

July 17, 2001

Mr. Oliver D. Kingsley, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
1400 Opus Place, Suite 500  
Downers Grove, IL 60515

SUBJECT: LASALLE COUNTY GENERATING STATION  
NRC INSPECTION REPORT 50-373/01-06(DRS); 50-374/01-06(DRS)

Dear Mr. Kingsley:

On June 22, 2001, the NRC completed an inspection at your LaSalle County Generating Station. The enclosed report documents the inspection findings which were discussed on June 22, 2001, with Mr. Schiavoni and other members of your staff.

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. Specifically, this inspection focused on the triennial fire protection baseline inspection.

No findings of significance were identified.

In accordance with 10 CFR Part 2.790 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Ronald N. Gardner, Chief  
Electrical Engineering Branch  
Division of Reactor Safety

Docket Nos. 50-373; 50-374  
License Nos. NPF-11; NPF-18

Enclosure: Inspection Report 50-373/01-06(DRS);  
50-374/01-06(DRS)

See Attached Distribution

cc w/encl: W. Bohlke, Senior Vice President, Nuclear Services  
C. Crane, Senior Vice President - Mid-West Regional  
J. Cotton, Senior Vice President - Operations Support  
J. Benjamin, Vice President - Licensing and Regulatory Affairs  
H. Stanley, Operations Vice President  
J. Skolds, Chief Operating Officer  
R. Krich, Director - Licensing  
R. Helfrich, Senior Counsel, Nuclear  
DCD - Licensing  
C. Pardee, Site Vice President  
M. Schiavoni, Station Manager  
W. Riffer, Regulatory Assurance Supervisor  
M. Aguilar, Assistant Attorney General  
Illinois Department of Nuclear Safety  
State Liaison Officer  
Chairman, Illinois Commerce Commission

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-373, 50-374  
License Nos: NPF-11, NPF-18

Report No: 50-373/01-06(DRS), 50-374/01-06(DRS)

Licensee: Exelon Generation Co., LLC

Facility: LaSalle County Generating Station

Location: 2601 N. 21st Road  
Marseilles, IL 61341

Dates: June 11 through 22, 2001

Inspectors: Doris M. Chyu, Reactor Inspector  
George M. Hausman, Senior Reactor Inspector  
Kenneth G. O'Brien, Senior Reactor Inspector (Lead)

Approved by: Ronald N. Gardner, Chief  
Electrical Engineering Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

IR 05000373-01-06(DRS), IR 05000374-01-06(DRS), on 06/11-22/2001, Exelon Generation Co., LLC, LaSalle County Generating Station. Triennial Fire Protection Baseline Inspection Report.

The report covers a ten day announced inspection. The inspection was conducted by three Region III based reactor inspectors. No findings of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609 "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violations.

A. Inspector Identified Findings

**Cornerstones: Initiating Events and Mitigating Systems**

No findings of significance were identified.

B. Licensee Identified Findings

No findings of significance were identified.

## Report Details

### Summary of Plant Status

Units 1 and 2 operated at full power throughout the inspection period.

#### **1. REACTOR SAFETY**

##### **Cornerstones: Initiating Events and Mitigating Systems**

#### 1R05 Fire Protection (71111.05)

The purpose of this inspection was to review the LaSalle County Generating Station's (LSCS) Fire Protection Program (FPP) for selected risk-significant fire areas. Emphasis was placed on verifying 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 inspection was performed in accordance with the Nuclear Regulatory Commission's (NRC's) new regulatory oversight process using a risk-informed approach for selecting the fire areas and attributes to be inspected. The lead inspector and a Region III senior reactor analyst used the LSCS's Individual Plant Examination of External Events (IPEEE) to choose several risk-significant areas for detailed inspection and review. The fire zones chosen for review during this inspection were:

- Fire Zones 4E1-1 and 4E1-2, Auxiliary Electric Equipment Room (Unit 1 Auxiliary Building, Elevation 731'-0")
- Fire Zone 4E3-2, Division 2 Essential Switchgear Room (Unit 1 Auxiliary Building, Elevation 731'-0")
- Fire Zone 4F1, Division 1 Essential Switchgear Room (Unit 1 Auxiliary Building, Elevation 710'-0")

For each of these fire zones, the inspection was focused on the fire protection features, the systems and equipment necessary to achieve and maintain safe shutdown conditions, determination of license commitments, and changes to the FPP.

#### .1 Systems Required to Achieve and Maintain Post-Fire Safe Shutdown

The guidelines established by Branch Technical Position (BTP), Chemical Engineering Branch (CMEB) 9.5-1, Section C.5.b, "Safe Shutdown Capability," paragraph (1), required the licensee to provide fire protection features that were capable of limiting fire damage to structures, systems, and components (SSCs) important to safe shutdown. The SSCs that were necessary to achieve and maintain post-fire safe shutdown were required to be protected by fire protection features that were capable of limiting fire damage to the SSCs so that:

- One train of systems necessary to achieve and maintain hot shutdown conditions from either the control room or emergency control station(s) is free of fire damage; and
- Systems necessary to achieve and maintain cold shutdown from either the control room or emergency control station(s) can be repaired within 72 hours.

#### General Description of LaSalle's Safe Shutdown Paths and Capability

The licensee's safe shutdown analysis identified a basic and an alternate method for achieving safe shutdown following a fire condition. The basic method utilized the reactor protection system for reactivity control, the automatic depressurization system (Division 2) and the high pressure core spray system for depressurization, reactor water makeup, decay heat removal, and the residual heat removal system (Loop A) for suppression pool cooling. The alternate shutdown method utilized the automatic depressurization system (Division 1) for depressurization, the reactor core isolation cooling for reactor water makeup and decay heat removal, and the residual heat removal system (Loop B) for suppression pool cooling. The safe shutdown analysis assumed that the basic method would be available from the control room and the alternate method would be available from the remote shutdown panel. Systems included as a part of the alternate method could also be utilized from the control room. With the exception of fires involving either the control room or remote shutdown panels, the licensee's fire response process utilized non-fire specific plant procedures.

#### a. Inspection Scope

The inspectors reviewed the plant systems required to achieve and maintain post-fire safe shutdown to determine if the licensee had properly identified the components and systems necessary to achieve and maintain safe shutdown conditions for each fire zone selected for review. Specifically, the review was performed to determine the adequacy of the systems selected for reactivity control, reactor coolant makeup, reactor heat removal, process monitoring, and support system functions. This review included the fire protection safe shutdown analysis.

The inspectors also reviewed the operators' ability to perform the necessary manual actions for achieving safe shutdown including a review of procedures, accessibility of safe shutdown equipment, and the available time for performing the actions.

The inspectors reviewed 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) to determine the licensing basis.

#### b. Findings

No findings of significance were identified.



## .2 Fire Protection of Safe Shutdown Capability

The guidelines established by BTP CMEB 9.5-1, Section C.5.b, "Safe Shutdown Capability," paragraphs (2) (a) and (3), required separation of cables and equipment and associated circuits of redundant trains by a fire barrier having a three hour rating. If the guidelines cannot be met, then alternative or dedicated shutdown capability and its associated circuits, independent of cables, systems or components in the area, room, or zone under consideration should be provided.

### a. Inspection Scope

For each of the selected fire areas, the inspectors reviewed the licensee's safe shutdown analysis to ensure that at least one post-fire safe shutdown success path was available in the event of a fire. This included a review of manual actions required to achieve and maintain hot shutdown conditions and make the necessary repairs to reach cold shutdown within 72 hours. The inspectors also reviewed procedures to verify that adequate direction was provided to operators to perform these manual actions. Factors, such as timing, access to the equipment, and the availability of procedures, were considered in the review.

The inspectors also evaluated the adequacy of fire suppression and detection systems, fire area barriers, penetration seals, and fire doors to ensure that at least one train of safe shutdown equipment was free of fire damage. To do this, the inspectors observed the material condition and configuration of the installed fire detection and suppression systems, fire barriers, and construction details and supporting fire tests for the installed fire barriers. In addition, the inspectors reviewed license documentation, such as deviations, detector placement drawings, fire hose station drawings, carbon dioxide pre-operational test reports, smoke removal plans, fire hazard analysis (FHA) reports, safe shutdown analysis, and National Fire Protection Association (NFPA) codes to verify that the fire barrier installations met license commitments.

### b. Findings

No findings of significance were identified.

## .3 Post-fire Safe Shutdown Circuit Analysis

The guidelines established by BTP CMEB 9.5-1, Section C.5.b, "Safe Shutdown Capability," paragraph (1), required that SSCs important to safe shutdown be provided with fire protection features capable of limiting fire damage to ensure that one train of systems necessary to achieve and maintain hot shutdown conditions remained free of fire damage. Options for providing this level of fire protection were delineated in BTP CMEB 9.5-1, Section C.5.b, "Safe Shutdown Capability," paragraph (2). Where the protection of systems whose function was required for hot shutdown did not satisfy BTP CMEB 9.5-1, Section C.5.b, paragraph (2), an alternative or dedicated shutdown capability and its associated circuits, was required to be provided that was independent of the cables, systems and components in the area. For such areas, BTP CMEB 9.5-1, Section C.5.c, "Alternative or Dedicated Shutdown Capability," paragraph (3), specifically required the alternative or dedicated shutdown capability to be physically and

electrically independent of the specific fire areas and capable of accommodating post-fire conditions where offsite power was available and where offsite power was not available for 72 hours.

a. Inspection Scope

On a sample basis, the inspectors investigated the adequacy of separation provided for the power and control cabling of redundant trains of shutdown equipment. This investigation focused on the cabling of selected components in systems important for safe shutdown. The inspectors' review also included a sampling of components whose inadvertent operation due to fire may adversely affect post-fire safe shutdown capability. The purpose of this review was to determine if a single exposure fire, in one of the fire areas selected for this inspection, could prevent the proper operation of both safe shutdown trains.

The team reviewed the licensee's fuse/breaker coordination analysis for the 4.16 kV and 480 Vac switchgears required for post-fire safe shutdown and the vital low-voltage AC and DC buses. The purpose of this review was to verify that selective coordination exists between branch circuit protective devices (fuses, breakers, relays, etc.) and the bus feeder breaker/fuse to ensure that in the event of a fire-induced short circuit, the fault is isolated before the feeder device trips. In addition, a review of the licensee's fuse replacement procedure was conducted to determine if adequate administrative controls exist to prevent the inadvertent substitution of incorrectly sized fuses in critical circuits.

b. Findings

No findings of significance were identified.

4 Alternative Safe Shutdown Capability

The guidelines established by BTP CMEB 9.5-1, Section C.5.b, "Safe Shutdown Capability," paragraph (1), required the licensee to provide fire protection features that were capable of limiting fire damage so that one train of systems necessary to achieve and maintain hot shutdown conditions remained free of fire damage. Specific design features for ensuring this capability, were provided in BTP CMEB 9.5-1, Section C.5.b, paragraph (2). Where compliance with the separation criteria of BTP CMEB 9.5-1, Section C.5.b, paragraphs (1) and (2) could not be met, BTP CMEB 9.5-1, Section C.5.b, paragraph (3) and Section C.5.c, required an alternative or dedicated shutdown capability be provided that was independent of the specific fire area under consideration. Additionally, alternative or dedicated shutdown capability must be able to achieve and maintain hot standby conditions and achieve cold shutdown conditions within 72 hours and maintain cold shutdown conditions thereafter. During the post-fire safe shutdown, the reactor coolant process variables must remain within those predicted for a loss of normal ac power, and the fission product boundary integrity must not be affected (i.e., no fuel clad damage, rupture of any primary coolant boundary, or rupture of the containment boundary).

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.

b. Findings

No findings of significance were identified.

.5 Operational Implementation of Alternative Shutdown Capability

The guidelines established by BTP CMEB 9.5-1, Section C.5.c, "Alternative or Dedicated Shutdown Capability," paragraph (2).(d), required that the process monitoring function should be capable of providing direct readings of the process variables necessary to perform and control the functions necessary to achieve reactivity control, reactor coolant makeup, and decay heat removal.

a. Inspection Scope

The inspectors performed a walkdown of a sample of the actions defined in Procedure LOA-FX-101 (201), "Unit 1 (2) Safe Shutdown with a Loss of Offsite Power and a Fire in the Control Room or Auxiliary Electric Equipment Room," which was the procedure for performing a plant alternative shutdown from outside the control room. The inspectors verified that operators could reasonably be expected to perform the procedure actions within the identified applicable plant shutdown time requirements and that equipment labeling was consistent with the procedure.

The inspectors' reviews of the adequacy of communications and emergency lighting associated with these procedures are documented in Sections 1R05.6 and 1R05.7 of this report.

b. Findings

No findings of significance were identified.

.6 Communications

The guidelines established by BTP CMEB 9.5-1, Section C.5.g, "Lighting and Communication," paragraph (4), required that a portable communications system should be provided for use by the fire brigade and other operations personnel required to achieve safe plant shutdown. This system should not interfere with the communications capabilities of the plant security force. Fixed repeaters installed to permit use of portable radio communication units should be protected from exposure fire damage.

a. Inspection Scope

The inspectors reviewed the adequacy of the communication system to support plant personnel in the performance of alternative safe shutdown functions and fire brigade duties.

b. Findings

No findings of significance were identified.

.7 Emergency Lighting

The guidelines established by BTP CMEB 9.5-1, Section C.5.g, "Lighting and Communication," paragraph (1), required that fixed self-contained lighting consisting of fluorescent or sealed-beam units with individual eight hour minimum battery power supplies should be provided in areas that must be manned for safe shutdown and for access and egress routes to and from all fire areas.

a. Inspection Scope

The inspectors performed a walkdown of a sample of the actions defined in Procedure LOA-FX-101 (201), "Unit 1 (2) Safe Shutdown with a Loss of Offsite Power and a Fire in the Control Room or Auxiliary Electric Equipment Room." As part of the walkdowns, the inspectors verified that sufficient emergency lighting existed for access and egress to areas and for performing necessary equipment operations. The inspectors verified that testing of emergency lighting for the remote shutdown panel area and the diesel generator rooms ensured a minimum of eight hours of emergency lighting.

b. Findings

No findings of significance were identified.

.8 Cold Shutdown Repairs

The guidelines established by BTP CMEB 9.5-1, Section C.5.c, "Alternative or Dedicated Shutdown Capability," paragraph (5), required that equipment and systems comprising the means to achieve and maintain cold shutdown conditions should not be damaged by fire; or the fire damage to such equipment and systems should be limited so that the systems can be made operable and cold shutdown achieved within 72 hours. Materials for such repairs shall be readily available onsite and procedures shall be in effect to implement such repairs.

a. Inspection Scope

The inspectors reviewed the licensee's procedures to determine if any repairs were required to achieve cold shutdown. The inspectors determined that the licensee did require repair of some equipment to reach cold shutdown based on the safe shutdown methods used.

b. Findings

No findings of significance were identified.

.9 Fire Barriers and Fire Zone/Room Penetration Seals

The guidelines established by BTP CMEB 9.5-1, Section C.5.a, "Building Design," paragraph (3), required that penetration seal designs be qualified by tests that are comparable to tests used to rate fire barriers.

a. Inspection Scope

The inspectors reviewed the test reports for three hour rated barriers installed in the plant and performed visual inspections of selected barriers to ensure that the barrier installations were consistent with tested configuration.

b. Findings

No findings of significance were identified.

.10 Fire Protection Systems, Features, and Equipment

The guidelines established by BTP CMEB 9.5-1, required that fire protection systems, features and equipment were designed in accordance with the following:

<u>Fire Protection Systems, Features and Equipment</u>	<u>BTP CMEB 9.5-1 Section</u>	<u>BTP CMEB 9.5-1 Title</u>
Fire Brigade Capabilities	C.3	Fire Brigade
Passive Fire Protection Features	C.5.a	Building Design
Fire Detection System	C.6.a	Fire Detection
Fire Suppression System	C.6.b	Fire Protection Water Supply Systems
	C.6.c	Water Sprinkler and Hose Standpipe Systems
Manual Fire Fighting Equipment	C.6.f and C.3	Portable Extinguishers and Fire Brigade

a. Inspection Scope

The inspectors reviewed the material condition, operations lineup, operational effectiveness, and design of fire detection systems, fire suppression systems, manual fire fighting equipment, fire brigade capability, and passive fire protection features. The inspectors reviewed deviations, detector placement drawings, fire hose station drawings,

carbon dioxide pre-operational test reports, and FHA reports to ensure that selected fire detection systems, carbon dioxide systems, portable fire extinguishers, and hose stations were installed in accordance with their design, and that their design was adequate given the current equipment layout and plant configuration.

b. Findings

No findings of significance were identified.

.11 Compensatory Measures

a. Inspection Scope

The inspectors conducted a review to verify that adequate compensatory measures were put in place by the licensee for out-of-service, degraded or inoperable fire protection and post-fire safe shutdown equipment, systems, or features. The inspectors also verified that short term compensatory measures were adequate to compensate for a degraded function or feature until appropriate corrective actions were taken.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES (OA)**

4OA2 Identification and Resolution of Problems

The guidelines established by BTP CMEB 9.5-1, Section C.4, "Quality Assurance [QA] Program," paragraph h, required that measures should be established to ensure that conditions adverse to fire protection, such as failures, malfunctions, deficiencies, deviations, defective components, uncontrolled combustible material and nonconformance, are promptly identified, reported, and corrected.

a. Inspection Scope

The inspectors reviewed a selected sample of condition reports associated with LaSalle's FPP to verify that the licensee had an appropriate threshold for identifying issues. The inspectors evaluated the effectiveness of the corrective actions for the identified issues.

b. Findings

No findings of significance were identified.

#### 4OA6 Meetings

##### Exit Meeting

The inspectors presented the inspection results to Mr. Schiavoni and other members of licensee management at the conclusion of the inspection on June 22, 2001. The licensee acknowledged the findings presented. No proprietary information was identified.

## KEY POINTS OF CONTACT

### Licensee

E. Ballou, Fire Protection Design Engineer  
S. Chingo, Corporate Fire Protection Engineer  
W. Collins, Fire Marshall  
A. Duncan, NRC Coordinator  
F. Gogliotti, Design Engineering Manager  
B. Hilton, Mechanical/Structural Design Engineer  
D. Mefferd, Assistant Fire Marshall  
M. Murskyj, Electrical Engineering Supervisor  
D. Roberts, Corporate Fire Protection Engineer  
R. Vickers, Fire Protection Engineer

### Illinois Department of Nuclear Safety (IDNS)

J. Yesinowski



## LIST OF ACRONYMS USED

ac	Alternating Current
ADAMS	Agencywide Documents Access and Management System
AEER	Auxiliary Electrical Equipment Room
BTP	Branch Technical Position
CFR	Code of Federal Regulations
CMEB	Chemical Engineering Branch
CR	Condition Report
dc	Direct Current
DCP	Design Change Package
DRS	Division of Reactor Safety
EDG	Emergency Diesel Generator
EOP	Emergency Operating Procedure
EQ	Environmental Qualification
FHA	Fire Hazard Analysis
FP	Fire Protection
FPP	Fire Protection Program
HPCI	High Pressure Coolant Injection
HPCS	High Pressure Core Spray
HVAC	Heating Ventilation and Air Conditioning
IDNS	Illinois Department of Nuclear Safety
IMC	Inspection Manual Chapter
IPE	Individual Plant Evaluation
IPEEE	Individual Plant Examination of External Events
IR	Inspection Report
ITE	Inverse Time Element
LLC	Limited Liability Company
LSCS	LaSalle County Generating Station
LT	Level Transmitter
MCC	Motor Control Center
MOD	Modification
MOV	Motor Operated Valve
NFPA	National Fire Protection Association
NO	Nuclear Oversight
NRC	United States Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NWR	Nuclear Work Request
OA	Other Activities
OAD	Operational Analysis Division
OPRM	Oscillation Power Range Monitor
PARS	Publicly Available Records
PRA	Probabilistic Risk Analysis
QA	Quality Assurance
QC	Quality Control
RPS	Reactor Protection System

RWCU	Reactor Water Cleanup
RHR	Residual Heat Removal
SDP	Significance Determination Process
SLICE	Sargent & Lundy Interactive Cable Engineering
SQUG	Seismic Qualification Utility Group
SSA	Safe Shutdown Analysis
SSC	Structure, System, or Component
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
V	Volt

## LIST OF DOCUMENTS REVIEWED

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

### **CALCULATIONS**

<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
1C-7-0784-001	LaSalle County Station Fire Protection Analysis Identification of Valves Whose Spurious Operation Could Cause Concern	1
1C-7-0784-002	LaSalle County Station Fire Protection Valve Operation Analysis	1
4266-EAD-3	Low Voltage Circuit Breaker Settings and Coordination Curves Units 1 and 2	5
4266-EAD-4	4.16kV Safety Related Busses Relay Settings	1
4266/19D11	DC Distribution Equipment Breaker and MCC Settings	42
L-001726	Hydraulic Analysis to Determine the Adequacy of the Service Water Pumps to Function as Fire Pumps	2
L-001947	Safe Shutdown Control Circuit Breaker-Fuse Coordination	1
Project Number 6854-31	Evaluation of the LaSalle County Station Fire Protection Water Distribution and Standpipe System	02/1984

### **CONDITION REPORTS GENERATED PRIOR TO INSPECTION**

<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
L1998-03745	Safe Shutdown Fuse Coordination	05/19/1998
L2000-06280	Undocumented Transient in the Plant	11/08/2000
L2000-06722	Minor Fire During Hot Work	11/22/2000
L2000-07137	Elevated Dose Rates Found in the Unit 2 Hydrogen Analyzer Room	12/13/2000
L2000-07164	Tygon Catch Basin Hose Cut and Removed from Floor Drain	12/13/2000
L2000-07199	Deficiencies Discovered During the Performance of LTS-1000-42	12/18/2000

**CONDITION REPORTS GENERATED PRIOR TO INSPECTION**

<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
L2000-07358	Numerous Radiation Area Boundary Movements on 710' Unit 1 Trackway	12/21/2000
L2000-07359	Numerous Cases of Unsecured Hoses/Lines Crossing Contam Area Boundaries	12/21/2000
L2000-07369	Elevated Dose Rates Found on 692' Auxiliary Building.	12/21/2000
L2001-00139	Oil, Lube Room a Mess	01/11/2001
L2001-00269	Loss of Unit 1 Turbine Lube Oil Demister	01/16/2001
L2001-00765	Transient Combustible Permits Open Past Estimated Removal Date	02/07/2001
L2001-00766	Non Fire Retardent Wood Used in the Plant IAW LAP-900-18	02/07/2001
L2001-01206	Fire Drills Post Drill Critique	02/26/2001
L2001-01284	Operation Crew 5 Post Fire Drill Critique	02/28/2001
L2001-01430	Crew 1 First Quarter Fire Drill	03/06/2001
L2001-01433	Crew 4 First Quarter Fire Drill	03/06/2001
L2001-01485	Sill Found in Degraded Condition During System Walkdown	03/08/2001
L2001-01561	100' FP Hose Reel Connection Found Loose During FP Drill	03/11/2001
L2001-01600	Fire Zone 4D2, Unit 2 Cable Spreading Room Fire Impairment Exceeded its 14 Day Timeclock	03/13/2001
L2001-01615	Unit 2 Cable Spreading Room Fire Protection Inoperable for 14 Days	03/14/2001
L2001-01716	First Quarter Post Fire Drill Critique for Crew 6	03/19/2001
L2001-02202	Investigate Pulling Fuses Instead of Verifying Breakers Open During Control Room Fire	04/09/2001
L2001-02217	Basis for Conclusion in Engineering Request Not Readily Available	04/10/2001
L2001-02261	Conflict Between Safe Shutdown Analysis and Procedures Regarding Instrumentation	04/11/2001
L2001-02617	Heating Ventilation and Air Conditioning Duct Insulation Is Not Included in Combustible Loading Calculation	05/01/2001
L2001-02908	Fire Drill Critiques for 2nd Quarter Fire Drills 1 Through 5	05/15/2001

**CONDITION REPORTS GENERATED PRIOR TO INSPECTION**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
L2001-03023	System Engineering Review of Operating Experience No. OE12199	05/21/2001
L2001-03069	Hydrogen Detected in Stuffing Box Area of 1D Heater Drain Pump While Welding	05/23/2001
L2001-03089	LES-CO-03 Hose Reel Station Issues	05/24/2001

**CONDITION REPORTS GENERATED DURING INSPECTION**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
L2001-03079	Material/Housekeeping Conditions Discovered During Walkdown with the NRC	05/24/2001
L2001-03473	Correct ADS Error on Safe Shutdown Equipment List	06/13/2001
L2001-03499	Safe Shutdown Cables Not in UFSAR Appendix H	06/14/2001
L2001-03563	Safe Shutdown Cables in SLICE Are Not in Appendix H of the UFSAR	06/18/2001
L2001-03574	Suppression Pool Water Level Indication Documentation Discrepancies in the UFSAR	06/19/2001
L2001-03577	Location of Instruments Credited for Normal Post Fire Safe Shutdown	06/19/2001
L2001-03582	HPCS Cable Fire Protection Separation is Not Thoroughly Described in FHA/SSA	06/19/2001
L2001-03589	Documentation Discrepancy in UFSAR Table H.4-67	06/19/2001
L2001-03590	Apparent Discrepancy in Radio Use in AEER	06/19/2001
L2001-03639	Safe Shutdown Cables Not Identified in SLICE	06/21/2001
L2001-03647	Fire Protection Inspection NRC	06/21/2001
L2001-03649	Calculation EAD-4 Not Updated	06/21/2001

**ELECTRICAL DRAWINGS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
1E-0-3073	Electrical Installation Fire-Stop and Fire-Barriers Detail	F
1E-0-3333	Cable in Raceway Segregation Chart	G

## **ELECTRICAL DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
1E-1-3434, Sht 1	Electrical Installation Auxiliary Building Plan Elevation 710'-6" Columns 9-12 and J-N	BD
1E-1-3434, Sht 2	Electrical Installation Auxiliary Building Plan Elevation 710'-6" Columns 9-12 and J-N	L
1E-1-3435, Sht 1	Electrical Installation Auxiliary Building Plan Elevation 710'-6" Columns 12-15 and J-N	BR
1E-1-3435, Sht 2	Electrical Installation Auxiliary Building Plan Elevation 710'-6" Columns 12-15 and J-N	P
1E-1-3445	Electrical Installation Auxiliary Building Auxiliary Equipment Room Plan Elevation 731'-0" Columns 12-15 and J-N	AS
1E-1-3454, Sht 1	Electrical Installation Auxiliary Building Plan Elevation 749'-0" Columns 9-12 and J-N	BB
1E-1-3454, Sht 2	Electrical Installation Auxiliary Building Plan Elevation 749'-0" Columns 9-12 and J-N	BA
1E-1-3645	Fire-Barrier Seal Tabulation Auxiliary Building	P
1E-1-3652	Cable Pan Routing Reactor Building Plan Elevation 710'-6"	J
1E-1-3662	Cable Pan Routing Auxiliary Building Plan Elevation 710'-6" Columns 6-12	H
1E-1-3845, Sht 1	Appendix R Emergency Lighting Battery Packs Tabulation	D
1E-1-3845, Sht 2	Appendix R Emergency Lighting Battery Packs Tabulation	D
1E-1-3845, Sht 3	Appendix R Emergency Lighting Battery Packs Tabulation	E
1E-1-3845, Sht 4	Appendix R Emergency Lighting Battery Packs Tabulation	E
1E-1-4000A	Single Line Diagram Generator, Transformers and 6900Vac Buses Part 1	L
1E-1-4000AB	Key Diagram 6900Vac Switchgear 151	F
1E-1-4000AC	Key Diagram 6900Vac Switchgear 152	G
1E-1-4000AJ	Key Diagram 4160Vac Switchgear 141 X	C
1E-1-4000AK	Key Diagram 4160Vac Switchgear 141 Y	D
1E-1-4000AL	Key Diagram 4160Vac Switchgear 142 X	C
1E-1-4000AM	Key Diagram 4160Vac Switchgear 142 Y	D

## **ELECTRICAL DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
1E-1-4000AN	Key Diagram 4160Vac Switchgear 143	B
1E-1-4000B	Single Line Diagram Stand-By Generators and 4160Vac Buses Part 2	N
1E-1-4000BN	Key Diagram 480Vac Switchgear 135X	C
1E-1-4000BP	Key Diagram 480Vac Switchgear 135Y	F
1E-1-4000BQ	Key Diagram 480Vac Switchgear 136X	E
1E-1-4000BR	Key Diagram 480Vac Switchgear 136Y	G
1E-1-4000CT	Key Diagram 480Vac Motor Control Center's 135X-1 & 135X-2	AF
1E-1-4000CU	Key Diagram 480Vac Motor Control Center 135X-3	M
1E-1-4000CV	Key Diagram Reactor Bldg 480Vac Motor Control Center 135Y-2	Y
1E-1-4000CW	Key Diagram 480Vac Motor Control Center 136X-2	Q
1E-1-4000CX	Key Diagram 480Vac Motor Control Center 136Y-1	Y
1E-1-4000CY	Key Diagram 480Vac Motor Control Center's 136Y-2 and 136Y-3	U
1E-1-4000DA	Key Diagram 480Vac Motor Control Center 143-1	R
1E-1-4000DN	Key Diagram Reactor Bldg 480Vac Motor Control Center 136X-1	H
1E-1-4000DU	Key Diagram Reactor Bldg 480Vac Motor Control Center 135Y-1	L
1E-1-4000DW	Key Diagram 480Vac Motor Control Center 136X-3	L
1E-1-4000NF	Relay and Metering Diagram System Auxiliary Transformer 142	D
1E-1-4217ZA	Schematic Diagram Safety Parameter Display System Isolators	D
1E-1-4018ZE	Loop Schematic Diagram Containment Monitoring System CM Part-5	P
1E-1-4018ZF	Loop Schematic Diagram Containment Monitoring System CM Part-6	F
1E-1-4018ZG	Loop Schematic Diagram Containment Monitoring System CM Part-7	V

**ELECTRICAL DRAWINGS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
1E-1-4018ZJ	Loop Schematic Diagram Containment Monitoring System CM Part-9	W
1E-1-4089AA	Schematic Diagram Core Standby Cooling System VY Part 1	E
1E-1-4201AA	Schematic Diagram Auto Depressurization System NB (B21C) Part 1	H
1E-1-4203AA	Schematic Diagram Main Steam/Nuclear Boiler System NB (B21) Part 1	L
1E-1-4203AK	Schematic Diagram Main Steam/Nuclear Boiler System NB (B21) Part 10	X
1E-1-4205AD	Schematic Diagram Reactor Re-circulation System RR (B33) Part 4	G
1E-1-4214AA	Schematic Diagram Remote Shutdown System RS (C61) Part 1	H
1E-1-4214AC	Schematic Diagram Remote Shutdown System RS (C61) Part 3	R
1E-1-4217ZA	Schematic Diagram Safety Parameter Display System Isolators	D
1E-1-4220AA	Schematic Diagram Residual Heat Removal System RH (E12A) Part 1	Q
1E-1-4220AC	Schematic Diagram Residual Heat Removal Pump 1C System RH (E12) Part 3	Z
1E-1-4220AD	Schematic Diagram Residual Heat Removal Pump 1C System RH (E12) Part 4	X
1E-1-4220AQ	Schematic Diagram Residual Heat Removal System RH (E12) Part 15	S
1E-1-4220BT	Schematic Diagram Residual Heat Removal System RH (E12) Part 42	J
1E-1-4228AK	Schematic Diagram Reactor Water Cleanup System RT (G33) Part 10	M
1E-1-4232AA	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 1	G
1E-1-4232AB	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 2	Y



## **ELECTRICAL DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
1E-1-4232AC	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 3	AD
1E-1-4232AD	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 4	AE
1E-1-4232AE	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 5	AB
1E-1-4232AF	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 6	R
1E-1-4232AG	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 7	P
1E-1-4232AH	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 8	H
1E-1-4232AJ	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 9	N
1E-1-4232AK	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 10	U
1E-1-4232AL	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 11	G
1E-1-4232AM	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 12	R
1E-1-4232AN	Schematic Diagram Primary Containment and Reactor Vessel Isolation System "PC" (B21H) Part 13	Y
1E-1-4336BS	Wiring Diagram Primary Containment Instrument Nitrogen and Containment Monitor Part 1	Z
1E-1-4345AD	Wiring Diagram 4160V Switchgear 142Y Part 4	N
1E-1-4345AF	Wiring Diagram 4160V Switchgear 142Y Part 6	L
1E-1-4378AA	Wiring Diagram 480V Motor Control Center Details	R
1E-1-4346AA	Wiring Diagram HPCS 4160V Switchgear 143 Cubicle 001	U
1E-1-4391AA	Wiring Diagram Reactor Building 480V Motor Control Center 136Y-1 Part 1	Q
1E-1-4391AF	Wiring Diagram Reactor Building 480V Motor Control Center 136Y-1 Part 6	U

**ELECTRICAL DRAWINGS**

<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
1E-1-4411AD	Wiring Diagram Auxiliary Building 480V Motor Control Center 135X-2 Part 4	Y
1E-1-4441AA	Wiring Diagram 125Vdc Distribution Bus 1A and 125Vdc Distribution Panel 111Y	S
1E-1-4457AM	Wiring Diagram Section 1PA02J - Part 12	N
1E-1-4505AB	Wiring Diagram RHR B and C Cubicle Ventilation Panel 1PL33J	D
1E-1-4505AG	Wiring Diagram Miscellaneous HVAC Instruments System VY	D
1E-1-4565AD	Wiring Diagram Console 1PM16J Containment Monitoring and Leak Detection	T
1E-1-4601AX	Wiring Diagram Reactor Core Cooling Benchboard Panel 1H13-P601 Part 2	Y
1E-1-4610AB	Wiring Diagram Feedwater and Recirculation Instrument Panel 1H13-P612	AL
1E-1-4619AA	Wiring Diagram Outboard Valve Relay Vertical Board 1H13-P623	Z
1E-1-4619AB	Wiring Diagram Outboard Valve Relay Vertical Board 1H13-P623	AV
1E-1-4619AC	Wiring Diagram Valves 1B21-F028A, 1B21-F028B, 1B21-F028C, 1B21-F028D	K
1E-1-4619AD	Front Elevation Outboard Valve Relay Vertical Board 1H13-P623	W
1E-1-4658AA	Front Elevation Part 1 Remote Shutdown Panel 1C61-P001	G
1E-1-4658AB	Front Elevation Part 2 Remote Shutdown Panel 1C61-P001	K
1E-1-4658AC	Wiring Diagram Part 1 Remote Shutdown Panel 1C61-P001	P
1E-1-4658AD	Wiring Diagram Part 2 Remote Shutdown Panel 1C61-P001	AB
1E-1-4658AE	Wiring Diagram Part 3 Remote Shutdown Panel 1C61-P001	S
1E-1-4658AF	Wiring Diagram Part 4 Remote Shutdown Panel 1C61-P001	T
1E-1-4658AG	Wiring Diagram Part 5 Remote Shutdown Panel 1C61-P001	AJ
1E-1-4658AH	Wiring Diagram Part 6 Remote Shutdown Panel 1C61-P001	Z
1E-1-4658AJ	Wiring Diagram Part 7 Remote Shutdown Panel 1C61-P001	M

## **ELECTRICAL DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
1E-1-4658AK	Wiring Diagram Part 8 Remote Shutdown Panel 1C61-P001	K
1E-1-4707AA	Wiring Diagram Analog Input Cabinet 1C91-P607 AIT's 1,2,3,4 Left Side	P
1E-2-3845, Sht 1	Appendix R Emergency Lighting Battery Packs Tabulation	B
1E-2-3845, Sht 2	Appendix R Emergency Lighting Battery Packs Tabulation	D
1E-2-3845, Sht 3	Appendix R Emergency Lighting Battery Packs Tabulation	B
1E-2-3845, Sht 4	Appendix R Emergency Lighting Battery Packs Tabulation	D
1E-2-4000A	Single Line Diagram Generator, Transformers and 6900Vac Buses Part 1	N
1E-2-4000AB	Key Diagram 6900Vac Switchgear 251	F
1E-2-4000AC	Key Diagram 6900Vac Switchgear 252	G
1E-2-4000AJ	Key Diagram 4160Vac Switchgear 241 X	C
1E-2-4000AK	Key Diagram 4160Vac Switchgear 241 Y	D
1E-2-4000AL	Key Diagram 4160Vac Switchgear 242 X	C
1E-2-4000AM	Key Diagram 4160Vac Switchgear 242 Y	E
1E-2-4000AN	Key Diagram 4160Vac Switchgear 243	C
1E-2-4000B	Single Line Diagram Stand-By Generators and 4160Vac Buses Part 2	L
1E-2-4000BN	Key Diagram 480Vac Switchgear 235X	C
1E-2-4000BP	Key Diagram 480Vac Switchgear 235Y	F
1E-2-4000BQ	Key Diagram 480Vac Switchgear 236X	C
1E-2-4000BR	Key Diagram 480Vac Switchgear 236Y	J
1E-2-4000CT	Key Diagram 480Vac Motor Control Center's 235X-1 and 235X-2	AL
1E-2-4000CU	Key Diagram 480Vac Motor Control Center 235X-3	R
1E-2-4000CV	Key Diagram Reactor Bldg 480Vac Motor Control Center 235Y-2	U
1E-2-4000CW	Key Diagram 480Vac Motor Control Center 236X-2	T
1E-2-4000CX	Key Diagram 480Vac Motor Control Center 236Y-1	AA

**ELECTRICAL DRAWINGS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
1E-2-4000CY	Key Diagram 480Vac Motor Control Center's 236Y-2 and 236Y-3	AC
1E-2-4000DA	Key Diagram 480Vac Motor Control Center 243-1	T
1E-2-4000DN	Key Diagram Reactor Bldg 480Vac Motor Control Center 236X-1	J
1E-2-4000DU	Key Diagram Reactor Bldg 480Vac Motor Control Center 235Y-1	T
1E-2-4000DW	Key Diagram 480Vac Motor Control Center 236X-3	M
1E-2-4201AA	Schematic Diagram Auto Depressurization System NB (B21C) Part 1	F
1E-2-4203AA	Schematic Diagram Main Steam/Nuclear Boiler System NB (B21) Part 1	M
1E-2-4203AK	Schematic Diagram Main Steam/Nuclear Boiler System NB (B21) Part 10	S
1E-2-4214AA	Schematic Diagram Remote Shutdown System RS (C61) Part 1	G
1E-2-4214AC	Schematic Diagram Remote Shutdown System RS (C61) Part 3	M
1E-2-4619AD	Front Elevation Outboard Valve Relay Vertical Board 2H13-P623	T
1E-2-4658AA	Front Elevation Part 1 Remote Shutdown Panel 2C61-P001	G
1E-2-4658AB	Front Elevation Part 2 Remote Shutdown Panel 2C61-P001	J

**LASALLE SYSTEM OVERVIEW DRAWINGS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
AP-1	AC Distribution	1
AP-2	AC Details	0
AP-3	AC Distribution	0
ARI-1	Alternate Rod Insertion System	0
CM-1	Containment Monitoring System	1
CSCS-1	Core Standby Cooling	1

## LASALLE SYSTEM OVERVIEW DRAWINGS

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
CW-1	Circulating Water System	0
CX-1	Computer Systems	0
DC-1	DC Distribution	1
DG-2	HPCS and Non-HPCS Fuel Oil Systems	0
DG-4	Cooling Water System	0
DG-5	D/G Air Start System	1
DG-6	Diesel Generator Governor	0
DG-7	Non-HPCS Protection and Speed Control	0
DG-8	HPCS Protection and Speed Control	0
DG-9	DG "0" Output Breaker Logic	1
FP-1	Fire Protection System	1
FP-2	Fire Protection System	0
FW-1	Feedwater System	1
FW-3	Feedwater System	0
HP-1	High Pressure Core Spray System	0
LP-1	Low Pressure Core Spray System	0
MS-1	Main Steam System	1
MS-2	Main Steam Details	1
NB-1	Automatic Depressurization System	1
PC, CS-1	Primary Containment	0
PC, CS-2	Secondary Containment	1
PC-3	Primary Containment Isolation System	0
RH-1	Residual Heat Removal System	0
RH-2	Residual Heat Removal Modes of Operation	1
RI-1	Reactor Core Isolation Cooling System	1
RL-1	Reactor Water Level Control System	1
RM-1	Reactor Manual Control System	1

## **LASALLE SYSTEM OVERVIEW DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
RP-1	Reactor Protection	0
RP-2	Reactor Protection	0
RR-1	Reactor Recirculation System	1
RR-2	Reactor Recirculation Flow Control System	1
RT-1	Reactor Water Cleanup System	1
RX-1	Remote Shutdown Panel (Division I)	1
RX-2	Remote Shutdown Panel (Division II)	0
RX-3	Remote Shutdown Panel	0
SW-1	Switchyard System	1
V-1	Plant Ventilation, ESF Systems	1
V-2	Plant Ventilation, Tech Spec Systems	0
VC/VE-1	Control Room HVAC and AEER HVAC Systems	1
VP-1	Containment Vent and Cooling	1
VQ-1	Primary Containment Purge	1
VR-1	Reactor Building Ventilation Systems	1
XX-1	Primary Composite	0

## **MECHANICAL DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
A-184	Auxiliary Building Ground Floor Plan	AW
4E1	Smoke Detection System Auxiliary Electrical Equipment Room Elevation 731'-0"	0
4E3	Smoke Detection System Division II Switchgear Room Elevation 731'-0"	0
4F1	Smoke Detection System Division I Switchgear Room Elevation 710'-6"	0
M-Index, Sheet 1	General Arrangement Index Units 1 and 2	AC
M-Index, Sheet 2	General Arrangement Index Units 1 and 2	T

## **MECHANICAL DRAWINGS**

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<b><u>Number</u></b>	<b><u>Description</u></b>	<b><u>Rev/Date</u></b>
M-Index, Sheet 3	General Arrangement Index Units 1 and 2	AA
M-Index, Sheet 4	General Arrangement Index Units 1 and 2	R
M-1	Property Plat	B
M-2	General Site Plan	A
M-3	Development Plan	K
M-4	General Arrangement Roof Plan	C
M-5	General Arrangement Reactor Building Floor Plans	E
M-6	General Arrangement Reactor Building Floor Plans	F
M-7	General Arrangement Main Floor Plan	Y
M-8	General Arrangement Mezzanine Floor Plan	R
M-9	General Arrangement Ground Floor Plan	M
M-10	General Arrangement Upper Basement Floor Plan	U
M-11	General Arrangement Basement Floor Plan	N
M-12	General Arrangement Miscellaneous Floor Plans	L
M-13	General Arrangement Section A - A	G
M-14	General Arrangement Section B - B	H
M-15	General Arrangement Section C - C	E
M-16	General Arrangement Section D - D	E
M-17	General Arrangement Section E - E and F - F	L
M-18	General Arrangement Section G - G and H - H	F
M-19	General Arrangement Lake Screen House	H
M-20	General Arrangement River Screen House	D
M-21	General Arrangement Off Gas Filter Building	C
M-22	General Arrangement Service Building	K
M-54, Sheet 1	Piping and Instrumentation Drawing (P & ID) Index and Symbols	V
M-54, Sheet 2	Piping and Instrumentation Drawing (P & ID) Index and Symbols	C

**MECHANICAL DRAWINGS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
M-54, Sheet 3	Piping and Instrumentation Drawing (P & ID) Index and Symbols	D
M-54, Sheet 4	Piping and Instrumentation Drawing (P & ID) Index and Symbols	A
M-54, Sheet 5	Piping and Instrumentation Drawing (P & ID) Index and Symbols	A
M-71FD	Flow Diagram for Fire Protection System	E
M-83, Sheet 1	P & ID Diesel Generator Auxiliary System	AK
M-83, Sheet 2	P & ID Diesel Generator Auxiliary System	Y
M-83, Sheet 3	P & ID Diesel Generator Auxiliary System	AP
M-95	P & ID High Pressure Core Spray	AH
M-96, Sheet 1	P & ID Residual Heat Removal System	AT
M-96, Sheet 2	P & ID Residual Heat Removal System	AR
M-96, Sheet 3	P & ID Residual Heat Removal System	AP
M-96, Sheet 4	P & ID Residual Heat Removal System	AC
M-101, Sheet 1	P & ID Reactor Core Isolation Coolant System	BA
M-101, Sheet 2	P & ID Reactor Core Isolation Coolant System	AK
M-141	P & ID High Pressure Core Spray	AN
M-142, Sheet 1	P & ID Residual Heat Removal System	AN
M-142, Sheet 2	P & ID Residual Heat Removal System	AR
M-142, Sheet 3	P & ID Residual Heat Removal System	AU
M-142, Sheet 4	P & ID Residual Heat Removal System	AA
M-147, Sheet 2	P & ID Reactor Core Isolation Coolant System	AH

**MODIFICATIONS:**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
M1-1-87-026	Resolution of Miscellaneous Human Engineering Discrepancies	12/31/1989



## PROCEDURES

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
CC-AA-206	Fuse Control Program	2
CC-AA-302	Control of the Cable Management Database	1
ER-AA-610	Performance Based Evaluations for Fire Protection	1
LAP-200-2	Operations Shift Complement and Functions	6
LAP-900-15	Station Housekeeping/Material Condition Program	26
LAP-900-16	Fire Protection Impairments	16
LAP-900-18	Fire Prevention for Transient Fire Loads	11
LAP-900-21	Control of Flammable Liquids	9
LAP-900-22	Use of Heat Generating Equipment and Heat Sources	3
LAP-900-40	Fire Watch Guidelines	9
LES-DC-106	Safe Shutdown (Appendix R) DC Emergency Light Inspection Data Sheets	24 and 25
LES-DC-107	Safe Shutdown (Appendix R) DC Emergency Light Eight Hour Discharge Test	21
LES-GM-103	Electrical Maintenance Surveillance Inspection of 4.16kV and 6.9kV ITE Circuit Breakers	30
LES-GM-108	Electrical Maintenance Surveillance Inspection of 480V Motor Control Center Equipment	14
LES-GM-109	Electrical Maintenance Surveillance Inspection of 480V Klockner-Moeller Motor Control Center	26
LGP-1-1	Normal Unit Startup	64
LGP-1-S2	Minimum Startup Checklist	37
LGP-1-S1	Master Startup Checklist	49
LMS-FP-22	Fire Damper Visual Inspection	3
LMS-ZZ-03	Inspection of Fire Doors Separating Safety Related Fire Areas	4
LOA-FP-101	Unit 1 Fire Protection System Abnormal	4
LOA-FP-201	Unit 2 Fire Protection System Abnormal	4
LOA-FX-101	Unit 1 Safe Shutdown with a Loss of Offsite Power <u>and</u> a Fire in the Control Room <u>or</u> AEER	4

## PROCEDURES

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
LOA-FX-201	Unit 2 Safe Shutdown with a Loss of Offsite Power <u>and</u> a Fire in the Control Room <u>or</u> AEER	5
LOA-RX-101	Unit 1 Control Room Evacuation Abnormal	3
LOA-RX-201	Unit 2 Control Room Evacuation Abnormal	3
LOP-RH-01	Filling and Venting the Residual Heat Removal System	33
LOP-RH-02E	Unit 1 Residual Heat Removal System Electrical Checklist	18
LOP-RH-04E	Unit 2 Residual Heat Removal System Electrical Checklist	13
LOP-RH-05	Operation of The RHR Service Water System	22
LOP-RH-07	Shutdown Cooling System Startup, Operation, and Transfer	46
LOP-RH-08	Shutdown Cooling System Shutdown	24
LOP-RH-11	Preparation for Standby Operation of the Low Pressure Coolant Injection (LPCI) System	22
LOP-RH-13	Suppression Pool Cooling Operation	23
LOP-RX-04	Startup and Operation of RCIC from the Remote Shutdown Panel	12
LOS-AA-S101	Unit 1 Shiftly Surveillance	7
LOS-RX-M1	Remote Shutdown Monitoring Instrumentation Channel Check	22
LOS-RH-M1	RHR System and RHR WS System Operability Test for Conditions 1, 2, 3, 4, and 5	17
MA-AA-EM-4-00450	Appendix R Emergency Lighting Battery Packs Quarterly Inspection	0
NSWP-S-04	Fire Stop Installation and Inspection	1
OP-AA-201	Fire Protection Program	0
OP-AA-201-001	Fire Marshall Tours	0
OP-AA-201-002	Fire Reports	0
OP-AA-201-003	Fire Drill Performance	2
OP-AA-201-004	Fire Prevention for Hot Work	3
OP-AA-201-005	Fire Brigade Qualification	1

## REFERENCES

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
DG97-001624	ComEd Letter Concerning Minor Fire Door Maintenance Deficiencies	12/11/1997
DG00-001540	ComEd Letter Concerning Performance Based Evaluations for Routine Fire Protection Surveillance Frequencies	12/19/2000
DG01-000296	LaSalle County Station Post Fire Safe Shutdown Self-Assessment Report	04/20/2001
LSCS Document	1999 Key LaSalle 1 and 2 PRA Results	01/31/2000
LSCS Document	LaSalle County Nuclear Power Station Individual Plant Examination and Individual Plant Examination (External Events) Submittal	04/28/1994
LSCS Document	LaSalle County Nuclear Station Fire Protection Report	1
LSCS Document	LaSalle County Nuclear Station Pre-Fire Plans	02/06/2001
LSCS Document	LaSalle NFPA Code Deviation Summary Matrix	06/15/1999
LSCS Document	LaSalle Station Organization Chart	04/30/2001
LSCS Document	LaSalle Station Triennial Assessment Report	05/11/2001
LSCS Document	LaSalle Station Main Control Room Unit 1 Photo Mosaic	06/04/1996
NON BW-01-005(XX)	Station Calculations Not Updated to Reflect System Protection Department Relay Settings (Braidwood)	02/08/2001
NPF-11	Unit 1 License Condition 2.C.(25)	06/10/1998
NPF-18	Unit 2 License Condition 2.C.(15)	06/10/1998
NRC Document	Evaluation of the Consequences of Postulated Failure of 1-Hour Fire Rated Dermatt KM-1 Fire Barrier under Seismic Loading	03/29/1996
NRC Document	Fire Protection Report 50-373/99013(DRS); 50-374/99013(DRS)	08/25/1999
NRC Document	Review of LaSalle Individual Plant Examination of External Events (IPEEE) Submittal	11/29/2000
NRC Document	Risk-Informed Inspection Notebook for LaSalle Nuclear Power Station	08/23/2000
NUREG 0519	Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, Section 9.5	03/1981

## REFERENCES

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
NUREG 0519, Supplement No. 2	Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, Section 9.5	02/1982
NUREG 0519, Supplement No. 3	Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, Section 9.5	04/1982
NUREG 0519, Supplement No. 5	Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, Section 9.5	08/1983
NUREG 0519, Supplement No. 7	Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, Section 9.5	12/1983
NUREG 0519, Supplement No. 8	Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, Section 9.5	03/1984
NUREG 4832	Analysis of the LaSalle Unit 2 Nuclear Power Plant: Risk Methods Integration and Evaluation Program (RMIEP)	03/1993
Project Number 6731-63/6744-63	Valve Separation Analysis	03/15/1985
SEC Project No. 83118	Analysis of Fire Detector Locations at LaSalle County Station	05/24/1984
SLICE	Cable Tabulation Index	7.5
TR-149	Transco Test Report - Fire and Hose Stream Tests of TCO-001 Cement Used in an Electrical Penetration	05/21/1984
TR-200	Transco Test Report - Three Hour Fire and Hose Stream Test of #TCO-001 Cement Installed in an Electrical Blockout Opening Penetrated by an Aluminum Cable Tray, Instrument Tubes, Tube Tray, and a #TCO-002 Medium Density Silicone Elastomer Seal	09/16/1985
	User's Manual for SLICE Version 7.4	12/16/1993

## SAFETY EVALUATIONS

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
L98-0104	UFSAR Change # LU1999-179	12/03/1999
L99-0083	DCP 9700311/12/13 - Service Air Receiver Drain Trap Upgrade	04/14/1998
L99-0092	DCP 9800308 - Relocation of Operators Ready Room to Auxiliary Building	09/05/2000

## **SAFETY EVALUATIONS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
L99-0628	Remove Valve 1E51-F064, Steam Condensing Supply Isolation Valve and Replace with a Spectacle Flange	08/30/1999
L00-0221	UFSAR Change # LU2000-016	03/10/2000
L00-0975	UFSAR Change # LU2000-124	08/17/2000
L00-1182	UFSAR Change # LU2000-139	10/06/2000
L00-1262	UFSAR Change # LU2000-141	01/05/2001

## **RELAY SETTING ORDERS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
1451-AP054A/B	Bus 141Y, Cubicle 9 Feed to Bus 135X	04/24/1994
1451-AP056A/B	Bus 141Y, Cubicle 9 Feed to Bus 135Y	04/24/1994
2451-AP054A/B	Bus 241Y, Cubicle 4 Feed to Bus 235X	01/11/1994
2451-AP056A/B	Bus 241Y, Cubicle 4 Feed to Bus 235Y	03/13/1995

## **TRAINING DOCUMENTS**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
054	Operations Training - Initial and Continuing Training Remote Shutdown System Lesson Plan	2
521\LOA-FX-101	Procedure Based Instruction Guide - Initial License Training Unit 1 Safe Shutdown with a Loss of Offsite Power and a Fire in the Control Room or AEER	0

## **UPDATED FINAL SAFETY ANALYSIS REPORT**

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
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Appendix H.4	Safe Shutdown Analysis	13
Figure 9.5 -1	Fire Protection System Legend and Description, Sheet 0 of 41	3
Figure 9.5 -1	Fire Protection System Development Plan, Sheet 1 of 41	13
Figure 9.5 -1	Fire Protection System Roof Plan, Sheet 2 of 41	3

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Figure 9.5 -1	Fire Protection System Elevation 820'-6", Sheet 5 of 41	3
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Figure 9.5 -1	Fire Protection System Elevation 807'-0", Sheet 7 of 41	3
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Figure 9.5 -1	Fire Protection System Elevation 786'-6", Sheet 9 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 786'-6", Sheet 10 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 768'-0", Sheet 11 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 768'-0", Sheet 12 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 768'-0", Sheet 13 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 768'-0", Sheet 14 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 749'-0", Sheet 15 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 749'-0", Sheet 16 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 740'-0", Sheet 17 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 740'-0", Sheet 18 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 734'-6", Sheet 19 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 731'-0", Sheet 20 of 41	3
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Figure 9.5 -1	Fire Protection System Elevation 710'-6", Sheet 23 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 710'-6", Sheet 24 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 710'-6", Sheet 25 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 706'-6", Sheet 26 of 41	3
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Figure 9.5 -1	Fire Protection System Elevation 663'-0", Sheet 32 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 663'-0", Sheet 33 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 663'-0", Sheet 34 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 663'-0", Sheet 35 of 41	3
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Figure 9.5 -1	Fire Protection System Elevation 677'-0", Sheet 40 of 41	3
Figure 9.5 -1	Fire Protection System Elevation 674'-0", 690'-0", 710'-6", Sheet 41 of 41	3
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Figure H.2 -1	Fire Area / Zone Locations, Sheet 2 of 10	0
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Section 9.5.1a	Fire Protection System Elevation 820'-6", Sheet 2 of 18	0
Section 9.5.1a	Fire Protection System Elevation 807'-0", Sheet 3 of 18	3

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Section 9.5.1a	Fire Protection System Elevation 768'-0", Sheet 8 of 18	3
Section 9.5.1a	Fire Protection System Elevation 749'-0", Sheet 9 of 18	3
Section 9.5.1a	Fire Protection System Elevation 749'-0", Sheet 10 of 18	3
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Section 9.5.1a	Fire Protection System Elevation 710'-6", Sheet 13 of 18	3
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Table H.2-1	Fire Area / Zone Description	04/1984
Table H.4-2	Basic Shutdown Method - Mechanical Equipment List, Sht 1 of 7	9
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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
Table H.4-3	Alternate Shutdown Method Mechanical Equipment List, Sht 5 of 5	10

### WORK/ACTION REQUESTS

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<u>Number</u>	<u>Description</u>	<u>Rev/Date</u>
960046229 01	0, 1A, 1B, 2A, 2B, WS Pump Vibration and Shutoff Head Test	06/08/1999
980078084 01	Accessible DC Emergency Lighting Inspection	12/06/1999
980110812 01	DC Emergency Light 8-Hour Discharge Test	03/14/2000
980116016 01	DC Emergency Light 8-Hour Discharge Test Group 15	03/25/2000
990106710 01	Inaccessible DC Emergency Lighting Inspection ATT F	08/30/2000
990221133 01	Safe Shutdown (APP R) DC Emergency Lighting Inspection	10/27/2000
990242906 01	Safe Shutdown (APP R) DC Emergency Lighting Inspection	02/05/2001
A/R 00045152	Review Setting Calculations for SPD	04/10/2001
A/R 00049506	Develop/Provide the Necessary Documentation (Calcs, Analyses, etc.) To Support Conclusions Provided in ER 99002200	12/21/2001