March 5, 2021
L-2021-051
10 CFR 2.201

U. S. Nuclear Regulatory Commission
ATTN: Document Control Center
Washington, DC 20555-0001

Subject: Turkey Point Nuclear Generating Station
Docket Nos. 50-250 and 50-251
Response to Apparent Violations in NRC Inspection Report 05000250,251/2021-011; EA-20-150

Reference: Turkey Point Nuclear Generating Station – NRC Inspection Report 05000250/2021011 and 05000251/2021011, and Investigation Report 2-2019-025; and Apparent Violations [ML21036A158]

Pursuant to CFR 2.201, enclosed is the Response to the Apparent Violations in NRC Inspection Report 0500250, 251/2021011 and Investigation Report 2-2019-025, issued to Florida Power and Light Company on February 4, 2021.

No new commitments are contained in the letter.

Should you have any questions regarding this reply, please contact Debbie Hendell, Managing Attorney, Nuclear, Florida Power & Light, at 561-304-5238.

Michael Pearce
Site Vice President
Turkey Point Nuclear Plant

cc: Regional Administrator, USNRC, Region II
Resident Inspector, USNRC, Turkey Point
Mark Miller, USNRC, Director of Reactor Projects, Region II

RESPONSE TO APPARENT VIOLATIONS IN NRC INSPECTION REPORT 0500250, 251/2021-011; EA-20-150

APPARENT VIOLATIONS:

1. *Apparent Violation 1 (Appendix B Matter)*: The ROP's significance determination process does not specifically consider willfulness in its assessment of licensee performance. Therefore, it is necessary to address this violation which involves apparent willfulness using traditional enforcement to adequately deter non-compliance.

   10 CFR Part 50 Appendix B, Criterion V, states that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

   Procedure OP-AA-100-1002, Plant Status Control Management" (an FPL implemented safety-related procedure), Step 3.6.7, states, in part, that site personnel are to immediately notify the Operations Shift Manager of any inadvertent bumping or mispositioning of plant components.

   Contrary to the above, on July 10, 2019, the reporting of a mispositioned plant component, an activity affecting quality, was not accomplished in accordance with procedure OP-AA-100-1002. Specifically, site personnel failed to immediately notify the Operations Shift Manager that I&C technicians assigned to work on the 4C charging pump inadvertently manipulated a pressure switch on the 3C charging pump. The I&C technicians, I&C Supervisor and I&C Department Head had several opportunities to report the human performance error to the control room and failed to do so.

2. *Apparent Violation 2 (50.9 Matter)*: The ROP's significance determination process does not specifically consider willfulness in its assessment of licensee performance. Therefore, it is necessary to address this violation which involves apparent willfulness using traditional enforcement to adequately deter non-compliance.

   10 CFR § 50.9(a) states, in part, that information required by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete and accurate in all material respects.

   Contrary to the above, on July 10, 2019, the licensee maintained information recorded in the PS-4-201C WOTD and Breaker/Switch/Valve Manipulation Form (Form 747) associated with WO Package 40632818-01 that was not complete and accurate in all material respects. Specifically, information recorded on both documents was inaccurate because it reflected work performed on the Unit 4C charging pump pressure switch (PS-4-201C), when in fact no work was performed on PS-4-201C. Additionally, the WO contained no documentation or notes explaining that the steps were completed on the wrong component. Records of maintenance of safety-related equipment are material to the NRC because they indicate whether the licensee is performing quality, safety-related activities in accordance with its operating procedure and NRC regulations. Documents associated with WO Package 40632818-01 for the safety-related unit 4C charging pump, are records that the licensee is required to maintain pursuant to 10CFR Part 50, Appendix B, Criterion XVII.

FPL RESPONSE TO THE APPARENT VIOLATIONS:

This response provides FPL's response to the foregoing Apparent Violations involving the aftermath of I&C technicians assigned to work on the 4C charging pump who inadvertently manipulated a pressure switch on the 3C charging pump (Charging Pump Event). Specifically, it addresses the failure to maintain complete and accurate records when I&C personnel recorded inaccurate/incomplete information on Breaker/Switch/Valve Manipulation Form (Form 747) associated with WO Package 40632818-01 (50.9 Matter) and the failure of site personnel to immediately notify the Operations Shift Manager of the Charging Pump Event (Appendix B Matter). It identifies the causes of the 50.9 Matter and Appendix B Matter, explains FPL's position that such incidents are of very low safety significance and outlines FPL's performed and planned corrective actions.

FPL does not contest the Apparent Violations and, as the following discussion will demonstrate, FPL has taken and will continue to take this matter very seriously. However, we believe additional factors should be considered by the NRC in its Severity Level determination and its final disposition of the Apparent Violations.

The Charging Pump Event occurred on July 10, 2019. As discussed below, FPL promptly conducted several layers of inquiry, evaluation and corrective actions upon becoming aware of the event. Following initial investigations into the Charging Pump Event, FPL actions included, but were not limited to, performing an internal investigation, denying the individuals' unescorted site access, terminating their employment, and immediately having the former Site Vice President share the incident in small sessions with station personnel. In addition, FPL conducted a thorough evaluation of the Charging Pump Event as part of a Common Cause Evaluation (CCE). Included in the CCE, was an assessment of the extent of condition by reviewing randomly selected work activities for Turkey Point's Security, Radiation Protection, Operations, and Chemistry departments. This systematic and detailed analysis identified common causes and contributing causes and applied behavioral science and industry benchmarking to develop extensive corrective actions to prevent recurrence. Specifically, the CCE methodology evaluated barriers that affect behavior that could lead to an unethical action. These barriers were rationalizing dishonesty, time between action and consequence, number of opportunities to be dishonest, and recency of ethical reminders. While such efforts proved successful in avoiding additional events, now, more than a year and a half following the Charging Pump Event and CCE, FPL is adopting new corrective actions to ensure the need for complete and accurate records and prompt disclosure of events remain topical in day-to-day operations.

Overall, FPL has taken significant remedial actions in responding to these willful incidents commensurate with the circumstances, such that the actions reflect the seriousness of the incidents, thereby creating a layer of defense in depth and a deterrent effect within the organization. Further, failing to recognize the time, effort and cost to investigate, evaluate and correct the harm created by the Charging Pump Event would be punitive and could act to dissuade other licensees from pursuing aggressive responses.

SAFETY SIGNIFICANCE:

The safety significance of the 50.9 Matter correlates with the safety significance of the Charging Pump Event, which is considered to be low. The 3C Charging Pump was out of service for a very short time. Another charging pump was available and was immediately started and there were no actual consequences to the general safety of the public, nuclear safety, industrial safety

or radiological safety for this condition. This is confirmed by Probabilistic Risk Assessment (PRA). Turkey Point's PRA subject matter expert reviewed the Charging Pump Event and confirmed that the unavailability of the 3C charging pump was less than 4 hours, resulting in a change in core damage probability of less than 3E-10, over 3 orders of magnitude below the established upper boundary (E-06) for a very low safety significance finding in the NRC's Reactor Oversite Process. The planned maintenance on the 4C charging pump was completed with no consequences.

CAUSES OF THE INCIDENTS

FPL conducted a thorough causal analysis of the Charging Pump Event as part of a CCE utilizing external industry experts in investigation of integrity events as well as Turkey Point and fleet resources. In addition to the Charging Pump Event, the CCE team captured a broad swathe of behaviors that could directly or indirectly evidence, or contribute to, potential violations of 10CFR50.5 and 10CFR50.9, collectively referred to as "Integrity Events". The CCE team then systematically identified several common causes, contributing causes, and corrective actions to prevent recurrence.

Initial investigation and interviews of the involved individuals revealed that the immediate cause was Maintenance staff willfully violated procedures and falsified records in an attempt to cover up the unethical behavior.

The underlying causes are as follows:

a) Inadequate site leadership identification and resolution of integrity issues.

b) Members of the site leadership team had not exhibited behaviors that set the standard for integrity and had not exercised accountability for shortfalls in meeting ethical standards.

c) Turkey Point Nuclear Generating Station demonstrated inadequate Nuclear Safety Culture with respect to integrity.

In addition to the common causes, the CCE also identified the following contributing causes:

a) Inadequate oversight of maintenance activity.

b) Inadequate recognition and follow-up of internal and external events related to integrity.

c) Gaps in corrective action program implementation for issues involving integrity.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

In addition to the corrective actions referred to in the Choice Letter (Reference), FPL took significant remedial actions in response to the incidents, commensurate with the circumstances and seriousness of the incidents, to create a deterrent effect within the Turkey Point organization.

Numerous corrective actions were implemented as a result of the CCE. To develop corrective actions, the CCE used a systematic methodology utilizing some of the latest research in the area of integrity. This research identified barriers to integrity including 1) rationalizing

dishonesty, 2) time between action and consequence, 3) the number of opportunities to be dishonest, and 4) recency of ethical reminders. Reducing the number of opportunities to be dishonest and the ability of personnel to rationalize dishonesty is often not practical. Thus, the corrective actions are primarily focused on creating timely ethical reminders (ER), while providing reminders about, and visibility to, timely consequences (TC). Specifically, the systematic analysis of the CCE led to corrective actions that have created a layer of defense in depth creating barriers to prevent integrity events.

Such corrective actions include, but are not limited to, the following:

- To improve detection of Integrity Events, fleet procedure AD-AA-103, Nuclear Safety Culture Program, was updated to expand the semi-annual verification of randomly selected work activities, already being performed across the NextEra fleet for Maintenance, Operations, Radiation Protection and Chemistry Departments, to also include work performed by Security and Emergency Preparedness Departments. The purpose of these verifications is to determine whether the responsible workers were in the correct location to perform assigned duties (by reference to logs, observations. preventative maintenance records, etc.) and whether the duration of time spent at that location was adequate to perform the assigned duties. This action was completed on November 13, 2019. No integrity events at Turkey Point have been identified from this process. (Barrier - TC)

- To increase awareness to potential integrity issues, Turkey Point Department Plan of the Day agendas were revised to include integrity discussions. This action was completed on October 31, 2019. (Barrier – ER)

- To improve detection of similar events, leadership training was developed and implemented for all supervisors, managers, GMLs and Nuclear Watch Engineers on identification of potential integrity events and the actions to take in response to potential integrity events. The training included how to challenge and identify any potential integrity compromises, expectations for entering an integrity issue into CAP, and escalation of potential integrity events to senior site leadership and Human Resources/Legal. This action was completed on 2/28/2020. (Barrier – TC)

- An additional case study from the CCE was presented to Turkey Point staff to reinforce and institutionalize standards and expectations with a focus on complete and accurate documentation. This action was completed on January 23, 2020. (Barrier – ER)

- On October 24, 2019, the Chief Nuclear Officer issued a fleet-wide communication regarding expectations for accurately performing and documenting work activities, focusing on the message, "Your Signature Is Your Word." Then, in 2020, the Chief Nuclear Officer issued a series of communications focused on Nuclear Safety Culture topics including the importance of integrity, the use of the corrective action program, and the meaning of our signature on the documents we sign. (Barrier – ER)

- FPL implemented an annual training requirement for all nuclear fleet employees regarding the Value of Your Signature. The training module includes the importance of providing complete and accurate information to the NRC (10 CFR 50.9), deliberate misconduct (10 CFR 50.5), the potential consequences for violations of 10 CFR 50.5 and 10 CFR 50.9, the need to report errors to the control room and/or management, what it means to sign a quality record, and understanding electronic signatures. The

training addresses both FPL and industry examples of integrity events. This action was completed on 2/28/2020. (Barrier – ER / TC)

- The nuclear fleet's corrective action program condition report screening procedure, PI-AA-104-1000, was revised to require causal analysis for substantiated Nuclear Safety Culture (NSC) events. This includes events such as deliberate misconduct, violations of employee protection regulations, willful violations of NRC requirements, and NSC adverse trends as identified by the Nuclear Safety Culture Monitoring Panel (NSCMP). This action was completed on 11/13/2020. (Barrier – TC)

- The NSC program procedure, AD-AA-103, was revised to require NSCMP review of internal evaluations of substantiated integrity events and all NRC violations related to NSC. This action was completed on 11/13/19. (Barrier – TC)

- Leadership training regarding proper use of corrective action program as it relates to integrity events was developed and implemented. The training includes how to identify potential integrity events and what actions to take and the use of ethical reminders in day-to-day activities. This action was completed on 2/28/2020. (Barrier – TC)

EFFECTIVENESS REVIEWS

- Two interim effectiveness reviews (EFR's) have been completed. One in February 2020 and one in October 2020. Through interviews, document reviews, and Human Resource/Employee Concerns Program data reviews, the actions taken to date were found effective and sustainable.

CORRECTIVE STEPS PLANNED:

- The Chief Nuclear Officer will issue a written fleet wide communication discussing the circumstances leading to the Appendix B Event and 50.9 Event. The communication will stress the importance of procedure adherence, ensuring records are complete and accurate, timely reporting to the control room, and consequences of engaging in deliberate misconduct. This action will be completed by 3/31/2021. (Barrier – ER)

- Turkey Point will utilize the process under fleet procedure PI-AA-102-1003, Rev. 16, Sharing Operating Experience with Nuclear Industry, to share operating experience with the nuclear industry related to this event. This action will be completed by 3/31/2021. A copy of the report will be available to the NRC for review.

- Fleet site access requalification training will be revised to include discussions on: 1) the importance of providing complete and accurate information to the NRC (10 CFR 50.9); 2) deliberate misconduct (10 CFR 50.5); 3) the potential consequences for violations of 10 CFR 50.5 and 10 CFR 50.9; and 4) a behavioral approach to promote honesty and integrity. This action will be completed by 6/30/2021. (Barrier – ER/TC)

- Semi-annual verification of randomly selected work activities at Turkey Point will be continued in accordance with AD-AA-103, Nuclear Safety Culture Program for Operations, Radiation Protection, Chemistry, Security and Emergency Preparedness Departments. For the Maintenance Department, in lieu of the semi-annual verification required by procedure AD-AA-103, FPL will perform two assessments per quarter of safety-related work orders and activities in each of the four sub-departments (FIN, I&C, Electrical, and Mechanical) within the Turkey Point Maintenance department. This will

result in performing at least 4 Work Orders per quarter in each of the four Maintenance department disciplines for a total of 48 Work Orders. The increased frequency will commence in the second quarter of 2021 and revert back to semi-annual at the end of 2021 if there are no further integrity events in 2021. In addition, FPL will conduct unannounced oversight (direct observation of work activity in progress) of 8 randomly selected maintenance work activities at Turkey Point each year by a supervisor. These actions will continue until 12/31/2022. (Barrier – TC)

- Leadership training will be provided to Turkey Point Maintenance Managers/Supervisors regarding compliance with 10 CFR 50.5 and 10 CFR 50.9 and using the 50.9 Event and Appendix B Event as case studies. This action will be completed by 6/30/2021. (Barrier – ER)

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

FPL is currently in full compliance.

SELF-IDENTIFICATION AND ADDITIONAL ENFORCEMENT POLICY CONSIDERATIONS

To the extent these incidents are considered for escalated enforcement action, FPL should receive credit for self-identification. As discussed in the Inspection Report, once FPL identified these issues, FPL: "conducted a prompt review of the issues," "promptly initiated a human performance incident investigation," and "immediately initiated an investigation regarding the behaviors of each of the individuals involved."

Further, several additional aspects of the NRC's Enforcement Policy are relevant in this case. First, it is NRC policy that:

> When a licensee or applicant has corrected inaccurate or incomplete information, the decision to issue an enforcement action for the initial inaccurate or incomplete information normally will depend on the circumstances, including the ease of detection of the error, the timeliness of the correction, whether the NRC or the licensee or applicant identified the problem with the communication, and whether the NRC relied on the information prior to the correction. Generally, if the matter was promptly identified and corrected by the licensee or applicant before the NRC relies on the information, or before the NRC raises a question about the information or before the NRC raises a question about the information, no enforcement action will be taken for the initial inaccurate or incomplete information.
>
> NRC Enforcement Policy at 2.3.11.

As discussed above, for the 50.9 Matter, FPL identified the inaccuracy within hours of the event and promptly performed the work on the correct charging pump. Similarly, with the Appendix B Matter, the Department Head informed the control room of the error on the day of the Charging Pump Event. The NRC did not rely on the information before it was corrected. This counsels in favor of mitigating enforcement action for this event.

In addition, Section 3.3 of the Enforcement Policy allows the NRC to exercise discretion to refrain from issuing an NOV or civil penalty where violations are identified by the licensee as part of the corrective action for previous violations and the violation has a same or similar root cause. Here, FPL identified this issue in part due to FPL's corrective actions following a similar

event in January 2019, which has been addressed in NRC Inspection Report 05000250/2020011 and 05000251/2020011 and Investigation Report 2-2019-011, dated July 23, 2020.

Specifically, that the Charging Pump Event (and therefore the 50.9 Matter) and the Appendix B Matter were willful, and not human performance events, was identified by FPL personnel. Specifically, when the technician identified that the internal communications regarding the Charging Pump Event inaccurately reflected the facts surrounding the event, it brought critical information to FPL's leadership attention. When questioned, the technician attributed his awareness of the need to report such matters to communications and training conducted earlier in 2019 that addressed, among other topics, the consequences of deliberate misconduct.

Subsequent to the Charging Pump Event, FPL performed a common cause evaluation and determined that the events had a set of common causes, as detailed above. And as also discussed above, FPL has instituted a robust set of corrective actions to prevent recurrence of similar integrity events. This provides the NRC with a second, independent reason to exercise discretion mitigating enforcement for this event.

Finally, FPL respectfully submits that the factors the NRC will consider in determining whether to escalate enforcement actions involving willful violations should not counter the arguments set forth above counseling the mitigation of any enforcement action. These factors, set forth in Section 2.2.1.d of the Enforcement Policy, include "the position, training, experience level, and responsibilities of the person involved in the violation (e.g., licensee official or nonsupervisory employee), the significance of any underlying violation, the intent of the violator (i.e., careless disregard or deliberateness), and the economic or other advantage, if any, gained as a result of the violation." While the Appendix B Matter did involve supervisory employees, as noted above, the 50.9 Event only involved non-supervisory employees. Further, both events were promptly corrected by FPL, had a very low safety significance, and offered no economic benefit to FPL.

As a result, if the NRC determines that enforcement action is necessary in this case, FPL respectfully suggests that it should exercise its discretion to reduce the severity level and civil penalty, if any, to acknowledge FPL's initial identification of the issues, its corrective actions stemming from the previous event that helped to identify these events, the low safety significance, and FPL's prompt and comprehensive additional corrective actions.