



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713

August 12, 2021

Mr. Billy Reid
Site Vice President
ADP CR3, LLC
2760 South Falkenburg Rd
Riverview, FL 33578

SUBJECT: ACCELERATED DECOMMISSIONING PARTNERS (ADP) CR3, LLC, CRYSTAL RIVER UNIT 3 - NRC INSPECTION REPORT NOS. 05000302/2021001 AND 05000302/2021002

Dear Mr. Reid:

On June 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection under Inspection Manual Chapter 2561, "Decommissioning Power Reactor Inspection Program," at the permanently shut down Crystal River Nuclear Plant Unit 3 (CR-3). A combination of on-site and remote inspection activities (in-office reviews) were performed as a consequence of the COVID-19 public health emergency (PHE) during this inspection period. The inspectors examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of observations by the inspectors, interviews with site personnel, a review of procedures and records, and plant walkdowns. The results of the inspection were discussed with you and other members of the CR-3 staff on July 20, 2021 and are described in the enclosed report. No findings of safety significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if any, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Radioactive Waste; Decommissioning of Nuclear Facilities**; then **Regulations, Guidance and Communications**. The current Enforcement Policy is included on the NRC's Website at www.nrc.gov; select **About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents**; then **Enforcement Policy** (Under 'Related Information'). You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

B. Reid

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No reply to this letter is required. Please contact Katherine Warner, at 610-337-5389, if you have any questions regarding this matter.

Sincerely,

Anthony Dimitriadis, Chief
Decommissioning, ISFSI, and Reactor HP
Branch
Division of Radiological Safety and Security

Docket No. 05000302

License No. DPR-72

Enclosure: Inspection Reports 05000302/2021001 and 05000302/2021002
w/Attachment

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ACCELERATED DECOMMISSIONING PARTNERS (ADP) CR3, LLC, CRYSTAL RIVER UNIT 3, NRC INSPECTION REPORT NO. 05000302/2021001 AND 05000302/2021002, DATED August 12, 2021.

DOCUMENT NAME: <https://usnrc.sharepoint.com/teams/Region-I-Decommissioning-Branch/Inspection Reports/Inspection Reports - Draft/1Q and 2Q 2021 Crystal River report draft.docx>

SUNSI Review Complete: KWarner

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U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection Nos. 05000302/2021001 and 05000302/2021002

Docket No. 05000302

License No. DPR-72

Licensee: Accelerated Decommissioning Partners CR3, LLC (ADP)

Facility: Crystal River Unit 3 (CR-3)

Location: Crystal River, FL 34428-6708

Inspection Dates: January 1 – June 30, 2021

Inspector: K. Warner, Senior Health Physicist
Decommissioning, ISFSI, and Reactor HP Branch
Division of Radiological Safety and Security

O. Masnyk Bailey, Health Physicist
Decommissioning, ISFSI, and Reactor HP Branch
Division of Radiological Safety and Security

Approved By: Anthony Dimitriadis, Chief
Decommissioning, ISFSI, and Reactor HP Branch
Division of Radiological Safety and Security

EXECUTIVE SUMMARY

Accelerated Decommissioning Partners CR3, LLC (ADP)
Crystal River Nuclear Plant
NRC Inspection Report Nos. 05000302/2021001 and 05000302/2021002

An announced decommissioning inspection was completed on June 30, 2021, at the permanently shutdown Crystal River Unit 3 (CR3). Certain inspection activities (in-office reviews) were conducted remotely as a consequence of the COVID-19 public health emergency (PHE) during this inspection period. The inspection included design changes and modifications, self-assessments, corrective actions, occupational radiation exposure, decommissioning performance and status reviews, solid radioactive waste management, transportation, and security of radioactive materials. The inspection consisted of observations by the inspectors, interviews with site personnel, a review of procedures and records, and plant walkdowns. The NRC's program for overseeing the safe decommissioning of a shutdown nuclear power reactor is described in Inspection Manual Chapter (IMC) 2561, "Decommissioning Power Reactor Inspection Program."

Based on the results of this inspection, no findings of safety significance were identified.

REPORT DETAILS

1.0 Background

On February 20, 2013, Duke Energy sent a letter [Agency Documentation and Management System Accession Number ML13056A005] to the NRC certifying the permanent cessation of activities and permanent removal of fuel from the reactor. This met the requirements of 10 Code of Federal Regulations (CFR) 50.82(a)(1)(i) and 50.82(a)(1)(ii). On June 14, 2019, the NRC received a license transfer application [ML19170A209] and conforming amendment filed by the Duke Energy Florida (DEF), LLC on behalf of itself and Accelerated Decommissioning Partners (ADP) CR3, LLC. The application sought NRC approval of the direct transfer of Facility Operating License No. DPR-72 for CR-3 and the general license for the CR-3 ISFSI from the current holder, DEF to ADP CR3, which is a wholly owned subsidiary of ADP, LLC, which the NRC approved on April 1, 2020 [ML20069A023]. On October 1, 2020, ADP and Duke Energy successfully completed the transaction.

CR-3 transitioned from “SAFSTOR, No Fuel in the Spent Fuel Pool” to the “Actively Decommissioning (DECON), No Fuel in the Spent Fuel Pool” category as described in IMC 2561 during this inspection period.

2.0 Decommissioning No Fuel Status Review

2.1 Inspection Procedures (IPs) 37801, 40801, 71801, 83750, and 86750

a. Inspection Scope

In-office reviews of information supplied by ADP were performed during the inspection period. The inspectors performed on-site decommissioning inspections February 8 - 11, 2021 and April 12 - 14, 2021 supplemented by in-office reviews and periodic phone calls. The inspection consisted of observations by the inspectors, interviews with site personnel, a review of procedures and records, and plant walkdowns.

The inspectors conducted document reviews and interviews with plant personnel to determine if ADP procedures and processes were adequate and in accordance with the regulations and guidance associated with 10 CFR 50.59, and to verify that changes made by ADP under 10 CFR 50.59 did not require prior NRC approval.

The inspectors reviewed a representative selection of CAP documents to determine if a sufficiently low threshold for problem identification existed, if follow-up evaluations were of sufficient quality, and if ADP assigned timely and appropriate prioritization for issue resolution commensurate with the significance of the issue.

The inspectors conducted walkdowns and tours of various facilities and storage areas, including the reactor building and auxiliary building. The inspectors observed select pre-job briefs and associated work activities, including hot leg removal and steam generator segmentation and removal.

The inspectors reviewed documentation associated with occupational exposure and radioactive waste management to determine the effectiveness of site radiological programs. The inspectors interviewed radiation workers, radiation protection management and technicians. The inspectors reviewed dose records for 2020 and 2021 to date, as low as reasonably achievable (ALARA) plans, surveys, radiation work permits, instrument calibrations, and radiation protection related procedures and changes thereto in part to determine if work activities were effectively pre-planned to limit worker exposure.

The inspectors reviewed activities and documentation with the possession, processing, storage, and shipment of licensed radioactive material. The inspectors observed surveys of several shipments of waste from CR-3 and the loading of railroad cars in preparation for transport. The inspectors also reviewed work packages for select recent shipments of radioactive waste.

Inspectors evaluated the licensee's program of controlling storage of radioactive materials pursuant to 10 CFR 37 by reviewing the CR3 Physical Security Plan, interviewing and observing ADP personnel in the performance of their security duties, and by observing and assessing barriers, access control to licensed material, and compensatory measures.

b. Observations and Findings

The inspectors determined that 10 CFR 50.59 screenings and evaluations had been properly performed and that ADP had trained and qualified individuals to perform the evaluations. The inspectors determined that selected changes under 10 CFR 50.59 did not require prior NRC approval and safety reviews were performed for design changes and modifications in accordance with applicable regulatory requirements, license conditions and the Decommissioning Safety Analysis Report. Based on reviews and interviews with site personnel, the inspectors noted that reviews under 10 CFR 50.59 would continue throughout the calendar year 2021.

The inspectors determined that issues had been identified and entered into the CAP and evaluated commensurate with their safety significance, although it was noted that in several instances, they were somewhat delayed. The inspectors noted that reviews of CAP items and audits would likely continue throughout the calendar year 2021, including the promptness of items being entered into the CAP.

The inspectors note that for the areas of the plant toured, the material condition and housekeeping was adequate. The inspectors noted through plant tours and observations of activities that ADP conducted activities in accordance with the regulatory requirements and plant procedures.

The inspectors determined that survey records were complete and timely, and RP technicians used appropriate instruments for surveys. The inspectors verified that ALARA plans were performed as needed and were effective in limiting worker exposure.

The inspectors determined that the occupational dose for 2020 was acceptable for the scope of the radiological activities that had been performed. The inspectors noted that RP staffing had significantly increased and appeared to be adequate.

The inspectors verified that selected radioactive waste shipping paperwork was properly completed, and ADP personnel were knowledgeable of their duties and responsibilities as required. The inspectors determined that radioactive waste shipped for disposal at land disposal facilities was properly classified, described, packaged, marked, labeled and was in proper condition for transportation.

The inspectors determined that the licensee was in compliance with the CR3 Security plan and Part 37 and that appropriate plant personnel were cognizant of additional security requirements.

The inspectors discussed ongoing active decommissioning preparations and upcoming plans for further large component removal with ADP staff.

3.0 Exit Meeting Summary

On, July 20, 2021, the inspectors presented the inspection results to Mr. Billy Reid, Site Vice President, and other members of the CR-3 staff. No proprietary information was retained by the inspectors or documented in this report.

PARTIAL LIST OF PERSONS CONTACTED

B. Reid, Site Vice President
B. Akins, Radiation Protection Manager
D. Bartlett, RP Technician
D. Brady, Senior Nuclear Security Specialist
C. Burtoff, RP Engineer
P. Dixon, ISFSI Manager
L. Reader, RP Specialist
M. Van Sicklen, Licensing Manager
J. Simmons, WCS Shipping Waste Control Specialist
M. Widener, ISFSI Security Manager
M. Walker, D&D Manager
L. McDougal, ORANO Project Manager

ITEMS OPEN, CLOSED, AND DISCUSSED

None

PARTIAL LIST OF DOCUMENTS REVIEWED

Condition Reports

202000027

202100001

Miscellaneous

10 CFR 50.59 Screenings Various Dated November 2020 – April 2021
CR-ENG-EC25-QG, Crystal River 50.59/72.48 Screening and Evaluator Training,
October 28,2019
CR3-QAPM, Crystal River Quality Assurance Program Manual, Revision 2
CR3 Part 37 Security Plan for the Protection of Category 1 and Category 2 Quantities
of Radioactive Material, Revision 5
CR HPP-11, Radiation Control Field Operations, Revision 17
CR HPP-202A, Radiological Surveys and Inspections, Revision 47
Defueled Safety Analysis Report Crystal River Unit 3, Revision 7
DPR-72 Facility Operating License, Amendment 258
Plant Manual DOS-4010, Internal Dose Assessment, Revision 3
REG10-2020-04, October 26, 2020
RXB-TRWP-007, 'A' Steam Generator Segmentation, Revision 1

LIST OF ACRONYMS USED

ADAMS	Agencywide Document and Management System
ADP	Accelerated Decommissioning Partners
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CR-3	Crystal River Unit 3
Duke Energy/DEF	Duke Energy Florida, Inc.
IMC	Inspection Manual Chapter
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
NRC	U.S. Nuclear Regulatory Commission
PHE	Public Health Emergency
PSDAR	Post Shutdown Activities Report