



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

November 19, 2020

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

SUBJECT: NRC INSPECTION REPORT NO. 05000302/2020001, ACCELERATED  
DECOMMISSIONING PARTNERS (ADP) CR3, LLC, CRYSTAL RIVER UNIT 3,  
CRYSTAL RIVER, FLORIDA

Dear Mr. Hager:

On November 2 - 5, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed a remote inspection under Inspection Manual Chapter 2561, "Decommissioning Power Reactor Inspection Program," at the permanently shut down Crystal River Nuclear Plant Unit 3 (CR-3). Inspection activities (in-office reviews) were conducted remotely as a consequence of the COVID-19 public health emergency (PHE) during this inspection period. The inspector 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 interviews with personnel and a review of procedures and records. The results of the inspection were discussed with you and other members of the CR-3 staff on November 5<sup>th</sup>, 2020 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(s), and your response 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](http://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](http://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).

J. Hager

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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,

*/RA/*

Anthony Dimitriadis, Chief  
Decommissioning, ISFSI, and Reactor HP  
Branch  
Division of Nuclear Materials Safety

Docket No. 05000302  
License No. DPR-72

Enclosure: Inspection Report 05000302/2020001  
w/Attachment

cc w/encl: Distribution via ListServ

NRC INSPECTION REPORT NO. 05000302/2020001, ACCELERATED DECOMMISSIONING PARTNERS (ADP) CR3, LLC, CRYSTAL RIVER UNIT 3, CRYSTAL RIVER, FLORIDA, DATED NOVEMBER 19, 2020.

DOCUMENT NAME: \\nrc.gov\nrc\R1\Office\DNMS\DIRHP\Decom Reactor Sites\Crystal River\Reports\LDPR-72.2020001 final.docx

**SUNSI Review Complete:** KWarner

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U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

INSPECTION REPORT

Inspection No. 05000302/2020001  
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: November 2 – 5, 2020  
Inspector: Katherine Warner, Senior Health Physicist  
Decommissioning, ISFSI, and Reactor HP Branch  
Division of Nuclear Materials Safety, Region 1  
Approved By: Anthony Dimitriadis, Chief  
Decommissioning, ISFSI, and Reactor HP Branch  
Division of Nuclear Materials Safety, Region I

## **EXECUTIVE SUMMARY**

Accelerated Decommissioning Partners CR3, LLC (ADP)  
Crystal River Nuclear Plant  
NRC Inspection Report Nos. 05000302/2020001

An announced CR-3 decommissioning remote inspection was performed November 2 - 5, 2020. Inspection activities were conducted remotely as a consequence of the COVID-19 public health emergency (PHE) during this inspection period. The inspection included a review of organization and management, design changes and modifications, corrective action program, effluent and environmental monitoring, decommissioning status, and radioactive waste management. The inspection consisted of interviews with site personnel and a review of procedures and records. The NRC's program for overseeing the safe operation of a shut-down 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 is currently transitioning from the “SAFSTOR No Fuel” category to the “Decommissioning No Fuel” category as described in IMC 2561.

### **2.0 SAFSTOR Performance and Status Review**

- a. Inspection Scope [Inspection Procedures (IPs) 36801, 37801, 40801, 71111.01, 71801, 83750, 84750, and 86750]

The inspector conducted document reviews, attended safety meetings, and interviewed plant personnel to determine if regulatory requirements were properly implemented with respect to the site organization, staffing and qualifications, fire protection, and employee training programs. The inspector reviewed procedures and processes to evaluate ADP's ability to resolve employee safety concerns, disseminate safety information and effectively resolve identified problems. The inspector reviewed ADP's decommissioning activities to determine if they were performed in a manner consistent with the Post Shutdown Decommissioning Activities Report (PSDAR).

The inspector met (remotely) with ADP management and discussed staffing, the current maintenance workload, and financial assurance. The inspector attended a CR3 deactivation and decommissioning weekly integration meeting and a nuclear safety strategic planning meeting. The inspector reviewed the backlog of maintenance work to assess the age and prioritization of the items. The inspector selected an ongoing work-week activity, attended a pre-job brief, and had further discussions with staff on the status on the activity.

The inspector 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 inspector reviewed documents and interviewed CR-3 personnel to verify ADP management performed audits and self-assessments, and ensured issues were identified and corrected in accordance with the site's corrective action program (CAP). The inspector reviewed a representative selection of CAP documents to determine if a sufficiently low threshold for problem identification existed, that follow-up evaluations were of sufficient quality, and ADP had assigned timely and appropriate prioritization for issue resolution commensurate with the significance of the issue. The inspector attended a weekly condition review group meeting and also reviewed a selection of site audits for the past year to verify that audits were thorough and corrective actions were initiated as necessary.

The inspector reviewed activities and documentation associated with effluent and environmental monitoring to determine if the licensee effectively controlled, monitored, and quantified releases of radioactive materials in liquid, gaseous, and particulate forms to the environment. The inspector reviewed the annual radiological environmental monitoring program (REMP) report, the annual radioactive effluent report, and the Off-Site Dose Calculation Manual (ODCM). The inspector reviewed the 50.75(g) file and assessed its adequacy to determine if records were stored in accordance with the requirements.

The inspector reviewed documentation associated with occupational exposure and radioactive waste management to determine the effectiveness of site radiological programs. The inspector reviewed radwaste inventory to evaluate if CR-3 properly classified and stored radioactive materials. The inspector also reviewed work packages for selected recent shipments of radioactive waste. The inspector reviewed the records of radiation dose totals for CY 2019 and CY 2020 (to date), radiation work permits, and As Low As Reasonably Achievable (ALARA) work plans to determine if work activities were effectively pre-planned to limit worker exposure.

The inspector reviewed whether the site had entered into any adverse weather procedures in 2020.

The inspector discussed the recent license transfer with ADP management and staff.

b. Observations and Findings

The inspector 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 inspector determined that 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. The inspector noted that the licensee made changes to site procedures via the 50.59 process for the recent license transfer. The majority of the changes appear to be administrative in nature. The inspector notes that changes or modifications to site programs and systems, including electrical and fire

protection were ongoing and will be reviewed further in subsequent inspections to ensure that appropriate controls are in place for active decommissioning activities.

The inspector verified that management oversight was adequate for the decommissioning organization and changes to the operating unit organization's responsibilities was appropriately implemented upon the recent license transfer from Duke Energy to ADP. The inspector noted that staffing levels had increased since the last inspection, which appears appropriate in view of the increased activities as the site prepares and begins active decommissioning activities. The inspector determined that training programs were being appropriately implemented, and safety issues were reported to management and the site holds periodic safety meetings. The inspector determined that site decommissioning activities were in accordance with the PSDAR. The inspector discussed ongoing work activities with staff and reviewed a specific activity for appropriate radiological and industrial work controls. No issues were identified.

The inspector determined that issues were being identified and entered into the CAP in a timely manner and the issues were effectively screened, prioritized and evaluated commensurate with their safety significance. The inspector verified that audits were being performed by qualified individuals independent of the organization being audited, and that management reviewed the audits and associated corrective actions.

The inspector verified that effluent releases to the environment had been properly controlled, monitored, and quantified as required by NRC regulations. The inspector verified that the annual radiological effluent and the annual REMP reports demonstrated that calculated doses were below regulatory dose criteria of 10 CFR 50, Appendix I.

The inspector verified solid radioactive waste was adequately stored, monitored, and inventories were up to date. The inspector verified that radioactive waste shipping paperwork was properly completed, and ADP personnel were knowledgeable of their duties and responsibilities as required. The inspector determined radioactive waste shipped for disposal at land disposal facilities was properly classified, described, packaged, marked, labeled and was in proper condition for transportation.

The inspector noted that the site is transitioning from a SAFSTOR state to active decommissioning. In addition, the inspector noted that the recent license transfer had not negatively affected the safety of site operations. The inspector discussed ongoing active decommissioning preparations and upcoming plans for large component removal with ADP staff. The inspector noted that there would be an increase in NRC oversight commensurate with the increased decommissioning activities.

#### **4.0 Exit Meeting Summary**

On, November 5, 2019, the inspector presented the inspection results to Mr. John Hager, Site Vice President, and other members of the CR-3 staff. No proprietary information was retained by the inspector or documented in this report.



**PARTIAL LIST OF PERSONS CONTACTED**

J. Hager, Site Vice President  
B. Akins, Radiation Protection Manager  
J. Bourassa, Quality Assurance Manager  
C. Burtoff, RP Engineer  
P. Dixon, ISFSI/Plant Manager  
A. Doroff, Work Control Manager  
T. Hobbs, Duke On-site Representative  
J. LaPratt, D&D Operations Manager  
C. Miller, Operations Manager  
L. Reader, RP Specialist  
M. Van Sicklen, Licensing Manager  
P. Dixon, Manager, Technical Support

**ITEMS OPEN, CLOSED, AND DISCUSSED**

None

**PARTIAL LIST OF DOCUMENTS REVIEWED**

Audits

023111211-11, RP Key Control Practices, January 20, 2020  
2020 Radiation Protection Program Annual Review, January 20 – 21, 2020

Condition Reports

2297282	2332606
2303335	2334030
2303581	2333224
2314791	
2318683	
2309368	
2303284	

Miscellaneous

10 CFR 50.59 Screenings Various Dated November 2019 – September 2020  
2019 Annual Radioactive Effluent Release Report, April 7, 2020  
2019 Annual Radiological Environmental Operating Report, April 7, 2020  
ADP-CR3 Organization Chart, June 15, 2020  
ALARA Work Plan 2020-01, Remove Sand from Reactor Cavity Deep End, Revision 0  
Crystal River 3 - TLD-ED Correlations for 1st Semi-Annual 2020 Monitoring Period, August 12, 2020  
CR3-QAPM, Crystal River Quality Assurance Program Manual, Revision 2  
Defueled Safety Analysis Report Crystal River Unit 3, Revision 7  
DPR-72 Facility Operating License, Amendment 258  
DRR 2338389, Off-Site Dose Calculation Manual Crystal River Unit 3, Revision 40  
Fire Hazards Analysis, Revision 18

Miscellaneous (Cont'd)

Fire Protection Plan, Revision 38  
Health Physics Survey Records, Various October, 2020  
HPP-230, Recordkeeping for Decommissioning Planning, Records for 1998, May 19, 2014  
Post Shutdown Decommissioning Activities Report  
RXB-CWP-001, Fuel Transfer Canal Sand Removal, October 26, 2020  
SP-300D, Defueled Daily Surveillance Log, Revision 20 Various from October, 2020  
SP-736L, Liquid Releases to the Discharge Canal Via RM-L2, L-2020-0001 and L-2020-0002, dated February 5, 2020  
Waste Inventory as of June 30, 2020  
Waste Shipments 20-016 and 20-017  
Work Order Backlog as of September, 2020

Procedures

EM-220D, Violent Weather (Permanently Defueled), Revision 12  
ISFS-190, ISFSI Off-Normal Events, Revision 6

**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