

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, ILLINOIS 60532-4352

March 18, 2020

Mr. Bruce Hinkley General Manager Zion Restoration Project Zion Solutions, LLC 2701 Deborah Avenue, Suite 2F Zion, IL 60099

SUBJECT: NRC INSPECTION REPORT NO. 05000295/2019001(DNMS);

05000304/2019001(DNMS) - ZION NUCLEAR POWER STATION

Dear Mr. Hinkley:

From January 23, 2019, to February 19, 2020, the U.S. Nuclear Regulatory Commission (NRC) conducted an inspection at the permanently shut down Zion Nuclear Power Station (ZNPS) in Zion, Illinois. The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with NRC requirements. The enclosed report presents the results of this inspection, which were discussed with members of your staff on Feb 19, 2020.

During the inspection period, the NRC inspectors reviewed the following aspects of onsite activities: self-assessments, audits, and corrective actions; decommissioning performance; occupational radiation exposure; inspection of remedial and final surveys; radioactive waste treatment, and effluent and environmental monitoring; and solid radioactive waste 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, the NRC identified two Severity Level (SL) IV violations of NRC requirements. However, because of the very low safety significance and because the issues were entered into your corrective action program (CAP), the NRC is treating the issues as Non-Cited Violations (NCVs), in accordance with Section 2.3.2 of the NRC's Enforcement Policy.

No response is required for the NCVs. However, if you contest the violation or significance of the NCVs, 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.

This letter, its enclosure, and your response (if any) 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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

We will gladly discuss any questions you have concerning this inspection. If you have any questions, please contact Mr. Rhex Edwards of my staff at 630-829-9722.

Sincerely,

/RA/

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

Docket No: 50-0295; 50-0304 License No: DPR-39; DPR-48

Enclosure:

IR 05000295/2019001(DNMS); 05000304/2019001(DNMS);

cc w/encl: ZionSolutions, Service List

Letter to Bruce Hinkley from Michael Kunowski, dated March 18, 2020.

SUBJECT: NRC INSPECTION REPORT NO. 05000295/2019001(DNMS); 05000304/2019001(DNMS) – ZION NUCLEAR POWER STATION

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket No: 50-295; 50-304

License No: DPR-39; DPR-48

Report No: 05000295/2019001(DNMS);

05000304/2019001(DNMS);

Enterprise Identifier: I-2019-001-0093

Licensee: Zion Solutions, LLC

Facility: Zion Nuclear Power Station, Units 1 and 2

Location: Zion, Illinois

Dates: January 23, 2019, to February 19, 2020

Inspectors: Bill C. Lin, Health Physicist

Rhex A. Edwards, Senior Health Physicist

Peter J. Lee, Reactor (Decom) Inspector, Ph.D., CHP

Approved by: Michael A. Kunowski, Chief

Materials Control, ISFSI, and Decommissioning Branch

Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

Zion Nuclear Power Station, Units 1 and 2 NRC Inspection Report 05000295/2019001(DNMS); 05000304/2019001(DNMS)

The Zion Nuclear Power Station is a permanently shut-down and defueled power reactor facility that was maintained in a safe storage condition from 1998 through 2010. Active decommissioning began in 2011 and continued throughout this inspection period. This periodic safety inspection reviewed licensed activities associated with self-assessments, audits, and corrective actions; decommissioning performance; occupational radiation exposure; inspection of remedial and final surveys; radioactive waste treatment, and effluent and environmental monitoring; and solid radioactive waste management and transportation of radioactive materials.

Self-Assessment, Auditing, and Corrective Action

 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. (Section 1.0)

Decommissioning Performance and Status Review

• The inspectors identified a Severity Level (SL) IV, Non-Cited Violation (NCV) of License Condition 2.C.(17) for failing to implement and maintain in effect all provisions of the approved License Termination Plan (LTP). Specifically, the licensee placed contaminated concrete debris in an area under Final Status Survey (FSS) controls which is inconsistent with LTP section 5.6.3 to implement controls throughout FSS activities until there is no risk of recontamination from decommissioning or the survey area has been released from the license. (Section 2.0)

Occupational Radiation Exposure

 Radiation surveys were performed adequately to identify the hazards present. Command and control of radiologically significant activities was executed in a manner that was safe and achieved the desired result. (Section 3.0)

Inspection of Remedial and Final Surveys

• The inspectors identified a SL IV NCV of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.9(a), "Completeness and Accuracy of Information," for the failure to submit to the NRC complete and accurate information in the Final Status Survey Report (FSSR) – Phase 1, dated November 1, 2018, and the annual decommissioning funding status report, dated March 26, 2019. (Section 4.0)

Radioactive Waste Treatment, and Effluent and Environmental Monitoring

 The licensee maintained effluent monitoring as described within the Offsite Dose Calculation Manual (ODCM). The licensee's Annual Radiological Environmental Operating Report was in compliance with the ODCM and 10 CFR Part 20. (Section 5.0)

Solid Radioactive Waste Management and Transportation of Radioactive Materials

• Radioactive materials planned for shipment were classified, characterized, and packaged appropriately, in accordance with NRC and Department of Transportation (DOT) regulations, to meet low-level waste burial site criteria. (Section 6.0)

Report Details

Summary of Plant Activities

During this inspection period, the licensee continued performing FSSs, shipping radioactive waste, and backfilling areas around the site.

1.0 Self-Assessments, Auditing, and Corrective Action (IP 40801)

1.1 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;
- License 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; and
- Quality assurance personnel audited changes in the status of decommissioning and licensee organization.

The inspectors reviewed CAP documents to determine if a sufficiently low threshold for problem identification existed; the quality of follow-up evaluations, including extent-of-condition; and if the licensee assigned timely and appropriate prioritization for issue resolution, commensurate with the significance of the issue.

1.2 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.

No findings were identified.

1.3 <u>Conclusions</u>

Issues were identified by the licensee at appropriate thresholds and entered into the CAP. Issues were screened and prioritized commensurate with safety significance. Licensee evaluations determined the significance of issues and included appropriate remedial corrective actions.

2.0 Decommissioning Performance and Status Reviews (IP 71801)

2.1 Inspection Scope

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

- Status of ongoing decommissioning activities and planning for future activities;
- Licensee activities were in accordance with license conditions and docketed commitments, as well as, within the bounds of the docketed PSDAR;
- Appropriate plant staffing was maintained, and appropriate management oversight of licensee and supplemental activities was performed;
- Pre-job briefs were conducted for facility operations, including maintenance, surveillance, operations, and decommissioning activities;
- In-plant field conditions and decommissioning abandonment activities were adequate; and
- In-progress field work was conducted in accordance with approved work instructions and workers were knowledgeable of tasks.

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

2.2 Observations and Findings

On February 6, 2019, NRC Region III inspectors held a periodic conference call with ZNPS staff during which the inspectors learned that ZNPS had placed concrete debris from the demolition of buildings on land areas that were previously final status surveyed. To the inspectors, the placement of the concrete on areas that had been final status surveyed appeared to be inconsistent with the License Termination Plan (LTP), the NRC-approved plan for the remaining decommissioning activities at the site. On February 26, the inspectors were onsite to confirm the placement of this concrete. At this point, since concrete debris had already been placed in land area survey units (SUs), the licensee began stockpiling the concrete debris, North to South, between SU12113 and SU12203. A licensee survey map dated February 26, 2019, showed SU12113 and SU12203 having been final status surveyed.

On December 19, 2014, the Zion Nuclear Power Station (ZNPS) submitted the License Termination Plan (LTP) as part of a license amendment request (ML15005A336). In this

submittal, the licensee indicated their intent to reuse concrete debris generated from the demolition of buildings as basement fill in certain locations onsite. LTP section 2.2, Characterization Approach, states, "Concrete that meets the non-radiological definition of Clean Concrete Demolition Debris (CCDD) and has been deemed suitable for offsite release in accordance with the site unconditional release process may be used as basement fill." The NRC, as part of its review of the proposed LTP, requested additional information on the planned use of concrete and where it would be used onsite as fill. In its response dated July 20, 2016 (document ZS-2016-0084, (ML16211A199), ZionSolutions clarified that "Concrete debris from the demolition of buildings will not be used to backfill excavations made in soil or land voids."

Following the submittal of this supplemental information and other information, the ZNPS LTP was approved on September 28, 2018 (ML18163A313) and added as License Condition 2.C.(17). The July 20, 2016 response from the licensee, as well as a number of other letters, were incorporated into the approval. As such, the NRC approved the use of concrete debris as backfill in designated basements and assigning an appropriate dose from the licensed material contained in the concrete debris. However, as specifically highlighted by the NRC in the Safety Evaluation Report (ML18164A222), section 3.5.5.9.2, Evaluation of Concrete Reuse Surveys and Implementation) that accompanied the approval of the LTP, the NRC stated that any residual radioactivity that is distinguishable from background must be considered in the dose assessment for a survey unit, even if the amount of radioactivity is below the derived concentration guideline limit or DCGL. The reuse of concrete was limited to filling specific basement foundations and the reuse concrete debris was never found to be completely free of residual radioactivity generated during licensed operations.

LTP section 5.6.3 states "isolation and control measures will be implemented through approved plant procedures and will remain in force throughout FSS activities and until there is no risk of recontamination from decommissioning or the survey area has been released from the license." Because the licensee did not demonstrate that the reuse concrete debris was free of residual radioactive material, placing the concrete debris in the FSS areas mentioned above was inconsistent with section 5.6.3 of the LTP, aimed at preventing recontamination of FSS areas. Failing to implement controls in accordance with LTP section 5.6.3 throughout FSS activities until there is no risk of recontamination from decommissioning or the survey area has been released from the license is a violation of License Condition 2.C.(17) to implement and maintain in effect all provisions of the approved LTP.

The inspectors determined that the violation was of more than minor significance in that the licensee needed to remove and dispose of the reuse concrete applied to the FSS land areas and resurvey the SUs where the concrete was placed. 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 SL: (1) commensurate with its safety significance; and (2) informed by similar violations addressed in the Violation Examples. The inspectors did not find an example in the NRC's enforcement guidance that was similar to this issue. However, since there was no actual dose impact to a member of the public, there was minimal risk to the public. As such, the violation was not considered to be of higher safety significance and screened as a SL IV.

The violation is as follows:

License Condition 2.C.(17) requires, in part, that the licensee implement and maintain in effect all provisions of the approved LTP.

LTP section 5.6.3 states "isolation and control measures will be implemented through approved plant procedures and will remain in force throughout FSS activities and until there is no risk of recontamination from decommissioning or the survey area has been released from the license."

Contrary to the above, on or around February 6, 2019, the licensee did not implement and maintain in effect all provisions of the approved LTP. Specifically, isolation and control measures were not implemented for survey unit areas SU12113 and SU12203 when potentially contaminated concrete debris was placed on the survey areas after the areas had already been final status surveyed but before they had been released from the license.

The licensee entered this issue into the CAP as ES-ZION-CR-2019-0026. Ultimately, the concrete was removed from the survey units and shipped for disposal as low-level radioactive waste. Once the concrete was removed, the two areas were re-surveyed and controls were implemented to preclude re-contaminating these areas. Because this issue was of very low safety significance (SL IV) and was entered into the CAP, this violation is being treated as an NCV consistent with section 2.3.2 of the NRC Enforcement Policy (NCV 05000295/2019001-01; 05000304/2019001-01; Failure to Implement the LTP).

2.3 Conclusions

The inspectors identified a SL IV, NCV of License Condition 2.C.(17) for the licensee's failure to follow a limitation in the LTP on the reuse of concrete debris onsite.

3.0 Occupational Radiation Exposure (IP 83750)

3.1 Inspection Scope

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

- Planning and preparation for radiation work were adequate and licensee management supported Radiation Protection planning;
- Personal dosimetry for external exposure met requirements;
- Management and administrative controls of external radiation exposure met requirements and were designed to make exposures As Low As is Reasonably Achievable;
- Survey and monitoring activities were performed as required; and
- Control of radioactive materials and contamination met requirements.

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

3.2 Observations and Findings

The inspectors directly observed licensee personnel perform contamination surveys of excavators, trucks, and industrial vehicles to ensure that all vehicles were free of contamination as they exited the industrial work area. The surveys were performed in accordance with licensee's approved procedures. The inspectors also observed that licensee personnel wore the appropriate dosimetry and had implemented the appropriate radiation protection controls during the surveys and decontamination of the vehicles.

3.3 Conclusions

Radiation surveys were performed adequately to identify the hazards present.

Command and control of radiologically significant activities was executed in a manner that was safe and achieved the desired result.

4.0 Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors (IP 83801)

4.1 <u>Inspection Scope</u>

Independent confirmatory surveys were conducted for the NRC by Oak Ridge Associated Universities (ORAU) in various locations where the main power generation buildings had been located and elsewhere onsite. NRC inspectors accompanied ORAU during these surveys, which were performed during the week of December 2, 2019. Confirmatory surveys were also conducted in other areas in July 2019. NRC inspectors and headquarters staff reviewed the results of these surveys and licensee survey reports, and decommissioning financial assurance documents, submitted to the NRC.

4.2 Observations and Findings

The results of the independent confirmatory surveys conducted by ORAU will be reviewed by NRC technical specialists as part of the review of the large number of final status survey reports submitted by the licensee. The results of the July 2019 independent surveys have been finalized (ML20034D661) whereas the final results of the surveys from December 2019 are not yet publicly available. The report for the July 2019 surveys also refers to a visit by the NRC and ORAU in April 2019 to conduct surveys. That visit was terminated shortly after beginning because miscommunications within the licensee organization had erroneously identified certain areas as being ready for the confirmatory surveys when they were not.

The inspectors and NRC headquarters staff identified two instances where documents submitted by the licensee to the NRC were not accurate, a SL IV, NCV of 10 CFR 50.9(a), "Completeness and Accuracy of Information." These instances are discussed below.

On November 1, 2018, the licensee submitted a required report of the final status surveys for ten survey units (Final Status Survey (FFS) Final Report – Phase 1, report

package at ML18331A015) – the reports are required to be submitted by the LTP, which is required to be implemented per License Condition 2.C.(17). The NRC staff reviewed this report and identified a number of inaccuracies that required correction before the report could be reviewed for approval. The details of the inaccuracies were documented in a letter dated March 22, 2019 (ML19079A359) to the licensee, and included that survey information provided for SU10219B in three locations on pages 20 and 21 were actually for a different survey unit and that survey information provided for SU10224 on pages 13, 19, and 22 were actually for a different survey unit. The licensee corrected the Phase 1 Report and submitted it to the NRC on June 21, 2019 (ML19178A106). If the NRC had not identified the inaccuracies, it could have erroneously approved the site as meeting the radiological criteria for unrestricted use (10 CFR 20.1402), thus the inaccurate information provided to the NRC was material.

On March 26, 2019, the licensee submitted its annual decommissioning funding status report (ML19092A270) for ZNPS, Units 1 and 2, which showed a negative balance in the radiological decommissioning and irradiated fuel management trust. The NRC staff reviewed the submittal and concluded that additional information was needed from the licensee, as specified in 10 CFR 50.82(a)(8)(vi), regarding the source and adequacy of funds for remaining decommissioning activities. In a letter dated May 22, 2019 (ML19133A029), this request for additional information was sent to the licensee. The licensee responded with a significantly revised, corrected report dated June 13, 2019 (ML19168A029).

The issues described above, along with other performance issues, were discussed with the licensee during a public telephonic meeting on June 27, 2019 (ML19193A183). Because these issues involved incomplete and inaccurate information that was required to be submitted to the NRC in support of terminating the license in accordance with 10 CFR 50.82(a)(11) and 10 CFR 20.1402 and in support of providing decommissioning funding assurance through the 10 CFR 50.75(f) and 10 CFR 50.82(a)(8) reporting requirements, 10 CFR 50.9 was applicable. As such, failing to provide complete and accurate information impeded the NRC's oversight function and was a performance deficiency and subsequent violation of more than minor significance. In determining the significance of the violation, the inspectors referenced the examples of violations in Section 6.9, "Inaccurate and Incomplete Information or Failure to Make a Required Report," of the NRC's Enforcement Policy. 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 SL: (1) commensurate with its safety significance; and (2) informed by similar violations addressed in the Violation Examples. Because the issue was determined to be more than minor but did not meet the threshold of the examples of SL I, II, or III violations in Section 6.9 of the NRC Enforcement Policy, the inspectors determined the issue was a SL IV violation.

The violation is as follows:

10 CFR 50.9(a) requires, in part, that information provided to the Commission by a licensee be complete and accurate in all material aspects.

Contrary to the above, on November 1, 2018 and March 26, 2019, the licensee did not provide information that was complete and accurate in all material aspects. Specifically, the final status survey report dated November 1 for two areas contained information for

two different areas. This information was material because it is used by the NRC to determine if these areas meet the radiological criteria for unrestricted use in 10 CFR 20.1402. And the decommissioning funding status report dated March 26, showed a negative balance when adequate funds were apparently available from another source. This information was material because it is used by the NRC to determine the adequacy of all funding sources to cover the projected estimated cost to complete decommissioning.

Because this violation was entered into the licensee's CAP (ES-ZION-CR-2019-0033), it is being treated as an NCV consistent with Section 2.3.2.a of the NRC Enforcement Policy (NCV 05000295/2019001-02; 05000304/2019001-02; Failure to Submit Complete and Accurate Information).

NRC inspector review of a selection of the licensee's final status survey reports will continue to review any instances where survey areas may have been reclassified prior to the submission of the final reports or areas that may have been re-surveyed after final status surveys reports had already been submitted.

4.3 Conclusions

The inspectors identified a SL IV, NCV of 10 CFR 50.9(a), "Completeness and Accuracy of Information," for the licensee's submission of an inaccurate final status survey report and an annual decommissioning funding status report.

5.0 Radioactive Waste Treatment, and Effluent and Environmental Monitoring (IP 84750)

5.1 Inspection Scope

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

 The radiological environmental monitoring programs were effectively implemented to ensure effluent releases were being adequately performed as required to minimize public dose; and

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

5.2 Observation

The inspectors reviewed the licensee's liquid effluent records and the environmental monitoring program to ensure that all effluents released were properly monitored and documented. Specifically, the inspectors reviewed the Annual Radiological Environmental Operating Report for compliance with the ODCM and 10 CFR Part 20.

No findings were identified.

5.3 Conclusions

The licensee maintained effluent monitoring as described within the ODCM. The licensee's Annual Radiological Environmental Operating Report was in compliance with the ODCM and 10 CFR Part 20.

6.0 Solid Radioactive Waste Management and Transportation of Radioactive Materials (IP 86750)

6.1 Inspection Scope

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

- Whether the licensee provided detailed instructions and operating procedures for transfer, packaging, and transport of low-level radioactive waste;
- Whether the material was properly classified, described, packaged, marked, and labeled for transportation; and
- Whether shipments made by the licensee were in compliance with NRC and DOT regulations.

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

6.2 Observation

The inspectors directly observed the licensee load waste and debris into rail cars. The inspectors directly observed licensee personnel perform walkthrough of the rail cars in accordance with the licensee's approved procedures. The inspectors also reviewed the last five manifests and noted they were properly filled out in accordance with all applicable regulatory requirements.

No findings were identified.

6.3 Conclusions

Radioactive materials planned for shipment were classified, characterized, and packaged appropriately, in accordance with NRC and DOT regulations, to meet low-level waste burial site criteria

7.0 Exit Meeting

The inspectors presented the results of the inspection to Mr. G. van Noordennen on February 19, 2020. 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

- G. van Noordennen, Vice President of Regulatory Affairs
- J. Houff, Decommissioning Plant Manager
- D. Wojtkowiak, Characterization/License Termination Manager
- D. Villicana, Radiation Protection Manager/Training Manager/ Waste

INSPECTION PROCEDURES (IPs) USED

IP 40801	Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors
IP 71801	Decommissioning Performance and Status Review at Permanently Shutdown Reactors
IP 83750	Occupation Radiation Exposure
IP 83801	Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors
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>	Summary
05000295/2019001-01 05000304/2019001-01	NCV	Failure to Implement the LTP
05000295/2019001-02 05000304/2019001-02	NCV	Failure to Submit Complete and Accurate Information
Closed	<u>Type</u>	Summary
Closed 05000295/2019001-01 05000304/2019001-01	<u>Type</u> NCV	Summary Failure to Implement the LTP

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.

- -Zion Station Survey Unit Schedule Progress; 04/11/2019
- -Zion Station Survey Unit Schedule Progress; 02/19/2019

- -ZS-QA-10; Quality Assurance Project Plan; Revision 10
- -ZS-LT-01; Quality Assurance Project Plan (for Characterization and FRS); Revision 6
- -LS-JA-08; Defueled Safety Analysis Report and License Termination Plan Update Program; Revision 1
- -S-15-010; QA Surveillance Report Final Radiation Survey Program; 10/01/2015
- -ZS-2018-0065; Submittal of Defueled Safety Analysis Report Update; 10/01/2018
- -ZS-LT-400-001-001; Unconditional Release of Material, Equipment and Secondary Structures; Revision 5
- -Site Characterization/License Termination; Revision 4
- -ES-ZION-CR-2019-0026; Potential Violation of Change to LTP; 02/27/2019
- -ES-ZION-CR-2019-0027; Suspect Materials Found in Waste Pile; 03/05/2019
- -ES-ZION-CR-2019-0033; Suspension of NRC Review of Zion FSS Reports; 03/13/2019
- -ES-ZION-CR-2019-0039; Tritium Detected in Excavated Area Filled with Water; 03/27/2019
- -ES-ZION-CR-2019-0048; Management Decision to Suspend ORISE Confirmatory Survey Activities; 04/17/2019
- -ES-ZION-CR-2019-0064; Power Block Survey Omissions; 05/06/2019
- -ES-ZION-CR-2019-0069; Discrete Radioactive Particle Discovered During FSS; 05/15/2019
- -ES-ZION-2019-CR-2019-0074; Omissions Were Made in Power Block Survey Expectations; 05/18/2019
- -Issue Review CR-2019-0046; Discrete Radioactive Particle Found in Open Land Survey Unit 12106; 05/01/2019

LIST OF ACRONYMS USED

ADAMS Agencywide Documents Access and Management System

CAP Corrective Action Program

CCDD Clean Concrete Demolition Debris

CFR Code of Federal Regulation

DNMS Division of Nuclear Materials Safety

DOT Department of Transportation

FSS Final Status Survey

FSSR Final Status Survey Report IP Inspection Procedure LTP License Termination Plan

NCV Non-Cited Violation

NRC U.S. Nuclear Regulatory Commission
ODCM Offsite Dose Calculation Manual
ORAU Oak Ridge Associated Universities
RAI Request for Additional Information

SL Severity Level SU Survey Unit

ZNPS Zion Nuclear Power Station