July 14, 2005

Mr. David A. Christian, Sr. Vice President
and Chief Nuclear Officer
Dominion Resources
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION UNIT 2 - NRC TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000336/2005011

Dear Mr. Christian:

On June 24, 2005, the NRC completed a triennial fire protection team inspection at the Millstone Power Station Unit 2 Power Plant. The enclosed report documents the inspection findings which were discussed at an exit meeting on June 24, 2005, with Mr. J. Alan Price and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's regulations and with the conditions of your license. The purpose of the inspection was to evaluate your post-fire safe shutdown capability and fire protection program. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/ADAMS.html (the Public Electronic Reading Room).

Sincerely,

/RA/

John F. Rogge, Chief
Engineering Branch 3
Division of Reactor Safety

Docket No. 50-336
License No. DPR-65

Enclosure: Inspection Report No. 05000336/2005011

cc w/encl:
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C. L. Funderburk, Director, Nuclear Licensing and Operations Support
D. W. Dodson, Supervisor, Station Licensing
L. M. Cuoco, Senior Counsel
C. Brinkman, Manager, Washington Nuclear Operations
J. Roy, Director of Operations, Massachusetts Municipal Wholesale Electric Company
First Selectmen, Town of Waterford
R. Rubinstein, Waterford Library
J. Markowicz, Co-Chair, NEAC
E. Woollacott, Co-Chair, NEAC
E. Wilds, Director, State of Connecticut SLO Designee
J. Buckingham, Department of Public Utility Control
G. Proios, Suffolk County Planning Dept.
R. Shadis, New England Coalition Staff
G. Winslow, Citizens Regulatory Commission (CRC)
S. Comley, We The People
D. Katz, Citizens Awareness Network (CAN)
R. Bassilakis, CAN
J. M. Block, Attorney, CAN
P. Eddy, Electric Division, Department of Public Service, State of New York
P. Smith, President, New York State Energy Research and Development Authority
J. Spath, SLO Designee, New York State Energy Research and Development Authority
S. Glenn, Institute of Nuclear Power Operations

Distribution w/encl: **(VIA E-MAIL)**
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REGION I

Docket No.	50-336
License No.	DPR-65
Report No.	05000336/2005011
Licensee:	Dominion Nuclear Connecticut, LLC
Facility:	Millstone Power Station
Location:	Rope Ferry Road Waterford, Connecticut
Dates:	June 6-10 and June 20-24, 2005
Inspectors:	R. Fuhrmeister, Sr. Reactor Inspector, Division of Reactor Safety (DRS) K. Young, Reactor Inspector, DRS T. Sicola, Reactor inspector, DRS D. Szwarc, Engineer, Nuclear Safety Professional Development Program
Approved by:	John F. Rogge, Chief Engineering Branch 3 Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000336/2005011 on 06/06-10/2005 and 06/20-24/2005, Dominion Nuclear Connecticut, LLC, Millstone Power Station Unit 2. Fire Protection Team Inspection.

The report covered a two-week triennial fire protection team inspection by specialist inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None

REPORT DETAILS

Background

This report presents the results of a triennial fire protection inspection conducted in accordance with NRC Inspection Procedure (IP) 71111.05T, “Fire Protection.” The objective of the inspection was to assess whether Dominion Nuclear Connecticut has implemented an adequate fire protection program and that post-fire safe shutdown capabilities have been established and are being properly maintained at the Millstone Power Station Unit 2 facility. The following fire areas were selected for detailed review based on risk insights from the Millstone Power Station Unit 2 (MP2) Individual Plant Examination (IPE) and Individual Plant Examination of External Events (IPEEE):

- Fire Area A-25
- Fire Area A-20
- Fire Area I-1

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems

1R05 Fire Protection

.01 Shutdown From Outside Main Control Room

a. Inspection Scope

The team walked down accessible portions of the selected fire areas to observe material condition and the adequacy of design of fire area boundaries, fire doors, and fire dampers. The team reviewed engineering evaluations, as well as surveillance and functional test procedures for selected items. The team also reviewed the licensee submittals and NRC safety evaluation reports (SERs) associated with fire protection features at MP2. Additionally, the team reviewed the design and qualification testing of selected barriers and reviewed surveillance procedures for structural fire barriers and penetration seals. These reviews were performed to ensure that the passive fire barriers were properly maintained and met the licensing and design bases as described in the licensee submittals, NRC SERs, the fire hazards analysis (FHA) and the MP2 Final Safety Analysis Report (FSAR).

b. Findings

No findings of significance were identified.

.02 Protection of Safe Shutdown Capabilities

a. Inspection Scope

The team reviewed the fire hazards analysis, safe shutdown analysis and supporting drawings and documentation to verify that safe shutdown capabilities were properly protected. The team verified that separation requirements of Section III.G of Appendix R were maintained for the credited safe shutdown equipment and their supporting power, control and instrumentation cables. This review included an assessment of the adequacy of the selected systems for reactivity control, reactor coolant makeup, reactor heat removal, process monitoring, and associated support system functions. The team also performed plant walkdowns to verify that protective features were being properly maintained.

b. Findings

No findings of significance were identified.

.03 Passive Fire Protection

a. Inspection Scope

The team walked down accessible portions of the selected fire areas to observe material condition and the adequacy of design of fire area boundaries (including fire doors and fire dampers), and electrical raceway fire barriers to ensure they were appropriate for the fire hazards in the area.

The team reviewed installation/repair and qualification records for a sample of penetration seals to ensure the fill material was of the appropriate fire rating and that the installation met the engineering design.

The team reviewed engineering evaluations, as well as surveillance and functional test procedures for selected passive fire protection items. The team also reviewed the licensee submittals and NRC safety evaluation reports (SERs) associated with passive fire protection features. These reviews were performed to ensure that the passive fire barriers were properly maintained and met the licensing and design bases as described in the licensee submittals, NRC SERs, the fire hazards analysis (FHA) and the MP2 FSAR.

b. Findings

No findings of significance were identified.

.04 Active Fire Protection

Fire Detection Systems and Equipment

a. Inspection Scope

The team reviewed the adequacy of the fire detection systems in the selected plant fire areas. This included a walkdown of the systems and review of the type of installed detectors as shown per location drawings. Additionally, the team reviewed fire detection surveillance procedures to determine the adequacy of the fire detection component testing and to ensure that the detection system would function as required.

b. Findings

No findings of significance were identified.

Fixed Fire Suppression Systems

a. Inspection Scope

Halon Systems

The team reviewed the adequacy of the East DC Switchgear room Halon systems by performing walkdowns of the systems and the fire area envelopes. The team also reviewed the design and installation initial discharge testing that verified concentration and hold times and the adequacy of surveillance procedures. Completed surveillance procedures were also reviewed to ensure periodic testing of the systems was being accomplished. These reviews were performed to ensure that the low pressure total flooding Halon systems met the design and licensing bases as described in the licensee submittals, NRC SERs, the FHA and the FSAR and that the system could perform its intended function in the event of a fire in these areas.

b. Findings

No findings of significance were identified.

Manual Fire Suppression Capability

a. Inspection Scope

The team walked down selected standpipe systems and observed portable extinguishers to determine the material condition of the manual fire fighting equipment and verify locations as specified in the pre-fire plans and fire protection program documents. The team reviewed fire hose hydrostatic pressure tests to ensure that the equipment was meeting the design requirements.

The team reviewed pre-fire plans for the selected fire areas to determine if appropriate information was provided to fire brigade members and plant operators to identify safe shutdown equipment and instrumentation, and to facilitate suppression of a fire that could impact post-fire safe shutdown.

The team performed in-plant walk downs to evaluate the physical configuration of electrical raceway and safe shutdown components in the selected fire areas to determine whether water from an inadvertent fire suppression system pipe rupture or from manual fire suppression activities in the selected areas could cause damage that could inhibit the ability to safely shutdown the plant.

The team reviewed fire brigade initial training and continuing training course materials to verify appropriate training was being conducted for the station fire fighting personnel. Additionally, the team observed fire brigade training at the on-site fire-fighting simulator.

The team reviewed the qualifications of several fire brigade leaders and members to ensure that they had met and maintained the requirements to be fire brigade leaders and members.

The team performed a walkdown of the fire brigade facilities and response vehicles for adequacy and material conditions.

b. Findings

No findings of significance were identified.

.05 Protection From Damage From Fire Suppression Activities

a. Inspection Scope

The team performed document reviews and plant walkdowns to verify that redundant trains of systems required for hot shutdown are not subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems. Specifically, the team verified that:

- A fire in one of the selected fire areas would not indirectly, through production of smoke, heat or hot gases, cause activation of suppression systems that could potentially damage all redundant trains.

- A fire in one of the selected fire areas (or the inadvertent actuation or rupture of a fire suppression system) would not indirectly cause damage to all redundant trains (e.g., sprinkler caused flooding of other than the locally affected train).

- Adequate drainage is provided in areas protected by water suppression systems.

b. Findings

No findings of significance were identified.

.06 Alternative Shutdown Capability

a. Inspection Scope

Methodology

The team verified that the alternative shutdown methodology properly identified the components and systems necessary to achieve and maintain safe shutdown conditions for each of the fire areas selected for review. The team specifically assessed the adequacy of systems for reactivity control, reactor coolant makeup, decay heat removal, process monitoring and support system functions. The team also verified that hot and cold shutdown from outside the control room could be achieved and maintained with or without off-site power available.

The team verified that the transfer of control from the control to the alternative shutdown location(s) will not be affected by fire-induced circuit faults (e.g., by the provision of separate fuses and power supplies for alternative shutdown control circuits).

Operational Implementation

The team verified that the training program for licensed and non-licensed operators included alternative shutdown capability. The team also verified that personnel required for safe shutdown using the alternative shutdown systems and procedures are trained and available onsite at all times, exclusive of those assigned as fire brigade members.

The team reviewed the adequacy of procedures utilized for alternative shutdown and performed independent walk throughs of procedure steps to ensure the implementation and human factors adequacy of the procedures. The team also verified that the operators could be reasonably expected to perform specific actions within the time required to maintain plant parameters within specified limits. Time critical actions which were verified included restoration of AC electrical power, restoration of reactor coolant pump seal cooling, establishing reactor coolant makeup using the charging systems and establishing decay heat removal.

The team also reviewed the periodic testing of the alternative shutdown transfer capability and instrumentation and control functions to ensure the tests are adequate to ensure the functionality of the alternative shutdown capability.

b. Findings

No findings of significance were identified.

.07 Circuit Analyses

a. Inspection Scope

The team verified that the Dominion Nuclear had performed a post-fire safe shutdown analysis for the selected fire areas and that the analysis appropriately identified the structures, systems and components important to achieving and maintaining safe shutdown. Additionally, the team verified that Dominion Nuclear's analysis ensured that necessary electrical circuits were properly protected and that circuits that could adversely impact safe shutdown due to hot shorts, shorts to ground or other failures were identified, evaluated and dispositioned to ensure spurious actuations would not prevent safe shutdown.

The team's reviewed considered fire and cable attributes, potential undesirable consequences and common power supply/bus concerns. Specific items included the credibility of the fire threat, cable insulation attributes, cable failure modes, multiple spurious actuations, actuations resulting in flow diversion or loss of coolant events.

The team also reviewed cable raceway drawings for a sample of components required for post-fire safe shutdown to verify that cables were routed as described in the cable routing matrices. This included a walkdown of selected cable trays to verify their location.

Cable failure modes were reviewed for the following components:

- Power Operated Relief Valves (PORVs), 2-RC-402 and 2-RC-404
- Reactor Head Vents, 2-RC-414, 415, 416, and 417
- Auxiliary Flow Control Valve, 2-FW-43B
- Turbine Driven AFW Pump Discharge Valve, 2-FW-44

The team reviewed circuit breaker coordination studies to ensure equipment needed to conduct post-fire safe shutdown activities would not be impacted due to a lack of coordination. The team confirmed that coordination studies had addressed multiple faults due to fire. Additionally, the team reviewed a sample of circuit breaker maintenance and records to verify that circuit breakers for components required for post-fire safe shutdown were properly maintained in accordance with procedural requirements.

Additionally, the team reviewed self-assessment MP-SA-05-13, Fire Safe Shutdown Multiple Circuit Failure Exposure, June 9, 2005, to determine if Dominion Nuclear had identified any circuit non-compliance issues. The team also reviewed Dominion Nuclear's response to Information Notice (IN) 2005-04, Single Failure Vulnerability of Redundant Buses, to determine if Millstone Nuclear Power Station, Unit 2 was vulnerable to the IN identified condition.

b. Findings

No findings of significance were identified.

.08 Communications

a. Inspection Scope

The team reviewed safe shutdown procedures, the safe shutdown analysis and associated documents to verify an adequate method of communications would be available to plant operators following a fire. During this review the team considered the effects of ambient noise levels, clarity of reception, reliability and coverage patterns. The team also inspected the designated emergency storage lockers to verify the availability of portable radios for the fire brigade and for plant operators. The inspectors also verified that communications equipment such as repeaters, transmitters, etc. would not be affected by a fire.

b. Findings

No findings of significance were identified.

.09 Emergency Lighting

a. Inspection Scope

During walkthrough of a post-fire shutdown procedure, the team observed the placement and coverage areas of emergency lighting units to evaluate their adequacy for illuminating access and egress pathways and any equipment requiring local operation and/or instrumentation monitoring for post-fire safe shutdown. The team also verified that the battery power supplies were rated for at least an 8-hour capacity. Preventive maintenance procedures and various documents, including the vendors manual and completed surveillance tests were reviewed to ensure adequate surveillance testing and periodic battery replacements were in place to ensure reliable operation of the eight-hour emergency lights and that the emergency lighting units were being maintained consistent with the manufacturer's recommendations and accepted industry practices.

b. Findings

No findings of significance were identified.

.10 Cold Shutdown Repairs

a. Inspection Scope

During walkthroughs of the selected fire areas, the team verified that the temporary instruments called out in AOP 2579AA, "Fire procedure for Cooldown and Cold

Shutdown, Appendix R Fire Area, R-1" were stored and available in the locker adjacent to Fire Shutdown Panel C-10 in the Upper 4169V Switchgear Room.

b. Findings

No findings of significance were identified

.11 Compensatory Measures

b. Inspection Scope

The team verified that compensatory measures were in place for out-of-service, degraded or inoperable fire protection and post-fire safe shutdown equipment, systems, or features (e.g., detection and suppression systems and equipment, passive fire barriers, pumps, valves and electrical devices providing safe shutdown functions or capabilities). The team also verified that the short term compensatory measures were adequate for the degraded function or feature until appropriate corrective action could be taken and that Dominion was effective in returning the equipment to service in a reasonable period of time.

b. Findings

No findings of significance were identified.

.12 Programmatic Controls

During tours of the facility, the team observed the material condition of fire protection systems and equipment, the storage of permanent and transient combustible materials, and control of ignition sources. The team also reviewed the procedures that controlled hot-work activities and combustibles at the site. Additionally, the team reviewed a sample of hot work permits and transient combustible evaluations. These reviews were accomplished to ensure that Dominion was maintaining the fire protection systems, controlling hot-work activities, and controlling combustible materials in accordance with the FSAR, administrative procedures and other fire protection program procedures.

c. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

.01 Corrective Actions for Fire Protection Deficiencies

a. Inspection Scope

The team verified that Dominion was identifying fire protection and post-fire safe shutdown issues at an appropriate threshold and entering them into the corrective action program. The team also reviewed a sample of selected issues to verify that Dominion had taken or planned appropriate corrective actions.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

The team presented their preliminary inspection results to Mr. J. Alan price, Site Vice president, and other members of the site staff at an exit meeting on June 24, 2005.

No proprietary information was included in this inspection report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Dominion Personnel

J. Price, Site Vice President
S. Sarver, Director, operations and Maintenance
A. Jordan, Director, Engineering
P. Grossman, Manager, Nuclear Engineering
S. Wainio, Supervisor, Nuclear Technical Programs
W. Bartron, Licensing Engineer
M. Jalbert, Inspector Liaison
N. Kuzel, Technical Programs Engineer
S. Garvin, Supervisor, Operations Support
R. Wells, Engineer, Mechanical Systems and Standards
J. Armstrong, Engineer, Nuclear Technical Programs
P. Raimondi, Technical Programs Engineer, Appendix R
D. Scott, Technical Programs Engineer, Appendix R
B. Smith, Engineer, Nuclear Technical Programs
W. Weseman, Engineer, Materials Engineering Programs

NRC

J. Rogge, Chief, Engineering Branch 3, Division of Reactor Safety
S. Schneider, Senior Resident Inspector, Millstone
S. Kennedy, Resident Inspector, Millstone

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Open and Closed

NONE

Closed

NONE

Discussed

NONE

LIST OF DOCUMENTS REVIEWED

Fire Protection Design and Licensing Documents

Exemption Letter, Appendix R Exemption For Millstone Unit 2, May 4, 1988
Safety Evaluation Report, Fire Protection, September 19, 1978
Millstone Nuclear Power Station - 2, Final Safety Analysis Report (FSAR)
Millstone Nuclear Power Station - 2, Technical Requirements Manual
25203-SP-M2-SU-1046, MP2 Appendix R Compliance Report, Rev. 00

Calculations/Engineering Evaluation Reports

M2-EV-98-0113, 120 VAC Vital Bus Appendix R Coordination Study Millstone Unit 2, Rev. 00
PA84-065-753GE, AC 480 Volt Load Center, Rev. 2
PA85-082-0812GE, 125 VDC Coordination Study, Rev. 3
PA90-050-0308E3, Station Blackout Diesel Generator Loading (U-3), Rev. 2
PA98-ENG-02132E2, Appendix R Load Analysis, Rev. 1
P1164-MP2-COORD, Breaker/Fuse Coordination For The Circuits of Panels D11, D12, D21, and D22 Which Are Credited To Perform An Appendix R Safe Shutdown Function, Rev. 0
P1164-MP2-COORD/MHIF, Breaker/Fuse Coordination and Multiple High Impedance Fault (MHIF) Recovery Actions for 120 VAC Panels VR11 and VR21 Which are Credited to Perform an Appendix R Safe Shutdown Function, Rev. 1 and Rev. 2
P1164-MP-MHIF DV10, DV210, Multiple High Impedance Fault Evaluation For The Circuits of Panels DV10 and DV20 Which Are Credited To Perform an Appendix R Safe Shutdown Function, Rev. 1
P1164-MP2-MHIF D11, D12, D21, D22, MHIF Evaluation for the Circuits of Panels D11, D12, D21, and D22 Which are Credited to Perform and Appendix R Safe Shutdown Function, Rev. 1
97-ENG-01912E2, 4.16kV Switchgear Relay Settings, Rev. 00

Procedures

MP-PROC-OPS-SFP1, Rev. 2, Fire Protection Training Program
MP-PROC-OPS-AOP 2579A, Rev. 009-04, Fire Procedure for Hot Standby Appendix R Fire Area R-1
MP-PROC-OPS-AOP 2579AA, Rev. 004-02, Fire Procedure for Cooldown and Cold Shutdown, Appendix R Fire Area, R-1
MP-PROC-OPS-AOP 2579E, Rev. 006-03, Fire Procedure for Hot Standby Appendix R Fire Area R-9
MP-PROC-OPS-AOP 2579P, Rev. 007-04, Fire Procedure for Hot Standby Appendix R Fire

Area R-16
SP 2402ER, Pressurizer Level Rack Calibration, Rev. 000-01
SP 2402ET, Pressurizer Level Transmitter Cal., Rev. 000-02
SP 2414A, TRM Safety Related Instrument Calibrations-Shutdown, Rev. 000-01
SP 2601M, Facility 2 Charging Pump Operability From C-10, Rev. 000-00
SP 2610B-001, TDAFP Operability Test & 2-MS-464 (SSV-4188) Stroke & Timing IST, Rev. 013
SP 2610BO, TDAFP Tests, Operating, Rev. 000-01
SP 2610B5, TDAFP Tests, Shutdown, Rev. 000-02
SP 2610E, Main Steam Valve Closure Tests From Bottle-Up Panel, Rev. 001-01
SP 2610E, Atmospheric Dump Valve Testing, Rev. 001-02
SP 3610E, MSIV Closure & Main Steam Valve Operational Readiness Testing, Rev. 009-08
SPF 12 Rev. 002-03 – Unit MP2 Fire Watch Reasons – 6/7/2005
SPIP 52 Rev. 000-02 – Security During Emergencies – 5/11/2005

Completed Tests/Surveillances

T88-8 Rev. 0 - East DC Switchgear room Halon Fire Suppression System Operability 2/10/1988
SP 2618C-01 Rev. 015-04 – Fire Protection System Smoke and Heat Detector Test – ½1/05
SP 22412A Rev. 000-03 – East DC Switchgear Room Halon Fire Supression System Functional Test – 4/12/02
SP 2413 Rev. 005-01 - DC Switchgear Room Duct Detector Operability Test – 9/14/2001
SFP 17-04 Rev. 000-01 – Unit 2 Fire Penetration Seal Inspection – Group 4 – 2/4/2002
SFP 17-04 Rev. 000-01 – Unit 2 Fire Penetration Seal Inspection – Group 6 – 2/4/2002
SFP 17-04 Rev. 000-01 – Unit 2 Fire Penetration Seal Inspection – Group 8 – 2/4/2002
SFP 17-04 Rev. 000-01 – Unit 2 Fire Penetration Seal Inspection – Group 9 – 2/4/2002
SFP 17 Rev. 002-00 – Fire Penetration Seal and Barrier Inspections – 1/14/05
SFP 17 Rev. 0 Chg 2 - Penetration Seal Inspection Survey Notice of Discrepancy and Engineering Resolution – 11/15/1999

Quality Assurance (QA) Audits and System Health Reports

MP-SA-05-13, Fire Safe Shutdown Multiple Circuit Failure Exposure, June 9, 2005
Audit 05-04: Fire Protection QA Program – 4/26/2005
Program Health Report, Millstone Fire Protection/Appendix R/BTP 9.5-1, 4th Quarter
Program Health Report, Fire Protection, 1st Quarter
System Health Report, 120 Volt Vital Regulated Instrument AC System, 4th Quarter 2004
System Health Report, 120 Volt Vital Regulated Instrument AC System, 1st Quarter 2005
System Health Report, 125 Volt DC System 4th Quarter 2004
System Health Report, 125 Volt DC System 1st Quarter 2005

Drawings

25203-11036, Rev. 2, Intake Structure Roof Plan & Sections
25203-28500, Sh. 55, Rev. 8, PT-102B-1 Pressurizer, Pressure, Wide Range 0-3000PSIG Loop Diagram
25203-28500, Sh. 69A, Rev. 11, LT-110X, 110Y Pressurizer Level Loop Diagram

25203-28500, Sh. 69B, Rev. 6, LT-110X, 110Y Pressurizer Level Loop Diagram
25203-28500, Sh. 69C, Rev. 8, LT-110X, 110Y Pressurizer Level Loop Diagram
25203-28500, Sh. 69D, Rev. 7, LT-110X, 110Y Pressurizer Level Loop Diagram
25203-28500, Sh. 73 , Rev. 16, TE-111X, Loop One Hot Leg Temp From Reactor Loop Dia.
25203-28500, Sh. 79, Rev. 12, TE-112CA TC Loop 1A & TE-122CA TC Loop 2A To CH. A, RPS Loop Diagram
25203-28500, Sh. 100, Rev. 9, TE-121X Hot Leg From Reactor To Steam Generator #2 Loop Diagram
25203-28500, Sh. 355, Rev. 9, PT-1023A STM. GEN. Press. Loop Diagram
25203-28500, Rev. 9, PT-4224 Steam Generator #2 Dump To Atmosphere
25203-30001, Rev. 23, Unit 2 Main Single Line Diagram
25203-30044, Schematic Diagram 4.16 KV Bus 24D (A4)
25203-30101, Rev. 3, U-2 Arrangement Fire Shutdown Panel C10
25203-31234, Sh. 1, Rev. 2, Connection Diagram Fire Shutdown Panel C10
25203-31234, Sh. 2, Rev. 3, Connection Diagram Fire Shutdown Panel C10
25203-31234, Sh. 3, Rev. 1, Connection Diagram Fire Shutdown Panel C10
25203-31234, Sh. 4, Rev. 2, Connection Diagram Fire Shutdown Panel C10
25203-31234, Sh. 5, Rev. 2, Connection Diagram Fire Shutdown Panel C10
25203-32007, Sh. 23, Rev. 10, Pressurizer Relief SOV RC402
25203-32007, Sh. 24, Rev. 10, Pressurizer Relief SOV RC404
25203-32007, Sh. 41 , Rev. 3, Head Vent SOV RC-414 (2-RC-414)
25203-32007, Sh. 42 , Rev. 3, Head Vent SOV RC-415 (2-RC-415)
25203-32007, Sh. 43 , Rev. 3, Head Vent SOV RC-416 (2-RC-416)
25203-32007, Sh. 44 , Rev. 3, Head Vent SOV RC-417 (2-RC-417)
25203-32008, Sh. 33, Rev. 16, Shutdown Cooling Isolation MOV SI652
25203-32009, Sh. 35 , Rev. 8, Aux. Spray SOV CH517 (2-CH-517)
25203-32009, Sh. 41, Rev. 21, Charging Pump Control MP18B
25203-32009, Sh. 42, Rev. 13, Charging Pump Power Supply Crossover P18B
25203-32009, Sh. 42A, Rev. 2, Charging Pump Control MP18B
25203-32009, Sh. 43, Rev. 16, Charging Pump MP18C
25203-32009, Sh. 43A, Rev. 5, Charging Pump P18C
25203-32012, Sh. 22 , Rev. 14, Aux. Feedwater Cont. Valve HV5279 (2-FW-43B)
25203-32012, Sh. 22A , Rev. 6, Aux. Feedwater Cont. Valve HV5279 (2-FW-43B)
25023-32020, Sh. 15 , Rev., STM. GEN. 2 Blowdown Line Isolation Valve HV4248 (2-MS-220B)
25203-32020, Sh. 18, Rev. 17, SG #1 Main Steam Iso. Trip Valve HV4217 2-MS-64A Channel #1
25203-32020, Sh. 19, Rev. 19, SG #1 Main Steam Iso. Trip Valve 2-MS-64A, Channel 2
25203-32020, Sh. 20, Rev. 20, SG #2 Main Steam Iso. Trip Valve HV4221 2-MS-64B Channel #2
25203-32020, Sh. 21, Rev. 19, SG #2 Main Steam Iso. Trip Valve 2-MS-64B, Channel #1, HV4221
25203-32020, Sh. 42, Rev. 42, Aux. SGFP Turbine H21 Gov. Speed Adjusting Motor
25203-32020, Sh. 49, Rev. 8, Steam Gen. Aux. Feed Pump Turbine H21 MOV SV-4188 (2-MS-464) Schematic
25203-32020, Sh. 49A, Rev. 4, Steam Gen. Aux. Feed Pump Turbine H21 MOV SV4188 (2-MS-464) Schematic
SKE-3.1-ELEC-DIST, Rev. 1, Unit 2 Emergency System One Line Diagram For Appendix “R”

25203-24107 – Warehouse , Aux. Bldg & Containment Encl. Bldg. El 14’ 6” Barrier Boundaries – 11/30/1994
25203-24108 – Warehouse , Aux. Bldg & Containment Encl. Bldg. El 14’ 6” Map of Maps – 4/1/1994
25203-24099 – Turb & Aux Bldg. El. 25’-6” & Turb. Ldg. EL. 45’-0” Barrier Boundaries – 4/29/1994
25203-24100 – Turb & Aux Bldg. El. 25’-6” & Turb. Ldg. EL. 45’-0” Map of Maps – 4/29/1994
25203-24092 SH. A20W2 – Penetration Seal survey Map and Inspection Record – 10/20/1993
25203-24092 SH. A20W3 – Penetration Seal survey Map and Inspection Record – 10/20/1993
25203-24092 SH. A20W4 – Penetration Seal survey Map and Inspection Record – 10/20/1993
25203-24092 SH. A20W5 – Penetration Seal survey Map and Inspection Record – 10/20/1993
25203-24092 SH. A20W5A – Penetration Seal survey Map and Inspection Record – 10/20/1993
25203-24092 SH. A20W6 – Penetration Seal survey Map and Inspection Record – 10/20/1993
25203-24092 SH. A20W7 – Penetration Seal survey Map and Inspection Record – 10/20/1993

Drawings (Cable Raceway Plans)

25203-34004 , Rev. 28, Turbine Area 2 EL. 14'-6"
25203-34008 , Rev. 15, Turbine Area 2 EL. 31'-6"
25203-34011 , Rev. 10, Turbine Area 2 EL. 45'-0"
25203-34013 , Rev. 8, Turbine Area 2 EL. 54'-6"
25203-34018 , Rev. 16, Turbine Area 2 EL. 25'-6" & 36'-6"
25203-34021 , Rev. 10, Aux. Bldg. Area 6 & 7, EL. (-) 45'-6"
25203-34024 , Rev. 9, Aux. Bldg. Area 6, EL. (-) 5'-0"
25203-34026 , Rev. 17, Aux. Bldg. Area 6, El. 14'-6"
25203-34027, Sh. 1 , Rev. 6, D.C. Equipment Room Aux. Bldg. Area 7 EL. 14'-6"
25203-34029 , Rev. 15, East Elect. Pent. Rm. EL. 14'-6"
25203-34030 , Rev. 15, West Elect. Pent. Rm. EL. + 14'-6"
25203-34031 , Rev. 11, Cable Vault Area 6, EL. 25'-6"
25203-34032, Sh. 1, Rev. 16, Cable Vault Area 7, EL. 25'-6", FAC 2
25203-34032, Sh. 2, Rev. 10, Cable Vault Area 7, EL. 25'-6", FAC 2
25203-34033 , Rev. 11, Cable Vault Penetration Area EL. 25'-6"
25203-34038 , Rev. 16, Aux. Bldg. At EL. 36'-6" & 38'-6"
25203-34051, Rev. 33, Aux. Bldg. MISC Plans Sect. & Details

Fire Brigade Training

Millstone Station Fire Fighting Strategy manual – Generic Fire Brigade Guidelines/Information. - 02/2004
Millstone Student Qualification/Training Status – 6/7/2005
Millstone Fire Brigade Continuing Training Matrix – 2003
Millstone Fire Brigade Continuing Training Matrix – 2004
Millstone Fire Brigade Continuing Training Matrix – 2005
Fire Brigade Planned Meeting Minutes, 1st Quarter 2003

Operator Safe Shutdown Training

JPM-049, Rev. 4, Energize Bus 24C from Bus 14H (Unit 1)
JPM-045, Rev. 5, Chg. 1, Supply Emergency Backup Air to 2-CH-192
JPM-052, Rev. 3, Manual Operation of a 4160 Volt Breaker
JPM-085, Rev. 9, Chg. 1, Local Manual Operation of the Turbine Driven Auxiliary Feedwater pump
JPM-093, Rev. 8, Local Manual Operation of the "A" Atmospheric Dump Valve
JPM-138, Rev. 0, Shifting AFW FRV to Manual Handwheel Control
JPM-207, Rev. 0, Local Manual Operation of the "A" Atmospheric Dump Valve

Miscellaneous Documents

NFPA 72E, 1974
MP2 Fire Fighting Strategies – East DC Switchgear Room
Halon 1301 Fire Supression System Parts List
SP 2412A 000-04 – Minimum Halon Pressure Depending on Temperature
FPI 18-003 Rev. 011-03 – Site Fire Protection Reference Material Revision Verification – 5/13/204
DCM 3-2A Rev. 011 – DCR Review and Approval form – Replacement of Millstone 2 Traveling Screens – 12/22/2004
DCM 3-2A Rev. 011 – DCR Review and Approval form – Installation of Permanent Jumpers in MP2 120 VDC Switchgear D01, D02 and D03 - – 1/09/2003

Condition Reports

CR-05-00497	CR-05-06264	CR-05-00461	CR-05-06377
CR-05-06711	CR-05-03813	CR-05-03371	CR-05-02964
CR-05–2591	CR-05-02392	CR-05-02251	CR-05-02250
CR-05-01922	CR-05-01165	CR-05-01007	CR-05-00868
CR-05-00790	CR-05-00452	CR-05-00275	CR-03-03902
CR-03-02870	CR-03-02036	CR-03-02016	CR-03-01664
CR-03-00247	CR-03-00230	CR-02-13712	CR-02-13093
CR-02-12319	CR-02-11942	CR-02-11564	CR-02-11148
CR-02-10962	CR-02-10889	CR-02-10304	CR-02-10160

Work Orders

M2 99 00652	M2 04 01507	M2 03 20224	MP 04 06278
M2 03 03500	M2 04 01706	MP 04 06276	M2 03 10175
M2 04 01753	M2 01 04287	M2 03 03158	MP 04 06277
M2 03 02255	M2 03 09695	MP 04 06274	M2 04 10351
M2 03 03445	MP 04 06279	M2 98 08334	M2 99 04925
M2 99 07681	M2 99 13799	M2 00 07422	M2 02 00926
M2 03 01659			

Work Observations

WO-02-3832	WO-03-5389	WO-03-7734	WO-04-2841
WO-02-4309	WO-03-5578	WO-04-0605	WO-04-3089
WO-02-4307	WO-03-5659	WO-03-0633	WO-04-4030
WO-02-5060	WO-03-6528	WO-04-1512	WO-04-5869
WO-02-5369	WO-03-6743	WO-04-2147	WO-04-7398
WO-02-6115	WO-03-7079	WO-04-2438	WO-05-0521
WO-02-7911	WO-03-7138	WO-04-2471	WO-04-0819
WO-03-1844	WO-03-7467	WO-04-2687	WO-04-2631
WO-03-4315	WO-03-7679	WO-04-2703	WO-04-2738
WO-03-5389	WO-03-7728	WO-04-2718	WO-04-2740

LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater System
CFR	Code of Federal Regulations
CO_2	Carbon Dioxide
CR	Condition Report
DRS	Division of Reactor Safety
EDG	Emergency Diesel Generator
FA	Fire Area
FHA	Fire Hazards Analysis
FSAR	Final Safety Analysis Report
FZ	Fire Zone
IP	Inspection Procedure
IPE	Individual Plant Examination
IPEEE	Individual Plant Examination of External Events
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission
PAR	Publicly Available Records
P&ID	Piping and Instrumentation Drawing
PORV	Power Operated Relief Valve
QA	Quality Assurance
RCP	Reactor Coolant Pump
RHR	Residual Heat Removal
SCBA	Self-Contained Breathing Apparatus
SER	Safety Evaluation Report
TRM	Technical Requirements Manual