



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

May 15, 2013

Mr. Terry Hobbs, Plant General Manager
Crystal River Nuclear Plant (NA1B)
15760 West Power Line Street
Crystal River, FL 34428-6708

**SUBJECT: NUCLEAR REGULATORY COMMISSION OVERSIGHT OF THE CRYSTAL
RIVER UNIT 3 NUCLEAR GENERATING PLANT**

Dear Mr. Hobbs:

This letter is to inform you that the U.S. Nuclear Regulatory Commission (NRC) will conduct oversight of licensed activities at the Crystal River Unit 3 Nuclear Generating Plant in accordance with the Decommissioning Power Reactor Inspection Program described in Inspection Manual Chapter 2561. Since Florida Power Corporation certified cessation of power operations and the permanent removal of fuel from the Crystal River Unit 3 reactor vessel by letter to the NRC dated February 20, 2013, the NRC will no longer use the Reactor Oversight Process and the inspection program described in Inspection Manual Chapter 2515, Light Water Reactor Inspection Program – Operations Phase, when conducting oversight activities at Crystal River. Therefore, it is no longer necessary to report Reactor Oversight Process performance indicator data for Crystal River Unit 3 as described in Inspection Manual Chapter 0608, Performance Indicator Program. Although the inspection program for NRC oversight at your facility will change substantially, all license commitments remain in effect until altered by formal action from the NRC.

When Florida Power Corporation certified permanent cessation of power operations to the NRC, it had not yet fully staffed a decommissioning organization and had not formulated a schedule of decommissioning activities. Therefore, the NRC was not able to immediately formulate plans to fully implement the decommissioning inspection program. In order to allow for a reasonable transition from the Reactor Oversight Process to the Decommissioning Power Reactor Inspection Program, NRC Region II will conduct inspections in accordance with the attached inspection plan. NRC Region I will take responsibility for oversight of Crystal River in the near future and will develop a comprehensive inspection plan which will replace the attached transition plan and fully implement Inspection Manual Chapter 2561.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). Adams is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

T. Hobbs

2

Please contact Dan Rich at (404) 997-4721 with any questions you may have regarding this letter.

Sincerely,

/RA/

Victor M. McCree
Regional Administrator

Docket No. 50-302
License No. DPR-72

Enclosure: Crystal River Interim Master Inspection Plan

cc w/encl: (See page 3)

T. Hobbs

2

Please contact Dan Rich at (404) 997-4721 with any questions you may have regarding this letter.

Sincerely,

/RA/

Victor M. McCree
Regional Administrator

Docket No.: 50-302
License No.: DPR-72

Enclosure: Crystal River Interim Master Inspection Plan

cc w/encl: (See page 3)

***FOR PREVIOUS CONCURRENCE SEE ATTACHED SHEET**

☒PUBLICLY AVAILABLE

NON-PUBLICLY AVAILABLE

SENSITIVE

☒ NON-SENSITIVE

ADAMS: ☒Yes

ACCESSION NUMBER: _____

☒ SUNSI REVIEW COMPLETE ☒FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	NRR:DIRS	NSIR:DSO	NSIR:DPR	RII:DRP	RII:DRP
SIGNATURE	DWR:/RA/	RPC: /RA/	Via email	Via email	Via email	LXW:/RA/	VMM:/RA/
NAME	*DRich	*RCroteau	*HNieh	*PHolahan	*MThaggard	LWert	VMcCree
DATE	5/8/2013	5/13/2013	5/2/2013	5/10/2013	5/13/2013	5/13/2013	5/14/2013
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: [HTTP://PORTAL.NRC.GOV/EDO/RII/DRP/BRANCH3/CR/OTHER](http://portal.nrc.gov/EDO/RII/DRP/BRANCH3/CR/OTHER)
REPORTS RPV ISSUE/IMC 2561/CR 2561 LETTER TO DUKE.DOCX

cc w/encl:

Lara S. Nichols
Deputy General Counsel
Duke Energy Corporation
Electronic Mail Distribution

M. Christopher Nolan
Director - Regulatory Affairs
General Office
Duke Energy Corporation
Electronic Mail Distribution

Regis T. Repko
Senior Vice President
Duke Energy Corporation
Electronic Mail Distribution

Richard A. Wiemann
Superintendent, Nuclear Oversight
Crystal River Nuclear Plant
Electronic Mail Distribution

Brian C. McCabe
Manager, Nuclear Oversight
Shearon Harris Nuclear Power Plant
Progress Energy
Electronic Mail Distribution

Blair P. Wunderly
Director - Engineering Nuclear
Crystal River Nuclear Plant (NA2C)
Electronic Mail Distribution

R. Alexander Glenn
General Counsel
Progress Energy
Electronic Mail Distribution

Donna B. Alexander
Manager, Nuclear Regulatory Affairs (interim)
Progress Energy
Electronic Mail Distribution

Cynthia Becker
(Acting) Chief
Florida Bureau of Radiation Control
Department of Health
Electronic Mail Distribution

Daniel R. Westcott
Supervisor
Licensing & Regulatory Programs
Crystal River Nuclear Plant (NA1B)
Electronic Mail Distribution

Joseph W. Donahue
Vice President
Nuclear Oversight
Progress Energy
Electronic Mail Distribution

David T. Conley
Senior Counsel
Legal Department
Progress Energy
Electronic Mail Distribution

Mark Rigsby
Manager, Support Services - Nuclear
Crystal River Nuclear Plant (NA2C)
Electronic Mail Distribution

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Crystal River Nuclear Generating Plant
6745 N Tallahassee Rd
Crystal River, FL 34428

Attorney General
Department of Legal Affairs
The Capitol PL-01
Tallahassee, FL 32399-1050

Bryan Koon
Director
Florida Division of Emergency Management
Electronic Mail Distribution

Chairman
Board of County Commissioners
Citrus County
110 N. Apopka Avenue
Inverness, FL 36250

T. Hobbs

4

Letter to Terry Hobbs from Victor M. McCree dated May 15, 2013.

SUBJECT: NUCLEAR REGULATORY COMMISSION OVERSIGHT OF THE CRYSTAL
RIVER UNIT 3 NUCLEAR GENERATING PLANT

Distribution w/encl:

C. Evans, RII EICS

L. Douglas, RII EICS

B. Watson, FSME/DWMEP/DURLD/RD

M. Ferdas, RI DNMS/DB

OE Mail

RIDSNRRDIRS

PUBLIC

RidsNrrPMCystal River Resource

INTERIM MASTER INSPECTION PLAN

- Plant:** Crystal River Unit 3
- Inspection Dates:** Inspection under this plan will begin on approval and will continue until administration of the decommissioning inspection program for Crystal River has been transitioned from Region II to Region I.
- Documentation:** Inspection results will be documented in quarterly integrated inspection reports using the guidance provided by Inspection Manual Chapter 0612, "Power Reactor Inspection Reports." Division of Reactor Safety (DRS) team inspection results may be documented in separate reports.
- Inspection Procedures:**
- DRP Inspection Procedures
- | | |
|----------|---|
| 71111.01 | Adverse Weather Protection |
| 71111.04 | Equipment Alignment |
| 71111.05 | Fire Protection |
| 71111.12 | Maintenance Effectiveness |
| 71111.18 | Plant Modifications |
| 71111.20 | Refueling and Other Outage Activities |
| 71152 | Problem Identification and Resolution (PI&R) |
| 71153 | Event Follow-up & Notices of Enforcement Discretion |
| 71130.11 | Material Control & Accounting (MC&A) |
| IMC 2515 | Plant Status (App. D) |
- DRS Inspection Procedures
- | | |
|----------|---|
| 71111.11 | Biennial Licensed Operator Requalification |
| 71114 | Reactor Safety Emergency Preparedness baseline inspections (entire series) |
| 71124 | Radiation Safety—Public and Occupational baseline Inspections (entire series) |
| 71130 | Security baseline inspections |
- Inspectors:** Qualified inspectors
- Licensee Contact:** Dennis Herrin, Lead Engineer, Licensing
352-563-4633
- Inspection Objectives:**
1. To verify that the licensee's activities during the transition to decommissioning are adequate and in conformance with requirements in the facility license, licensing commitments, and regulations.
 2. To identify declining trends in performance and perform inspections to verify that the licensee has resolved issue(s) before performance declines below an acceptable level.

Enclosure

3. Verify that activities during the transition to decommissioning maintain adequate radiation protection, security, emergency preparedness, and spent fuel protection controls.

Resource Estimate & T&A: Hours of direct inspection effort will not exceed fiscal year 2013 budget. Inspectors should charge direct baseline inspection effort to the appropriate inspection procedure using task code BI. Time spent preparing for the inspection and entrance meeting is charged to task code BIP and time spent for the exit meeting and all documentation is charged to task code BID. DRS team inspections may require the use of different task codes.

Background: Crystal River Unit 3 shut down in September of 2009 for a planned steam generator replacement outage. While creating the steam generator opening, workers discovered an unexpected crack in the containment concrete wall. In 2011, after repairing the initial damage and while returning the containment structure to service, additional cracking occurred in other sections of the containment concrete wall. The unit remained shut down, with the reactor core fully off-loaded to the spent fuel pool, while the licensee evaluated whether to repair or retire the unit.

On February 5, 2013, Progress Energy (a subsidiary of Duke Energy) publically announced their intention to retire Crystal River Unit 3 and proceed with decommissioning. The NRC has been conducting ROP baseline inspections at the site in accordance with Inspection Manual Chapter (IMC) 0351, "Implementation of the Reactor Oversight Process at Reactor Facilities in an Extended Shutdown Condition for Reasons Other Than Significant Performance Problems." The latest revision to the inspection plan was approved on January 18, 2013, and is electronically available from the Publicly Available Record (PARS) component of the NRC's document system (ADAMS) under ML13016A115.

On February 20, 2013, Progress Energy certified to the NRC the permanent removal of fuel from the Crystal River Unit 3 reactor vessel. According to IMC 2561, "Decommissioning Power Reactor Inspection Program," the decommissioning inspection program is to be implemented following the certification date for the removal of all fuel from the reactor vessel. In order to allow for transition from the Reactor Oversight Process to the Decommissioning Power Reactor Inspection Program, oversight of licensed activities at Crystal River will be accomplished using the IMC 2515 baseline inspection procedures whose inspection objectives are aligned with the core decommissioning inspection procedures specified in IMC 2561. The inspections identified in this plan ensure that activities performed by the licensee are inspected as intended in IMC 2561 and the associated decommissioning core inspection procedures.

I. DRP INSPECTION ACTIVITIES

The following inspection procedures (IP) will be completed as specified below. The associated decommissioning core inspection procedures should be utilized as additional guidance when planning inspections. Inspection scope and sample selection should be focused on those structures, systems, and components (SSCs) required to maintain the safety of spent fuel and minimize the spread of contamination.

IMC 2515 Procedures	Inspection scope	IMC 2561 Procedures
71111.01 Adverse Weather Protection	<p>Conduct one annual review of the site's hurricane season preparations prior to the onset of hurricane season. Normally completed 2nd quarter.</p> <p>Inspector may conduct review(s) of readiness for impending adverse weather conditions (e.g., tornado, high winds, etc.) if an inspector is onsite prior to onset of imminent adverse weather conditions.</p> <p>Conduct one annual review of the site's readiness for seasonal extreme weather conditions (typically cold weather readiness completed during the 4th or 1st quarters).</p>	71714 Cold Weather Preparations
71111.04 Equipment Alignment	Perform one annual complete alignment review of spent fuel pool (SFP) system or a SFP support system.	71801 Decommissioning Performance and Status Review at PSRs
71111.05 Fire Protection	Walk down at least one plant fire area important to SFP pool safety (per quarter).	71801 Decommissioning Performance and Status Review at PSRs
71111.12 Maintenance Effectiveness	Perform one annual maintenance effectiveness review on those structures, systems and components important to spent fuel safety. The review should included in-service test results and system heat exchanger performance to verify that maintenance has been effective in maintaining the availability and capability of those systems required to remove decay heat from spent fuel.	62801 Maintenance and Surveillance at PSRs

IMC 2515 Procedures	Inspection scope	IMC 2561 Procedures
71111.18 Plant Modifications	Review modifications (no minimum specified - as samples become available). Note: Availability of samples may be limited during the transition period. Containment detensioning and stabilization activities may be reviewed under this IP since these activities will be implemented via the 10CFR50.59 process.	37801 Safety Reviews, Design Changes, and Modifications at PSRs
71111.20 Refueling and Other Outage Activities	Verify SFP FME controls and SFP protection (no minimum number of samples required – performed while on-site)	60801 Spent Fuel Pool Safety at PSRs
71152 Problem Identification and Resolution	Perform routine corrective action program (CAP) review activities, as applicable, while on-site (no minimum number of samples required). Note: The annual operator work-around review is not applicable with the core fully off-loaded to the spent fuel pool.	40801 Self-Assessment, Auditing, and Corrective Action at PSRs
71153 Event Follow- up and Notices of Enforcement Discretion	Complete as specified by IP (no minimum number of samples required).	N/A
71130.11 Material Control and Accounting (MC&A)	Conduct triennial review of Material Control & Accounting. Last completed 3 rd Qtr 2010 (IR 05000302/2010403)	N/A
IMC 2515, App D Plant Status	Conduct plant status inspection activities, as applicable, focusing on SSCs necessary for the safe storage of spent fuel including security, radiation protection, and emergency preparedness areas. Periodically discuss with licensee representatives the status of decommissioning activities, problems encountered, and performance insights.	71801 Decommissioning Performance and Status Review at PSRs

II. DRS INSPECTION ACTIVITIES

The following team inspections will be completed during the transition period (inspection dates TBD):

IP Number	Title	Comments
71111.11	Biennial Licensed Operator Requalification	Inspection in this area will focus heavily on fuel handling activities associated with spent fuel and associated support systems.
71114	Reactor Safety Emergency Preparedness baseline inspections (including all attachments)	Adjust schedule and scope based on licensee's schedule of decommissioning activities and current licensing basis. IPs 82301, 82302, and 82701 may be used as additional guidance for these inspections during the transition period.
71124	Radiation Safety—Public and Occupational baseline inspections (including all attachments)	Adjust schedule and scope based on licensee's schedule of decommissioning activities. IMC 2561 decommissioning IPs 83750, 84750, 86750 may be used as additional guidance for these inspections during the transition period.
71130	Security baseline inspections	Adjust schedule and scope based on licensee's schedule of decommissioning activities and current licensing basis.

INSPECTIONS NOT COMPLETED DURING TRANSITION

a. The following DRP inspections will not be completed during the transition period:

IP Number	Title	Comments
71111.06	Flood Protection Measures	This inspection focuses on internal flooding which could cause initiating events or cause loss of safe-shutdown equipment. Not applicable for site already in safe-shutdown condition.

Enclosure

IP Number	Title	Comments
71111.07	Heat Sink Performance (annual review)	Inspections performed in Section I of this attachment are sufficient to monitor performance issues of heat exchangers important to SFP safety.
71111.11	Licensed Operator Requalification Training & Control Room Observations (Quarterly and Annual Review by Residents)	Operator requalification training program is no longer applicable. Operators will ultimately be trained as non-licensed certified fuel handlers for decommissioning. Control Room observations are not applicable due to lack of periods of heightened activity in the control room.
71111.13	Maintenance Risk Assessment & Emergent Work Control	IP is not applicable with all fuel off-loaded to the SFP.
71111.15	Operability Determination and Functionality Assessments	Inspections performed in Section I of this attachment are sufficient to review degraded equipment issues at the site.
71111.19	Post Maintenance Testing	Inspections performed under Section I of this attachment are sufficient to monitor licensee performance in this area.
71111.22	Surveillance Testing	Inspections performed under Section I of this attachment are sufficient to monitor licensee performance in this area.
71114.06	Drill Evaluation (resident portion)	Inspections performed under Section II of this attachment are sufficient to monitor licensee performance in this area.
71151	Performance Indicator Verification	IP is not applicable for a permanently shut down plant

IP Number	Title	Comments
71152	PI&R (Biennial)	Inspections performed under Sections I and II of this attachment are sufficient to monitor licensee performance in this area.

b. The following DRS inspections will not be completed during the transition period:

IP Number	Title	Comments
71111.05	Fire Protection Inspection (Triennial)	Inspections performed under Section I of this attachment are sufficient to monitor licensee performance issues.
71111.07	Heat Sink Performance (Biennial)	Inspections performed under Sections I of this attachment are sufficient to monitor licensee performance issues.
71111.08	In-service Inspection Activities (Biennial)	Inspections performed under Sections I of this attachment are sufficient to monitor licensee performance issues.
71111.17	Evaluations of Changes, Tests and Experiments and Permanent Plant Modifications	Inspections performed under Section I of this attachment are sufficient to monitor licensee performance in this area.
71111.21	Component Design Basis Inspection (Triennial)	Inspections performed under Sections I of this attachment are sufficient to monitor licensee performance issues.

c. The following IMC 2561 inspection procedures are not referenced by this interim inspection plan during the transition period:

IP Number	Title	Comments
36801	Organization, Management, and Cost Controls at Permanently Shutdown Reactors (PSRs)	It is not anticipated that the site will be at a point in the decommissioning process where this inspection would be applicable

Enclosure

IP Number	Title	Comments
81XXX	Physical Security Assessment at PSRs	Revisions to this series of inspection procedures are being evaluated. The 71130 series of security baseline inspection procedures are sufficient to verify adequate licensee performance in this area.
83801	Inspection of Final Surveys at PSRs	The site will not be at a point in the decommissioning process where this inspection would be applicable