



Dianne M. Triplett
ASSOCIATE GENERAL COUNSEL
Duke Energy Florida, Inc.

March 18, 2015

Via ELECTRONIC DELIVERY

Ms. Carlotta Stauffer, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket 150000-OT – Crystal River Unit 3 – DEF post-shutdown activities

Ms. Stauffer:

Pursuant to and in compliance with Rule 25-6.04365(6), F.A.C., please find enclosed for filing on behalf of Duke Energy Florida, Inc. ("DEF"), recent correspondence from the Nuclear Regulatory Commission ("NRC") in response to DEF's Post-Shutdown Decommissioning Activities Report previously filed with the NRC and the Florida Public Service Commission.

Thank you for your assistance in this matter. If you have any questions, please feel free to contact me at (727) 820-4692.

Sincerely,

/s/ Dianne M. Triplett

Dianne M. Triplett

DT:at
Attachment



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 11, 2015

Mr. Terry D. Hobbs
General Manager, Decommissioning
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, FL 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT
POST-SHUTDOWN DECOMMISSIONING ACTIVITIES REPORT

Dear Mr. Hobbs:

By letter dated December 2, 2013, Duke Energy Florida, Inc. (DEF, the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) the Post-Shutdown Decommissioning Activities Report (PSDAR), including the Site-Specific Decommissioning Cost Estimate (DCE), for Crystal River Unit 3 Nuclear Generating Plant (CR-3) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13343A183), pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.82(a)(4). The PSDAR was supplemented by letter dated June 17, 2014 (ADAMS Accession No. ML14178B285). The licensee had previously certified on February 20, 2013 (ADAMS Accession No. ML13056A005), that it had permanently ceased reactor operations, permanently removed all fuel from the reactor vessel, and is temporarily storing the spent fuel in the spent fuel pool.

Pursuant to 10 CFR 50.82(a)(4)(i), the PSDAR must contain a description of the planned decommissioning activities along with a schedule for their accomplishment, a discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate, previously issued environmental impact statements, and a site-specific DCE, including the projected cost of managing irradiated fuel. Additionally, pursuant to 10 CFR 50.82(a)(3), decommissioning is to be completed within 60 years of permanent cessation of operations. The regulations do not require the NRC to approve a licensee's submitted PSDAR before decommissioning activities can take place.

The public was offered opportunities to comment on the PSDAR. The PSDAR was noticed for comment on December 5, 2013, in the *Federal Register* (78 FR 79709). The NRC staff requested that comments be submitted within 90 days.

The NRC staff also held a public meeting in the vicinity of CR-3 on January 16, 2014, to discuss the decommissioning process and receive comments and questions from the public regarding the PSDAR. A summary of the meeting can be found at ADAMS Accession No. ML14034A026. The public's questions and comments, and the NRC staff's responses, are available for review in the transcript of the meeting (ADAMS Accession Number ML14034A024) beginning on page 31. The NRC staff also encouraged members of the public to submit their comments, in written form, through one of the several available formats discussed during the meeting.

At the conclusion of the 90-day comment period, the NRC staff received comments from 8 stakeholders. Full text versions of the comments can be viewed at <http://www.regulations.gov>, by searching on Docket NRC-2013-0283 and selecting "Open Docket Folder," or at ADAMS Accession No. ML15022A612.

Comments received electronically and those presented in the public meeting generally fell into three categories: (1) comments that were specifically addressed during the NRC staff's review, (2) comments that were considered during our review, but for which additional information from the licensee was not needed, and (3) comments that were found to be outside the regulatory purview of the NRC, or were not relevant to the review performed by the NRC staff and thus were not considered, as detailed below.

The public questions and comments the staff considered during its review of the PSDAR, including those specifically addressed by the staff in information requests with the licensee or during the January 16, 2014, public meeting, are summarized below:

- Questions or comments about the use decommissioning trust fund resources for expenses other than those defined in 10 CFR 50.2;
- Questions or comments about the date that the permanent national high level waste storage facility is assumed to be available;
- Questions or comments about how specific costs are treated in the financial analysis regarding waste disposal;
- Questions or comments on spent fuel management costs, including construction and management of an independent spent fuel storage installation;
- Questions or comments about the damaged CR-3 containment structure's relevance to the revised design basis of the facility;
- Questions or comments about the description of the licensee's activities planned during the various decommissioning periods;
- Questions or comments about whether there is reasonable assurance that sufficient funds are available to decommission the facility, and who manages those funds; and
- Questions or comments about the environmental impact of the decommissioning and the maintenance of the historical site assessment.

Public comments or questions that were considered by the NRC staff during its review of the PSDAR but were found to be outside of the NRC's regulatory purview or outside the scope of the NRC staff's review of the PSDAR, as defined in 10 CFR 50.82(a)(4)(i), are summarized below:

- Questions or comments regarding the formation of non-governmental citizen oversight committees;
- Questions or comments regarding the appropriateness or reasonableness of allowing the licensee to pass maintenance and decommissioning costs to the customer;
- Questions about whether organizations are currently working on methods of converting spent nuclear fuel into inert materials;
- Questions or comments regarding the specific condition of various plant components, including the condition of the spent fuel in the SFP;

- Questions or comments regarding the specifics of the spent fuel disposal or greater than class C waste;
- Questions or comments regarding the licensee's purpose for the proposed decommissioning schedule;
- Questions or comments regarding the transportation of low level radioactive material and its ultimate storage;
- Questions on the condition of plant components (e.g., are they "highly radioactive," or sellable?), or their ultimate burial location;
- Questions or comments on the cost or benefit of the licensee using wet versus dry spent fuel storage;
- Question or comments relating to regulatory requirements that the licensee must meet (e.g., emergency planning requirements of 10 CFR 50.54(q));
- Questions or comments postulating conditions beyond the design of the plant, or where a nexus to safety is not clear, or describing events of a speculative nature;
- Questions or comments about who is responsible for the containment building damage or the cost of the decommissioning;
- Questions or comments about reviews, inspections, or processes that are defined in current regulations or publically available documents;
- Questions or comments on the acceptability of current NRC regulations; and
- Questions or comments about activities that are regulated by the other entities.

Following review of the information submitted by the licensee and considering the comments provided by the public, the NRC staff requested additional information (ADAMS Accession Nos. ML14104A039 and ML14133A503) from the licensee regarding the content of the PSDAR. The licensee responded to the staff's information request by letter dated June 17, 2014 (ADAMS Accession No. ML14178B285).

The NRC staff reviewed the PSDAR and DCE against the requirements in 10 CFR 50.82(a) and considering the guidance in Regulatory Guide (RG) 1.185, Revision 1, "Standard Format and Content for Post-Shutdown Decommissioning Activities Report," and concludes the following:

1. Section 2.0 of the PSDAR, "Description of Planned Decommissioning Activities," and the DCE provide the applicable information identified in Section C(1) of RG 1.185. The NRC staff's review found that the licensee described the activities associated with the major periods or milestones related to the decommissioning, as required by 10 CFR 50.82(a)(4)(i) and consistent with RG 1.185. These periods included Preparations (for Dormancy), Dormancy, Preparations for Decommissioning, Decommissioning, and Site Restoration.
2. Section 3.0 of the PSDAR, "Schedule of Decommissioning Activities," and the DCE provide the estimated dates for initiation and completion of major decommissioning activities, as required by 10 CFR 50.82(a)(4)(i) and consistent with Section C(2) of RG 1.185. The NRC staff finds that the schedule for decommissioning activities is adequate to achieve CR-3 license termination within 60 years of permanent cessation of operations, as required by 10 CFR 50.82(a)(3).

3. Section 4.0 of the PSDAR, "Estimated of Expected Decommissioning and Spent Fuel Management Costs," and the DCE provide an estimate of the expected decommissioning costs for CR-3. DEF estimated the total decommissioning cost of CR-3 to be approximately \$861.9 million (in 2013 dollars), which is greater than the NRC minimum decommissioning cost of \$483.3 million (in 2013 dollars). The NRC staff finds that DEF's site-specific DCE and the cost of long-term storage of spent fuel for CR-3 are not unreasonable, are described consistent with the guidance in R.G. 1.185, provide sufficient details associated with the funding mechanisms, and meet the requirements of 10 CFR 50.82(a)(4)(i).
4. Section 5.0 of the PSDAR, "Environmental Impacts," provides a discussion of the potential environmental impacts associated with CR-3 decommissioning activities, as identified by Section C(4) of RG 1.185. The PSDAR includes a comparison of potential environmental impacts from CR-3 planned decommissioning activities with impacts from similar activities provided in NUREG-0586, Initial Report, "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities," dated August 1988 (GEIS) and Supplement 1, dated November 2002. The GEIS and supplement evaluated the environmental impacts of decommissioning activities at nuclear power reactors necessary to reduce residual radioactivity to levels that allow for the termination of the NRC license. The licensee compared the CR-3 facility to the reference facility in NUREG-0586 and found that the CR-3 environmental impacts were all bounded by the analyses provided in NUREG-0586. After reviewing the licensee's comparison, the NRC staff finds that that the potential environmental impacts associated with the CR-3 decommissioning activities are bounded by the previously issued GEIS and its supplement, are described consistent with the guidance in R.G. 1.185, and meet the requirements of 10 CFR 50.82(a)(4)(i).

Based on this review, the NRC staff finds that the PSDAR contains the information required by 10 CFR 50.82(a)(4)(i), and is consistent with R.G. 1.185. In accordance with 10 CFR 50.82(a)(7), DEF must notify the NRC in writing before performing any significant decommissioning activity inconsistent with, or making a significant schedule change from, the planned decommissioning activities or schedules described in the PSDAR, including changes that significantly increase the decommissioning costs.

In accordance with 10 CFR Part 2, "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

T. Hobbs

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If you have any questions regarding this letter, please contact Michael Orenak, at (301) 415-3229, or by e-mail at Michael.Orenak@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael D. Orenak". The signature is written in a cursive style with a large initial "M".

Michael D. Orenak, Project Manager
Plant Licensing IV-2 and Decommissioning
Transition Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-302

cc: Distribution via Listserv

T. Hobbs

- 5 -

If you have any questions regarding this letter, please contact Michael Orenak, at (301) 415-3229, or by e-mail at Michael.Orenak@nrc.gov.

Sincerely,

/RA/

Michael D. Orenak, Project Manager
Plant Licensing IV-2 and Decommissioning
Transition Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-302

cc: Distribution via Listserv

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*** via memo**

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DATE	11/20/2014	11/19/2014	11/19/2014	11/24/2014
OFFICE	NRR/DLR/RERB/BC	NRR/DIRS/IFIB/BC	NRR/DORL/LPL4-2/BC	NRR/DORL/LPL4-2/PM
NAME	DWrona	MDusaniwskyj*	MKhanna	MOrenak
DATE	12/12/2014	7/7/2014	3/11/2015	3/11/2015

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