



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

July 21, 2017

Mr. Daniel G. Stoddard  
Senior Vice President and Chief Nuclear Officer  
Dominion Energy Kewaunee, Inc.  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: NRC INSPECTION REPORT NOS. 05000305/2017001(DNMS) AND  
07200064/2017001 – KEWAUNEE POWER STATION

Dear Mr. Stoddard:

On June 28, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed onsite inspection activities for January 1 through June 28, 2017, at the permanently shut down Kewaunee Power Station (KPS) in Kewaunee, Wisconsin. The purpose of the inspection was to determine whether decommissioning and spent fuel storage activities were conducted safely and in accordance with NRC requirements. The enclosed report presents the results of this inspection, which were discussed with Mr. S. Yuen and other members of your staff on June 28, 2017.

During the inspection period, the NRC inspectors reviewed the following aspects of onsite activities: organization, management, and cost controls at the site; safety reviews, design changes, and modifications; self-assessments, audits, and corrective actions; operation of an Independent Spent Fuel Storage Installation (ISFSI); maintenance and surveillance; decommissioning performance; effluent and environmental monitoring; and management and transportation of radioactive materials. The inspection consisted of an examination of activities at the site as they relate to safety and compliance with the Commission's rules and regulations. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observation of work activities, and interviews with personnel.

Based on the results of this inspection, no violations of NRC requirements were identified.

D. Stoddard

- 2 -

This letter and its enclosure will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Michael A. Kunowski, Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

Docket Nos: 050-00305; 072-00064  
License No: DPR-43

Enclosure:  
IR 05000305/2017001(DNMS);  
07200064/2017001

cc w/encl: Distribution via LISTSERV®

D. Stoddard

- 3 -

Letter to Mr. Daniel Stoddard from Michael Kunowski dated July 21, 2017

SUBJECT: NRC INSPECTION REPORT NOS. 05000305/2017001(DNMS) AND  
07200064/2017001 – KEWAUNEE POWER STATION

DISTRIBUTION w/encl:

James Trapp  
John Giessner  
Christine Lipa  
Bruce Watson

Ted Carter  
Carole Ariano  
Paul Pelke  
Richard Skokowski

MCID Inspectors

ADAMS Accession Number: ML17202G453

OFFICE	RIII DNMS	E	RIII DNMS	E				
NAME	RAEdwards:bw		MAKunowski					
DATE	07/20/2017		07/21/2017					

**OFFICIAL RECORD COPY**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION III

Docket Nos: 050-00305  
072-00064

License No: DPR-43

Report No: 05000305/2017001(DNMS);  
07200064/2017001(DNMS)

Licensee: Dominion Energy Kewaunee, Inc., (DEK)

Facility: Kewaunee Power Station (KPS)

Location: Kewaunee, WI

Dates: January 1 through June 28, 2017

Inspectors: Rhex A. Edwards, Senior Health Physicist  
Matthew C. Learn, Reactor Engineer  
Dr. Nicole Fields, Health Physicist  
Kevin Barclay, Resident Inspector (Point Beach Nuclear  
Plant)

Approved by: Michael A. Kunowski, Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

Enclosure

## **EXECUTIVE SUMMARY**

### **Kewaunee Power Station NRC Inspection Report 05000305/2017001(DNMS) AND 07200064/2017001(DNMS)**

Kewaunee Power Station (KPS) operated at full power until May 7, 2013, when KPS shutdown and permanently ceased power operation. On May 14, 2013, KPS certified the permanent removal of fuel from the reactor vessel (ADAMS Accession No. ML13135A209). On May 31, 2013, the U.S. Nuclear Regulatory Commission (NRC) notified KPS that the Operating Reactor Assessment Program had ceased and that implementation of the Decommissioning Power Reactor Inspection Program would begin on June 1, 2013 (ADAMS Accession No. ML13151A375).

Currently, KPS is a permanently shut-down and defueled power reactor facility that was maintained in a safe storage (SAFSTOR) condition. On January 4, 2017, the licensee initiated loading of all spent fuel in the spent fuel pool (SFP) into 24 NAC MAGNASTOR storage casks. Loading activities continued until June 15, 2017, when the last cask was moved to the onsite Independent Spent Fuel Storage Installation (ISFSI).

#### **Organization, Management, and Cost Controls**

- The licensee adequately implemented organization, management, and cost controls in accordance with regulatory requirements, license conditions, and the Technical Specifications (TSs). (Section 1.0)

#### **Safety Reviews, Design Changes, and Modifications**

- The licensee performed adequate safety evaluations or screenings, completed design change evaluations, and properly assessed decommissioning impacts of various work activities as required by Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59. (Section 2.0)

#### **Self-Assessments, Audits, and Corrective Actions**

- Issues were identified by the licensee at appropriate thresholds and entered into the Corrective Action Program (CAP). Issues were screened and prioritized commensurate with the safety significance. Licensee evaluations determined the significance of issues and included appropriate remedial corrective actions. The licensee appropriately evaluated unusual noises heard during dry cask storage lifting operations and also the cause of a loss of offsite power to the station. (Section 3.0)

#### **Operation of an ISFSI**

- The licensee performed ISFSI loading activities in accordance with NAC MAGNASTOR Certificate of Compliance (CoC) 1031 requirements. (Section 4.0)

#### **Maintenance and Surveillance**

- Plant material condition and housekeeping were adequate and had not adversely impacted safe decommissioning or SAFSTOR activities. Workers followed work plans, surveillance

procedures, and industrial safety protocols, and were aware of job controls specified in work instructions. Evaluations regarding maintenance effectiveness were performed in accordance with 10 CFR 50.65. (Section 5.0)

### **Decommissioning Performance and Status Reviews**

- The inspectors determined that the licensee conducted decommissioning activities in accordance with the regulations and license requirements. The inspectors verified that the licensee's activities were in accordance with TSS, the Updated Safety Analysis Report (USAR), and the Post Shutdown Decommissioning Activities Report (PSDAR). Finally, the inspectors conducted plant tours to verify that the material condition of structures, systems, and components supported the safe storage of spent fuel and conduct of safe decommissioning. (Section 6.0)

### **Radioactive Waste Treatment, and Effluent and Environmental Monitoring**

- The licensee controlled, monitored, and quantified releases of radioactive materials released to the environment to ensure offsite doses were within regulatory limits and were As Low As Is Reasonably Achievable (ALARA). (Section 7.0)

### **Solid Radioactive Waste Management and Transportation of Radioactive Materials**

- Radioactive materials planned for shipment were classified and characterized appropriately as an exempt concentration in accordance with 49 CFR 173.436. (Section 8.0)

## REPORT DETAILS

### **Summary of Plant Activities**

During the inspection period, the licensee continued to prepare for SAFSTOR conditions. Specifically, on January 4, 2017, the licensee initiated loading of all spent fuel contained within the SFP into 24 NAC MAGNASTOR storage casks. Loading activities continued until June 15, 2017, when the last cask was moved to the onsite ISFSI.

#### **1.0 Organization, Management, and Cost Controls at Permanently Shutdown Reactors (Inspection Procedure (IP) 36801)**

##### **1.1 Inspection Scope**

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

- Implementation of CAP procedures;
- Implementation of a cost and personnel reduction strategy that did not adversely challenge public health and safety;
- Regulatory requirements were properly implemented with respect to the site organization, staffing, and staff qualifications;
- Future licensee plans for decommissioning organization and staffing would continue to meet regulatory requirements;
- Certified fuel handler and employee training programs were implemented in accordance with licensee procedures and NRC requirements;
- Licensee appropriately implemented TS, Technical Requirements Manual, PSDAR, and fire protection plan requirements and commitments;
- Licensee continued implementation of regulatory requirements that remained applicable as described in NRC Bulletins, Generic Letters, and Orders; and
- Licensee decommissioning activities were initiated, sequenced, and performed in a manner consistent with the PSDAR.

As part of the inspection, the inspectors verified that licensee programs and procedures were appropriately implemented by licensee staff. In addition, the inspectors verified that when issues were identified, licensee personnel appropriately documented the issue in the CAP.

##### **1.2 Observations and Findings**

The inspectors determined through direct licensee observation; sampling of training programs, qualification matrices, and corrective action documents; and interviews with licensee personnel that the appropriate regulatory requirements and commitments were

followed. During walkdowns, the inspectors concluded that the licensee maintained good housekeeping practices and adhered to fire protection program requirements.

No findings were identified.

### 1.3 Conclusions

The licensee adequately implemented organization, management, and cost controls in accordance with regulatory requirements, license conditions, and the TSs.

## 2.0 **Safety Reviews, Design Changes, and Modifications (IP 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 conform to the regulation and guidance associated with 10 CFR 50.59;
- Procedures that control and implement design changes and modifications to assess that the procedures provided adequate guidance for implementation, review, and approval;
- Design change modifications to verify that procedures and controls were followed; and to confirm that the applicable changes were effectively implemented in the field and in plant procedures, drawings, and training programs if applicable; and
- Verification that changes made under 10 CFR 50.59 did not require prior NRC approval.

The inspectors verified that when issues were identified that licensee personnel appropriately documented the issue in the CAP.

### 2.2 Observations and Findings

The inspectors reviewed the licensee's programs for changes and performed a review of procedure and modification changes on a sample of licensee-approved changes. Specifically, the inspectors reviewed plans for proposed changes to the ISFSI facility, including demolition of the former Simulator Training Facility. The inspectors determined that when issues were identified, the issues were documented by the licensee in the CAP at an appropriate threshold.

No findings were identified.

### 2.3 Conclusions

The licensee performed adequate safety evaluations or screenings, completed design change evaluations, and properly assessed decommissioning impacts of various work activities as required by 10 CFR 50.59.



### **3.0 Self-Assessments, Audits, and Corrective Actions (IP 40801)**

#### **3.1 Inspection Scope**

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

- Administrative procedures prescribed actions for the identification, evaluation, and resolution of problems;
- Licensee procedures prescribed thresholds for the performance of self-assessments, audits, and surveillances;
- Licensee management reviewed self-assessments, audits, and corrective actions to remain knowledgeable of plant performance;
- Self-assessments were conducted with technically qualified personnel and sufficient independence from the licensee;
- Issues or problems were identified and corrected in accordance with the licensee's CAP;
- Quality assurance personnel audited changes in the status of decommissioning and licensee organization; and
- Licensee management observed maintenance and surveillance activities, operations evolutions, and training.

The inspectors reviewed CAP documents to determine if a sufficiently low threshold for problem identification existed. The inspectors also reviewed the quality of follow-up evaluations, including extent-of-condition and whether the licensee assigned timely and appropriate prioritization for issue resolution commensurate with the significance of the issue. Issues that were repetitive and those with the potential for safety or regulatory consequence were evaluated further by the inspectors to assess apparent and/or common cause and significance. During this inspection period, the inspectors specifically reviewed the licensee's actions and evaluations of unusual noises heard in the overhead crane used in dry cask storage operations and an event where the site lost offsite power.

#### **3.2 Observations and Findings**

The inspectors determined that issues were identified by the licensee at an appropriate threshold within various functional areas of the site and entered into the CAP. Issues were effectively screened, prioritized, and evaluated commensurate with safety significance. The scope and depth of evaluations were adequate in that the evaluations reviewed addressed the significance of issues and assigned an appropriate course of remedial action. The licensee proactively addressed the noises heard in the overhead crane through troubleshooting, development of a repair plan, and successfully performed the repair. On May 2, 2017, during dry cask processing operations, an unexpected loss of offsite power occurred at the site. One of the site's emergency diesel generators was

immediately started and power was restored to the SFP cooling system, applicable dry cask storage systems, and other systems important to the decommissioned condition of the plant. The resident inspector from the nearby Point Beach nuclear plant visited the site following the loss of offsite power and determined that the operator response to the event was appropriate and that approved procedures were followed. All plant equipment responded as expected and offsite power was restored approximately 24 hours later. The licensee prepared an Apparent Cause Evaluation (ACE) and concluded that the loss of power was likely due to an internal fault which caused a fuse to open leading to the system protecting itself as designed. As a result, the transformer supplying power to the station was isolated. However, due to the short time duration (less than 20 minutes) between the loss of offsite power to restoring power to the SFP cooling and dry cask processing systems, there was negligible effect on these systems and they remained well within design thermal limits.

The inspectors verified that self-assessments conducted during the inspection period were performed with technically qualified personnel and that they were independent of the audited organization. Finally, the inspectors verified that quality assurance personnel continued to audit changes implemented at the plant.

No findings were identified.

### 3.3 Conclusions

Issues were identified by the licensee at appropriate thresholds and entered into the CAP. Issues were screened and prioritized commensurate with the safety significance. Licensee evaluations determined the significance of issues and included appropriate remedial corrective actions. The licensee appropriately evaluated unusual noises heard during dry cask storage lifting operations and also the cause of a loss of power to the station.

## 4.0 **Operation of an ISFSI (IP 60855)**

### 4.1 Inspection Scope

The inspectors observed and evaluated select licensee loading operations during the licensee's 2017 dry fuel storage campaign to assess:

- Compliance with the applicable CoC conditions, the associated TSSs, and ISFSI procedures;
- Changes made to programs related to the ISFSI to verify that changes were made consistent with the license, or CoC, and did not reduce the effectiveness of the program;
- The effectiveness of the licensee's plans and preparations for controlling radiological activities;
- Whether loading operations were conducted in a safe manner and in compliance with approved procedures;

- The fuel assemblies were identified and recorded and documents were controlled;
- Routine activities and surveillances were performed in accordance with approved procedures and within required frequencies; and
- The effectiveness of management's oversight and quality assurance assessments of ISFSI loading activities.

#### 4.2 Observations and Findings

The inspectors observed and evaluated select licensee loading, processing, and transfer operations during the licensee's 2017 dry fuel storage campaign to verify compliance with the applicable CoC conditions, the associated TSs, and ISFSI procedures. Specifically, the inspectors observed: independent verification of the fuel assemblies placed into the transportable storage canister (TSC); lifting the transfer cask from the SFP; decontamination and surveying; welding of the TSC lid; non-destructive testing of the TSC lid-to-shell welds; draining the TSC of water; vacuum drying the TSC; transfer of the TSC from the transfer cask to the storage cask; and required radiological surveys.

The inspectors toured the ISFSI pad to assess the material condition of the pad and casks. The inspectors reviewed the licensee's evaluations of flammable materials near the ISFSI and the radiation monitoring program. Additionally, the inspectors performed independent radiation surveys around the ISFSI pad and casks and verified that the radiation levels from the casks were well below the regulatory limits.

The inspectors reviewed select documents, in part, after the licensee completed certain loading activities and reviewed the fuel selection documentation to verify the fuel placed in the TSC met the TS requirements. The inspectors reviewed the applicable procedures for compliance with the site's control of heavy loads program. In addition, the inspectors reviewed condition reports and the associated corrective actions, as well as reviewed changes to the licensee's 10 CFR 72.212 evaluations since the last ISFSI inspection. The inspectors verified that the licensee took adequate corrective actions in a timely manner to correct any issues identified.

No findings were identified.

#### 4.3 Conclusions

The licensee performed ISFSI loading activities in accordance with NAC MAGNASTOR CoC 1031 requirements.

### 5.0 **Maintenance and Surveillance (IP 62801)**

#### 5.1 Inspection Scope

The inspectors conducted plant tours and interviews, and reviewed maintenance effectiveness evaluations during the inspection period to evaluate the maintenance of structures, systems, and components important to the safe storage of spent fuel and proper operation of radiation monitoring and effluent control equipment.

During walkdowns, the inspectors evaluated material condition and housekeeping, assessed area radiological conditions, radiological access control and associated posting/labeling, and reviewed the overall condition of systems, structures, and components that support decommissioning. Independent radiation measurements were periodically made by the inspectors in areas toured to determine if those areas were controlled properly and posted as prescribed in 10 CFR Part 20.

The inspectors reviewed the licensee's periodic assessment performed in accordance with 10 CFR 50.65(a)(3) and Maintenance Rule Expert Panel meeting minutes and associated evaluations involving condition monitoring failures of Radiation Monitor R-13.

## 5.2 Observations and Findings

The inspectors found that housekeeping remained satisfactory throughout the inspection period and changing radiological conditions were addressed in a prompt and timely manner by licensee staff.

The inspectors noted that the licensee appropriately prioritized corrective maintenance on the remaining systems required for SAFSTOR and appropriately performed evaluations of systems within scope of 10 CFR 50.65 when equipment failures occurred.

No findings were identified.

## 5.3 Conclusions

Plant material condition and housekeeping were adequate and had not adversely impacted safe decommissioning or SAFSTOR. Workers followed work plans, surveillance procedures, industrial safety protocols, and were aware of job controls specified in work instructions. Evaluations regarding maintenance effectiveness were performed in accordance with 10 CFR 50.65.

## 6.0 **Decommissioning Performance and Status Reviews (IP 71801)**

### 6.1 Inspection Scope

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

- Status of ongoing decommissioning activities and planning for future activities;
- Whether licensee activities were in accordance with license conditions and docketed commitments as well as within the bounds of the docketed PSDAR;
- Operability and functionality of systems necessary for safe decommissioning were assessed through control room and plant walkdowns, including the following systems: radioactive effluent monitoring, SFP cooling, level and temperature control, radiation protection monitors and alarms, and equipment that provided normal and standby electrical power;

- Operator logs and data taking for normal facility operations, surveillances, maintenance, and verification that out-of-specification data were appropriately dispositioned and resolved;
- Assessed ongoing in-plant work activities to ensure work activities were evaluated for risk in accordance with 10 CFR 50.65(a)(4), operational work risk assessments were performed, and operations shift turnovers appropriately communicated pertinent plant status;
- Verified appropriate plant staffing was maintained and that appropriate management oversight of licensee and supplemental activities were performed;
- Performed plant tours to assess field conditions and decommissioning abandonment activities;
- Plant material condition of structures, systems, and components was maintained at a high level to ensure safe storage of spent fuel; and
- Verified the storage of combustibles and flammables were in accordance with plant procedures and the fire plan.

The inspectors verified that when issues were identified, licensee personnel appropriately documented the issues in the CAP.

## 6.2 Observations and Findings

The inspectors determined through plant tours and activities observed that the licensee conducted activities in accordance with the regulatory requirements and plant procedures. Structures, systems, and components were maintained to support the safe storage of spent fuel and good housekeeping practices were in place to limit the quantity of combustibles.

No findings were identified.

## 6.3 Conclusions

The inspectors determined that the licensee conducted decommissioning activities in accordance with the regulations and license requirements. The inspectors verified that the licensee's activities were in accordance with TSS, the USAR, and the PSDAR. Finally, the inspectors conducted plant tours to verify that the material condition of structures, systems, and components supported the safe storage of spent fuel and conduct of safe decommissioning.

## 7.0 **Radioactive Waste Treatment, and Effluent and Environmental Monitoring (IP 84750)**

### 7.1 Inspection Scope

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

- Radioactive waste treatment systems were maintained and operated to keep offsite doses ALARA;
- The licensee effectively controlled, monitored, and quantified releases of radioactive materials in liquid, gaseous, and particulate forms to the environment; and
- The radiological environmental monitoring programs were effectively implemented to ensure effluent releases were being adequately performed as required to minimize public dose.

As part of the inspection, the inspectors verified that licensee programs and procedures were appropriately implemented by licensee staff. In addition, the inspectors verified that when issues were identified licensee personnel appropriately documented the issues in the CAP and adequate corrective actions were taken.

## 7.2 Observations and Findings

The inspectors noted during walkdowns of the effluent equipment and pathways that they were configured as described in the Offsite Dose Calculation Manual and were in good material condition. As previously discussed, the former Simulator Training Facility was demolished during this inspection period. Although the building was never used for radioactive material and was outside the radiological controlled area, the inspectors verified that the licensee performed radiological surveys to confirm that no radioactive material was present before demolition. The inspectors concluded that the survey was appropriate and that no radioactive materials above background were detected.

No findings were identified.

## 7.3 Conclusions

The licensee controlled, monitored, and quantified releases of radioactive materials released to the environment to ensure offsite doses were within regulatory limits and ALARA.

# 8.0 **Solid Radioactive Waste Management and Transportation of Radioactive Materials (IP 86750)**

## 8.1 Inspection Scope

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

- Material was properly classified, described, packaged, marked, and labeled for transportation; and
- Shipments made by the licensee were in compliance with NRC and Department of Transportation regulations.

## 8.2 Observations and Findings

Procedures for the preparation and shipping of radioactive waste were provided by the licensee and followed by the licensee's staff. While the inspectors were onsite, a sample of resin was shipped as an exempt quantity material. In reviewing the characterization paperwork, the inspectors concluded that the material was properly classified as an exempt concentration in accordance with 49 CFR 173.436

No findings were identified.

## 8.3 Conclusions

Radioactive materials planned for shipment were classified and characterized appropriately as an exempt concentration in accordance with 49 CFR 173.436.

## 9.0 **Exit Meeting**

The inspectors presented the results of the inspection to Mr. S. Yuen and other members of the KPS staff at an onsite exit meeting on June 28, 2017. The licensee acknowledged the results presented and did not identify any of the information discussed as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **PARTIAL LIST OF PERSONS CONTACTED**

S. Yuen, Plant Manager  
T. Olson, Technical Support Manager  
M. Hale, Radiation Protection Manager  
D. Shannon, Radiation Protection Manager  
B. Koehler, Project Manager  
J. McNamara, Project Manager  
R. Repshas, Licensing Manager  
J. Gadzala, Licensing Engineer

### **INSPECTION PROCEDURES (IPs) USED**

IP 36801	Organization and Management Controls at Permanently Shutdown Reactors
IP 37801	Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors
IP 40801	Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors
IP 60855	Operation of an ISFSI
IP 62801	Maintenance and Surveillance at Permanently Shutdown Reactors
IP 71801	Decommissioning Performance and Status Reviews at Permanently Shutdown Plants
IP 84750	Radioactive Waste Treatment, and Effluent and Environmental Monitoring
IP 86750	Solid Radioactive Waste Management and Transportation of Radioactive Materials

### **ITEMS OPENED, CLOSED, AND DISCUSSED**

<u>Opened</u>	<u>Type</u>	<u>Summary</u>
---------------	-------------	----------------

None

<u>Closed</u>	<u>Type</u>	<u>Summary</u>
---------------	-------------	----------------

None



## PARTIAL LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

- ACE No. 392; Loss of Offsite Power
- AD-KW-102; Procedure Use and Adherence; Revision 0
- Cask 1 Lessons Learned Kewaunee MAGNASTOR Dry Cask Project; January 11, 2017
- Control Room Logs; May 1-3, 2017
- CR 366; Maintenance Rule 10CFR50.65(a)(3); December 3, 2015
- CR 755; R-13 Indication Spiked High After Scheduled PMs; August 16, 2016
- CR 773; R-13 Abnormal; September 7, 2016
- CR 1029; Transportable Storage Container (TSC) Vent and Drain Port Covers; February 9, 2017
- CR 1039; Aux Crane Main Hook Noise; February 18, 2017
- CR 1005; Siphon Tube Unable to be Removed from TSC Lid; January 31, 2017
- CR 1015; Aux Building Crane Main Hook Sheaves Squealing; February 4, 2017
- CR 1125; Unusual Isotope Silver 108 Metastable Identified in Effluent Stream; April 7, 2017
- CR 1140; Silt Build Up in Plant Intake Water Crib/Pipe; April 11, 2017
- CR 1166; Heavy Haul Path Degradation from Transport of VCT/VCC's; May 2, 2017
- CR 1167; TST Fused Disconnect Found Open on South Phase; May 3, 2017
- CR 1169; Loss of Offsite Power; May 2, 2017
- CR 1193; Neutron Absorber Wrapper Damaged in TSCDF-21 Cell Location 1; May 9, 2017
- CR 1241; Aux Building Crane Tripped While Lifting MTC/TSC-10; June 6, 2017
- CR 1246; NRC Question on STF Material Release Sample Plan; June 8, 2017
- E-10016; Switch Designation Diagram Relay Diagram; Revision T
- ER-KW-DEC-MRL-101 Attachment C; Radiation Monitoring System (RMS) KPS Scoping Process Information; Revision 0
- ER-KW-DEC-MRL-101 Attachment D; RMS KPS Maintenance Rule System Decommissioning Scoping Data; Revision 1
- ETE-KW-2017-0015; Kewaunee Dry Storage Fuel / Insert Certification for MAGNASTOR Canister: MAG-TSDF-30026-184-22; Revision 0
- ETE-KW-2017-0020; Kewaunee Dry Storage Fuel / Insert Certification for MAGNASTOR Canister: MAG-TSCDF-30026-184-24; Revision 0
- KW101015075; DC KW-16-02015 Demolish Simulator Training Facility; Revision 0
- KW101020410; Vendor to Disassemble, Inspect, and Repair Main Hoist Lower Block; Revision 0
- REP-20776-019; Work Plan for Main Hoist Lower Block Assembly Repair; Revision 0
- MA-KW-102; Foreign Material Exclusion; Revision 0
- MA-KW-MPM-CRN-006; Auxiliary Building Crane Main and Auxiliary Hoist Lower Block Post-Submersion Inspection; Revision 2
- Maintenance Rule Expert Panel Meeting Minutes; May 10, 2016
- Maintenance Rule Expert Panel Meeting Minutes; October 12, 2016
- MRS-SSP-3228; Dry Cask Storage (DCS) Component Cleaning Procedure for Kewaunee Unit 1; Revision 1
- MRS-SSP-3229; Heavy Haul Trailer (HHT) Operation at Kewaunee Unit 1; Revision 4

- MRS-SSP-3230; Vertical Cask Transporter (VCT) Operation at Kewaunee Unit 1; Revision 1
- MRS-SSP-3231; Vertical Concrete Cask (VCC) Pre-Use Inspection at Kewaunee Unit 1; Revision 1
- MRS-SSP-3232; Dry Cask Storage (DSC) Material Control for Kewaunee Unit 1; Revision 1
- MRS-SSP-3233; Transportable Storage Canister (TSC) Loading Procedure for Kewaunee Unit 1; Revision 5
- MRS-SSP-3233; Transportable Storage Canister (TSC) Loading Procedure for Kewaunee Unit 1; Revision 11
- MRS-SSP-3234; Annulus Circulating Water System (ACWS) Operation for Kewaunee Unit 1; Revision 2
- MRS-SSP-3234; Annulus Circulating Water System (ACWS) Operation for Kewaunee Unit 1; Revision 4
- MRS-SSP-3235; Canister Processing System (CPS) Operation for Kewaunee Unit 1; Revision 5
- MRS-SSP-3236; Vertical Concrete Cask (VCC) Loading and Transport Operations for Kewaunee Unit 1; Revision 10
- MRS-SSP-3237; MAGNASTOR Process & Readiness Procedure for Kewaunee Unit 1; Revision 1
- MRS-SSP-3238; Transportable Storage Canister (TSC) Unloading for Kewaunee Unit 1; Revision 8
- MRS-SSP-3239; Dry Run Plan for Kewaunee Unit 1; Revision 0
- MRS-SSP-3240; Cask Loading Contingency Procedure for Kewaunee Unit 1; Revision 1
- MRS-SSP-3241; Cask Loading Lift Plans for Kewaunee Unit 1; Revision 2
- OP-KW-OSP-MI-002; Daily Instrument Channel Checks; Revision 10
- Plan Number 16-0002; Material Release Sample Plan for the Site Training Facility (Simulator)
- Radioactive Material Packaging Form PID No.: 2017-06-07-1; Resin Samples of CVC Mixed Bed and SFP Mixed Bed; June 6, 2017
- RP-KW-225; Unrestricted Release of Material; Revision 1
- Vendor Nonconformance Report No. 845165-06; May 9, 2017
- SAR 150; Kewaunee Power Station Maintenance Rule (a)(3) Formal Self-Assessment; April 12, 2016
- WO KW100997658; NAC ISFSI Campaign-Load Cask Sequence #2 (VCC 4 to PAD A2)
- WO KW100997676; NAC ISFSI Campaign-Load Cask Sequence #11 (VCC 11 to PAD B4)
- WO KW100997684; NAC ISFSI Campaign-Load Cask Sequence #15 (VCC 19 to PAD A7)
- 72.48 Evaluation No. 2017-03; MRS-SSP-3240, Revision 1, One-time-only Change, 2017-05-24

## LIST OF ACRONYMS USED

ACE	Apparent Cause Evaluation
ADAMS	Agencywide Documents Access and Management System
ALARA	As Low As Is Reasonably Achievable
CAP	Corrective Action Program
CFR	<i>Code of Federal Regulations</i>
CoC	Certificate of Compliance
DEK	Dominion Energy Kewaunee
DNMS	Division of Nuclear Materials Safety
IP	Inspection Procedure
IR	Inspection Report
ISFSI	Independent Spent Fuel Storage Installation
KPS	Kewaunee Power Station
NRC	U.S. Nuclear Regulatory Commission
PSDAR	Post Shutdown Decommissioning Activities Report
SAFSTOR	Safe Storage
SFP	Spent Fuel Pool
TSC	Transportable Storage Canister
TS	Technical Specification
USAR	Updated Safety Analysis Report