



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

May 7, 2021

Ms. Mary J. Fisher, Vice President  
Energy Production and Nuclear  
Decommissioning  
Omaha Public Power District  
Fort Calhoun Station  
Mail Stop FC-2-4  
9610 Power Lane  
Blair, NE 68008

SUBJECT: FORT CALHOUN STATION – NRC INSPECTION REPORT 050-00285/2021-002

Dear Ms. Fisher:

This letter refers to the U.S. Nuclear Regulatory Commission (NRC) decommissioning inspection conducted on April 19-22, 2021, at the Fort Calhoun Station, located near Blair, Nebraska. The NRC inspector discussed the results of the decommissioning inspection with you and other members of your staff during a final exit meeting conducted on April 22, 2021. The inspection results are documented in the enclosure to this letter.

The NRC inspection examined activities conducted under your license as they relate to public health and safety, the common defense and security, and confirmed compliance with the Commission's rules and regulations, and with the conditions of your license. Within these areas the inspection consisted of selected examination of procedures and representative records, observation of activities, and interviews with personnel. Specifically, the inspectors reviewed your corrective action program (CAP), while also evaluating your safety design screenings, evaluations, and modifications relevant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59. No violations of significance were noted and no response to this letter is required.

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

If you have any questions regarding this inspection report, please contact Mr. Chris Steely at 817-200-1432 or the undersigned at 817-200-1154.

Sincerely,

Natasha A. Greene, PhD, Acting Chief  
Reactor Inspection Branch  
Division of Nuclear Materials Safety

Docket No.: 050-00285  
License No.: DPR-40

Enclosure:  
Inspection Report 050-00285/2021-002

FORT CALHOUN STATION – NRC INSPECTION REPORT 050-00285/2021-002  
 DATED – May 7, 2021

Distribution:

SMorris, ORA  
 JMonninger, ORA  
 MMuessle, DNMS  
 LHowell, DNMS  
 NGreene, DNMS  
 RLantz, DRP  
 MHay, DRP  
 GMiller, DRS  
 GWarnick, DRS  
 DCylkowski, ORA  
 MHaire, RIV/OEDO  
 VDricks, ORA  
 LWilkins, OCA  
 AMoreno, RIV/CAO  
 BMaier, RSLO  
 JKim, NRR  
 BWatson, NMSS  
 JParrott, NMSS  
 MMadison, DRMA  
 CSteely, DNMS  
 SAnderson, DNMS

[mjfisher@oppd.com](mailto:mjfisher@oppd.com)

ADAMS ACCESSION NUMBER: ML21127A128

<input checked="" type="checkbox"/> SUNSI Review By: CDS	ADAMS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Sensitive <input checked="" type="checkbox"/> Non-Sensitive	<input type="checkbox"/> Non-Publicly Available <input checked="" type="checkbox"/> Publicly Available	Keyword NRC-002
OFFICE	DNMS/RxIB	C:RxIB		
NAME	CDSteely	NAGreene		
SIGNATURE	CDS	NAG		
DATE	05/06/2021	05/06/2021		

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket No.: 050-00285  
License No.: DPR-40  
Report No.: 050-00285/2021-002  
Licensee: Omaha Public Power District  
Facility: Fort Calhoun Station  
Location: 9610 Power Lane  
Blair, Nebraska  
Dates: April 19-22, 2021  
Inspectors: Chris D. Steely  
Health Physicist  
Reactor Inspection Branch  
Division of Nuclear Materials Safety  
  
Approved By: Natasha A. Greene, PhD, Acting Chief  
Reactor Inspection Branch  
Division of Nuclear Materials Safety

Enclosure

## **EXECUTIVE SUMMARY**

### Fort Calhoun Station NRC Inspection Report 050-00285/2021-002

The U.S. Nuclear Regulatory Commission (NRC) inspection was a routine, announced inspection of decommissioning activities being conducted at the Fort Calhoun Station (FCS) under inspection report 050-00285/2021-002. In summary, the licensee was conducting these activities in accordance with site procedures, license requirements, and applicable NRC regulations.

#### **Problem Identification and Resolution at Permanently Shutdown Reactors**

- The licensee was adequately implementing its Problem Identification and Resolution program in accordance with regulatory requirements and commitments. The licensee's audit program was being conducted and maintained in accordance with the appropriate regulatory requirements as prescribed by the Quality Assurance Topical Report (QATR), Revision 15. (Section 1.2)

#### **Safety Reviews, Design Changes and Modifications at Permanently Shutdown Reactors**

- The licensee's safety evaluation program and process for evaluating the safety impacts of facility changes and modifications were adequate for complying with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59 and 10 CFR 72.48. The licensee's 10 CFR 50.59 safety evaluation program provided effective periodic training for personnel preparing, reviewing, and approving safety evaluations. (Section 2.2)

## Report Details

### Summary of Plant Status

On June 24, 2016, Omaha Public Power District (OPPD), the licensee, formally notified the Nuclear Regulatory Commission (NRC) by letter of its intent to permanently cease operations of Fort Calhoun Station (FCS) (ADAMS Accession No. ML16176A213). By letter dated November 13, 2016, OPPD notified NRC that it had permanently ceased power operations at FCS on October 14, 2016, and certified pursuant to 10 CFR 50.82(a)(1)(ii), that as of November 13, 2016, all fuel had been permanently removed from the FCS reactor vessel and placed in the FCS spent fuel pool (ADAMS Accession No. ML16319A254). On December 28, 2016, the NRC informed the licensee that it was no longer under NRC Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," IMC 0608, "Performance Indicator Program," and IMC 2515, "Light-Water Reactor Inspection Program," when conducting oversight activities and assessing site performance (ADAMS Accession No. ML1636A449). The licensee was informed that the NRC's oversight of licensed activities under decommissioning would be conducted under the provisions of IMC 2561, "Decommissioning Power Reactor Inspection Program."

The licensee submitted its Post-Shutdown Decommissioning Activities Report (PSDAR) on March 20, 2017 (ADAMS Accession No. ML17089A759). The PSDAR is not a licensing action and therefore is not approved by the NRC; however, the NRC reviewed the report. The licensee's PSDAR described the decommissioning activities and schedule to support SAFSTOR strategy for the facility which is one of the options allowed by the NRC for decommissioning. The NRC subsequently held a public meeting in Omaha, Nebraska on May 31, 2017, to discuss comments regarding the FCS PSDAR. The transcript of the public meeting is available on the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>, under (ADAMS Accession No. ML17160A394).

The licensee selected the SAFSTOR decommissioning options as described in the PSDAR. The licensee had planned to continue in SAFSTOR until the spent fuel was transferred to the U.S. Department of Energy in 2058. On April 29, 2019, however, OPPD voted to change its decommissioning approach from SAFSTOR to DECON by contracting with Energy Solutions. DECON will consist of decontamination and destruction of the site in a process that will begin much sooner on a date to be determined by OPPD. FCS submitted a new PSDAR to reflect the change from SAFSTOR to DECON (ADAMS Accession No. ML19351E355).

On May 13, 2020, FCS removed the last canister of fuel and all Special Nuclear Material from the spent fuel pool. The licensee documented this event with a letter to the NRC dated May 18, 2020 (ADAMS Accession No. ML20139A138). Accordingly, FCS has entered Independent Spent Fuel Storage Installation (ISFSI)-only Technical Specifications and Emergency Plan on May 18, 2020, and ISFSI-only Security Plan on June 24, 2020.

## **1 Problem Identification and Resolution at Permanently Shutdown Reactors (40801)**

### **1.1 Inspection Scope**

The inspectors reviewed documents and interviewed plant personnel to assess the licensee's performance in the following areas:

- audits and assessments are conducted in accordance with the requirements of the NRC-approved quality assurance (QA) program and 10 CFR Part 50, Appendix B, with appropriate managerial oversight;
- licensee effectiveness at reasonably preventing problems and promptly detecting and correcting issues of concerns, conditions adverse to quality, and non-conformances;
- issues or problems were identified and corrected in accordance with the NRC-approved QA program and 10 CFR Part 50, Appendix B, Criterion XVI;
- licensee has established, implemented, and performs management reviews of the safety-conscious work environment; and
- licensee is identifying and placing potential 10 CFR Part 21, "Reporting of Defects and Non-Compliance Issues," into the CAP and appropriately evaluating them.

## 1.2 Observations and Findings

The inspector reviewed the QATR, Revision 15, Chapter 16, "Corrective Action," that described the licensee's program to identify and correct conditions adverse to quality and reviewed the licensee's Procedure FCSI-RA-301, "Decommissioning Corrective Action Program," Revision 1, which governs the Problem Identification and Resolution program (PIR).

The inspector reviewed the meeting minutes from the most recent Management Review Committee; this committee typically meets weekly as a forum for management review of that week's issued and resolved condition reports. The Management Review Committee had representatives from the different functional areas and a quorum was met, as specified by procedure. The review and discussion by the Management Review Committee members appeared appropriate to the significance level, ownership, and task assignments of the condition reports on the agenda.

The licensee performed audits of their PIR program under assessment NOSMDA-FC-21-01, "Fort Calhoun Station Nuclear Oversight Management Directed Assessment Report," with an assessment period of January 11-25, 2021, and assessment NOSA-FCS-20-03, "Post ISFSI Audit Reset Audit Report," dated September 1-October 14, 2020. Both assessments appeared to be thorough and appropriately critical where necessary. The assessments contained several observed deficiencies and areas of enhancement that would greatly benefit the program along with the appropriate amount of managerial oversight.

The inspector reviewed approximately 15 condition reports and concluded that the condition reports provided adequate documentation and description of the condition adverse to quality or condition adverse to regulatory compliance as defined by the licensee's procedure. In addition, the inspector determined that the significance levels assigned to the respective condition reports were appropriate. The inspector also verified that the corrective actions adequately addressed the deficiencies described in the documentation, were entered at the appropriate threshold and with the appropriate amount of managerial oversight.

### 1.3 Conclusion

The licensee was adequately implementing its PIR program in accordance with regulatory requirements and commitments. The licensee's audit program was being conducted and maintained in accordance with the appropriate regulatory requirements as prescribed by the QATR, Revision 15.

## **2 Safety Reviews, Design Changes and Modifications at Permanently Shutdown Reactors (37801)**

### 2.1 Inspection Scope

The inspectors reviewed documents and interviewed plant personnel to assess the licensee's performance in the following areas:

- determination that licensee procedures and processes ensure they are adequately identifying changes to technical specifications (TS) resulting from proposed changes, tests, experiments, and modifications;
- evaluate whether the licensee's safety review process committee is appropriately staffed and trained in accordance with its charter, as defined in the licensee's TSs, quality assurance plan, or other licensing documentation, as applicable;
- verify supporting design basis documentation, such as calculations, design specifications, vendor manuals, PSDAR, and TSs are updated consistent with design changes;
- verify that the licensee's training program provides effective periodic training for personnel preparing, reviewing, and approving safety evaluations. Verify that the training and qualification of the personnel conducting the 10 CFR 50.59 training is consistent with license requirements. Determine whether the licensee has established a process to assess training effectiveness; and
- verify that the licensee is identifying problems related to safety reviews, design changes, and modifications at an appropriate threshold and entering them into its corrective action program.

### 2.2 Observations and Findings

The regulations under 10 CFR 50.59 allow a licensee to make changes in the facility as described in the final safety analysis report (as updated) (FSARU), make changes in the procedures as described in the FSARU, and conduct tests or experiments not described in the FSARU without obtaining a license amendment, provided the criteria established in the regulations are met. The inspector reviewed the licensee's 10 CFR 50.59 safety evaluation program, as implemented by Procedure FCSI-RA-203, "50.59 Review Process," Revision 4. The inspector determined that the procedures provided adequate instructions to assure proper implementation, review, and approval of design changes.

The inspectors reviewed the licensee's 10 CFR 50.59 safety evaluation program and confirmed that it provided effective periodic training for personnel responsible for preparing, reviewing, and approving safety evaluations. Additionally, the licensee's

program established an adequate process to assess training effectiveness. The inspectors reviewed the qualifications for the screeners, evaluators, reviewers, and the process owner to verify they were qualified and trained at the time of performing their job functions.

The inspector reviewed eleven 50.59 screenings, where licensee personnel had determined that a full evaluation was not necessary, and an in-depth review of one 50.59 screening that did result in an evaluation. The inspector concluded that the licensee reviewed the proposed activities under the 10 CFR 50.59 screening process in accordance with procedural and regulatory requirements. For the screenings which did not result in an evaluation, the screeners had documented an adequate explanation as to why an evaluation was not necessary.

In accordance with 10 CFR 50.59(d)(2), the licensee is required to submit a 50.59 Summary Report every 24 months to the NRC. The report must contain a brief description of any changes, tests, and experiments, including a summary of the evaluation of each. The last report was submitted on April 20, 2020, and is therefore within the 24-month requirement.

### 2.3 Conclusion

The licensee was adequately maintaining their safety evaluation program. The processes for evaluating the safety impacts of facility changes and modifications were adequate for complying with the provisions of 10 CFR 50.59. The licensee's 10 CFR 50.59 safety evaluation program provided effective periodic training for personnel preparing, reviewing, and approving safety evaluations. Additionally, the licensee's program established an adequate process to assess training effectiveness.

## 3 **Exit Meeting Summary**

On April 22, 2021, the NRC inspectors presented the final inspection results to Ms. Mary Fisher, Vice President, Energy Production and Nuclear Decommissioning, and other members of the licensee's staff. All proprietary information was returned by the NRC inspection team.

**SUPPLEMENTAL INSPECTION INFORMATION**  
**KEY POINTS OF CONTACT**

Licensee Personnel

M. Fisher, Vice President, Energy Production and Nuclear Decommissioning  
A. Barker, Regulatory Assurance & Emergency Planning Manager  
C. Cameron, Principal Regulatory Specialist  
T. Uehling, Senior Director, Decommissioning  
T. Maine, Plant Manager  
A. Hansen, Principal Regulatory Specialist

**INSPECTION PROCEDURES (IPs) USED**

IP 37801	Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors
IP 40801	Problem Identification and Resolution at Permanently Shutdown Reactors

**LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

Open

None

Closed

None

Discussed

None

## LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CAP	corrective action program
CFR	<i>Code of Federal Regulations</i>
FCS	Fort Calhoun Station
IMC	Inspection Manual Chapter
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
NRC	U.S. Nuclear Regulatory Commission
OPPD	Omaha Public Power District
PIR	Problem Identification and Resolution
PSDAR	Post-Shutdown Decommissioning Activities Report
QA	quality assurance
QATR	Quality Assurance Topical Report
TS	Technical Specifications
FSARU	final safety analysis report (as updated)