



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION IV  
1600 E. LAMAR BLVD  
ARLINGTON, TX 76011-4511

August 1, 2017

Mr. Adam C. Heflin, President  
and Chief Nuclear Officer  
Wolf Creek Nuclear Operating Corporation  
P.O. Box 411  
Burlington, KS 66839

**SUBJECT: WOLF CREEK GENERATING STATION – NRC DESIGN BASES ASSURANCE  
INSPECTION (PROGRAMS) REPORT 05000482/2017007**

Dear Mr. Heflin:

On May 23, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Wolf Creek Generating Station. On May 23, 2017, the NRC inspectors discussed the preliminary results of this inspection with C. Reasoner, Site Vice President, and other members of your staff. On July 12, 2017, the NRC inspectors discussed the final results of this inspection with C. Reasoner, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements. Further, the inspectors documented a licensee-identified violation which was determined to be of very low safety significance (Green) in this report. The NRC is treating these violations as non-cited violations (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violation or significance of the 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 IV; the Director, Office of Enforcement; and the NRC resident inspector at the Wolf Creek Generating Station.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV; and the NRC resident inspector at the Wolf Creek Generating Station.

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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

*/RA/*

Thomas R. Farnholtz, Branch Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket No. 05000482  
License No. NPF-42

Enclosure:  
Inspection Report 05000482/2017007  
w/Attachment: Supplemental Information

WOLF CREEK GENERATING STATION – NRC DESIGN BASES ASSURANCE INSPECTION (PROGRAMS) REPORT 05000482/2017007 – Dated August 1, 2017

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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 05000482

License: NPF-42

Report Nos.: 05000482/2017007

Licensee: Wolf Creek Nuclear Operating Corporation

Facility: Wolf Creek Generating Station

Location: 1550 Oxen Lane NE  
Burlington, KS 66839

Dates: May 8 through July 12, 2017

Team Leader: G. George, Senior Reactor Inspector, Engineering Branch 1

Inspectors: S. Alferink, PhD, Reactor Inspector, Engineering Branch 2  
R. Latta, Senior Reactor Inspector, Engineering Branch 1

Approved By: Thomas R. Farnholtz, Branch Chief  
Engineering Branch 1  
Division of Reactor Safety

Enclosure

## SUMMARY

IR 05000482/2017007; 05/08/2017 – 07/12/2017; Wolf Creek Generating Station; IP 71111.21N, Design Bases Assurance (Programs)

The inspection activities described in this report were performed between May 8, 2017, and July 12, 2017, by three inspectors from the NRC's Region IV office. One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. Additionally, a licensee-identified violation of very low safety significance (Green) is documented in this report. The significance of inspection findings is indicated by their color (Green, White, Yellow, or Red), which is determined using Inspection Manual Chapter 0609, "Significance Determination Process." Their cross-cutting aspects are determined using Inspection Manual Chapter 0310, "Aspects Within the Cross-Cutting Areas." Violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

### Cornerstone: Emergency Preparedness

- Green. The inspectors identified a Green non-cited violation of 10 CFR 50.54(q)(2) which requires that a holder of a nuclear power plant operating license follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E of this part and the risk significant planning standards of 10 CFR 50.47(b). Specifically, from March 7, 2017, to July 12, 2017, Wolf Creek Generating Station's response to the inoperability of containment high radiation monitors failed to restore capability to classify emergency action levels during a loss-of-coolant accident or main-steam-line-break accident. In response to this issue, the licensee provided additional radiation survey monitoring measures and correlations to monitor radiation in the containment building. This finding was entered into the licensee's corrective action program as Condition Report CR-114274.

The inspectors determined that the failure to maintain the effectiveness of the emergency action level schemes by providing adequate preplanned methods and compensatory measures for the loss of the containment high range radiation monitors in accordance with 50.54 (q)(2) was a performance deficiency. This finding was determined to be more than minor because it was associated with emergency response organization performance attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective. Specifically, the failure to maintain the effectiveness using appropriate compensatory measures adversely affected the objective of ensuring the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The finding was determined to be of very low safety significance (Green) because (1) emergency action level schemes were rendered ineffective such that any Site Area Emergency would not be declared for a particular off-normal event, but because of other emergency action levels, an appropriate declaration could be made in a degraded manner; and, (2) the emergency action level classification process would result in an over-classification causing an unnecessary emergency declaration. This finding had a cross-cutting aspect in the area of human performance associated with conservative bias because the licensee failed use decision making-practices that emphasized prudent choices over those that are simply allowable. [H.14] (Section 1R21N)

### **Licensee-Identified Violations**

A violation of very low safety significance (Green) that was identified by the licensee has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and associated corrective action tracking numbers are listed in Section 4OA7 of this report.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### 1R21N Design Basis Assurance Inspection (Programs) (71111.21N)

##### a. Inspection Scope

The inspection team performed an inspection as outlined in NRC Inspection Procedure (IP) 71111.21N, Attachment 1, "Environmental Qualification under 10 CFR 50.49 Programs, Processes, and Procedures." The team assessed Wolf Creek Generating Station's implementation of the environmental qualification program as required by 10 CFR 50.49, "Environmental qualification of electric equipment important to safety for nuclear power plants." The team evaluated whether Wolf Creek Generating Station staff properly maintained the environmental qualification of electrical equipment important to safety throughout plant life, established and maintained required environmental qualification documentation records, and implemented an effective corrective action program to identify and correct environmental qualification related deficiencies.

The inspection included review of environmental qualification program procedures, component environmental qualification files, environmental qualification test records, equipment maintenance and operating history, maintenance and operating procedures, vendor documents, design documents, and calculations. The team interviewed program owners, engineers, maintenance staff, and warehouse staff. The team performed in-plant walkdowns (where accessible) to verify equipment was installed as described in Wolf Creek Generating Station's environmental qualification component documentation files; and to verify that the components were installed in their tested configuration. Additionally, the team performed in-plant walkdowns to determine whether equipment surrounding the components could fail in a manner that could prevent the safety functions of the components, and to verify that components located in areas susceptible to a high energy line break were properly evaluated for operation in a harsh environment. The team reviewed and inspected the storage of replacement parts and associated procurement records to verify environmental qualification parts approved for installation in the plant were properly identified and controlled, and that storage and environmental conditions did not adversely affect the components' qualified lives. Documents reviewed for this inspection are listed in the Attachment.

The inspection procedure requires the team to select 6 to 10 components to assess the adequacy of the environmental qualification program. The team selected 10 components for this inspection. Component samples selected for this inspection are listed below:

- ABHV0020-MV5, Loop 3 Main Steam Isolation Valve Control Solenoid
- ABPT0004, Steam Generator D Steamline Pressure Transmitter
- ABZS0007A, ABLV0007 NAMCO Limit Switch
- BNHV8812A, Residual Heat Removal Pump Reactor Water Storage Suction Valve Motor

- DSG110B, Residual Heat Removal Pump Room Cooler Motor
- EGFT0062, Reactor Coolant Pump Thermal Barrier (Total) Outlet Flow Transmitter
- EGHV0058, Reactor Coolant Pump Component Cooling Water Supply Containment Isolation Valve Motor
- LFLE0009A, Containment Normal Sump Level Element
- ZNE298, Electrical Penetration Assembly Encapsulation
- ZZG-1-EQ, 600 Volt Power Cables

b. Findings

Failure to Maintain Effectiveness of the Emergency Plan upon Loss of Containment High Radiation Monitoring

Introduction. The inspectors identified an Green non-cited violation of 10 CFR 50.54(q)(2) associated with risk significant planning standard 10 CFR 50.47(b)(4) for the failure to maintain the effectiveness of the Wolf Creek Generating Station Emergency Plan. Specifically, from March 7, 2017, to July 12, 2017, Wolf Creek Generating Station's response to the inoperability of containment high radiation monitors failed to restore the capability to classify emergency action levels during a loss-of-coolant accident or main-steam-line-break accident.

Description. On March 7, 2017, the licensee determined that the containment high range radiation monitors, GTRE0059 and GTRE0060, were susceptible to thermal induced current and moisture intrusion into their respective coaxial cable jackets and Amphenol (N) connectors during a design bases loss-of-coolant accident or main-steam-line-break accident. Based on industry operating experience, the licensee determined that the elevated temperature and humidity conditions can impact the indication accuracy and functions. Because no evaluation was available to justify the acceptability of the coaxial cables, the licensee determined that the containment high range radiation monitors were inoperable, but remained functional. The licensee entered Condition F of Technical Specification 3.3.3, "Post Accident Monitoring (PAM) Instrumentation." On March 27, 2017, the licensee submitted a Post Accident Monitoring (PAM) Report, in accordance with Technical Specification 5.6.8, which described the preplanned methods and additional compensatory measures to provide radiation monitoring in containment for use in emergency classification and assessment. These compensatory measures included placing portable survey equipment outside the containment personnel hatch. The portable survey equipment's use was directed through an operator essential reading. The measures also involved changing procedure AP 06-004, "Equipment Important to Emergency Response," to allow the use of reactor core exit thermocouple temperatures for monitoring containment radiation. Procedure AP 06-004 also allowed the use of multiple permanently installed auxiliary building radiation monitors to deduce the relative radiation conditions in containment if the containment high range radiation monitors were not available.



The inspectors reviewed the preplanned methods and compensatory measures for the inoperable containment high range radiation monitors, GTRE0059 and GTRE0060, to determine compliance with the regulations of 10 CFR 50.54(q)(2). The inspectors determined that the preplanned methods and compensatory measures would not provide appropriate information to deduce the actual radiation conditions in containment for event classification associated with 250 R/hr and 2500 R/hr emergency action level criteria. Specifically, the inspectors determined that the selection of the core exit thermocouples acceptance criteria used for radiation monitoring did not represent a direct or indirect correlation between containment radiation and core exit temperatures during a core degradation event. Additionally, the inspectors determined that no radiation shielding transmission correlations were provided or developed for monitoring containment radiation using auxiliary building radiation monitors, as allowed by AP 06-004. The inspectors determined that the selection of the transmission correlation for the containment hatch portable survey equipment did not appropriately take into account different factors such as radiation source, isotopes, and uncertainties to provide an accurate estimation of radiation inside containment. Therefore, the compensatory measures would not be capable of providing a valid reading for emergency action level criteria for containment radiation in EAL-2, "Steam Generator Tube Failure," EAL-3, "Loss of Reactor Coolant Boundary," EAL-4, "Main Steam Line Break," and EAL-5, "Fuel Element Failure." The NRC determined that the compensatory measures failed to restore the capability to classify events and reduced their effectiveness of the emergency plan.

Analysis. The inspectors determined that the failure to maintain the effectiveness of the emergency action level schemes by providing adequate preplanned methods and compensatory measures for the loss of the containment high range radiation monitors in accordance with 50.54 (q)(2) was a performance deficiency. This finding was determined to be more than minor because it was associated with emergency response organization performance attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective. Specifically, the failure to maintain the effectiveness using appropriate compensatory measures adversely affected the objective of ensuring the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency.

The finding was evaluated in accordance with Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," dated September 22, 2015, because the finding was a failure to comply with risk significant planning standard 10 CFR 50.47(b)(4), "Emergency Classification System." The finding was compared to the examples in Section 5.4 of Inspection Manual Chapter 0609, Appendix B. With the reduced effectiveness of emergency action level classification schemes, the inspectors considered mitigating factors, such as alternative emergency action level criteria within loss-of-coolant accident or main-steam-line-break accident schemes and the time in which the containment radiation monitors would be affected by thermal induced currents. The inspectors determined that an appropriate General Emergency classification would have occurred based on 2500 R/hr radiation in containment because the monitors would not be affected by the thermal induced current later in the events. However, containment radiation monitors were susceptible to erratic readings early in the events which could result in over-classification of the event causing unnecessary emergency declaration. The erratic readings could cause a declaration of a Site Area Emergency, Alert, or Notification of Unusual Event (NOUE) early in the event to be degraded or delayed using the alternative emergency action level classification

criteria. The finding was determined to be of very low safety significance (Green) because (1) emergency action level schemes were rendered ineffective such that any Site Area Emergency would not be declared for a particular off-normal event, but because of other emergency action levels, an appropriate declaration could be made in a degraded manner; and, (2) the emergency action level classification process would result in an over-classification causing an unnecessary emergency declaration.

This finding had a cross-cutting aspect in the area of human performance associated with conservative bias because the licensee failed to use decision making-practices that emphasized prudent choices over those that are simply allowable. Specifically, the engineering staff incorrectly rationalized an assumption that a direct correlation existed between two symptoms of core degradation, core exit thermocouple and containment radiation, which formed the basis the emergency plan maintain its effectiveness. [H.14]

Enforcement. The inspectors identified a Green non-cited violation of 10 CFR 50.54(q)(2) which requires that a holder of a nuclear power plant operating license follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E of this part and the risk significant planning standards of 10 CFR 50.47(b). Title 10 CFR 50.47(b)(4) requires that a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures. Contrary to the above, the licensee failed to maintain the effectiveness of an emergency plan that meets the requirements of the risk significant planning standard of 10 CFR 50.47(b)(4). Specifically, from March 7, 2017, to July 12, 2017, Wolf Creek Generating Station's response to the inoperability of containment high radiation monitors failed to restore capability to classify emergency action levels during a loss-of-coolant accident or main-steam-line-break accident. In response to this issue, the licensee provided additional radiation survey monitoring measures and correlations to monitor radiation in the containment building. This finding was entered into the licensee's corrective action program as Condition Report CR-114274. Because this finding was of very low safety significance and has been entered into the licensee's corrective action program, this violation is being treated as a non-cited violation consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000482/2017007-01, "Failure to Maintain Effectiveness of the Emergency Plan upon Loss of Containment High Radiation Monitoring."

#### **4. OTHER ACTIVITIES**

**Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security**

##### **40A2 Problem Identification and Resolution (71152)**

The team reviewed one condition report associated with the environmental qualification of electrical equipment selected components, operator actions, and operating experience notifications. The findings identified in this review were documented in report Sections 1R21N and 40A7.

## **40A6 Meetings, Including Exit**

### Exit Meeting Summary

On May 23, 2017, the inspectors presented the inspection results to C. Reasoner, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

On July 12, 2017, the inspectors presented the inspection results to C. Reasoner, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

## **40A7 Licensee-Identified Violations**

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy for being dispositioned as a non-cited violation.

- Technical Specification 3.3.3, "Post Accident Monitoring Instrumentation," required two channels of containment area radiation (high range) detectors to be operable when the unit is in Modes 1, 2, or 3. It also required, for one or more functions with two required channels inoperable, that one of the required channels be restored to Operable within 7 days or initiate action in accordance with Technical Specification 5.6.6. Specification 5.6.6 required that a Post Accident Monitoring Instrumentation Report be submitted within 14 days that outlined the preplanned alternate method of monitoring, the cause of inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to Operable status. Contrary to the above, from 1997 to March 2017, the licensee failed to restore at least one channel of containment high range radiation monitors to operable status, initiate preplanned alternate methods of monitoring the appropriate parameter, or prepare and submit a Post Accident Monitoring Instrumentation Report within 14 days pursuant to Technical Specification 5.6.6. The violation was more than minor because it was associated with the Facilities and Equipment attribute of the Emergency Preparedness Cornerstone and adversely affected the cornerstone objective of ensuring that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors determined the significance using Inspection Manual Chapter 0609, Attachment 04, "Initial Characterization of Findings," and Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Section 5.4 for failure to comply with risk significant planning standard 10 CFR 50.47(b)(4). The finding was determined to be of very low safety significance (Green) because (1) emergency action level schemes were rendered ineffective such that any Site Area Emergency would not be declared for a particular off-normal event, but because of other emergency action levels, an appropriate declaration could be made in a degraded manner; and, (2) the emergency action level classification process would result in an over-classification causing an unnecessary emergency declaration. The violation was entered into the licensee's corrective action program as Condition Reports CR-111440, CR-111536, and CR-113217.

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee Personnel**

J.R. Bertzler, Design Engineering  
D.L. Campbell, Superintendent, Electrical Maintenance  
E.A. Clark, Design Engineering  
M. Dingler, Design Engineering  
J.A. Ernest, Programs Engineering  
K.L. Frederickson, Licensing, Integrated Plant Scheduling  
C.R. Hafenstine, Manager, Nuclear and Regulatory Affairs  
P.J. Hermann, Manager, Design Engineering  
K.A. Hinterweger, Design Engineering  
R.D. Hobby, Licensing, Integrated Plant Scheduling  
E.C. Holman, Maintenance  
J.R. Isch, Superintendent, Operations  
K.M. Jay, Manager, Radiation Protection  
B.R. Kever, Design Engineering  
W. Ketchum, Supervisor, Engineering Plant Risk Assessment  
K.L. Law, Auditor, Quality  
D.S. Mand, Manager, System Engineering  
B.D. Masters, Design Engineering  
W.T. Muilenberg, Licensing, Integrated Plant Scheduling  
M.D. Oberheu, Design Engineering  
J.M. Pankaskie, Design Engineering  
E.M. Peterson, Coordinator, Employee Concerns  
L.D. Ratzlaff, Manager, Maintenance  
E.A. Ray, Manager, Special Projects  
C.O. Reasoner, Site Vice President  
C.M. Robins, Design Engineering  
C.M. Robins, Design Engineering  
S.M. Shelton, Maintenance  
S.L. Smith, Plant Manager, Operations  
J.F. Suter, Design Engineering  
C.W. Wells, System Engineering  
T.E. Wilson, Supervisor, Corrective Action Program  
D.M. Wirth, Safety Analysis and Core Design  
R.E. Wise, Design Engineering  
E.K. Wise, Programs Engineering

#### **NRC Personnel**

H. Gepford, Branch Chief, Plant Support Branch 2  
P. Elkmann, Senior Emergency Preparedness Inspector, Plant Support Branch 2  
M. Phalen, Senior Health Physics Inspector, Plant Support Branch 2  
N. Greene, Health Physics Inspector, Plant Support Branch 2  
D. Dodson, Senior Resident Inspector  
F. Thomas, Resident Inspector

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened and Closed

05000482/2017017-01	NCV	Failure to Maintain Effectiveness of the Emergency Plan upon Loss of Containment High Radiation Monitoring (Section 1R21N)
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## LIST OF DOCUMENTS REVIEWED

### Plant Qualification Evaluation of Electrical Equipment (PQE)

<u>Number</u>	<u>Title</u>	<u>Revision</u>
PQE-E-035-P01	Containment Low Voltage Elect. Amphenol (Bunker Ramo) Penetration Assys.	1
PQE-E-058-P01	Durasheath EP 600 Volt Copper Power Cable	0
PQE-J301-P02	Rosemount Transmitters Model 1153 Series B with Output Card P or R Electronics	2
PQE-Limitorque-P01	Limitorque Motor Operated Valve Actuators with Reliance or Peerless RH Motor	0
PQE-M-612-P01	Area Room Cooler Motors	0
PQE-M-630-P01	Control Components Inc. Solenoid Valves MV Type 1	0
PQE-NAMCO-P01	Namco Limit Switches, Model EA180-XX302 Series	3

### General Qualification Evaluations

<u>Number</u>	<u>Title</u>	<u>Revision</u>
GQE-M-612-G01	Class 1E Medium A.C. Motors (Outside Containment)	1
GQE-J-301-G02	Rosemount Pressure Transmitter 1153B	2
GQE-M-630-G01	Control Components, Inc. Solenoid Valve MV Type 1, with ELC	0
GQE-NAMCO-G01	Namco Controls, Position Switch	1

Equipment Qualification Work Package

<u>Number</u>	<u>Title</u>	<u>Revision Date</u>
J-481	Probe Type Level Instrumentation	2

Test Reports

<u>Number</u>	<u>Title</u>	<u>Revision Date</u>
J-301-00064	Qualification Report for Pressure Transmitters Rosemount Model 1153 Series B, Rosemount Procedure Number 1802	W13
J-301-00064-W13	Qualification Report for Pressure Transmitters Rosemount Model 1153 Series B, Rosemount Report Number 108025	W13
J-301-00065-W12	Type Test Report for Pressure Transmitters Rosemount Model 1153 Series B, Rosemount Report Number 108026	February 4, 1981
J-301-0063-04	Qualification and Type Test Procedure for Pressure Transmitters Rosemount Models 1153AB, 1153DB, 1153GB, and 1153HB	July 11, 1980
J-601A-00175	Qualification Test Report QTR 155, Generic Qualification of EA180-Series Limit Switches	W02
M-628-00144	Main Steam Isolation Valve PPS-A700: Trentec Report 2Q003.0 for Control Components, Inc Solenoid Valves	W02
M-628-00184	Generic Qualification of EA180 Series Limit Switches with Receptacles and Connector/Cable Assemblies for Use in Nuclear Power Plant Class 1E Applications in Compliance with IEEE Standards 323-1974 382-1972 and 344-1975	00
M-628-00185	Qualification of NAMCO Controls Limit Switch Model EA-180	00
M-628-00188	High Energy Line Break Steam Testing of NAMCO EA180 Series Limit Switches for Southern California Edison Test Report 54078, Rev. A 04-25-1990	00

Program Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EQSD-I	Equipment Qualification Design Basis Document	12
EQSD-II	EQ Program Master List Plus Mild Environment SR Electrical Equipment List	29
EQSD-III	Component Maintenance Replacement Information Sheet	12

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AP 05G-002	Environmental Qualification Review of Electrical Equipment to 10 CFR 50.49	4
AP 24E-003	Warehouse Material Storage, Handling, Packaging, Shipping and Maintenance	11

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
M-612-00001	Vertical Draw Thru Central Station Weathermaker	W08
M-612-00004	Vertical Draw Thru Central Station Weathermaker	W10

Condition Reports

00101059      00111440

Condition Reports Generated During the Inspection

112938      113001      112939      112940      112954  
113001      113032      113152      113217      113218  
113208

Work Orders

10-327557-000    99-211147-000    99-211148-000    00-216082-000    00-2016082-001  
99-211824-000    17-423916-000

Vendor Instruction Manuals Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision</u>
J-481-00039	Instruction Manual for Probe Type Level Instruments	W09
M-628	Design Specification for Main Steam Stop Valves and Actuators for Containment Isolation to ASME Section III for the Wolf Creek Generation Station	14
M-630-00104	System Medium Actuators CCI Type PPS 300 Operating and Maintenance Manual	W05
M-628-00145	Instruction Manual for System Medium Operated Gate Valve MSIV Main Steam Isolation Valve PPS 700 Operating and Maintenance Manual Mechanical Equipment	W07

Calculations

<u>Number</u>	<u>Title</u>	<u>Revision</u>
YY-64	Thermal Lag Analysis for Electrical Equipment Subject to Blowdown from a MSLB in the MST for Equipment Qualification Purposes	0
YY-63	Main Steam Line Break in the Main Steam Tunnel with Superheated Blowdown and 8% Revaporization	0
SA-91-011	Analysis of Equipment/Cables Surface Temperature During a Main Steam Line Break Accident	0