified JFD 3 wording.</li> </ul>
3.2.2	Nuclear Enthalpy Rise Hot Channel Factor	
3.2.3	Axial Flux Difference	<ul style="list-style-type: none"> <li>• DOC A05 replaced and now associated with CTS 3.2.1, Action b.2.</li> <li>• Added DOC M02 to including base load operation being "equal" to PT.</li> <li>• CTS 4.2.1.2, target flux difference of each OPERABLE excore determined, and 4.2.1.3, updating the target flux difference determined relocated to COLR. DOC LA01 modified.</li> </ul>
3.2.4	Quadrant Power Tilt Ratio	

ITS Section Package	Title	Summary of Non-Editorial Changes
3.3	Instrumentation	
3.3.1	RTS	<ul style="list-style-type: none"> <li>• Deleted requirements and actions for source range monitors in Modes 3, 4, and 5 with the reactor trip circuit breakers open. Added DOC L06.</li> <li>• Removed CTS Table 4.3-1 Note 1 and added DOC A12.</li> <li>• Deleted Notes deviating from ISTS from SR 3.3.1.2, SR 3.3.1.3, and SR 3.3.1.6. Neutron detectors exclusion from CHANNEL CALIBRATION Note is covered in ITS SR 3.3.1.9. Updated CTS pages and ITS Bases markup pages to reflect the deletion.</li> <li>• Added CTS MU pages for all of CTS 2.2.1 (LSSS).</li> <li>• Deleted DOC LA11 (duplicate of LA01) and renumbered subsequent LA DOCs.</li> <li>• Added new DOC LA11, relocating certain design information from Functional Units 9, 10, 11, 12, and 15.b to the Bases.</li> <li>• Added new DOC LA12, relocating supporting information associated with the Overttemperature <math>\Delta T</math> function to the Bases.</li> </ul>
3.3.2	ESFAS	<ul style="list-style-type: none"> <li>• Notes rewritten to align more closely with ISTS.</li> <li>• Deleted Note that Alarms do not have to be tested; not needed because of the definition of OPERABLE. Added DOC L07.</li> <li>• Added DOC L08 to justify deletion of CTS Table 4.3-2, Note 2, associated with an AFW reference.</li> <li>• Deleted text in Table 3.3-2 ACTION 21 stating ACTION required by Specification 3.7.1.5 (redundant to LCO 3.0.6). Revised Required Action J.2 of ITS 3.3.2 markup Insert 2. Added reference to ITS 3.7.2 (MSIVs) to Bases of Condition J. Added DOC A08.</li> <li>• Added "and deactivated" to closed when referring to MSIVs and MFIV Auto closure Actuation to DOC, CTS Mu, ITS MU, and Bases MU.</li> <li>• L06 revised to add additional justification for 6-hour Completion Time.</li> </ul>
3.3.3	PAM	<ul style="list-style-type: none"> <li>• Removed the non-Type 1 Category A Instruments from the TS and relocated them to the TRM consistent with the ISTS. Added DOC R01.</li> <li>• Added five (5) instruments that are either Type 1 or Category A variables in PTN CLB. Added DOC M02.</li> <li>• Revised TS ACTIONS to align more closely with ISTS.</li> <li>• Modified DOCs A02 through A06 and added DOCs A07 (RCS temperature) and A08 (reactor vessel level).</li> <li>• Added DOC M01 to address PTN design associated with containment pressure and radiation channels.</li> <li>• Reordered and modified DOCs LA01, LA02, and LA03.</li> <li>• Replaced DOCs L02 and L03 with new DOCs L01, L02, and L03. Original DOC L01 moved to DOC L04 and modified.</li> </ul>

ITS Section Package	Title	Summary of Non-Editorial Changes
3.3.4	CREVS Instrumentation	<ul style="list-style-type: none"> <li>• Actuation Logic requirements deleted. Added DOC L02.</li> <li>• DOC A04 added for addition of Separate Condition Entry Note.</li> <li>• Revised DOC A02 to improve discussion of not duplicating sub-function requirements (i.e., SI and CI).</li> <li>• Added DOC A05 associated with omitting action to "restore".</li> <li>• DOC LA02 added to relocate details of placing control room on recirc to the Bases.</li> </ul>
3.3.5	LOP EDG Start Instrumentation	<ul style="list-style-type: none"> <li>• Converted Spec to be consistent with ISTS. Modified DOCs A04 through A07 and added DOC A08. Also modified DOCs LA02 and LA03.</li> <li>• Per bus added to Actions.</li> <li>• Added L03 to address bypassing of channel.</li> <li>• Added JFD 4 to permit restoring "all" channels.</li> </ul>
3.3.6	Containment Ventilation isolation Instrumentation	<ul style="list-style-type: none"> <li>• Table 3.3.6-1 Action b, "Setpoint may vary according to current plant conditions that the release rate does not exceed allowable limits provided in the ODCM" moved to the Bases. Added DOC M01.</li> <li>• Changed second condition in Conditions A and B from two radiation monitoring channels inoperable... to one required radiation monitoring channel inoperable, since only one of two are required per CTS. Deleted Note to Required Action A.2 since condition would be entered only when both channels are inoperable, thus the Note is unnecessary.</li> <li>• Added DOC L02 to address insertion of term "recently" irradiated fuel.</li> <li>• Added DOC L03 to discuss number of required containment radiation channels.</li> </ul>
3.4	Reactor Coolant System	
3.4.1	RCS, P, T, and Flow DNB Limits	Added DOC A04 related to RCS flow calibrations (DOC LA01 removed and DOC LA02 renumbered to LA01).
3.4.2	RCS Minimum Temperature for Criticality	
3.4.3	RCS P/T Limits	Removed Material Property Basis information from the 48 EFPY Heatup and Cooldown Curves out of TS into the UFSAR. Added new DOC LA02.
3.4.4	RCS Loops-MODES 1 and 2	
3.4.5	RCS Loops-MODES 3	
3.4.6	RCS Loops-MODES 4	

ITS Section Package	Title	Summary of Non-Editorial Changes
3.4.7	RCS Loops- MODES 5, Loops Filled	
3.4.8	RCS Loops- MODES 5, Loops Not Filled	
3.4.9	Pressurizer	Added a separate Condition for pressurizer heaters not capable of being powered from an EDG. Revised ITS 3.4.9 Bases to reflect the ITS change.
3.4.10	Pressurizer Safety Valves	
3.4.11	PORV Block Valves	Added PORVS back into ITS consistent with CTS. Results in modifications to CTS MU, DOCs, ITS MU, ITS Base MU, etc.
3.4.12	OMS	<ul style="list-style-type: none"> <li>• Restored CTS wording to isolate high pressure SI flow path to RCS versus ITS wording to verify on SI pump is capable of injecting.</li> <li>• Added DOC M02 permitting an option to establish an RCS vent path.</li> <li>• Increase Completion Time to vent RCS if inoperable PORV exceeds restoration time in MODE 4 from 8 hours to 24 hours consistent with CTS time to depressurize in MODES 5 and 6. Added DOC L01.</li> </ul>
3.4.13	RCS Operations Leakage	Changed DOC for deleting CTS surveillances 4.4.6.2.1.a, b, and d from LA01 to L03.
3.4.14	RCS PIV Leakage	<ul style="list-style-type: none"> <li>• The Applicability of auto-closure interlock requirements was expanded to MODE 4 because it supports the accident analysis.</li> <li>• Added DOC A06 to address locating requirements for the RHR auto-closure interlock in ITS 3.4.14.</li> <li>• 4 hours allowed to restore inoperable auto-closure interlock versus LCO 3.0.3 entry. Added DOC L04.</li> <li>• Added the Applicability exception for PIVs in the RHR flow path when transition to or operating in the RHR cooldown mode. Added DOC L05.</li> </ul>
3.4.15	RCS Leakage Detection Instrumentation	Added an Action to take grab samples when the containment atmosphere gaseous radiation monitor is the only operable monitor. Added DOC M03.
3.4.16	RCS Specific Activity	
3.4.17	SG Tube Integrity	

ITS Section Package	Title	Summary of Non-Editorial Changes
3.5	ECCS	
3.5.1	Accumulators	
3.5.2	ECCS - Operating	<ul style="list-style-type: none"> <li>• LCO and ACTIONS restructured to more closely match ISTS. Presentation changed from a facility basis to a unit basis. ITS Bases revised to reflect the change. DOCs A04, A05, A06, and A07 added.</li> <li>• Revised to match the Safety Analysis and more closely match the ISTS by requiring 3 HHSI subsystems vs 4 pumps and flow paths in the CTS. Added DOC L02.</li> <li>• Added DOC M01 associated with requiring verification of crosstie valve positions.</li> <li>• Original DOCs LA02 and LA07 deleted; LA DOCs reordered and renumbered.</li> <li>• Added DOC L03 to permit more than one subsystem to be inoperable.</li> </ul>
3.5.3	ECCS - Shutdown	Added JFDs 3 and 4.
3.5.4	RWST	<ul style="list-style-type: none"> <li>• Added DOCs A02 and JFD 4 related to RWT temperature verifications.</li> <li>• Added DOC A03 regarding dual unit RWT requirements.</li> </ul>
3.6	Containment Systems	
3.6.1	Containment	
3.6.2	Containment Air Locks	<ul style="list-style-type: none"> <li>• Added DOC A07 discussing testing following closure of air lock door.</li> <li>• SR 4.6.1.3.a CTS MU modified to delete specific reference to a vacuum test of the airlock door seals and refer only to the Containment Leakage Rate Testing Program of ITS 5.5.13. Added DOC L03 since this change would permit a vacuum test of the door seals or a pressure test of the airlock, either of which would be permitted under the Containment Leakage Rate Testing Program.</li> </ul>
3.6.3	Containment Isolation Valves	Added DOC LA02, relocating administrative position verification to the Bases.
3.6.4	Containment Pressure	
3.6.5	Containment Air Temperature	
3.6.6	CS and Cooling System	

ITS Section Package	Title	Summary of Non-Editorial Changes
3.6.7	Recirculation pH Control System	
3.7	Plant Systems	
3.7.1	MSSVs	<ul style="list-style-type: none"> <li>• Conditions restructured to more closely match ISTS convention. DOC A05 modified to reflect the restructuring.</li> <li>• With one or more MSSVs inoperable in MODE 2, only a power reduction is required irrespective of whether MTC is positive, negative, or zero. DOC L01 modified.</li> </ul>
3.7.2	MSIVs	
3.7.3	FIVs and FCVs and Associated Bypass Valves	Deleted unnecessary words in CTS 3.7.1.7, Action c, "...in different steam generator flow paths..." Replaced DOC A04 with new DOC A04 explaining why the deleted phrase is unnecessary.
3.7.4	Secondary Specific Activity	<ul style="list-style-type: none"> <li>• SRs rewritten to match ISTS. DOC A02 added.</li> <li>• Deleted CTS allowance to perform less frequent analysis. DOC M01 added.</li> <li>• DOC LA01 modified to relocate sample analysis detail to the Bases.</li> <li>• DOC LA02 added to change sample frequency to in accordance with the SFCP.</li> <li>• Deleted requirement to determine gross radioactivity, retained DEI-131 as in ISTS. Added DOC L01.</li> </ul>
3.7.5	AFW	<ul style="list-style-type: none"> <li>• Revised Specification presentation from a facility basis to a unit basis.</li> <li>• Revised to match the Safety Analysis and more closely match the ISTS presentation by requiring 2 AFW Trains to be OPERABLE vs 3 AFW Trains in CTS. Essentially third train is treated as a spare. (CLB single failure analysis assumes one pump out-of-service and then another pump failure).</li> <li>• DOCs A02, L01, L02, and L04 have been added with CTS markups revised to reflect these changes. DOC L01 revised to DOC L03</li> <li>• JFD 3 revised to reflect changes to the ISTS markup.</li> <li>• New JFD 5 added to justify the addition of proposed ITS ACTION C and proposed Note to ISTS 3.7.5 Condition E (ITS 3.7.5, Condition F).</li> </ul>
3.7.6	CST	<ul style="list-style-type: none"> <li>• Revised Specification presentation from a facility basis to a unit basis.</li> <li>• Notes that the Actions apply to both units deleted because duplicative of LCO 3.0.10 for dual unit TS. Removed in all specifications in PTN ITS. Added DOCs A02, A03, LA01, LA02, L01 (extending restore time from 4 hours to 7 days when backup water supply is available) and JFD 3.</li> </ul>
3.7.7	CCW System	Revised to match the Safety Analysis (one pump and two HXs) and more closely match the ISTS by requiring 2 CCW Trains to be OPERABLE vs 3 CCW Trains in CTS. Essentially third train is treated as a spare. The requirement for two heat exchangers remains unchanged. Replaced DOCs A02 and A03, original A02 changed to A04, added A05, A06, LA01, LA02, and L01, and renumbered original L0 DOCs accordingly. Modified JFD 2.

ITS Section Package	Title	Summary of Non-Editorial Changes
3.7.8	ICW System	Revised to match the Safety Analysis and more closely match the ISTS presentation by requiring 2 ICW Trains to be OPERABLE vs 3 ICW Trains in CTS. Essentially third train is treated as a spare. Added DOCs A02, A03, A05, renumbered original A02 to A04, added LA01 and L01 and renumbered original L0 DOCs accordingly. Deleted original JFDs 2 and 4, renumbered JFD 3 to JFD 2 and JFD 5 to JFD 3, and new JFD 4.
3.7.9	UHS	Added DOCs A03 and LA01. Added JFD 7.
3.7.10	CREVS	<ul style="list-style-type: none"> <li>• Changed to two trains and three AHU's required to be OPERABLE to more closely match the ISTS. AHUs are required support the control room filtration function, three are required to support single failure criterion. Added DOCs A02, A03, and M01, replaced L02 and added L05 (both associated with removing actions for inoperable dampers).</li> <li>• Added DOC L03 to allow use of actual or simulated test signal.</li> <li>• Added DOC L04 to remove testing for locked, sealed, or otherwise secured valves.</li> </ul>
3.7.11	CREATCS	Originally added requirement for three AHU's to this specification (Condensers); moved back to Ventilation specification (3.7.10). Two condensing units and two AHU's required for this specification per the Bases. Only one AC unit is required to support the control room cooling function. Modified DOCs A03 and L02.
3.7.12	Fuel Storage Pool Water Level	Revised to require $\geq 23$ feet above fuel vs 56' 10" elevation. Added DOC A02 and renumbered original A02 to A03.
3.7.13	Fuel Storage Pool Boron Concentration	
3.7.14	Spent Fuel Storage	Revised LCO to align more closely with the ISTS.

ITS Section Package	Title	Summary of Non-Editorial Changes
3.8	Electrical Power Systems	
3.8.1	AC Sources-Operating	<ul style="list-style-type: none"> <li>• Significant changes in ITS to more closely align it with the ISTS and Safety Analysis. Revised Specification presentation from a facility basis to a unit basis. Changed LCO and ACTIONS to define details for opposite unit consistent with industry ITS presentation for dual units. Added DOCs A09, A10, A11, and A12. Added LA06 (removes detail of acceptance criteria to the Bases) and renumbered remaining LAs accordingly. Added LA10 placing details of fuel oil system in Bases. Added JFDs 6 and 7.</li> <li>• Added DOC A05 (originally omitted).</li> <li>• Added DOC M06, requiring both EDGs when associated supported equipment is required.</li> <li>• Added DOC L01 increasing Mode 2, 3, and 4 offsite circuit restore time from 24 to 72 hours and renumbered L DOCs accordingly.</li> <li>• Added DOC L05 removing requirement to test redundant EDG after inoperable EDG returned to operable status and renumbered L DOCs accordingly.</li> <li>• Added DOC L05 allowing more than 2 EDGs to be inoperable and renumbered L DOCs accordingly.</li> <li>• Added DOC L19 associated with EDG voltage/frequency band.</li> </ul>
3.8.2	AC Sources-Shutdown	<ul style="list-style-type: none"> <li>• The addition of "a qualified" when referring to offsite source removed.</li> <li>• DOC M02 added deleting duplicate Required Actions for low water inventory and ensuring immediate action is taken to restore an inoperable power supply.</li> <li>• Add DOC L05 to justify deletion of Core Alterations.</li> <li>• Added DOC for deletion of footnote that states, "Caution - If the opposite unit is in MODES 1, 2, 3, or 4 see Specification 3.8.1.1."</li> </ul>
3.8.3	Diesel Fuel Oil, Lube Oil, and Starting Air	Added DOC M02 associated with temporary fuel oil exception.
3.8.4	DC Sources - Operating	Added DOC A04 and changed original A04 to A05. Added DOCs LA02 and LA04; renumbered subsequent LAs. Replaced DOC L01.
3.8.5	DC Sources - Shutdown	
3.8.6	Battery Parameters	
3.8.7	Inverters – Operating	
3.8.8	Inverters - Shutdown	

ITS Section Package	Title	Summary of Non-Editorial Changes
3.8.9	Distribution Systems - Operating	<ul style="list-style-type: none"> <li>• Significant changes in ITS from originally modeling the CTS like ITS to more closely align it with the ITS and Safety analysis. Revised Specification presentation from a facility basis to a unit basis. Changed LCO presentation and ACTIONS to define details for opposite unit consistent with industry ITS presentation for dual units. Replaced DOC A02 and added A03. Added JFDs 4 through 7.</li> <li>• Added DOC M02 requiring both trains when supported equipment on both trains is required to be operable.</li> <li>• Moved Actions for 480 V Load Center and MCC inoperabilities to TRM. Added DOC LA03.</li> <li>• EDG supply to remaining battery chargers not required during extended outage time. Added DOC L06.</li> </ul>
3.8.10	Distribution Systems - Shutdown	
3.9	Refueling Operations	
3.9.1	Boron Concentration	
3.9.2	Refueling Cavity Water Level	
3.9.3	Nuclear Instrumentation	Added DOC L03 associated with source range monitor details.
3.9.4	Containment Penetrations	
3.9.5	RHR and Coolant Circulation – High Water Level	
3.9.6	RHR and Coolant Circulation – Low Water Level	
4.0	Design Features	
4.1	Site Location	
4.2	Reactor Core	

ITS Section Package	Title	Summary of Non-Editorial Changes
4.3	Fuel Storage	Design requirements removed because they are covered in 3.7.14 where most of the details were already moved. Added DOC A03.
5.0	Administration Controls	
5.1	Responsibility	
5.2	Organization	<ul style="list-style-type: none"> <li>Plant specific titles going to QATR or UFSAR vs QATR because the QATR is a fleet document. Added DOC A06.</li> <li>ITS 5.2.2.e – Removed deviation from ISTS added DOCs A04 and A05. Revised CTS Table 6.2-1 with A04 and A05.</li> </ul>
5.3	Unit Staff Qualifications	<ul style="list-style-type: none"> <li>Relocated CTS 6.3.1.4 and CTS 6.3.2 to the UFSAR and added DOCs LA01 and LA02, respectively, to justify the change.</li> <li>Deleted ISTS 5.3.1 Insert 1 since it is unnecessary. See DOCs A02, LA01, and LA02.</li> </ul>
5.4	Procedures	
5.5	Programs and Manuals	<ul style="list-style-type: none"> <li>Revised CTS 6.8.4.h.1 to delete the reference to the Amendment where the alternate vacuum testing method was approved. Added DOC A09 and updated ITS 5.5.13 markup.</li> <li>Deleted ITS 5.5 Insert 4 and restored ITS 5.5.13.d.1 consistent with the ISTS since the CTS information and ISTS information are equivalent.</li> <li>Deleted ITS 5.5 Insert 5 since it is duplicative to the wording in ITS 5.5.15.d. Renumbered remaining Inserts.</li> <li>Revised ITS 5.5 Insert 6 (revised Insert 4) and restored ISTS 5.5.20.d.1 and d.2 (ITS 5.5.17.d.1 and d.2) since information in Insert 6 is equivalent to the information in the ISTS and is not a deviation from the ISTS.</li> <li>Added specific NSHCs in accordance with LIC 601 to cover LA02, which relocated ITS 5.5 periodic Frequencies to the SFCP.</li> </ul>
5.6	Reporting Requirements	<ul style="list-style-type: none"> <li>Added CTS markup page related to Accident Monitoring as it relates to post accident monitoring reporting.</li> <li>Revised paragraph in CTS 6.9.1.7 listing parameters to be determined with generic ISTS wording as shown in CTS markup Insert 1. Restored ITS 5.6.3.c in the ITS markup. Added DOC A03 to justify the change.</li> <li>Deleted ITS markup Insert 3 since it is duplicative of information in Insert 2.</li> </ul>
5.7	High Radiation Area	

## Revisions to the Florida Power & Light Company (FPL) Responses to NRC's Request for Supplemental Information (RSI)

### Introduction

During the NRC's Acceptance Review of FPL's Improved Technical Specification (ITS) Conversion License Amendment Request (LAR) (Reference 1), the NRC staff sent an RSI to FPL (Reference 2). By letter dated January 19, 2022, (Reference 3) FPL supplied responses to the NRC's RSI.

During the development of responses to the NRC RSI's, FPL identified areas in which modifications could be made that would allow the PTN ITS to align more closely with NUREG 1431, Revision 5, "Standard Technical Specifications Westinghouse Plants." As a result of making these changes, some of FPL's RSI responses changed. The following describes these changes by FPL RSI response attachment number. The NRC RSI question, original FPL response, revised FPL response and a discussion of the revised response are provided. The Table below identifies the RSI responses that have changes.

Attachments Index		
Attachment No.	RSI No.	Subject
13	3.4-4	Volume 9 – Section 3.4 (ADAMS Accession No. ML21265A380) Question 4
27	3.8-1	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 1
28	3.8-2	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 2
29	3.8-3	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 3
30	3.8-4	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 4
31	3.8-5	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 5
32	3.8-6	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 6
33	3.8-7	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 7
34	3.8-8	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 8
38	3.8-12	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 12
44	3.8-18	Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 18

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**References:**

1. Florida Power & Light Company (FPL) Letter L-2021-158 dated September 22, 2021, License Amendment Request for the Technical Specifications Conversion to NUREG-1431 Revision 5 (ADAMS Accession No. ML21265A371)
2. NRC letter dated December 21, 2021, Turkey Point Nuclear Plant, Units 3 And 4 – Supplemental Information Needed for Acceptance of Requested License Amendment Request Concerning Technical Specification Conversion to NUREG-1431, Revision 5 (EPID L-2021-LLI-0002) (ADAMS Accession Nos. ML21342A293)
3. Florida Power & Light Company (FPL) Letter L-2022-010 dated January 19, 2022, License Amendment Request for the Technical Specifications Conversion to NUREG-1431 Revision 5 – Request for Supplemental Information (RSI) Response (ADAMS Accession No. ML22019A067)

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 13 to FPL Response to NRC RSI No. 3.4-4  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 9 – Section 3.4 (ADAMS Accession No. ML21265A380) Question 4**

On page 89/456, provide an explanation for why the proposed changes to LCO 3.4.5, Conditions C and D and associated Required Actions do not follow the STS format.

**Current FPL Response:**

PTN ITS ACTION C will be changed to adopt NUREG-1431 Section 3.4.5 ACTION C as written. PTN ITS ACTION D will be changed to adopt NUREG-1431 Section 3.4.5 ACTION D with the following exception. At the end of the second part of Condition D, "when the Rod Control System is not capable of rod withdrawal," will be added. If not added, when the Rod Control System is capable of rod withdrawal and the required RCS loops are not in operation, both Actions C and D will be required to be entered.

**Revised FPL Response**

PTN ITS ACTION C will be changed to adopt NUREG-1431 Section 3.4.5 ACTION C as written. PTN ITS ACTION D will be changed to adopt NUREG-1431 Section 3.4.5 ACTION D with the following exception. At the end of the second part of Condition D, "with Rod Control System not capable of rod withdrawal," will be added. If not added, when the Rod Control System is capable of rod withdrawal and the required RCS loops are not in operation, both Actions C and D will be required to be entered. In addition, revisions, will be made, as necessary, to the CTS markup, ITS markup, and ITS Bases markup.

**Discussion of Revised Response**

The addition to the end of the second part of Condition D was revised to be consistent with the wording in Condition C. In addition, in the previous response, other sections that required revision were not identified. The other sections that require revision (ITS 3.4.5 CTS Markup, ITS Markup, and ITS Bases Markup were changed in this revision.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 27 to FPL Response to NRC RSI No. 3.8-1  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 1**

ITS 3.8.1 - page 19/419 – On ITS 3.8.1 discussion of change (DOC) page 3 of 17, DOC M01 describes Actions in Mode 1. There is also a less restrictive change which is missing a discussion of the change. In Modes 2, 3, and 4, CTS action a.5 requires restoration of the inoperable startup transformer within 24 hours. This is less than the Completion Time of 72 hours allowed in ITS. Provide a DOC for this less restrictive change.

**FPL Response:**

There is no missing Less Restrictive change; CTS Action a.5 is equivalent to ITS ACTION C. As described in ITS 1.3, Completion Times, "if situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time." ITS LCO 3.8.1, ACTION C is applicable when one required associated offsite circuit is inoperable. Condition C is modified by a Note stating that it is only applicable when the associated unit is in MODES 2, 3, or 4, similar to CTS Action a.5 which states, "If the inoperable startup transformer is the associated startup transformer and became inoperable while the unit was in MODE 2, 3, or 4 . . ." As in CTS Action a.5, ITS ACTION C allows 24 hours to restore the inoperable Startup Transformer.

**FPL Revised Response:**

Revised ITS 3.8.1 DOC L01 provides a discussion for this less restrictive change.

**Discussion of Revised Response:**

Revised ITS 3.8.1 DOC L01 discusses CTS Actions a.3 and a.5 which provide different actions based on the unit's MODE. The DOC discusses ITS 3.8.1 Required Action A.3 which requires that with one unit offsite circuit inoperable to restore the offsite circuit to OPERABLE status within 72 hours or in accordance with the Risk Informed Completion Time Program. This DOC proposes that the Completion Time to restore a unit offsite circuit is 72 hours regardless of the MODE.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 28 to FPL Response to NRC RSI No. 3.8-2  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 2**

ITS 3.8.1 - page 23 – On discussion of changes (DOC) page 7 of 17 of ITS 3.8.1, DOC LA05 states that the removal of CTS 4.8.1.1.2.a.6, from the Technical Specifications is acceptable because this type of information is not necessary to be included in the TS to provide adequate protection of public health and safety. DOC LA05 also states that an OPERABLE Emergency Diesel Generator (EDG) must be capable of providing power to the associated emergency bus as indicated in the Bases. ITS 3.8.1 LCO b is the requirement for EDGs to be capable of supplying the onsite Class 1E power distribution subsystem therefore the details of CTS 4.8.1.1.2.a.6 are not being removed from TS. Provide a revised discussion of change for CTS 4.8.1.1.2.a.6.

**FPL Response:**

It is agreed that a DOC is required; however, an Administrative DOC will be provided because the surveillance requirement is being deleted but the definition of OPERABLE/OPERABILITY and the LCO retain the details of surveillance. CTS 4.8.1.1.2.a.6 is a surveillance requirement to specifically verify the diesel generator is aligned to provide standby power to the associated emergency buses. For the diesel generator to provide its safety function, as required by the definition of OPERABLE, it must be aligned to provide standby power. The change will be categorized as an Administrative Change with a revised discussion of change as follows.

A09 CTS 4.8.1.1.2.a.6 requires the verification that each EDG is aligned to provide standby power to the associated emergency buses. ITS 3.8.1 does not contain this surveillance requirement. This changes the CTS by deleting the surveillance requirement as the detail that each EDG is aligned to provide standby power to the associated emergency buses is included in the ITS LCO.

The removal of CTS 4.8.1.1.2.a.6, which is related to system design, from the Technical Specifications is acceptable because this type of information is not necessary to be included as a specific surveillance requirement to provide adequate protection of public health and safety. ITS LCO 3.8.1 requires the EDGs to be OPERABLE. For the emergency diesel generator to provide its safety function, as required by the definition of OPERABLE, it must be aligned to provide standby power, capable of providing power to the associated emergency bus as described in the Bases. This change is designated as administrative because it does not result in a technical change to the CTS.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**FPL Revised Response:**

The response FPL provided in the RSI response letter has not changed, however, the DOC number has changed and is now DOC A11.

**Discussion of Revised Response:**

Change is in DOC number only.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 29 to FPL Response to NRC RSI No. 3.8-3  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 3**

ITS 3.8.1 - page 25 – On ITS 3.8.1 discussion of change (DOC) page 9 of 17, DOC L01 states, “CTS ACTIONS a.3.b. a.4, a.5, b.3, d.1, e.2, and f, in part, require that if the associated Action and Completion time are not met to be ... in at least HOT STANDBY within the next 12 hours and in HOT SHUTDOWN within the following 6 hours...” However, the action to be in HOT Standby within the next 12 hours and in HOT SHUTDOWN within the following 6 hours does not seem to apply to any of the listed CTS Actions. Provide an explanation to why this action is listed in DOC L01 or revise DOC L01.

**FPL Response:**

The statement, "in at least HOT STANDBY within the next 12 hours and in HOT SHUTDOWN within the following 6 hours," does not apply to any of the listed CTS Actions. The statement, "in at least HOT STANDBY within the next 12 hours and in HOT SHUTDOWN within the following 6 hours," is associated with CTS ACTION d.2. CTS ACTION d.2 was not included in this DOC. The DOC will be revised to delete this statement as follows.

L01 (Category 4 – Relaxation of Required Action) CTS ACTIONS a.3.b, a.4, a.5, b.3, d.1, e.2, and f, in part, require that if the associated Action and Completion Time are not met to be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours; or in at least HOT STANDBY within the next 12 hours and in COLD SHUTDOWN within the following 30 hours. ITS ACTION J requires that with the Required Action and associated Completion Time of Condition A, B, C, D, E, F, G, or H not met to be in MODE 3 in 6 hours and MODE 4 in 12 hours. This changes the CTS by requiring a less restrictive end state in the required actions, MODE 4 (HOT SHUTDOWN) instead of MODE 5 (COLD SHUTDOWN).

The purpose of the CTS 3.8.1.1 ACTIONS is to limit the time the unit can remain operating with different combinations of inoperable offsite circuits and EDGs. Once these limits to operation are exceeded, ACTION J is entered to provide a reasonable time to place the unit in a safe condition. End states are usually defined based on placing the unit into a MODE or condition in which the Technical Specification Limiting Condition for Operation (LCO) is not applicable. MODE 5 is the current end state for LCOs that are applicable in MODES 1 through 4. This change is acceptable because the risk of the transition from MODE 1 to MODES 4 or 5 depends on the availability of alternating current (AC) sources and the ability to remove decay heat such that remaining in MODE 4 may be safer. During the realignment from MODE 4 to MODE 5, there is an increased potential for loss of shutdown cooling and loss of inventory events. Decay heat removal following a loss-of-offsite power event in MODE 5 is dependent on

## **Revisions to the Florida Power & Light Company (FPL) Responses to NRC's Request for Supplemental Information (RSI)**

AC power for shutdown cooling whereas, in MODE 4, the turbine driven auxiliary feedwater (AFW) pump will be available. Therefore, transitioning to MODE 5 is not always the appropriate end state from a risk perspective. Thus, for specific TS conditions, Westinghouse Topical Report WCAP-16294-A R1 (ADAMS Accession No. ML103430249) justifies MODE 4 as an acceptable alternate end state to Mode 5. The proposed change to the Technical Specifications will allow time to perform short-duration repairs, which currently necessitate exiting the original mode of applicability. The MODE 4 TS end state is applied, and risk is assessed and managed in accordance with Title 10 of the Code of Federal Regulations (10 CFR) Section 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants." Modified end states are limited to conditions where: (1) entry into the shutdown mode is for a short interval, (2) entry is initiated by inoperability of a single train of equipment or a restriction on a plant operational parameter, unless otherwise stated in the applicable TS, and (3) the primary purpose is to correct the initiating condition and return to power operation as soon as is practical. This proposed change is consistent with NRC approved TSTF-432-A Revision 1 (ADAMS Accession No. ML103360003), noticed for availability by the NRC in the Federal Register (77 FR 27814) on May 11, 2012. The NRC's approval of WCAP-16294-A included four limitations and conditions on its use as identified in Section 4.0 of the NRC Safety Evaluation associated with WCAP-16294-A. Implementation of these stipulations were addressed in the Bases of TSTF-432-A. Florida Power & Light implemented these limitations and conditions at PTN in the adoption of the associated TSTF-432-A Bases. This change is designated as less restrictive because less stringent Required Actions are being applied in the ITS than were applied in the CTS.

### **FPL Revised Response:**

The NRC's RSI and FPL's response stated that the DOC in question is DOC L01. Revision 1 added another less restrictive change to ITS 3.8.1 DOCs designating it as DOC L01. This changed the subject DOC to ITS 3.8.1 DOC L02. In addition, the NRC's RSI and FPL's response references ACTION J. The ACTION under PTN's ITS Conversion LAR Revision 1 is changed to ACTION I.

### **Discussion of Revised Response:**

Change is in DOC and ACTION designations only. Revision 0 ITS 3.8.1 DOC L01 is Revision 1 DOC L02, and ITS 3.8.1 Revision 0 ACTION J is Revision 1 ACTION I.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 30 to FPL Response to NRC RSI No. 3.8-4  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 4**

ITS 3.8.1 - page 25 – On ITS 3.8.1 discussion of change (DOC) page 9 of 17, DOC L01 states, “CTS ACTIONS a.3.b, a.4, a.5, b.3, d.1, e.2, and f, in part, require that if the associated Action and Completion time are not met to be ... in at least HOT STANDBY within the next 12 hours and in HOT SHUTDOWN within the following 6 hours...” However, the action to be in HOT Standby within the next 12 hours and in HOT SHUTDOWN within the following 6 hours does not seem to apply to any of the listed CTS Actions. Provide an explanation to why this action is listed in DOC L01 or revise DOC L01.

**FPL Response:**

Insert 3 has been inadvertently inserted inconsistent with the ISTS format. The insert should be inserted after the "AND" logic connector following Required Action E.1. A revision will be provided showing INSERT 3 following the "AND" logic connector following Required Action E.1.

**FPL Revised Response:**

In FPL response to the NRC's RSI Volume 13 – Section 3.8, RSI number 4, FPL provided the incorrect RSI question in Attachment 30. The correct RSI question is:

ITS 3.8.1 – page 37 - On ITS 3.8.1 page 3.8.1-2, it shows Insert 3 being added between Required Action E.1 and the logical connector “AND.” On ITS 3.8.1 Insert Page 3.8.1-2b, Insert 3 shows Required Action E.2 followed by a logical connector “AND”. As proposed, this would have Required Action E.1 on top of Required Action E.2 without a logical connector between them and would have two “AND” logical connectors between Required Action E.2 and Required Action E.3. As proposed, this change is not consistent with ISTS format. Provide a revision that is consistent with ISTS format.

The correct response was provided however, FPL's response to this RSI has changed. FPL provides the following response to this question.

In Revision 1 of FPLs ITS Conversion LAR, the allowance to not perform Required Actions allowed by the inserted Note will no longer be allowed. The inserted Note has been deleted.

## **Revisions to the Florida Power & Light Company (FPL) Responses to NRC's Request for Supplemental Information (RSI)**

### **Discussion of Revised Response:**

Turkey Point Unit 3 and Unit 4 current Technical Specification (CTS) provides an exception to requiring a common Fuel Storage System containing a minimum volume of 38,000 gallons of fuel and a separate fuel transfer pump. This exception states:

"A temporary Class III fuel storage system containing a minimum volume of 38,000 gallons of fuel oil may be used for up to 10 days during the performance of Surveillance Requirement 4.8.1.1.2i.1 for the Unit 3 storage tank while Unit 3 is in Modes 5, 6, or defueled. If the diesel fuel oil storage tank is not returned to service within 10 days, Technical Specification 3.8.1.1 Action b and 3.8.1.2 Action apply to Unit 4 and Unit 3 respectively."

Therefore, if the temporary Unit 3 Class III storage system is in use for longer than 10 days the Unit 4 EDG is considered inoperable but only required to perform the Actions required by CTS 3.8.1.1 Action b. These actions did not include CTS 3.8.1.1 Action d to verify that; 1. All required systems, subsystems, trains, components, and devices (except safety injection pumps) that depend on the remaining required OPERABLE diesel generators as a source of emergency power are also OPERABLE; and 2. At least two Safety Injection pumps are OPERABLE and capable of being powered from their associated OPERABLE diesel generators. ITS Required Action E.2 and E.3 represented CTS 3.8.1.1 Action d with Insert 3 being ITS Required Action E.2, inserted in the incorrect location. FPL has determined that if the temporary Class III storage system is used for greater than 10 days the Unit 4 EDG will be declared inoperable and all Required Actions will be performed, making the Insert unnecessary and no longer used. With the Insert removed, a revision that is consistent with ISTS format is provided.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 31 to FPL Response to NRC RSI No. 3.8-5  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 5**

ITS 3.8.1 - page 40 – On ITS 3.8.1 page 3.8.1-3, the completion time for Required Action F.2 states, “24 hours [OR In accordance with Risk Informed Completion Time Program],” and the proposed change deletes the brackets. However, license amendment numbers 284 and 278 did not approve a risk informed completion time (RICT) for CTS 3.8.1.1 Action e. Therefore, remove “or in accordance with the Risk Informed Completion Time Program” from the Completion Time for ITS 3.8.1 Required Action F.2, as it is not consistent with license amendment numbers 284 and 278.

**FPL Response:**

"[OR In accordance with Risk Informed Completion Time Program]," will be removed from Required Action F.2. In PTN's submittal to adopt the RICT program the NRC staff had a concern associated with "loss of function". One of the industry-proposed options to address the staff's concern was to exclude the use of the loss of function provisions provided in TSTF-505 and, based on PTNs definition of OPERABLE/OPERABILITY, this included two inoperable offsite circuits as a loss of function condition. With the adoption of the ISTS definition of OPERABLE/OPERABILITY two inoperable offsite circuits is no longer a loss of function condition. However, because PTNs adoption of the RICT program did not include the ISTS option, it will be deleted.

**FPL Revised Response:**

The NRC's RSI and FPL's response references Required Action F.2. The Required Action under PTN's ITS Conversion LAR Revision 1 is Required Action D.2.

**Discussion of Revised Response:**

Change is in Required Action number only.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 32 to FPL Response to NRC RSI No. 3.8-6  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 6**

ITS 3.8.1 - page 42 – On ITS 3.8.1 page 3.8.1-4, ITS 3.8.1 Condition I is entered when one automatic load sequencer is inoperable and Required action I.1 has a required completion time of 72 hours or in accordance with the Risk Informed Completion Time. CTS 3.8.1.1 does not have a specific Action for an inoperable automatic load sequencer and therefore, was not evaluated under license amendment numbers 284 and 278 for Units 3 and 4, respectively. For ITS 3.8.1 required action I.1 provide the following information: (1) the success criteria parameters used to determine PRA functional determination are the same as the design-basis success criteria parameters or, if different, plant-specific analyses used to support the PRA are justified; (2) identify how the load sequencers are implicitly or explicitly modeled in the PRA; (3) CCFs and/or surrogate identification; and (4) the Configuration Risk Management Program (CRMP) provides the capability to select the load sequencers as out-of-service in order to calculate a RICT.

**FPL Response:**

FPL provides the following response for RSI No, 3.8-6.

- (1) There is no success criterion for the emergency load sequencers. The emergency load sequencers sequence the loading of front-line and support system components on the diesel generators when there is a loss of offsite power. There are success criteria for these components for different scenarios; therefore, the sequencers affect whether these success criteria are met given a loss of offsite power.
- (2) The load sequencers are modeled under the front-line and support system fault tree logic as necessary for their operation given a loss of offsite power.
- (3) Common cause failures are not modeled for the sequencers.
- (4) The load sequencers may be selected as out of service in the CRMP risk monitor and their selection will result in the option to enter a RICT.

**FPL Revised Response:**

The NRC's RSI and FPL's response references Condition I. The Condition under PTN's ITS Conversion LAR Revision 1 is Condition H.

**Discussion of Revised Response:**

Change is in Condition designation only.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 33 to FPL Response to NRC RSI No. 3.8-7  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 7**

ITS 3.8.1 - page 42 – On ITS 3.8.1 insert page 3.8.1-4, Condition J Note states, “Condition J only applies [emphasis added] to one Unit during a dual Unit shutdown.” Condition Note K.1 states, “Condition K only applies when a dual Unit shutdown is required.” Condition Note K.2 states, “Only one Unit can enter Condition K.” The above Condition Notes are written such that they do not allow for a single Unit that doesn't meet the Required Action Completion Times for shutdown, they drive a single unit to LCO 3.0.3.

**FPL Response:**

FPL will revise the Condition J Note to state, "During a dual unit shutdown, Condition J only applies to one Unit."

**FPL Revised Response:**

FPL has revised the Conditions and Notes associated with the shutdown Required Actions to differentiate the applicable Required Actions to take based on whether a single unit shutdown is required or a dual unit shutdown is required. When a single unit is required to shut down the Condition is modified by a Note stating:

Not applicable when a dual  
unit shutdown is required.

When a dual unit shutdown is required, the Condition is modified by a Note stating:

Not applicable when a dual  
unit shutdown is required.

**Discussion of Revised Response:**

PTN's licensing bases is that a unit shutdown to MODE 3 is to be accomplished within 6 hours. If a single unit shutdown is required, the Required Action is to be in MODE 3 within 6 hours. Generally, when an ACTION statement (CTS) or Required Action (ITS) requires a dual unit shutdown, the time to be in MODE 3 is 12 hours. This is to allow the orderly shutdown of one unit at a time and NOT jeopardize the stability of the electrical grid by imposing a dual unit shutdown. The ITS Bases provides a discussion of these added Notes.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 34 to FPL Response to NRC RSI No. 3.8-8  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 8**

ITS 3.8.1 - page 48, 103 – On ITS 3.8.1 Insert page B 3.8.1-18, Insert 18 states, "...SR [3.8.1.6] is modified by a Note to indicate that all EDG starts for this Surveillance may be preceded by an engine pre-lube period and followed by a warmup period prior to loading." However, the SR Note is missing from ITS SR 3.8.1.6. Add the Note to ITS SR 3.8.1.6 or change the ITS Bases to be consistent with SR 3.8.1.6.

**FPL Response:**

The ITS Bases will be revised to remove the statement associated with a warmup period. The Note is included with ITS SR 3.8.1.6 that this Surveillance may be preceded by an engine pre-lube period however because this test is a rapid start of the EDG a warmup period is not applicable and will be removed from the ITS Bases.

**FPL Revised Response:**

The NRC's RSI and FPL's response references Insert 18. The Insert under PTN's ITS Conversion LAR Revision 1 is Insert 16.

**Discussion of Revised Response:**

Change is in Insert number only.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 38 to FPL Response to NRC RSI No. 3.8-12  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 12**

ITS 3.8.1 - page 87 – On ITS 3.8.1 Bases Insert Page B 3.8.1-8b, insert 11 for Required Action E.5 states, “The Required Actions have been modified by a Note.” The Note states that Required Actions E.2 and E.3 are not applicable for Unit 4 when the required Unit 3 EDG is declared inoperable by LCO 3.8.3 Condition F.” ITS 3.8.1 Required Actions E.2 and E.3 are not modified by a Note stating that they are not applicable for Unit 4 when the required Unit 3 EDG is declared inoperable by LCO 3.8.3, Condition F. Remove the discussion of the Note from insert 11 or provide the proposed Note and its JFD in ITS 3.8.1 Required Actions E.2 and E.3 as discussed in Bases insert 11.

**FPL Response:**

The Note is not associated with Required Action E.5 and will be removed from Required Action E.5 Bases. A Note will be added to Required Action E.2 and E.3 stating that these Required Actions are not applicable for Unit 4 when the required Unit 3 EDG is declared inoperable by LCO 3.8.3, Condition F and a discussion will be added to Required Actions E.2 and E.3 Bases.

**FPL Revised Response:**

The discussion of the Note has been removed from Insert 11

**Discussion of Revised Response:**

As discussed in the revised response to NRC RSI Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 4 the allowance provided by the discussion in Insert 11 will not be incorporated in PTN ITS conversion. Therefore, the discussion has been removed.

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's  
Request for Supplemental Information (RSI)**

**Attachment 44 to FPL Response to NRC RSI No. 3.8-18  
(Letter L-2022-010 dated January 19, 2022)**

**Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 18**

ITS 3.8.1 - page 181 – On ITS 3.8.3 Insert Page 3.8.3-1, insert 1, states, "...If the diesel fuel oil system is not returned to service within 10 days, LCO 3.8.1 Required Actions E.1, E.4, and E.5 apply to Unit 4 and LCO 3.8.2 ACTIONS apply to Unit 3." This proposed Note seems to limit which LCO 3.8.1 required actions should be entered for Unit 4. If the diesel fuel oil system is not returned to service within 10 days, provide an explanation for why LCO 3.8.1 Required Actions E.2 and E.3 are left out of this Note (i.e., why the Note does not point to entering LCO 3.8.1 Condition E for Unit 4) or to entering LCO 3.8.3 Condition F.

**FPL Response:**

The proposed change was crafted in this manner to convert the ITS to match the CTS requirements.

The fuel supply specified for the Unit 3 EDGs (Diesel Oil Storage Tank or temporary storage system) will ensure sufficient fuel for either EDG associated with Unit 3 for at least a week. The fuel supply specified for the Unit 4 EDGs ensures sufficient fuel for each EDG associated with Unit 4 for at least a week. This change was approved under Amendment No 197 and 191 (ADAMS Accession No ML013390410). The NRC SE states, "If 10 days of operation are exceeded using the temporary fuel oil storage system, the appropriate action statements for an inoperable but required Unit 3 EDG will be entered." The PTN CTS Note states that, "If the diesel fuel oil storage tank is not returned to service within 10 days, Technical Specification 3.8.1.1 Action b and 3.8.1.2 Action apply to Unit 4 and Unit 3 respectively." CTS 3.8.1.1, Action b has three Actions:

1. Demonstrate the OPERABILITY of the above required startup transformers and their associated circuits by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter.
2. If the diesel generator became inoperable due to any cause other than an inoperable support system, an independently testable component, or preplanned preventative maintenance or testing, demonstrate the OPERABILITY of the remaining required diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours, unless the absence of any potential common mode failure for the remaining diesel generators is determined. If testing of remaining required diesel generators is required, this testing must be performed regardless of when the inoperable diesel generator is restored to OPERABILITY.
3. Restore the inoperable diesel generator to OPERABLE status within 14 days\*\* or in accordance with the Risk Informed Completion Time Program, or be in at least HOT

**Revisions to the Florida Power & Light Company (FPL) Responses to NRC's Request for Supplemental Information (RSI)**

STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

\*\* 72 hours if inoperability is associated with Action Statement 3.8.1.1.c.

These three Actions in CTS are equivalent to ITS 3.8.1 Required Actions E.1, E.4, and E.5.

**FPL Revised Response:**

FPL has determined to eliminate the exclusion allowed by CTS when the use of the temporary Class ii fuel storage system has exceeded 10 days. All ISTS Required Actions for an inoperable EDG will be followed for the Unit 4 EDGs.

**Discussion of Revised Response:**

As discussed in the revised response to NRC RSI Volume 13 – Section 3.8 (ADAMS Accession No. ML21265A384) Question 4 the allowance provided by the discussion in Insert 11 will not be incorporated in PTN ITS conversion. Therefore, the discussion has been removed.