



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 23, 2014

Mr. Michael Kiley
Turkey Point Nuclear Plant Vice President
Florida Power & Light Company
9760 SW 344th St.
Florida City, FL 33035

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION (NOED) FOR FLORIDA POWER AND LIGHT COMPANY REGARDING TURKEY POINT NUCLEAR GENERATING STATION UNITS 3 AND 4 [NOED NO. 14-2-001]

Dear Mr. Kiley:

By letter dated July 21, 2014, you requested that the NRC exercise discretion to not enforce compliance with Technical Specification (TS) 3.7.4. Your letter documented information previously discussed with the NRC in a telephone conference on July 20, 2014. The principal NRC staff members who participated in that telephone conference are listed in the enclosure. The NRC staff determined that the information in your letter requesting the NOED was consistent with your verbal request.

You stated that on July 20, 2014, at 2:54 p.m. (all times reference Eastern Standard Time), Units 3 and 4 entered TS 3.7.4 Required Action for ultimate heat sink (UHS) average supply water temperature exceeding 100°F and if not restored, you would be required to place the units in Mode 3 within 12 hours, and in Mode 5 within 36 hours. This would result in an unnecessary shutdown of Turkey Point Units 3 and 4 without a corresponding health and safety benefit during a period of high system load demand when the operation of the units is essential for grid voltage stability. You requested that a NOED be granted pursuant to the NRC's policy regarding exercise of discretion for an operating facility, set out in Section 3.8 of the NRC Enforcement Policy. The requested enforcement discretion would end after meeting one of the following conditions: (a) 10 days, or (b) the UHS temperature exceeds 103°F; or (c) the UHS peak temperature drops below 96°F for three consecutive days and is on a declining trend; or (d) receipt of approval of the requested license amendment; or (e) if the loss of Turkey Point Units 3 and 4 will not result in a North American Electric Reliability Corporation (NERC) Emergency Alert Level (EEA) 3 alert. This letter documents the NRC's decision conveyed to you during the telephone conversation on July 20, 2014, at 6:00 p.m., when the NRC verbally granted this NOED request. I understand that the condition causing the need for this NOED has not yet been corrected and that you will continue to monitor UHS conditions.

In June 2014, peak UHS temperatures approached the TS limit of 100°F. Your engineering and environmental analysis determined that the cooling canal system water was absorbing unusual amounts of solar energy due to a higher than normal algae content. You stated that the algae concentration has recently been as high as 1.8 million cells per milliliter as compared to historic average values of 50,000 cells per milliliter. While immediate eradication of the algae was possible, the side effects on the canal ecosystem would be unacceptable.

A controlled chemical treatment of the canal system was initiated and is continuing to gradually restore the normal algae content and improve heat transfer efficiency. This has reduced the algae concentration to 1.5 million cells per millimeter in the last two weeks. Additionally, the much lower than average annual rainfall and consequentially the very low canal water level has also tended to increase UHS temperature. You stated that you have performed multiple analyses that demonstrate the continued operability of Turkey Point Units 3 and 4 at cooling canal temperatures as high as 104°F. The component cooling water (CCW) heat exchanger performance monitoring program required by TS 3/4.7.2 (Surveillance Requirements 4.7.2.a and 4.7.2.b(2)) ensures that at all UHS temperatures at or below 104°F, the CCW heat exchangers are capable of removing more heat than is required by the safety analysis. It is noted that Florida Power and Light (FPL) requested amendments to TS 3/4.7.4 on July 10, 2014, to increase UHS average temperature limit to 104°F. On July 17, 2014, FPL requested that the amendment be approved on an emergency basis.

The NRC staff considered information obtained from the independent entity (Florida Reliability Coordinating Council) in determining if placing Turkey Point Units 3 and 4 in Mode 3 would challenge the ability to maintain an adequate voltage profile throughout the system due to transmission constraints in specific areas and could result in adverse consequences to the health and safety of the public.

To evaluate this NOED request, NRC staff considered your following commitments: (1) to keep a third CCW heat exchanger in service which will only be removed from service for critical maintenance activities or as part of planned compensatory measures during night time hours; (2) the monthly CCW heat exchanger performance test required by TS SR 4.7.2.b(2) has been increased to weekly and will be performed at least twice weekly during the period of enforcement discretion; (3) the CCW heat exchanger cleaning frequency has been increased from one per unit bi-weekly to one per unit weekly with the time that the specified CCW heat exchanger will be out of service minimized; (4) to perform TS SR 4.7.2.a once every hour during the period of enforcement discretion when the UHS temperature is greater than 99°F and will revert to once per shift when the UHS temperature is less than 98°F; (5) verification of UHS temperature will be performed at least once per hour when UHS temperature exceeds 100°F; (6) to perform Just in Time training via tabletop discussion of the "Restoration of Intake Cooling Water" and "Align Service Water to Charging Pumps" procedures; (7) switchyard work that would impact grid reliability will be restricted during the NOED period and grid conditions will be verified at least once every 24 hours; (8) performance of other surveillance requirements will be minimized to the extent possible without creating a situation of a missed surveillance, and elective maintenance activities that are classified as high risk due to generation threat will be minimized; (9) PRA risk for both Units 3 and 4 will be maintained GREEN during planned maintenance activities; and (10) to increase management oversight to resolve any issues in a timely manner. NRC staff also considered that your calculated Incremental Conditional Large Early Release Probability values for Units 3 and 4 did not exceed the threshold guidance provided in Inspection Manual Chapter 0410, "Notices of Enforcement Discretion" and were consistent with values calculated by NRC regional analysts. In addition, the conditions and actions noted above have been, and will be, subject to independent verification by NRC inspectors.

M. Kiley

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On the basis of the NRC staff's evaluation of your request, I have concluded that granting this NOED is consistent with the Enforcement Policy and NRC staff guidance and has no adverse impact on public health and safety or the environment. This determination was qualitative and based upon balancing the effect on public health and safety of not operating, against the potential radiological or other hazards associated with continued operation (Inspection Manual Chapter 0410, Section 06.02.b, (i.e., natural event NOED)). Therefore, it is our intention to exercise discretion to not enforce compliance with TS LCO 3.7.4 from 6:00 p.m., on July 20, 2014 until one of the previously mentioned end conditions is met. It is also noted that your emergent license amendment is being reviewed by NRC staff.

As stated in the Enforcement Policy, action will be taken, to the extent that violations were involved, for the root cause that led to the non-compliance for which this NOED was necessary.

Sincerely,

/RA/

Victor M. McCree
Regional Administrator

Docket Nos.: 50-250, 50-251
License Nos.: DPR-31, DPR-41

Enclosure: List of Participants

cc: Distribution via Listserv

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ADAMS: X Yes ACCESSION NUMBER: _____ X SUNSI REVIEW COMPLETE

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SIGNATURE	PJM /RA/	MSL /RA/	JTM /RA/	PJM /RA for/	LDW /RA/	VMM /RA/	
NAME	PMcKenna	MLesser	JMunday	RLantz	LWert	VMcCree	
DATE	07/22/2014	07/22/2014	07/22/2014	07/22/2014	07/23/2014	07/23/2014	
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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Letter to Michael Kiley from Victor M. McCree dated July 23, 2014

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Enclosure