



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

August 19, 2016

Mr. David A. Heacock
President and Chief Nuclear Officer
Dominion Energy Kewaunee, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: NRC INSPECTION REPORT NO. 05000305/2015004(DNMS);
07200064/2015002(DNMS) – KEWAUNEE POWER STATION

Dear Mr. Heacock:

On August 10, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed onsite inspection activities related to the Independent Spent Fuel Storage Installation (ISFSI) from October 27, 2015, to August 10, 2016, at the permanently shut down Kewaunee Power Station in Kewaunee, Wisconsin. The purpose of the inspection was to determine whether ISFSI 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 August 10, 2016.

During the inspection period, the NRC inspectors reviewed the preoperational testing of the ISFSI and the associated evaluations for using an NRC-approved cask design onsite for the first time. 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, the NRC identified one Severity Level IV violation of NRC requirements. However, because of the very low safety significance and because the issue was entered into your Corrective Action Program, the NRC is treating the issue as a Non-Cited Violation (NCV) in accordance with Section 2.3.2 of the NRC's Enforcement Policy. No response is required for the NCV. However, if you contest this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region III; and the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

D. Heacock

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In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," 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's Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

Docket Nos. 050-305; 072-064
License No. DPR-43

Enclosure:
IR Nos. 05000305/2015004(DNMS);
07200064/2015002(DNMS)

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D. Heacock

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U.S. NUCLEAR REGULATORY COMMISSION
REGION III

Docket Nos: 050-305
072-064

License No: DPR-43

Report Nos: 05000305/2015004(DNMS)
07200064/2015002(DNMS)

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

Facility: Kewaunee Power Station (KPS)

Location: Kewaunee, Wisconsin

Dates: October 27, 2015, through August 10, 2016

Inspectors: Rhex A. Edwards, Senior Health Physicist
Daniel C. Strohmeyer, Health Physicist
John V. Bozga, Reactor Inspector
Matthew C. Learn, Reactor Inspector
Clyde D. Morell, Materials Engineer

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 05000305/2015004(DNMS); 07200064/2015002(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 with spent fuel in wet storage and at an Independent Spent Fuel Storage Installation (ISFSI). During this inspection period, the licensee made preparations for a dry cask storage campaign to remove the remaining fuel from the spent fuel pool and place it on the ISFSI pad.

Preoperational Testing of an ISFSI

- The licensee's preoperational testing program completed canister closure welding and canister processing demonstrations. Preoperational testing demonstrations are ongoing and will continue to be inspected by the NRC. Inspection results will be documented in a future inspection report. (Section 1.0)

Review of 10 CFR 72.212(b) Evaluations

- The NRC inspectors identified a Severity Level IV Non-Cited Violation (NCV) of 10 CFR 50.59(c)(2)(v), "changes, tests, and experiments," for failing to obtain a license amendment for a change that created an accident of a different type than any previously evaluated in the USAR. Specifically, the licensee approved procedure MRS-SSP-3236, which allowed the use of a non-single failure proof lifting device to handle a canister containing spent fuel. Using a non-single failure proof lifting device was inconsistent with the licensing basis and created the possibility of dropping a cask, an accident of a different type than described in the KPS USAR, which would require a license amendment pursuant to 10 CFR 50.59. (Section 2.0)

Report Details

Summary of Plant Activities

During this inspection period, the licensee made preparations for a dry cask storage campaign to remove the remaining fuel from the spent fuel pool and place it on the ISFSI pad. The site previously constructed an ISFSI pad to accommodate NAC MAGNASTOR vertical dry fuel storage casks. Throughout this inspection period, the licensee prepared engineering evaluations, developed procedures, and performed demonstrations of the MAGNASTOR system prior to loading the system with fuel.

1.0 Preoperational Testing of an ISFSI (IP 60854)

1.1 Inspection Scope

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

- Preoperational test procedures for dry cask storage system (DCSS) loading, unloading, and transfer activities met acceptance criteria specified in commitments and requirements;
- Preoperational test procedures were prepared, reviewed, and initially approved in accordance with the licensee's administrative programs;
- Licensee personnel conducting preoperational activities had a clear understanding of their duties and responsibilities;
- Equipment used during preoperational activities was tested or evaluated for its impact on plant structures, systems, and components before performance of preoperational tests;
- Responsibilities for specific activities related to the ISFSI were defined and integrated into appropriate plant programs;
- Management effectively provided quality oversight of preoperational testing activities;
- Preparations were made to effectively control radiological and security activities during preoperational testing;
- Preoperational testing demonstrations adequately displayed readiness to safely transfer spent fuel from the spent fuel pool to the ISFSI; and
- Preoperational testing demonstrations adequately displayed readiness to safely retrieve spent fuel from the ISFSI and transfer it to the spent fuel pool.

The inspectors verified that when issues were identified that licensee personnel appropriately documented the issues in the Corrective Action Program (CAP).

1.2 Observations and Findings

The NAC MAGNASTOR Certificate of Compliance (CoC) 1031 requires a dry run training exercise on loading, closure, handling, unloading, and transfer of the MAGNASTOR system prior to the first use of the system to load spent fuel assemblies. Preoperational test procedures for DCSS loading, unloading, and transfer activities met acceptance criteria specified in commitments and requirements. Additionally, procedures were approved for dry run training exercise in accordance with the licensee's programs. Individuals involved in dry cask storage activities were trained and qualified to perform the tasks they were assigned in accordance with the applicable plant programs. Equipment used in the conduct of dry cask storage operations was evaluated for impacts on plant structures, systems, and components prior to performing preoperational testing. KPS management was engaged in dry cask storage preparations as was the quality assurance organization. Preparations were in progress to effectively control radiological and security activities. During this inspection period, the licensee began dry run demonstrations but did not complete the activities. Specifically, the inspectors observed a successful demonstration of canister closure welding from October 26–29, 2015, and canister processing activities during the week of April 4, 2016. The licensee attempted to perform additional dry runs but was unable to complete a heavy load lift demonstration on April 5, when an empty spent fuel canister encountered interference during the lift. Following the incomplete lift, the NRC inspectors (who had observed the lift) and a specialist from the NRC headquarters office performed an additional review of the lifting device used during the lift. The results of this additional review are discussed in section 2.2 of this report. The remaining dry run inspections will be documented in a future inspection report.

No violations were identified.

1.3 Conclusions

The licensee's preoperational testing program completed canister closure welding and canister processing activities. Preoperational testing demonstrations are ongoing and will continue to be inspected by the NRC. Inspection results will be documented in a future inspection report.

2.0 **Review of 10 CFR 72.212(b) Evaluations (IP 60856)**

2.1 Inspection Scope

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

- Written evaluations were performed which established that the conditions set forth in the CoC were met;
- Written evaluations established that the cask storage areas had been designed to adequately support the stored static load of the storage casks;
- Provisions were in place for maintaining evaluations (records);

- Revisions to written evaluations required by 10 CFR 72.212 were performed in accordance with 10 CFR 72.48;
- The cask design bases were enveloped by the reactor site parameters and adequately documented;
- Activities related to the storage of spent fuel were evaluated in accordance with 10 CFR 50.59 to determine whether the activity involved a change to the facilities Technical Specifications (TSs) or required a license amendment.
- The Emergency Plan (EP), Quality Assurance Program (QAP), radiation protection program, and training program were reviewed for a decrease in effectiveness;
- Activities related to spent fuel storage were performed in accordance with written procedures;
- Current copies of the CoC and applicable references were maintained; and
- Records provided by the cask supplier were maintained.

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

2.2 Observations and Findings

The inspectors reviewed the licensee's written evaluations that document how the conditions of the CoC were met, including evaluations that established whether the cask design bases was bounded by the reactor site parameters and cask storage areas were adequately designed to support the weight of the storage casks. The review included structural evaluations associated with the floor loading in the spent fuel pool and other floor loading cask placement areas in the auxiliary building (AB). The inspectors also reviewed the licensee's operating experience response to a 10 CFR Part 21 report issued on May 18, 2015, regarding errors in the Staad.Pro software used by some utilities for certain structural analyses and design applications (ADAMS Accession No. ML15147A547). The licensee had performed an operating experience review and documented that the computer software error did not exist in the calculations of record for the cask placement areas in the AB. The inspectors reviewed the licensee's design, inspection, testing, and maintenance documentation associated with the special lifting devices (secure lift yoke and in-pool lift yoke). The secure lift yoke and in-pool lift yoke were designed, fabricated, and tested to the requirements of American National Standards Institute standard N14.6, "Radioactive Materials - Special Lifting Devices for Shipping Containers Weighing 10000 Pounds (4500 kg) or More," and were designed to lift the weight of a loaded transfer cask with an adequate safety factor with respect to yield stress and ultimate stress. These evaluations were approved and retained per the licensee's document control program. The EP, QAP, radiation program, and training program were all reviewed with respect to the impact dry cask storage activities may have on them. No decrease in effectiveness was identified by the inspectors. All activities pertaining to spent fuel storage were performed in accordance with written procedures and the licensee maintained current copies of the CoC, applicable references, and records provided by the cask supplier. Changes made during the

preparation for dry cask storage activities were screened by the licensee in accordance with their 10 CFR 72.48 and 10 CFR 50.59 procedures and were reviewed by the NRC inspectors.

The NRC inspectors identified a Severity Level IV NCV of 10 CFR 50.59(c)(2)(v), “changes, tests, and experiments,” for the licensee failing to obtain a license amendment for a change that created an accident of a different type than any previously evaluated in the USAR. Specifically, on March 8, 2016, the licensee approved procedure MRS-SSP-3236, which allowed the use of a non-single failure proof lifting device to handle a canister containing spent fuel. Using a non-single failure proof lifting device was inconsistent with the licensing basis and created the possibility of dropping a cask, an accident of a different type than described in the KPS USAR, which would require a license amendment pursuant to 10 CFR 50.59.

On November 20, 2008, the NRC approved License Amendment 200 to relocate heavy loads restrictions from the license’s TSs to a licensee-controlled Technical Requirements Manual (TRM). The previous TS prohibited heavy loads, greater than the weight of a fuel assembly, from being transported over or placed in the spent fuel pool. The license amendment approved the upgrade of the AB crane and relocated, with modification, the TS requirement to the TRM, where it states, in part, that “heavy loads greater than the weight of a fuel assembly...will not be transported over or placed in either spent fuel pool...unless: the load handling system (e.g. crane, associated lifting devices, and interfacing lift points) used for these heavy load lifts meets the single-failure-proof handling system criteria.” With the upgrade in the AB crane load handling system (crane, associated lifting devices, and interfacing lift points), the NRC also approved the removal of the cask drop accident from the KPS USAR.

KPS USAR section 9.5.2.2.4 provides the description of the AB crane and states its purpose is to handle spent fuel shipping and transfer casks and is designed to minimize the possibility of dropping such a cask. Specifically, it states that the crane was upgraded from its original design by replacing the trolley with a single failure proof design to meet the guidance of NUREG-0612, “Control of Heavy Loads at Nuclear Power Plants,” section 5.1.6, and NUREG-0554, “Single Failure Proof Cranes for Nuclear Power Plants.” Additionally, the bases for TRM section 8.9.1 states “a single failure proof AB lifting system allows for the removal of the cask drop accident from the licensing basis of the Kewaunee Power Station, as the accident is no longer credible.” TRM Section 6.0 states that the requirements in the TRM are part of the licensing basis for KPS and further discusses that the purpose of relocating requirements from the TS to the TRM is to provide flexibility for change under 10 CFR 50.59.

On March 8, 2016, KPS screened procedure MRS-SSP-3236, “Vertical Concrete Cask Loading and Transport Operations for Kewaunee Unit 1,” per the licensee’s 10 CFR 50.59 screening process. This procedure used the AB crane with a Secure Lift Yoke/Chain Hoist Assembly (SLY/CHA) attached to the main hook for handling a transfer cask containing spent nuclear fuel while in a vertical cask transfer configuration, referred to as stack-up. In this configuration, the transfer cask is placed on top of a storage overpack for the purpose of transferring a sealed canister containing spent fuel between the transfer cask and the storage overpack. The SLY connects the transfer cask to the single failure proof AB crane while the CHA, mounted to the underside of the SLY, is used to raise and lower the canister containing spent fuel into a storage overpack located in the AB truck bay. The SLY/CHA design is described in Equipment

Specification Sheet (ESS) Number 038, "100MT (110 Ton) Chain Hoist Assembly and Lifting Attachments." In ESS No. 038, section 2, the CHA is stated as "qualified as an ASME NUM-1, Type 1B critical load handling hoist for 55 tons, meeting the level of enhanced safety required in NUREG-0612." Additional description is provided in ESS No. 038, section 7, specifically that the CHA "shall be used in a single failure proof mode based on high design safety factors." As stated in the KPS USAR, NUREG-0612 and NUREG-0554 provide the basis for conducting single failure proof lifts with the AB crane. The ASME NUM-1 standard is not presently endorsed by the NRC and it is not discussed in NUREG-0612 or NUREG-0554. ASME NUM-1 2009 describes Type 1B equipment as having additional safety features; however, Type 1A equipment is described as having single failure proof features so that a failure of a single component will not result in the loss of capability to stop and hold a critical load. As such, the NRC concluded that the licensee did not adequately demonstrate that a NUM-1 Type 1B hoist met the licensing basis for handling spent fuel casks with a single failure proof handling system. Therefore, the use of a non-single failure proof CHA was inconsistent with the AB crane's design purpose of minimizing the possibility of dropping a cask containing spent nuclear fuel. This purpose was accomplished by following the single failure proof guidance found in NUREG-0612 and provided the basis for the NRC to remove the cask drop accident from the KPS USAR in License Amendment 200. Since the CHA was not single failure proof, the inspectors concluded that the licensee could not preclude the possibility of a cask drop accident in the AB truck bay and the potential for a subsequent radiological release, an accident of a different type than discussed in the KPS USAR. However, no lifts with the SLY/CHA were conducted with spent fuel and the licensee ceased dry run demonstrations once informed of the issue.

The licensee's 10 CFR 50.59 screening process did not recognize that further evaluation was needed. Specifically, the licensee failed to evaluate whether the SLY/CHA complied with the KPS control of heavy loads program and whether its use introduced an accident of a different type. This was a performance deficiency and subsequent violation for an activity that could not be performed under 10 CFR 50.59 without prior NRC approval.

The violation was determined to be of more than minor significance using Enforcement Manual, Part III, Appendix E, "Examples of Minor Violations," which states, in part, that a minor violation of 10 CFR 50.59 involves a change to the USAR where there is no reasonable likelihood that the change would ever require NRC approval per 10 CFR 50.59. Since NRC approval was needed, the performance deficiency was more than minor as this issue impeded the ability of the NRC to perform its regulatory oversight function.

Consistent with the guidance in Section 1.2.6.D of the NRC Enforcement Manual, if a violation does not fit an example in the Enforcement Policy Violation Examples, it should be assigned a severity level: (1) commensurate with its safety significance; and (2) informed by similar violations addressed in the Violation Examples.

The violation was determined to be a Severity Level IV violation of very low safety significance using NRC Enforcement Policy, Section 6.1.d.2, dated February 4, 2015. While the change was implemented, the lifts performed during March and early April were not done over the spent fuel pool and no lifts outside of the spent fuel pool area contained fuel. Therefore, the issue had very low safety significance.

Title 10 CFR(c)(2)(v) states, in part, that a licensee shall obtain a license amendment pursuant to 10 CFR 50.90 prior to implementing a proposed change, test, or experiment if the change, test, or experiment would create a possibility for an accident of a different type than any previously evaluated in the final safety analysis report (as updated).

USAR Section 9.5.2.2.4 states that the AB crane is designed to minimize the possibility of dropping a cask and meets the guidance of NUREG-0612, Section 5.1.6, and NUREG-0554. Furthermore, TRM Section 8.9.1 states that a single failure proof AB crane lifting system allowed for the removal of the cask drop accident from the licensing basis as it was no longer credible.

Contrary to the above, on March 8, 2016, the licensee failed to obtain a license amendment for a change that created the possibility for an accident of a different type than any previously evaluated. Specifically, the licensee approved procedure MRS-SSP-3236 on March 8, 2016, which allowed the use of a non-single failure proof lifting device to handle a canister containing spent fuel. The subsequent use of a non-single failure proof lifting device in March and early April was inconsistent with the licensing basis and created the possibility of dropping a cask, an accident of a different type than described in the KPS USAR.

Upon identification, the licensee suspended use of the SLY/CHA and entered the issue into the CAP (Condition Reports 589 and 690). Additionally, KPS participated in a public meeting with the NRC on June 28, 2016, to discuss a potential license amendment request to use the SLY/CHA at Kewaunee. This violation is being treated as an NCV, consistent with Section 2.3.2.a of the Enforcement Policy (NCV 05000305/2015004-01; Failure to Obtain License Amendment Before Changing the Auxiliary Building Crane Lift System).

2.3 Conclusions

The NRC inspectors identified a Severity Level IV NCV of 10 CFR 50.59(c)(2)(v), “changes, tests, and experiments,” for the licensee’s failure to obtain a license amendment for a change that created an accident of a different type than any previously evaluated in the USAR. Specifically, the licensee approved procedure MRS-SSP-3236, which allowed the use of a non-single failure proof lifting device to handle a canister containing spent fuel. Using a non-single failure proof lifting device was inconsistent with the licensing basis and created the possibility of dropping a cask, an accident of a different type than described in the KPS USAR, which would require a license amendment pursuant to 10 CFR 50.59.

3.0 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 August 10, 2016. 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
B. McMahon, Operations Manager
J. Helbing, Maintenance Manager
B. Koehler, Project Manager
J. McNamara, Project Manager
R. Repshas, Licensing Manager
J. Gadzala, Licensing Engineer

INSPECTION PROCEDURES (IPs) USED

IP 60854 Preoperational Testing of an Independent Spent Fuel Storage Installation (ISFSI)
IP 60856 Review of 10 CFR 72.212(b) Evaluations

ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Opened</u>	<u>Type</u>	<u>Summary</u>
05000305/2015004-01	NCV	Failure to Obtain License Amendment Before Changing the Auxiliary Building Crane Lift System (Section 2.2)

<u>Closed</u>	<u>Type</u>	<u>Summary</u>
05000305/2015004-01	NCV	Failure to Obtain License Amendment Before Changing the Auxiliary Building Crane Lift System (Section 2.2)

<u>Discussed</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 of 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.

- 50.59/72.48 Screen; MRS-SSP-3236, Revision 2; March 8, 2016
- American National Standards Institute N14.6 – 1993, Special Lifting Devices for Shipping Containers Weighing 10,000 Pounds (4500 kg) or More, 1993.
- American Society of Mechanical Engineers NUM-1 – 2009; Rules for Construction of Cranes, Monorails, and Hoists (with Bridge or Trolley or Hoist of the Underhung Type; 2009
- Equipment Specification Sheet No. 38; 100 MT(110Ton) Chain Hoist Assembly and Lifting Attachments; Revision 3
- Equipment Specification Sheet No. 42; Kewaunee Auxiliary Lift Rig Sets; Revision 4
- Equipment Specification Sheet No. 42; Kewaunee Auxiliary Lift Rig Sets; Revision 2
- Calculation No. CE-1836; Cask Leveling Pad for NUHOMS-32 Cask System; Revision 0
- Calculation No. 30026-2005; Structural Evaluation of the Kewaunee Lifting Yoke; Revision 2
- Calculation No. 71160-2039; MAGNASTOR Lifting Yoke Structural Evaluation; Revision 3
- Calculation No. 111862-010-ST-01; Spent Fuel Cask Load Path Evaluation Inside Auxiliary Building; Revision 3; Addendum D
- Calculation No. 111862-010-ST-01; Spent Fuel Cask Load Path Evaluation Inside Auxiliary Building; Revision 3; Addendum C
- Calculation No. S-13200-008-01; Evaluation of ISFSI Cask Leveling Pad Feet; Revision 0
- Calculation No. C11850; Cask Leveling Pad for NUHOMS-32 Cask System; Revision 0
- Certificate of Compliance No. 072-1031; Amendment 5
- Document No. 30026-S-02; Test Plan Requirements for the Secure-Lift Yoke and Integrated Chain Hoist Assembly and the In-Pool Lift Yoke - Kewaunee Power Station (KPS); Revision 3
- Document No. 71160-S-12; Procurement/Fabrication Specification, MAGNASTOR Transfer Cask Lift Yokes, Extensions and Associated Lift Components; Revision 1
- Drawing No. M-234; General Arrangement Spent Fuel Pool & New Fuel Storage; Revision W
- Drawing No. S-414; Spent Fuel Pool & Transfer Canal Liner; Revision H
- Drawing No. 30026-031; Truck Bay Stackup, MAGNASTOR, DEK, Kewaunee Power Station; Revision 1
- Drawing No. 30026-032; Auxiliary Building Elevations, MAGNASTOR, DEK, Kewaunee Power Station; Revision 1
- Drawing No. 30026-033; Pool Elevations, MAGNASTOR, DEK, Kewaunee Power Station; Revision 1
- Sargent and Lundy Letter to Kewaunee Power Station; List of Kewaunee Power Station (KPS) Calculations Potentially Affected by STAAD.Pro Critical Error Reports SPR05336 and SPR05682; dated July 17, 2015
- Drawing No. 30026-021, Sheet 1 thru 7; Secure-Lift Yoke, Transfer Cask, MAGNASTOR, DEK, Kewaunee Power Station; Revision 3
- Drawing No. 30026-022, Sheet 1 thru 6; In-Pool Lifting Yoke, Transfer Cask, MAGNASTOR, DEK, Kewaunee Power Station; Revision 3
- Drawing No. 30026-106, Sheet 1 thru 5; Auxiliary Lifting Rigs, Operations, MAGNASTOR, DEK, Kewaunee Power Station; Revision

- Drawing No. 30026-106, Sheet 1 thru 5; Auxiliary Lifting Rigs, Operations, MAGNASTOR, DEK, Kewaunee Power Station; Revision 2
- License Amendment Request 227; Relocation of Spent Fuel Pool Crane Technical Specification to Technical Requirements Manual; November 9, 2007
- License Amendment 200; Kewaunee Power Station – Issuance of Amendment to Relocate Spent Fuel Pool Crane Requirements from the Technical Specifications to the Technical Requirements Manual; November 20, 2008
- Procedure No. 71160-P-15; MAGNASTOR - Special Lifting Devices and Equipment Inspection Procedure; Revision 1
- Procedure No. 30026-S -21, Fabrication Specification for Field Closure Welding of MAGNASTOR Transportable Storage Canisters at Kewaunee Power Station; Revision 1
- Procedure No. PI-CNSTR-OP-NAC-KEW-01, Closure Welding of NAC MAGNASTOR Canisters at Kewaunee; Revision 4
- Procedure No. MRS-SSP-3235; Canister Processing System Operation for Kewaunee Unit 1; Revision 0
- Procedure No. MRS-SSP-3236; Vertical Concrete Cask Loading & Transport Operations for Kewaunee Unit 1; Revision 2
- Kewaunee Power Station Updated Safety Analysis Report; Chapter 9 and Appendix B; Revision 25.03
- NAC International Certificate of Conformance In-Pool Lift Yoke, Secure Lift Yoke and TSC Adapter Plate; ;January 29, 2016
- Condition Report No. 380; Track Revaluation of the Leveling Pad; December 10, 2015
- Condition Report No. 589; NRC Question Related to use of SLY/CHA Licensing Basis; April 26, 2016
- Condition Report No. 690; NRC Proposed Non-Cited Level IV Violation of 10 CFR 50.59; June 29, 2016

LIST OF ACRONYMS USED

AB	Auxiliary Building
ADAMS	Agencywide Documents Access and Management System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CHA	Chain Hoist Assembly
CoC	Certificate of Compliance
DCSS	Dry Cask Storage System
DEK	Dominion Energy Kewaunee
DNMS	Division of Nuclear Materials Safety
EP	Emergency Plan
ESS	Equipment Specification Sheet
KPS	Kewaunee Power Station
NCV	Non-Cited Violation
NRC	U.S. Nuclear Regulatory Commission
PARS	Publicly Available Records System
QAP	Quality Assurance Program
SAFSTOR	Safe Storage
SLY	Secure Lift Yoke
TRM	Technical Requirements Manual
TS	Technical Specification
USAR	Updated Safety Analysis Report