



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
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ATLANTA, GEORGIA 30303-1200

September 30, 2019

Mr. Don Moul
Vice President, Nuclear Division and Chief
Nuclear Officer
Florida Power & Light Company
Mail Stop: NT3/JW
15430 Endeavor Drive
Jupiter, FL 33478

SUBJECT: TURKEY POINT NUCLEAR GENERATING STATION – DESIGN BASIS
ASSURANCE INSPECTION (PROGRAMS) INSPECTION REPORT
05000250/2019011 AND 05000251/2019011

Dear Mr. Moul:

On August 16, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Turkey Point Nuclear Generating Station and discussed the results of this inspection with Mr. Stamp and other members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. Two of these findings involved violations of NRC requirements. We are treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violations or significance or severity of the violations documented in this inspection report, 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 II; the Director, Office of Enforcement; and the NRC Resident Inspector at Turkey Point Nuclear 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/

James B. Baptist, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos. 05000250 and 05000251
License Nos. DPR-31 and DPR-41

Enclosure:
As stated

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SUBJECT: TURKEY POINT NUCLEAR GENERATING STATION – DESIGN BASIS
ASSURANCE INSPECTION (PROGRAMS) INSPECTION REPORT
05000250/2019011 AND 05000251/2019011 dated September 30, 2019

DISTRIBUTION:

T. Fanelli, RII, DRS

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J. Baptist, RII, DRS

*See previous page for concurrence

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NAME	T. Fanelli	T. Su	J. Corujo-Sandin	J. Baptist	
DATE	9/ 20 /2019	9/ 25 /2019	9/ 30 /2019	9/ 30 /2019	

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U.S. NUCLEAR REGULATORY COMMISSION

Inspection Report

Docket Numbers: 05000250 and 05000251

License Numbers: DPR-31 and DPR-41

Report Numbers: 05000250/2019011 and 05000251/2019011

Enterprise Identifier: I-2019-011-0003

Licensee: Florida Power & Light Co.

Facility: Turkey Point Nuclear Generating Station

Location: Homestead, FL

Inspection Dates: July 29, 2019 to August 16, 2019

Inspectors: J. Corujo-Sandin, Reactor Inspector
T. Fanelli, Senior Reactor Inspector
T. Su, Reactor Inspector

Approved By: James B. Baptist, Chief
Engineering Branch 1
Division of Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a design basis assurance inspection (teams) inspection at Turkey Point Nuclear Generating Station in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

List of Findings and Violations

Failure to Qualify D.C. Combination Starter Panel 4N1405-A for Minimum Operating Time			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250, 251/2019011-02 Closed	None	71111.21N
The NRC identified a Green Non-Cited Violation (NCV) of 10 CFR 50.49.(e)(1), "Temperature and Pressure," for the licensee's failure to qualify direct current (D.C) combination starter panel 4N1405-A for a period of at least one hour in excess of the time assumed in the accident analysis.			

Two Examples of Failure to Verify Design Inputs to Qualification Criteria			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250, 251/2019011-03 Closed	None	71111.21N
The NRC identified a Green Non-Cited Violation (NCV) of 10 CFR 50 Appendix B, Criterion III, "Design Control," for the licensee's failure to verify the adequacy of qualification testing and installation requirements in accordance with Quality Instruction (QI) 1.7, "Nuclear Engineering Design Input/Verification."			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
URI	05000250, 251/2019011-01	Potential Harsh Environments from High-Energy Line Breaks	71111.21N	Open

INSPECTION SCOPE

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.21N - Design Bases Assurance Inspection (Programs)

The inspectors evaluated the licensee's environmental qualification program implementation through the sampling of the following components:

Select Sample Components to Review - Risk Significant/Low Design (Inside/Outside Containment) (IP Section 02.01) (6 Samples)

- (1) 3V30C, JOY Manufacturing Company Emergency Containment Cooling Fan
- (2) POV-2604, Main Steam Isolation Valve (MSIV) Opening Solenoid Channel B AVCO
- (3) FY-3-1457B-6, Fisher Current to Pressure (I/P) Converter CV-2832, 303
- (4) MOV-4-1405, Limitorque AFW Steam Supply
- (5) SV-3-6319B, Target Rock Pressurizer Vent Discharge Solenoid Valve
- (6) SPL SLEEVE-NPK, Raychemcor SPL Sleeve-NPK Nuclear Plant Splice Kit

Select Sample Components to Review - Primary Containment (Inside Containment) (IP Section 02.01) (1 Sample)

- (1) MOV-4-751, Limitorque Normal RHR Inlet from Reactor Coolant System

INSPECTION RESULTS

Failure to Qualify D.C. Combination Starter Panel 4N1405-A for Minimum Operating Time			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250, 251/2019011-02 Closed	None	71111.21N

The NRC identified a Green NCV of 10 CFR 50.49.(e)(1), "Temperature and Pressure," for the licensee's failure to qualify direct current (D.C) combination starter panel 4N1405-A for a period of at least one hour in excess of the time assumed in the accident analysis.

Description: The team identified that the licensee failed to qualify the D.C. combination starter panel, 4N1405, for MOV-4-1405 to meet the minimum required operating time as specified in Regulatory Guide (RG) 1.89, "Environmental Qualification of Certain Electric Equipment Important to Safety for Nuclear Power Plants." The licensee committed to following the guidance in RG 1.89 by reference in their updated final safety analysis report (UFSAR), Appendix 8A, "Environmental Qualification."

The Unit 4 D.C. starter panel 4N1405 controls the MOV 4-1405 which is the steam stop valve to the turbine-driven auxiliary feedwater pump. The starter panel environmental qualification report indicated a qualification time of 33 minutes. This time was consistent with the licensee's high energy line break (HELB) blowdown time, not the required valve operating time including post-accident operating time (PAOT) for various accidents. The UFSAR, Section 14.2.7, "Feedwater System Pipe Break," specified, in part, that "it is concluded that the available auxiliary feedwater capacity is adequate for long-term decay heat removal, and the applicable acceptance criteria for the feedwater system pipe break analysis are met." Final reactor coolant system cooldown begins (time of event turnaround) at one hour into the event (3600 seconds). For this accident sequence, the auxiliary feedwater pumps must operate for longer than 33 minutes. The pumps must continuously remove heat from the steam generators. The RG 1.89 Reg Position C.4, stated, in part, that "the equipment should remain functional in the accident environment for a period of at least 1 hour in excess of the time assumed in the accident analysis." This time included HELB blowdown time and PAOT, including an additional one hour in accordance with the site design basis above.

Corrective Actions: The licensee entered these deficiencies into the corrective action program to restore compliance.

Corrective Action References: AR 02324645

Performance Assessment:

Performance Deficiency: The licensee's failure to qualify D.C. combination starter panel 4N1405-A for a duration with margin as specified by RG 1.89 was a performance deficiency. Specifically, RG 1.89 stated, in part, that "the equipment should remain functional in the accident environment for a period of at least 1 hour in excess of the time assumed in the accident analysis." This included PAOT.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to qualify 10 CFR 50.49 equipment to the most severe environment for at least 1 hour in excess of the operating time assumed in the accident analysis fails to ensure the reliability and capability of those components to perform their safety function when called upon during and following a design basis accident.

Significance: The inspectors assessed the significance of the finding using manual chapter (IMC) 0609, Att. 4, "Initial Characterization of Findings," issued December 7, 2016, for mitigating systems, and IMC 609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined the finding was of very low safety significance (Green) because the finding was a design or qualification deficiency of a mitigating SSC and the SSC maintained its functionality.

Cross-Cutting Aspect: Not Present Performance. No cross cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

Violation: 10 CFR 50.49(e)(1) requires, in part, that "(e) The electric equipment qualification program must include and be based on the following:

(1) Temperature and pressure. The time-dependent temperature and pressure at the location of the electric equipment important to safety must be established for the most severe design basis accident during or following which this equipment is required to remain functional."

Contrary to above, since February 25, 2013, the licensee failed to base qualification on the time-dependent temperature and pressure at the location of the electric equipment important to safety during and following the most severe design basis accident which this equipment is required to remain functional. Specifically, combination starter panel 4N1405-A was not qualified for the post accident operating time.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Two Examples of Failure to Verify Design Inputs to Qualification Criteria

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000250, 251/2019011-03 Closed	None	71111.21N

The NRC identified a Green NCV of 10 CFR 50 Appendix B, Criterion III, "Design Control," for the licensee's failure to verify the adequacy of qualification testing and installation requirements in accordance with Quality Instruction (QI) 1.7, "Nuclear Engineering Design Input/Verification."

Description: Licensee instruction QI 1.7, Section 5.3, "Design Verification," required, that "design verification is the process whereby a competent individual, who has remained independent of the design process, reviews the design inputs, design and safety analyses, and design output to verify design adequacy. This independent review is provided to minimize the likelihood of design errors in items that are important to nuclear safety." In the following examples the adequacy of the environmental qualification and installation was not verified.

Example one: The licensee committed to RG 1.89 and Institute of Electrical and Electronics Engineers (IEEE) 323-1974 by reference in their updated final safety analysis report (UFSAR), Appendix 8A, "Environmental Qualification." The site failed to verify that Fisher

current to pressure (I/P) transducers were qualified in accordance with the site EQ requirements in RG 1.89 and IEEE 323-1974. The qualification program and testing performed on Fisher I/P transducers did not meet the requirements in IEEE 323-1974 or RG 1.89 for replacement equipment. For instance, the recorded accident environment did not include a temperature and pressure transient. Further, the recorded cool down rate was uniform over ten hours rather than the abrupt temperature changes expected during accidents. Also, the transducers were not operated or cycled during a transient or throughout the testing as expected for a modulating valve. When asked, the licensee performed an analysis to demonstrate how the Fisher qualification met the IEEE and RG. The qualification was determined to be nonconforming. The testing was not adequate to support qualification of the transducers.

Example two: The site failed to verify that environmentally qualified components were installed in the as-qualified configurations. Weep holes are required for "all boxes containing terminal blocks, relays, devices with exposed terminals, visible contacts, etc." as per licensee's drawing 5610-E-302, Rev. 22. The inspectors noted at least three examples where control and terminal boxes were installed without the requisite weep holes.

1. On Unit 4, the site failed to install drain holes for 1N1405 Starter panel as required per above referenced drawing.
2. On Unit 4, the site failed to install drain holes for the junction box associated with Automatic Valve Company (AVCO) solenoid valve, SV-4-2604B as required per the above referenced drawing.
3. On Unit 3, the site failed to install drain holes for the junction box associated with the Fisher I/P converter, FY-3-14578-6, as is required per the above reference drawing.

Some of the qualification records indicated that boxes with blocked weep holes failed the LOCA and HELB tests.

Corrective Actions: The licensee entered these deficiencies into the corrective action program to restore compliance.

Corrective Action References: AR 02324142 and AR 02324348

Performance Assessment:

Performance Deficiency: The failure to verify the adequacy of qualification testing and installation requirements to maintain qualification in accordance with QI 1.7 Section 5.3 was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to verify component qualification during testing and installation affected the component reliability when it is required to operate.

Significance: The inspectors assessed the significance of the finding using manual chapter (IMC) 0609, Att. 4, "Initial Characterization of Findings," issued December 7, 2016, for mitigating systems, and IMC 609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined the finding was of very low safety significance (Green) because the finding was a design or qualification deficiency of a mitigating SSC and the SSC maintained its functionality.

Cross-Cutting Aspect: Not Present Performance. No cross cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

Violation: 10 CFR Part 50 Appendix B, Criterion III, required, in part, that design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program.

Contrary to the above, since 1984, the licensee failed to provide design control measures that verified or checked the adequacy of design, by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program. Specifically, the licensee failed to verify the adequacy of environmental qualification testing and equipment installation methods to maintain environmental qualification, which resulted in unqualified I/P transducers and terminal boxes being installed in the plant.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Unresolved Item (Open)	Failure to Mitigate Potential Harsh Environments from HELBs URI 05000250, 251/2019011-01	71111.21N
Description: The inspectors are concerned that the licensee incorrectly classified certain areas in the turbine building as mild environments when the areas contain high energy fluid lines that could create harsh environments if pipe cracks or breaks occur in the lines. The high-energy fluid lines are near safe shutdown equipment. For these areas, critical cracks may have been required to be assumed by the site's current licensing basis. Licensee calculations did not address the possible harsh environments from high-energy line breaks (HELBs) in the turbine building. This was based on the turbine building design being open to the atmosphere; its structure has floors with no sides. Calculation 87-264.6000_000_2, Section 7.3, Environmental Effects, stated, in part, "since the blow down piping system is located outside (open to the atmosphere) flooding and temperature rise are of no significance and therefore not a concern to this analysis." All the postulated line breaks in this calculation had this same statement. The jet impingements temperatures could exceed 212 °F, and steam in an outside at atmospheric conditions could reach at least 212 °F, both of which would be classified as a harsh environment.		

In addition, calculation PTN-BFJM-92-016_000 determined that a break in a three-inch main steam line would have a mass flow rate of 215,645 lb./hr. Main steam is 1034 psi and 547 °F. A fraction of this flow jet could cover a large area with 212 °F steam. The calculation indicated that a break of this size would not cause a plant trip, so it could persist until it was noticed and manually stopped.

The high energy fluid lines in the turbine building are not safety related. The UFSAR Section 5A for Seismic Classification & Design Basis does not list the lines as Class 1 (seismically qualified) and they are adjacent to the safe shutdown electrical equipment. The inspectors are concerned that a HELB in certain turbine building areas could cause a plant trip and thus a potential loss of offsite power. There are feedwater and main steam lines in the area. The cracks in the high energy lines, as discussed in the guidance the licensee stated they used to develop their analysis (Giambusso letter errata dated 1/26/1973) range from four to twelve inches long, which are equivalent analytical pipe diameters of one to seven inches. The inspectors are concerned that either a feed water line HELB or a steam line HELB could create harsh environments in the areas. A HELB in these lines could create an initial transient overpressure that the doors in the area may not be designed for. These doors are to rooms that contain multiple trains of safety related switchgear.

The feedwater jets may not immediately flash to steam, which could impact the doors in the area. The jets from steam or feedwater may have enough energy to physically open some doors and damage some electrical equipment such as exposed cables or MCCs. The fluid release from any of the lines could elevate the temperature to at least 212 °F and envelope the areas with high humidity that could condense inside electrical equipment for which they are not qualified.

The Turkey Point Nuclear Generating Station may not have met the following licensing basis requirements:

Turkey Point Nuclear Generating Station received information notice (IN) 2000-20, "Potential Loss of Redundant Safety Related Equipment Because of the Lack of High-Energy Line Break Barriers," ML003760571. The IN informed licensees of the requirements to address the environmental effects from HELBs (critical cracks) near safety related SSCs. In addition, the IN 2000-20 identified four conditions that must coexist to produce a risk-significant configuration.

1. "lack of a HELB barrier between the redundant trains of a system that is needed to mitigate accidents,
2. the lack of environmental qualification for the redundant components of trains located in the same area,
3. the presence of high-energy piping in adjacent areas,
4. the lack of a HELB barrier between adjacent piping and the redundant safety system trains."

The Turkey Point Nuclear Generating Station may not have met the following licensing basis requirements:

10 CFR 50.55a(h)-IEEE 279-1968, stated in part, the design basis of protection system equipment shall be provided and based on, "the malfunctions, accidents, or other unusual events (e.g., fire, explosion, missiles, lightning, flood, earthquake, wind, etc.) which could physically damage protection system components or could cause environmental changes leading to functional degradation of system performance, and for which provisions must be incorporated to retain necessary protection system action."

The Giambusso letter dated December 18, 1972, "General Information Required for Consideration of the Effects of a Piping System Break Outside Containment," in conjunction with General Design Criterion 4, required, in part, that, "structures, systems, and components shall be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit." The licensee specified that they performed an analysis in accordance with the Giambusso letter and errata thereto. The errata specified, in part, that "where pipes carrying high energy fluid are routed in the vicinity of structures and systems necessary for safe shutdown of the nuclear plant, supplemental protection of those structures and systems shall be provided to cope with the environmental effects (including the effects of jet impingement) of a single postulated open crack at the most adverse location(s) with regard to those essential structures and systems." The licensee responded, in part, that "equipment is located sufficiently distant from the postulated high energy line breaks so as to ensure operability throughout cooldown in the event of a postulated pipe break." It was not evident to the inspectors how the licensee arrived at this conclusion given a lack of documented analysis concluding this.

10 CFR 50.49(d) dated 1984, stated in part, the licensee shall include the information in paragraphs (d)(1), (2), and (3) of this section for this electric equipment important to safety in a qualification file.

1. The performance specifications under conditions existing during and following design basis accidents,
2. The voltage, frequency, load, and other electrical characteristics for which the performance specified in accordance with paragraph (d)(1) of this section can be ensured,
3. The environmental conditions, including temperature, pressure, humidity, radiation, chemicals, and submergence at the location where the equipment must perform as specified in accordance with paragraphs (d)(1) and (2) of this section.

Planned Closure Actions: This issue is a URI pending further review, including consultation with the Office of Nuclear Reactor Regulation and Regional Counsel, to determine if this issue of concern constitutes a violation.

Licensee Actions: The licensee captured the inspectors' questions in their corrective action program.

Corrective Action References: AR2324737

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On August 16, 2019, the inspectors presented the design basis assurance inspection (programs) inspection results to Mr. Stamp and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N	Calculations	PTN-BFSM-11-020	NRC Generic Letter 89-10 MOV Design Basis Differential Pressure Determination - Post-EPU	0
	Corrective Action Documents	01761767	W/O#40034286-01, Lube ECC Motor	04/12/2012
		02305467	MOV-4-751: Inactive Boric Acid @Stem and Packing Gland	03/13/2019
	Corrective Action Documents Resulting from Inspection	02324144	10 CFR 50.49 Check Box	08/12/2019
		02324350	NRC DBAI EQ Program Inspection - Program Applicability	08/13/2019
		02324618	DOC Pac 16.0 Eval of Test RPT Anomalies	08/15/2019
		02324654	DOC 17.0 Changes	08/15/2019
	Drawings	5610-E-302	Electrical Installation Raceways, Notes, Symbols & Details	Rev. 22
		5614-E-26 SH 12G	Auxiliary Feedwater Pump Steam Supply D.C. MOV-4-1405	Rev. 9
		5614-E-377	Connection Diagram for Motor Operated Valves	Rev. 7
		5614-E-397	Connection Diagram - Control Board 4C02	Rev. 6
		5614-E-486	Connection Diagram - Containment Isolation Rack 4QR51	Rev. 5
	Engineering Evaluations	1003483	EPRI Technical Report 1003483 Comparative Analysis of Nebula and MOV Long Life Greases for Limitorque Main Gearbox Applications	0
		600456	Limitorque Test Report No. 600456 Qualification Type Test Report Limitorque Valve Actuators for PWR Service	0
		B0058	Limitorque Test Report No. B0058 Limitorque Valve Actuator Qualification for Nuclear Power Station Service	0
		DOC PAC No. 1000	Generic Backup Documentation	Rev. 10
		Documentation Package 14.1	Nuthern Starters	Rev. 1
		Documentation Package 16.0	Doc Pac - Joy Manufacturing Co. Electrical Fans	13
		Documentation Package 17.0	Doc Pac - Limitorque Corporation Valve Actuators	13

71111.21N	Engineering Evaluations	Documentation Package 17.3	Limatorque Corporation Valve Actuators	7
		Documentation Package 26.0	Target Rock Solenoid Valves	Rev. 10
		Documentation Package 41.0	Automatic Valve Company (AVCO) Solenoid Valves Page 1	4
		JPN-PTN-SEEJ-92-006	Engineering Evaluation to Develop an Enhanced EQ Profile	0
		X-604	Joy Manufacturing Co. Test Report X-604 Qualification Testing of Joy Axivane Fan and Reliance Electric Motor	0
	Miscellaneous	2375	TRC Report 2375 Qualification Test Report Aging, Seismic, & Accident Simulation Test of Target Rock Corporation 1" Solenoid Valve, Model 77CC-001	G
		3854	TRC Report 3854 Qualification Extension Analysis Report for Project 83UU Solenoid Operated Globe Valves	0
		3996	TRC Report 3996 Qualification Test Report for the Environmental Qualification of the Target Rock Corporation Solenoid Operated Globe Valves	A
		3J8345-A-L	Certificate of Compliance - Bechtel Power Corporation	10/20/1983
		44400R97	Qualification Test Report For Automatic Valve Solenoid and Air Operated Valves for Use in Various Nuclear Power Plants	Rev. A
		600456	Limatorque Test Report No. 600456 Qualification Type Test Report Limatorque Valve Actuators for PWR Service	0
		B0058	Limatorque Test Report No. B0058 Limatorque Valve Actuator Qualification for Nuclear Power Station Service	0
		B0058	Limatorque Valve Actuator Qualification for Nuclear Power Station Service	Rev. 0
		B0212	Limatorque Test Report B0212 Qualification Type Test Report Limatorque Valve Actuators with Type LR Motor for Westinghouse PWR	0

71111.21N	Miscellaneous	F-C3271	Franklin Research Institute Test Report F-C3271 Qualification Test of Limitorque Valve Actuator in a Steam Environment	0
		FPL-12808R	Nutherm Qualification Report for Nutherm Model 72978 & Model 73010 DC Starter Panels	Rev. 3
	Procedures	0-ADM-540	Motor Operated Valve Program	4
		0-ADM-703	10 CFR 30.49 Environmental Qualification	3
		0-ADM-704	Environmental Qualification Maintenance Index	Rev. 7
		Documentation Package 1001	Environmental Qualification Generic Approach and Treatment of Issues	10
		ER-AA-112	Environmental Qualification Program	4
		ER-AA-112-1000-10000	Environmental Qualification Program Document Control and Retrieval Guidance	Rev. 0
		ER-AA-116	Motor Operated Valve Program	3
	Work Orders	40016308 01	EQ-MOV-4-751 MOV & Grease Inspect	04/08/2011
		40189647 01	MOV-4-751: MOV & Grease Inspect	10/08/2014
		40470455 01	MOV-4-751: MOV & Grease Inspect	10/22/17