



Crystal River Nuclear Plant
15760 W. Power Line Street
Crystal River, FL 34428

Docket 50-302
Operating License No. DPR-72

May 13, 2013
3F0513-02

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Crystal River Unit 3 – Request for Rescission of Fukushima Orders (EA-12-049 and EA-12-051)

- References:
1. NRC to FPC letter dated March 13, 2013, "Crystal River Unit 3 Nuclear Generating Plant Certification of Permanent Cessation of Operation and Permanent Removal of Fuel from the Reactor" (ADAMS Accession No. ML13058A380)
 2. EA-12-049, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012 (ADAMS Accession No. ML12054A735)
 3. EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ADAMS Accession No. ML12054A679)
 4. Duke Energy to NRC Letter, "Carolina Power & Light Company and Florida Power Corporation's Initial Status Report In Response To March 12, 2012, Commission Order Modifying Licenses With Regard To Requirements For Mitigation Strategies For Beyond-Design-Basis External Events (Order Number EA-12-049)," dated October 29, 2012 (ADAMS Accession No. ML12307A021)
 5. Duke Energy to NRC Letter, "Carolina Power & Light Company And Florida Power Corporation's Initial Status Report In Response To March 12, 2012, Commission Order Modifying Licenses With Regard To Requirements For Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated October 29, 2012 (ADAMS Accession No. ML12307A020)
 6. NRC to CR-3 Letter, "Crystal River Unit 3 Nuclear Generating Plant - Relaxation of Schedule Requirements for Orders EA-12-049 and EA-12-051," dated February 25, 2013 (ADAMS Accession No. ML13052A670)

Dear Sir:

In accordance with 10 CFR 50.4, Duke Energy Florida, Inc. (DEF), formerly known as Florida Power Corporation (FPC), was obligated to submit an Overall Integrated Plan (OIP) on or before February 28, 2013, regarding implementation of Orders EA-12-049 and EA-12-051 at Crystal River Unit 3 (CR-3). DEF was working to fully comply with this obligation when Duke Energy, the parent company for FPC, announced on February 5, 2013, that CR-3 would be retired.

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In Reference 1, the NRC acknowledged CR-3's certification of permanent cessation of power operation and permanent removal of fuel from the reactor vessel. Accordingly, pursuant to 10 CFR 50.82(a)(2), the 10 CFR Part 50 license for CR-3 no longer authorizes operation of the reactor or emplacement or retention of fuel in the reactor vessel.

The announcement to retire CR-3 significantly impacted the OIPs that had been prepared for CR-3. Therefore, FPC requested and the Director, Nuclear Reactor Regulation granted (Reference 6) an extension of the OIP submittal due date by six months, to August 28, 2013, in order to complete a review and assessment of the above Orders and associated OIPs for their continued applicability and to ensure their completeness.

Order EA-12-051 requires that reliable spent fuel instrumentation be installed in the spent fuel pools (SFPs). The NRC issued Interim Staff Guidance (ISG) JLD-ISG-2012-03, "Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation," in order to provide guidance for complying with Order EA-12-051. The NRC staff's guidance in JLD-ISG-2012-03 endorsed Nuclear Energy Institute (NEI) 12-02, Rev. 1, "Industry Guidance for Compliance with NRC Order EA-12-051," subject to clarifications and exceptions. However, there were no clarifications or exceptions identified to NEI 12-02, Rev. 1, Section 2.3, which states, in part:

Conversely, for purposes of implementation of this order and guideline, pools that have the following distinct characteristics are not spent fuel pools:

- *Spent fuel pools that contain no fuel used in a reactor vessel for power generation within the past five years, or*

CR-3 has been safely shutdown since September 26, 2009, when the plant entered the Cycle 16 refueling outage to replace the steam generators. Since September 26, 2009, fuel was reloaded into the reactor vessel once in anticipation of unit restart. However, restart was subsequently deferred and the fuel was off loaded to the spent fuel pools where it currently resides. The final removal of fuel from the reactor vessel was completed on May 28, 2011. No fuel has been used in the reactor vessel for power generation since the CR-3 shutdown began on September 26, 2009. By the required implementation due date of the Order (i.e., December 31, 2016), fuel at CR-3 will not have been used in the reactor vessel for power generation for over seven years. Thus, in accordance with JLD-ISG-2012-03, the spent fuel pools at CR-3 should not be considered spent fuel pools subject to EA-12-051. As such, no enhancements to spent fuel instrumentation are necessary and Duke Energy believes that rescission of EA-12-051 is warranted as it applies to CR-3.

Order EA-12-049 requires that mitigating strategies be developed and implemented to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities. The currently prepared strategies at CR-3 assumed concurrent challenges of cooling the core in the vessel, maintaining Reactor Coolant System (RCS) inventory and containment function as well as monitoring and managing conditions in the spent fuel pools. However, the conditions at CR-3 that are substantially different from those anticipated with the Order are summarized below:

- There is no fuel in the core to cool. Thus, core cooling is unnecessary.
- The RCS is no longer pressurized or generally subject to forced flow so there is limited motive force to cause leakage.

- The primary challenge to the containment would come from mass energy losses from the primary and secondary systems to the containment during power operations. With the plant shutdown, these systems will not appreciably add energy to the containment.

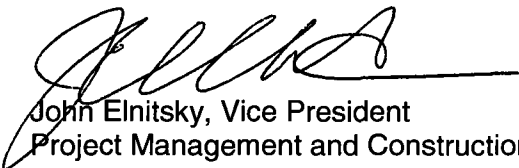
With all the fuel discharged to the spent fuel pools, this safety function becomes the primary focus. The fuel has not been used for power generation for over 3 and a half years and the current heat load would not result in bulk temperatures over 200°F for greater than 95 hours with no forced cooling. By the required implementation date, this value will be longer and is considered sufficient time to implement an effective means of mitigating spent fuel pool inventory using existing equipment and procedures.

Therefore, since the safety functions addressed in the Order are fully satisfied without taking any additional actions, Duke Energy Florida, Inc., believes it has shown good cause for the NRC to rescind Orders EA-12-049 and EA-12-051 for CR-3.

If you have any questions regarding this submittal, please contact Mr. Dan Westcott, Licensing Supervisor, at (352) 563-4796.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 13, 2013

Sincerely,



John Elnitsky, Vice President
Project Management and Construction

JE/krw

xc: NRR Project Manager
Fukushima Project Manager
Regional Administrator, Region II
Senior Resident Inspector