



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

**REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511**

January 24, 2020

Mr. Cleve Reasoner, Chief Executive Officer
and Chief Nuclear Officer
Wolf Creek Nuclear Operating Corp.
P.O. Box 411
Burlington, KS 66839

**SUBJECT: WOLF CREEK GENERATING STATION – NOTIFICATION OF NRC DESIGN
BASES ASSURANCE INSPECTION (PROGRAMS) (05000482/2020011) AND
INITIAL REQUEST FOR INFORMATION**

Dear Mr. Reasoner:

On April 6, 2020, the U.S. Nuclear Regulatory Commission (NRC) will begin an onsite inspection at the Wolf Creek Generating Station. A three-person team will perform this inspection using NRC Inspection Procedure 71111.21N.02, "Design Bases Inspection (Programs)," Attachment 2, "Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements."

This inspection will evaluate the reliability, functional capability, and design basis of risk-important power-operated valves as required by 10 CFR 50.55a and applicable 10 CFR Part 50, Appendix A and Appendix B, requirements, and as required by the Wolf Creek Generating Station Operating License. Additionally, the team will perform an inspection of the documentation files to verify that the plant activities associated with safety-related motor-operated valves meet your commitments to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," and GL 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves." In conducting this inspection, the team will select power-operated valves used to prevent and mitigate the consequences of a design basis accident.

The inspection will include an information gathering site visit by the team leader and 2 weeks of onsite inspection by the team. The inspection will consist of three NRC inspectors. The current inspection schedule is as follows:

Onsite Information Gathering Visit: February 24-26, 2020
Preparation Weeks: March 30 – April 3, 2020, and April 13-17, 2020
Onsite Weeks: April 6-10, 2020, and April 20-24, 2020

The purpose of the information gathering visit is to meet with members of your staff to become familiar with the power-operated valve activities at the Wolf Creek Generating Station. The lead inspector will request a meeting with your personnel to discuss the site power-operated valve procedures. Additionally, the lead inspector will request a discussion with your staff to become familiar with the regulations and standards applicable to power-operated valves at the site. Additional information and documentation needed to support the inspection will be identified during the inspection, including interviews with engineering managers and engineers.

In order to minimize the inspection impact on the site and to ensure a productive inspection, we have enclosed a request for information needed for the inspection. This information should be made available to the lead inspector during the March 16-17, 2020, visit. Since the inspection will be concentrated on safety-related and risk-significant power-operated valves, a list of such power-operated valves should be available to review during and following the information gathering visit to assist in our selection of appropriate power-operated valves to review.

It is requested that this information be provided to the lead inspector as the information is generated during the inspection. Additional requests by inspectors will be made during the onsite weeks for specific documents needed to complete the review of specific power-operated valves and associated activities. It is important that all of these documents are up-to-date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. In order to facilitate the inspection, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

The lead inspector for this inspection is Wayne C. Sifre. We understand that our licensing engineer contact for this inspection is Mr. Jason Knust. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1193 or by e-mail at Wayne.Sifre@nrc.gov.

Paperwork Reduction Act Statement

This letter contains mandatory information collections that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The Office of Management and Budget (OMB) approved these information collections (approval number 3150-0011). Send comments regarding this information collection to the Information Services Branch, Office of the Chief Information Officer, Mail Stop: T6 A10M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0011) Office of Management and Budget, Washington, DC 20503.

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This letter 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/

Vincent G. Gaddy, Chief
Engineering Branch 1
Division of Reactor Safety

Docket: 50-482
License: NPF-42

Enclosure:
Design Bases Assurance Inspection
(Programs) Power-Operated Valve
Initial Request for Information
w/Attachment: Wolf Creek Valves of Interest

cc w/ encl: Distribution via LISTSERV®

WOLF CREEK GENERATING STATION – NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (PROGRAMS) (05000482/2020011) AND INITIAL REQUEST FOR INFORMATION – JANUARY 24, 2020

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**Initial Request for Information
Design Bases Assurance Inspection (Programs), Power-Operated Valves
WOLF CREEK GENERATING STATION**

Inspection Report: 05000482/2020011

Information Gathering Dates: March 17-18, 2020

Inspection Dates: April 6-10, 2020, and April 20-24, 2020

Inspection Procedure: IP 71111, Attachment 21N.02, "Design Bases Assurance Inspection (Programs)" Attachment 2, "Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements"

Lead Inspector: Wayne C. Sifre, Senior Reactor Inspector

I. Information Requested for Information Gathering Visit (February 24, 2020)

The following information should be provided to the lead inspector in hard copy or electronic format, to the attention of Wayne Sifre by February 18, 2020, to facilitate the reduction in the items to be selected for a final list of components. The inspection team will finalize the selected list during the prep week using the documents requested in this enclosure. The specific items selected from the lists shall be available and ready for review on the day indicated in this request. *Please provide requested documentation electronically in "pdf" files, Excel, or other searchable formats, if possible. The information should contain descriptive names and be indexed and hyperlinked to facilitate ease of use. Information in "lists" should contain enough information to be easily understood by someone who has knowledge of pressurized water reactor technology. If requested documents are large and only hard copy formats are available, please inform the inspectors, and provide subject documentation during the first day of the onsite inspection.

1. Provide the valve characteristics for the valves listed in the attached list as described in Appendix C of NRC Inspection Procedure 71111.21N.02, "Design Bases Inspection (Programs)," Attachment 2, "Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements."
2. List of power-operated valves (POVs) important to safety for the Wolf Creek Generating Station. The list should include (a) component identification number; (b) applicable plant system; (c) ASME *Boiler and Pressure Vessel Code* (BPV Code) Class; (d) safety-related or non-safety related classification; (e) valve type, size and manufacturer; and (f) actuator type, size, and manufacturer. If the NRC has granted a license amendment to categorize structures, systems, and component in accordance with 10 CFR 50.69, please provide the risk-informed safety category of the component.
3. Listing of the POVs sorted by risk importance, including external risk considerations.

Enclosure

4. Wolf Creek Generating Station word-searchable updated final safety analysis report (UFSAR), License Conditions, Technical Specifications, and most recent Inservice Testing (IST) program plan. Specifically identify which UFSAR sections address environmental, seismic, and functional qualification of POVs.
5. NRC Safety Evaluation Report(s) associated with the Wolf Creek Generating Station IST program and relief and alternative requests submitted in accordance with 10 CFR 50.55a for POVs.
6. Identify the edition of the ASME *Operation and Maintenance of Nuclear Power Plants* (OM Code) that is the Code of Record for the current 10-year IST Program interval, as well as any standards to which the Wolf Creek Generating Station has committed with respect to POV capability and testing.
7. List of systems, system numbers/designators and corresponding names.
8. List of site contacts that will be associated with the inspection.

II. *Discussions Requested*

1. Interview with a Wolf Creek Generating Station representative to discuss site POV capability analyses, including plant drawings and assumptions. This includes analysis for accident conditions.
2. Interview with a Wolf Creek Generating Station representative to discuss POV maintenance elements as integrated into plant programs and procedures.
3. Interview with a Wolf Creek Generating Station representative to discuss maintaining the design-basis capability of POVs if they have entered a period of extended operation, if applicable.

III. *Information Requested for Inspection Preparation (March 30, 2020)*

1. Documentation files, including test reports, for the electrical and mechanical components associated with the POVs selected by the lead inspector (10 specific valves will be identified and communicated to you prior to March 23, 2020).
2. References associated with the electrical and mechanical components document files.
3. Vendor manuals and technical sheets associated with the selected POVs.
4. Tours of the rooms in which the selected POVs are installed.

Inspector Contact Information:

Wayne C. Sifre
Senior Reactor Inspector
817-200-1193
Wayne.Sifre@nrc.gov

Dustin Reinert
Reactor Inspector
817-200-1534
Dustin.Reinert@nrc.gov

Fabian Thomas
Reactor Inspector
817-200-1126
Fabian.Thomas@nrc.gov

Mailing Address:

U.S. NRC, Region IV
Attn: Wayne Sifre
1600 East Lamar Blvd.
Arlington, TX 76011-4

Wolf Creek Valves of Interest

No.	ACT	Valve Size	Valve Type	System Name	Utility ID	Selection Basis
1.	MOV	4"	Globe	Auxiliary Feedwater System	ALHV0009	Core Damage Frequency Contributor
2.	MOV	4"	Globe	Auxiliary Feedwater System	ALHV0011	Core Damage Frequency Contributor
3.	MOV	4"	Globe	Auxiliary Feedwater System	ALHV0005	Core Damage Frequency Contributor
4.	MOV	4"	Globe	Auxiliary Feedwater System	ALHV0007	Core Damage Frequency Contributor
5.	MOV	8"	Gate	Auxiliary Feedwater System	ALHV0036	Core Damage Frequency Contributor
6.	MOV	18"	Butterfly	Component Cooling Water System	EGHV0101	Risk Significant - Reason not determined
7.	MOV	18"	Butterfly	Component Cooling Water System	EGHV0102	Risk Significant - Reason not determined
8.	MOV	3"	Gate	Chemical and Volume Control System	EMHV8803A	Core Damage Frequency Contributor
9.	MOV	3"	Gate	Essential Service Water	EFHV0091	Core Damage Frequency Contributor
10.	MOV	3"	Gate	Essential Service Water	EFHV0092	Core Damage Frequency Contributor
11.	MOV	8"	Gate	Residual Heat Removal System	EJHV8804A	Core Damage Frequency Contributor
12.	MOV	8"	Gate	Residual Heat Removal System	EJHV8804B	Core Damage Frequency Contributor
13.	MOV	3"	Gate	Reactor Coolant System	BBHV8000B	Core Damage Frequency Contributor
14.	MOV	3"	Gate	Reactor Coolant System	BBHV8000A	Core Damage Frequency Contributor
15.	MOV	14"	Gate	Residual Heat Removal System	BNHV8812A	Core Damage Frequency Contributor
16.	MOV	14"	Gate	Residual Heat Removal System	BNHV8812B	Core Damage Frequency Contributor
17.	MOV	14"	Gate	Residual Heat Removal System	EJHV8811A	Core Damage Frequency Contributor
18.	MOV	14"	Gate	Residual Heat Removal System	EJHV8811B	Core Damage Frequency Contributor
19.	SOV	3"	Globe	Reactor Coolant System	BBPCV0456A	Core Damage Frequency Contributor
20.	SOV	3"	Globe	Chemical and Volume Control System	BGHV8160	Expert Panel Recommendation
21.	HOV	14"	Gate	Feedwater System	AEFV0040	Expert Panel Recommendation

<u>No.</u>	<u>ACT</u>	<u>Valve Size</u>	<u>Valve Type</u>	<u>System Name</u>	<u>Utility ID</u>	<u>Selection Basis</u>
22.	HOV	14"	Gate	Feedwater System	AEFV0042	Expert Panel Recommendation
23.	HOV	28"	Gate	Main Steam	ABV0014	LERF Contributor
24.	HOV	28"	Gate	Main Steam	ABV0020	LERF Contributor
25.	MOV	4"	Gate	Auxiliary Feedwater System	FCHV0312	Core Damage Frequency Contributor
26.	MOV	6"	Butterfly	Auxiliary Feedwater System	ALHV0031	Core Damage Frequency Contributor
27.	AOV	8"	Globe	Main Steam System	ABPV0001	Expert Panel Recommendation
28.	AOV	8"	Globe	Main Steam System	ABPV0002	Expert Panel Recommendation
29.	MOV	4"	Gate	High Pressure Coolant Injection	EMHV8821B	Expert Panel Recommendation
30.	MOV	30"	Butterfly	Essential Service Water	EFHV0025	Expert Panel Recommendation