

UNITED STATES NUCLEAR REGULATORY COMMISSION

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

September 20, 2010

Mr. Christopher J. Schwarz Vice President, Operations Entergy Nuclear Operations, Inc. Palisades Nuclear Plant 27780 Blue Star Memorial Highway Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT NRC TRIENNIAL FIRE PROTECTION BASELINE INSPECTION REPORT 05000255/2010-008(DRS)

Dear Mr. Schwarz:

On September 3, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed a triennial fire protection inspection at your Palisades Nuclear Plant. The enclosed inspection report documents the inspection results, which were discussed on September 3, 2010, with members of your staff.

As a result of your intent to adopt the National Fire Protection Association Standard (NFPA) 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," as defined by Title 10, Code of Federal Regulations (CFR), Part 50, Section 48(c), the inspection was conducted in accordance with Inspection Procedure (IP) 71111.05TTP, "Fire Protection - NFPA 805 Transition Period (Triennial)," issued December 24, 2009, and effective January 1, 2010. The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings 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 System (PARS) component of NRC's Agencywide

C. Schwarz

Documents Access and Management System (ADAMS), accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/RA/

Robert C. Daley, Chief Engineering Branch 3 Division of Reactor Safety

- Docket No.: 50-255 License No.: DPR-20
- Enclosure: Inspection Report 05000255/2010008(DRS) w/Attachment: Supplemental Information
- cc w/encl: Distribution via ListServ

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: License No:	50-255 DPR-20
Report No:	05000255/2010-008(DRS)
Licensee:	Entergy Nuclear Operations, Inc.
Facility:	Palisades Nuclear Plant
Location:	Covert, MI
Dates:	August 5 through September 3, 2010
Inspectors:	B. Jose, Senior Reactor Inspector, LeadZ. Falevits, Senior Reactor InspectorL. Kozak, Senior Reactor AnalystR. Winter, Reactor Inspector
Approved by:	R. C. Daley, Chief Engineering Branch 3 Division of Reactor Safety

SUMMARY OF FINDINGS

Inspection Report 05000255/2010008(DRS); 08/5/2010 – 09/3/2010; Palisades Nuclear Power Plant; Routine Triennial Fire Protection Baseline Inspection.

This report covers an announced triennial fire protection baseline inspection. The inspection was conducted by Region III inspectors. Based on the results of this inspection, no NRC-identified findings were discovered that involved violations of NRC requirements. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. <u>NRC-Identified and Self-Revealed Findings</u>

No violations of significance were identified.

B. <u>Licensee-Identified Violations</u>

No violations of significance were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events and Mitigating Systems

1R05 <u>Fire Protection</u> (71111.05TTP)

The purpose of the fire protection triennial baseline inspection was to conduct a designbased, plant specific, risk-informed, onsite inspection of the licensee's fire protection program's defense-in-depth elements used to mitigate the consequences of a fire. The fire protection program shall extend the concept of defense-in-depth to fire protection in plant areas important to safety by:

- preventing fires from starting;
- rapidly detecting, controlling and extinguishing fires that do occur;
- providing protection for structures, systems, and components important to safety so that a fire that is not promptly extinguished by fire suppression activities will not prevent the safe shutdown of the reactor plant; and
- taking reasonable actions to mitigate postulated events that could potentially cause loss of large areas of power reactor facilities due to explosions or fires.

The inspectors' evaluation focused on the design, operational status, and material condition of the reactor plant's fire protection program, post-fire safe shutdown systems and B.5.b mitigating strategies. The objectives of the inspection were to assess whether the licensee had implemented a fire protection program that: (1) provided adequate controls for combustibles and ignition sources inside the plant; (2) provided adequate fire detection and suppression capability; (3) maintained passive fire protection features in good material condition; (4) established adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems or features; (5) ensured that procedures, equipment, fire barriers and systems exist so that the post-fire capability to safely shut down the plant was ensured; (6) included feasible and reliable operator manual actions when appropriate to achieve safe shutdown; and (7) identified fire protection issues at an appropriate threshold and ensured these issues were entered into the licensee's problem identification and resolution program.

In addition, the inspectors' review and assessment focused on the licensee's post-fire safe shutdown systems for selected risk-significant fire areas. Inspector emphasis was placed on determining that the post-fire safe shutdown capability and the fire protection features were maintained free of fire damage to ensure that at least one post-fire safe shutdown success path was available. The inspectors' review and assessment also focused on the licensee's B.5.b related license conditions and the requirements of 10 CFR 50.54 (hh)(2). Inspector emphasis was to ensure that the licensee could establish command and control, maintain, or restore core cooling capabilities utilizing the B.5.b mitigating strategies following a loss of large areas of the power reactor facility due to explosions or fires. Documents reviewed are listed in the Attachment to this report.

The fire areas and/or fire zones and B.5.b mitigating strategies selected for review during this inspection are listed below and in Section 1R05.11. The fire areas and/or fire zones and B.5.b mitigating strategies selected constitute 5 inspection samples and 1 inspection sample, respectively, as defined in IP 71111.05TTP.

Fire Area	Description
4	1-C Switchgear Room
6	1-2 Diesel Generator Room
15	Engineered Safeguards Panel Room
21	Electrical Equipment Room

.1 Protection of Safe Shutdown Capabilities

a. Inspection Scope

The inspectors reviewed the functional requirements identified by the licensee as necessary for achieving and maintaining hot shutdown conditions to ensure that at least one post-fire safe shutdown success path was available in the event of fire in each of the selected fire areas and for alternative shutdown in the case of control room evacuation. In addition, the inspectors reviewed the fire hazards analysis, safe shutdown analysis, and supporting drawings and documentation to verify that safe shutdown capabilities were properly protected. The updated final safety analysis report and the licensee's engineering and/or licensing justifications (e.g., NRC guidance documents, License Amendments, Technical Specifications, Safety Evaluation Reports, Exemptions, and Deviations) were also reviewed to determine the licensing basis.

The inspectors reviewed the licensee procedures and programs for the control of ignition sources and transient combustibles to assess their effectiveness in preventing fires and in controlling combustible loading within limits established in the fire hazards analysis. The inspectors performed plant walkdowns to verify that protective features were being properly maintained and administrative controls were being implemented.

The inspectors examined the operators' ability to perform the necessary manual actions for achieving safe shutdown by reviewing post-fire shutdown procedures, the accessibility of safe shutdown equipment, the available time for performing the manual actions and whether manual actions had been verified and validated by plant walkdowns. In addition, the inspectors evaluated manual actions not supported by an NRC approved exemption or deviation using the guidance provided in Attachment 2 of IP 71111.05TTP.

The inspectors also reviewed the licensee's design control procedures to ensure that the process included appropriate reviews and controls to assess plant changes for any potential adverse impact on the fire protection program and/or post-fire safe shutdown analysis and procedures.

b. Findings

No findings of significance were identified.

.2 Passive Fire Protection

a. Inspection Scope

For the selected fire areas, the inspectors evaluated the adequacy of fire area barriers, penetration seals, fire doors, electrical raceway fire barriers, and fire rated electrical cables. The inspectors observed the material condition and configuration of the installed barriers, seals, doors, and cables. The inspectors reviewed approved construction details. In addition, the inspectors reviewed license documentation, such as NRC Safety Evaluation Reports, and deviations from NRC regulations and NFPA standards to verify that fire protection features met license commitments.

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

The inspectors reviewed the 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.

b. Findings

No findings of significance were identified.

- .3 Active Fire Protection
- a. Inspection Scope

For the selected fire areas, the inspectors evaluated the adequacy of fire suppression and detection systems. The inspectors observed the material condition and configuration of the installed fire detection and suppression systems. The inspectors reviewed design documents and supporting calculations. In addition, the inspectors reviewed licensing basis documentation, such as, NRC Safety Evaluation Reports, deviations from NRC regulations, and NFPA standards to verify that fire suppression and detection systems met license commitments.

b. Findings

No findings of significance were identified.

.4 Protection from Damage from Fire Suppression Activities

a. Inspection Scope

For the selected fire areas, the inspectors verified that redundant trains of systems required for hot shutdown would not be subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems including the effects of flooding. The inspectors conducted walkdowns of each of the selected fire areas to assess conditions such as the adequacy and condition of floor drains, equipment elevations, and spray protection.

b. Findings

No findings of significance were identified.

.5 Alternative Shutdown Capability

a. Inspection Scope

The inspectors reviewed the licensee's systems required to achieve alternative safe shutdown to determine if the licensee had properly identified the components and systems necessary to achieve and maintain safe shutdown conditions. The inspectors also focused on the adequacy of the systems to perform reactor pressure control, reactivity control, reactor coolant makeup, decay heat removal, process monitoring, and support system functions.

The team conducted selected area walkdowns to determine if operators could reasonably be expected to perform the alternate safe shutdown procedure actions and that equipment labeling was consistent with the alternate safe shutdown procedure. The review also looked at operator training as well as consistency between the operations shutdown procedures and any associated administrative controls.

b. Findings

No findings of significance were identified.

- .6 <u>Circuit Analyses</u>
- a. Inspection Scope

In accordance with IP 71111.05TTP, "Fire Protection - NFPA 805 Transition Period (Triennial)," issued December 24, 2009, and effective January 1, 2010, this segment of the IP was suspended for facilities in NFPA 805 transition.

b. <u>Findings</u>

No findings of significance were identified.

.7 Communications

a. Inspection Scope

The inspectors reviewed, on a sample basis, the adequacy of the communication system to support plant personnel in the performance of alternative safe shutdown functions and fire brigade duties. The inspectors verified that plant telephones, page systems, sound powered phones, and radios were available for use and maintained in working order.

b. Findings

No findings of significance were identified.

- .8 Emergency Lighting
- a. Inspection Scope

The inspectors performed a plant walkdown of selected areas in which a sample of operator actions would be performed in the performance of alternative safe shutdown functions. As part of the walkdowns, the inspectors focused on the existence of sufficient emergency lighting for access and egress to areas and for performing necessary equipment operations. The locations and positioning of the emergency lights were observed during the walkdown and during review of manual actions implemented for the selected fire areas.

b. Findings

No findings of significance were identified.

- .9 Cold Shutdown Repairs
- a. Inspection Scope

The inspectors reviewed the licensee's procedures to determine whether repairs were required to achieve cold shutdown and to verify that dedicated repair procedures, equipment, and material to accomplish those repairs were available onsite. The inspectors also evaluated whether cold shutdown could be achieved within the required time using the licensee's procedures and repair methods. The inspectors also verified that equipment necessary to perform cold shutdown repairs was available onsite and properly staged.

b. Findings

No findings of significance were identified.

.10 Compensatory Measures

a. Inspection Scope

The inspectors conducted a review to verify 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 or electrical devices providing safe shutdown functions or capabilities). The inspectors also conducted a review of the adequacy of short term compensatory measures to compensate for a degraded function or feature until appropriate corrective actions could be taken.

b. Findings

No findings of significance were identified.

.11 B.5.b Inspection Activities

a. Inspection Scope

The inspectors reviewed the licensee's preparedness to handle large fires or explosions by reviewing one or more mitigating strategies as identified below. This review ensured that the licensee continued to meet the requirements of their B.5.b related license conditions and 10 CFR 50.54(hh)(2) by determining that:

- Procedures were being maintained and adequate.
- Equipment was properly staged, maintained, and tested.
- Station personnel were knowledgeable and could implement the procedures.
- Additionally, inspectors reviewed the storage, maintenance, and testing of B.5.b related equipment.

The inspectors reviewed the licensee's B.5.b related license conditions and evaluated selected mitigating strategies to ensure they remain feasible in light of operator training, maintenance/testing of necessary equipment and any plant modifications. In addition, the inspectors reviewed previous inspection reports for commitments made by the licensee to correct deficiencies identified during performance of Temporary Instruction (TI) 2515/171 or subsequent performances of these inspections.

The B.5.b mitigating strategies selected for review during this inspection are listed below. The off-site and on-site communications, notifications Emergency Response Organization (ERO) activation, initial operational response actions, and damage assessment activities identified in Table A.3-1 are evaluated each time due to the mitigation strategies' scenario selected.

NEI 06-12, Revision 2, Section	Licensee Strategy (Table)	Selected for Review
3.2.2	On-Site and Off-Site Communications (Table A.3-1)	Evaluated
3.2.3	Notifications/ERO Activation (Table A.3-1)	Evaluated
3.2.4	Initial Operational Response Actions (Table A.3-1)	Evaluated
3.2.5	Initial Damage Assessment (Table A.3-1)	Evaluated
3.3.7	PWR Enhancement Strategy No.7 – Portable Sprays (Table A.4-7)	Evaluated

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution (71152)

a. Inspection Scope

The inspectors reviewed the licensee's corrective action program procedures and samples of corrective action documents to verify that the licensee was identifying issues related to the fire protection program at an appropriate threshold and entering them in the corrective action program. The inspectors reviewed selected samples of condition reports, and fire protection system non-conformance documents.

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On September 3, 2010, the inspectors presented the inspection results to Mr. M. Sicard and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

<u>Licensee</u>

- D.Hamilton, Nuclear Safety Assurance Director
- G. Sleeper, Assistant Operations Manager
- M. Sicard, Operations Manager
- J. Miksa, Programs Engineering Manager
- P. Anderson, Licensing Manager
- D. Campbell, Fire Marshall
- A. Verzwyvelt, System Engineer
- G. Schrader, Programs Supervisor
- S. Mongeau, PRA Engineer
- M. Knapp, System Engineer
- T. Swiecicki, Appendix R Engineer
- J. Kneeland, Fire Protection Engineer
- B. Dotson, Licensing Technical Specialist III

Nuclear Regulatory Commission

- R. Daley, Division of Reactor Safety, Engineering Branch 3
- J. Ellegood, Senior Resident Inspector
- T. Taylor, Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

CALCULATIONS

Number	Description or Title	Date or Revision
EA-APR-95-001	Appendix R Safe Shutdown Equipment List and Logic Diagram	4
EA-APR-95-006	10 CFR Part 50 Appendix R Functional Requirements Analysis	4
EA-APR-95-007	10 CFR Part 50 Appendix R Fire Safe Shutdown Analysis	3
EA-APR-95-008	10 CFR Part 50 Safe Shutdown Manual Actions Feasibility Analysis	2
EA-PSSA-00-001	Post Fire Safe Shutdown Summary Report	3
DBD-1.10	Fire Protection System	3
EA-FPP-03-001	Analysis of Combustible Loading at Palisades Nuclear Plant	2
EA-FPP-96-009	Sprinkler Drawing for Electrical Equipment Room	0
EA-FPP-Room 72503-001	Analysis for Justification of NFPA 3-1968 for Partially Obstructed Sprinkler	0
FHAR	Fire Hazards Analysis	7

CONDITION REPORTS (CR-PLP-) ISSUED DURING INSPECTION

<u>Number</u>	Description or Title	Date or Revision
PLP-2010-3425	Knowledge Weakness and Enhancements Identified in Command and Control During B.5.b Review	August 6, 2010
PLP-2010-3464	Emergency Lighting Location Drawing Error	August 17, 2010
PLP-2010-3498	ELU-10 Trickle Charge Lit not Lit During Walkdown with NRC	August 19, 2010
PLP-2010-3500	ELU-30 West Lamp not Aimed Properly	August 19, 2010
PLP-2010-3514	Discrepancy in Appendix C of EA-APR-95-007, Page 8 of 62	August 20, 2010
PLP-2010-3518	Discrepancy Between EA-APR-95-008 and ONP 25.2	August 20, 2010
PLP-2010-3643	Three Drawing References Listed on Drawing E-8 Sheet 2P are Incorrect	August 28, 2010
PLP-2010-3660	Appendix R Program Manager Database is Overly Conservative by Identifying Two Cables as Failing in Fire Area 4	August 30, 2010
PLP-2010-3661	Conduits X1401 and X1402 Could not be Located on Raceway Drawings E-356, E-359	August 30, 2010
PLP-2010-3700	ELU Aiming Discrepancy Between Surveillance Procedure FPSP-AE-5 and Plant Drawings	August 31, 2010

Attachment

CONDITION REPORTS (CR-PLP-) ISSUED DURING INSPECTION

Number	Description or Title	Date or Revision
PLP-2010-3707	Discrepancy Between Raceway Drawing and E-359 Drawing	August 31, 2010
PLP-2010-3737	Fire Tour Log not Updated to Document the Spare Service Water Motor was Offsite for Repairs	September 1, 2010
PLP-2010-3738	Fire Protection Check Sheet Fire Hose Hydrostatic Test	September 1, 2010
PLP-2010-3740	Migration of Data from Portal J Passport and Sharepoint to Asset Suites and Merlin Resulted in an Inappropriate Classification of Some DRNs	September 1, 2010
PLP-2010-3759	During Operation of V-24A or V-24B in 1-1 D/G Room Air Flow Precludes the Ability of the Automatic Door Closure Device on Door 71 from Closing the Door to a Latched Condition	September 2, 2010
PLP-2010-3425	Consider Revising the Fire Hazards Analysis Report to Include an Evaluation or Discussion of the Condition of Fire Door 82 Located at the South End of Electrical Equipment Room	September 2, 2010

CONDITION REPORTS (CR PLP-) REVIEWED DURING INSPECTION

Number	Description or Title	Date or Revision
2006-02759	FP328 Cannot Be Closed	July 8, 2006
2010-75261	DZNPS – Small Fire in Containment – Alloy 600 RCP 1-2 Discharge Interference	April 12, 2010
2010-01223	Fire Protection Program Self assessment Identified Program Deficiency 3.2. (unresolved IN-92-18 issues)	March 23, 2010
2003-07412	NRC Inspection Report No. 50-255/98013 (DRS) Identified URI 98013-02 Regarding Multiple Hot Shorts	November/04/2003
2009-04909	Condition Report with Operability Determination Closed to Condition Report with no Operability Determination	October 22, 2009
2007-01457	Multiple Fire Induced Failures Leading to LPSI Pump Concerns; SDNC	September 8, 2009
2007-00693	Fire Doors (82, 182, 265) Code Deviation-Fusible Link	February 15, 2007
2010-01411	Fire Barrier between the cable spreading room and battery rooms not rated for three hours	April 5, 2010
2010-03126	Security Fire Tour Missed for approximately 2 Hours	July 29, 2010
2010-03670	Unannounced Fire Drill received a Failing Grade	August 30, 2010

DRAWINGS

<u>Number</u>	Description or Title	Date or Revision
E-257 Sh. 4	Schematic Diagram Charging Pumps	13
E-4 Sh. 1	Single Line Meter and Relay Diagram 480 Volt Load Ctrs.	40
E-8 Sh. 2P	125 VDC Distribution Panel No. 2 ED21-1 Breaker Schematic Diagram	2
E-403	Lighting and Communications Turbine Building EL-760'-6"	22

Attachment

DRAWINGS

<u>Number</u>	Description or Title	Date or Revision
E-404	Lighting and Communications Turbine Building EL-625'-0"	25
E-407	Lighting and Communications Containment and Aux. Building EL-607'-6" and 611'-0"	50
E-408	Lighting and Communications Containment and Aux. Building EL-625'-0"	50
E-257 Sh. 4	Schematic Diagram Charging Pumps	13
M-202 Sh. 1B	Piping and Instrument Diagram Chemical and Volume Control System	55
M-205 Sh. 2	Piping and Instrument Diagram main Steam and Aux Turbine Systems	67
M207 Sh. 1B	Piping and Instrument Diagram Feedwater and Condensate	41
M207 Sh. 2	Piping and Instrument Diagram Feedwater and Condensate	37
M-216 Sh. 27	System Level Logic Diagram	1
M-216 Sh. 30	Chemical and Volume Control System (CVC) Logic Diag.	5
M-220 Sh. 1	Piping and Instrument Diagram Make-up Domestic Water and Chemical Injection System	5
VEN-M201 Sh. 45	Terminal Block Wiring Diagram Console Section CO2	36
VEN-M201 Sh. 44	Wiring Diagram Console Section CO2-3	42
E-236 Sh. 2	Schematic Diagram Charging and Letdown Loop Instrumentation	12
E-236 Sh. 2A	Schematic Diagram Shutdown Cooling Charging Letdown Line Valves	2
E-356	Conduit and Tray Plan Aux. BldgArea 2 EL. 590'-0"	71
E-361 Sh. 1	Electrical Layout Aux. Bldg. Area 4 EL. 625'-0"	33
E-363 Sh. 1	Conduit and Tray Plan Area 3-EL. 625'-0"	52
E-362	Conduit and Tray Plan Area 3-EL. 590'-0"	55
E-359 Sh. 1	Conduit and Tray Plan Aux. Bldg. Area 4 EL. 590'-0" and 607'-6"	75
E-359 Sh. 1A	Cable Spreading Rooms General Arrangement Elevations	12
E-359 Sh. 2	Cable Spreading Rooms North and South Elevations EL. 607'-6"	16
E-359 Sh. 3	Cable Spreading Rooms East and West Elevations EL. 607'-6"	16
E-359 Sh. 6	Cable Spreading Rooms Tray Layout EL. 607'-6"	11
E-359 Sh. 7	Cable Spreading Rooms Left Channel Tray Layout EL. 607'-6"	7
E-359 Sh. 9	Conduit Layout Cable Spreading Room EL. 607'-6"	31
E-359 Sh. 12	"I" C Switchgear Room General Arrangement EL 590'-0"	4
E-359 Sh. 13	"I" C Switchgear Room Wall Elevations EL. 590'-0"	8
E-359 Sh. 14	"I" C Switchgear Room Tray and Conduit Layout	14

DRAWINGS

<u>Number</u>	Description or Title	Date or Revision
E-359 Sh. 17	"I" C Switchgear Room General Arrangement EL. 590'-6"	17
E-359 Sh. 19	"I" D Switchgear Room Tray and Conduit Layout	16
E-359 Sh. 19A	Conduit and Tray Plan Aux. Bldg. Area 4 EL. 590'-0" and 607'-6"	3
E-359 Sh. 19B	Conduit and Tray Plan Aux. Bldg. Area 4 EL. 590'-0" and 607'-6"	1
E-359 Sh. 22	Cable Tray Plan and Section Aux. Bldg. Area 4 EL. 607'-6"	13

PROCEDURES

<u>Number</u>	Description or Title	Date or Revision
RO-34	Alternate Hot Shutdown Panel Instrumentation Checks	November 23, 2009
EOP-1.0	Emergency Operating Procedure-Standard Post-Trip Actions	12
EOP-4.0	Emergency Operating Procedure-Loss of Coolant Accident Recovery	20
EOP Supplement 28	Emergency Operating Procedure – Supplementary Actions for Loss of Power	9
ONP-6.1	Loss of Service Water	15
ONP-25.1	Fire Which Threatens Safety Related Equipment	19
ONP-25.2	Alternate Safe Shutdown Procedure	25
EGAD-ELEC-03	Electrical Engineering Separation Criteria, Practices, and Exceptions	2
EN-DC-132	Control of Engineering Documents	3
EN-DC-186	Fuse Control	0
EN-DC-127	Control of Hot Work and Ignition Sources	7
EN-DC-161	Control of Combustibles	4
FP-PE-9	Fire Hose Hydrostatic Test	June 30, 2010
FPIP-1	Fire Protection Plan, Organization and Responsibilities	16
FPIP-4	Fire Protection Systems and Fire Protection Equipment	26
FPSP-RO-9	Fire Sprinkler System Inspection	3
FPSP-RP-11	Fire Barrier Penetration Surveillance	9
MO-7B	Fire Water Pumps P-9A, P-9B, and P-41	35
ONP-6.1	Loss of Service Water	15
RO-52	Fire Suppression Water System Functional Test and Fire Pump Capacity Test	29
SOP-21	Fire Protection Systems	21
SOP-24	Ventilation and Air Conditioning	55

REFERENCES

=

<u>Number</u>	Description or Title	Date or Revision
DRN-10-01534	Correct Labeling Error in EER Smoke Detector Location Drawing	August 26, 2010
EA-FPP- Room725-03-01	Engineering Analysis for Code Deviation	0
FZ-0405	Fire Barrier Penetration Seal 31	May 23, 1998
LO-PLPLO-2009- 00078	Palisades Fire Protection NRC Triennial Preparation Focused Self Assessment	February 22-26, 2010
NFPA 1962	Inspection, Care and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose	2003 edition
Palisades FP	2010 Fire Brigade Qual Matrix	August 20, 2010
Palisades	Palisades Daily Activity Log Cover Page for Fire Tours	August 1 – 7, 2010

VENDOR DOCUMENTS

<u>Number</u>	Description or Title	Date or Revision
Catalog Number	Ultraviolet Flame Detector Engineer and Architect	August 1985
6122	Specifications	
52204559 1	PM-Emergency Lighting Unit Checkout	February/17/2010
00155835 01	RO-34 Alternate Hot Shutdown Panel Instrument Check	November 16, 2009
00189100 01	RO-127 –EC-150 and EC-33, AFW Alt Control Panels Functional Test	May 10, 2010
00168988 01	Fire Suppress WTR SYS Pump Capacity Test	May 20, 2010
51632392 01	Door-82, Mod Door Closer Mechanism	September 2, 2010
51633066 01	FPSP-RP-11 Fire Barrier Penetration Inspection	January 18, 2008
51636740 01	FPSP-RP-11 Fire Barrier Penetration Inspection	August 9, 2007
51690290 01	FPSP-RP-11 Fire Barrier Penetration Inspection	January 30, 2009

WORK ORDERS

<u>Number</u>	er Description or Title	
00168988 01	Fire Suppress WTR SYS Pump Capacity Test	May 20, 2010
51632392 01	Door-82, Mod Door Closer Mechanism	September 2, 2010
51633066 01	FPSP-RP-11 Fire Barrier Penetration Inspection	January 18, 2008
51636740 01	FPSP-RP-11 Fire Barrier Penetration Inspection	August 9, 2007
51690290 01	FPSP-RP-11 Fire Barrier Penetration Inspection	January 30, 2009
00155835 01	Alternate Hot Shutdown Panel Instrumentation Checks	November 23, 2009
52204559 01	PM-Emergency Lighting Unit Checkout	February 17, 2010

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
DRS	Division of Reactor Safety
ERO	Emergency Response Organization
FP	Fire Protection
IMC	Inspection Manual Chapter
IP	Inspection Procedure
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission
NUREG	NRC Technical Report Designation
PARS	Publicly Available Records
SDP	Significance Determination Process
ТΙ	Temporary Instruction

C. Schwarz:

Documents Access and Management System (ADAMS), accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/RA/

Robert C. Daley, Chief Engineering Branch 3 Division of Reactor Safety

Docket No.: 50-255 License No.: DPR-20

- Enclosure: Inspection Report 05000255/2010008(DRS) w/Attachment: Supplemental Information
- cc w/encl: Distribution via ListServ

DISTRIBUTION: Susan Bagley **RidsNrrPMPalisades** RidsNrrDorlLpl3-1 Resource RidsNrrDirsIrib Resource Steven Reynolds Steven Orth Jared Heck Allan Barker Carole Ariano Linda Linn DRPIII DRSIII Patricia Buckley Tammy Tomczak **ROPreports Resource**

OFFICE	RIII	Е	RIII			
NAME	BJose Is		RDaley			
DATE	09/17/10		09/20/10			

DOCUMENT NAME: G:\DRS\Work in Progress\PAL 2010 008 DRS Fire Protection1 BJ.docx Publicly Available Non-Publicly Available Sensitive Non-Sensitive N

OFFICIAL RECORD COPY