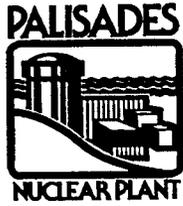


**PALISADES**  
Nuclear Plant

**PREDECISIONAL ENFORCEMENT CONFERENCE  
APPARENT 10 CFR 50.9 VIOLATION**

May 8, 2001



# Presentation

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- Discussion of apparent violation
- Background
- Information requested by NRC letter dated April 19, 2001
- Enforcement policy considerations
- Summary



# Discussion of Apparent Violation

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- 10CFR50.9 Section (a) states, in part, that information provided to the Commission by the licensee, "... shall be complete and accurate in all material respects."
- Licensee acknowledges that contrary to 10CFR50.9, incomplete and inaccurate information was provided to NRC relative to the abandonment of manual backup steam supply to Auxiliary Feedwater Pump P-8B. This information was provided to the NRC in a Request for Notice of Enforcement Discretion (NOED) on February 16, 2000 and a Technical Specification Change Request (TSCR) on February 18, 2000.



# Discussion of Apparent Violation

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- The incomplete and inaccurate information in the NOED and TSCR stated:
  - "Only one case exists where use of the underground steam supply through CV-0522A was considered as available to help the plant in achieving cold shutdown. This case is associated with a fire in the Southwest Cable Penetration Room..."
  
- NOED and TSCR submittals should have stated:
  - "For Appendix R fire areas, either Auxiliary Feedwater Pump P-8B with steam supply through CV-0522B or pump P-8C is available to satisfy decay heat removal requirements."
  
- The conclusion of the request for NOED and TSCR does not change.
  - "In all cases the backup underground steam supply through CV-0522A is not relied upon to mitigate the event and therefore, is not required to fulfill any safety function."



# Background

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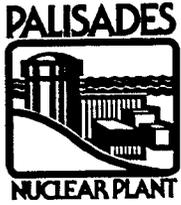
- Backup steam supply line failed – February 5, 2000
- Options considered:
  - Repair
  - Replace – same routing or above ground routing
  - Abandon – required NOED and TS change
- After line repaired, integrity of remaining line questioned. Abandonment option preferable based on:
  - Low safety significance
  - Palisades design basis maintained
  - Only one TS surveillance impacted



# Background

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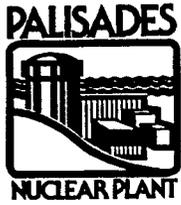
- Activities performed to abandon line:
  - Engineering Review via Engineering Assistance Request (EAR 2000-0064).
  - 50.59 evaluation completed for EAR 2000-0064. This 50.59 was subsequently used as basis for NOED and TSCR submittals.
  - Design and Licensing Bases reviews conducted including Appendix R.
  - Safety significance determination performed using Probabilistic Safety Assessment (PSA).
  - Preparation of NOED and TS change requests completed.
  - Temporary Modification (TM) 2000-006 implemented to abandon line.



# Background

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- EAR 2000-0064 and 50.59 evaluation development
  - Appendix R summary table was created from Engineering Analysis EA-APR-95-007 to show no impact to Appendix R compliance due to abandoning manual backup steam supply line to pump P-8B.
    - Engineer made error in table – listed incorrect valve number.
  - EAR 2000-0064 and associated 50.59 evaluation relied on Appendix R summary table.
    - Reviewer identified discrepancy between 50.59 evaluation and Design Basis Document (DBD) – issued comment #28 on Document Review Sheet SDR-00-0170.
    - Discrepancy was erroneously resolved stating the DBD was incorrect and Summary Table was correct – resulted in error remaining in the 50.59 evaluation.
  - Condition Report C-PAL-00-0496 documented the same discrepancy.
    - C-PAL-00-0496 evaluation was not completed until after NRC submittals.
    - Evaluation concluded that the DBD was correct and Summary Table incorrect. (This was a correct conclusion.)
    - Because of no impact on the 50.59 evaluation conclusion, no further action was taken.
    - No linkage was identified between C-PAL-00-0496 and NRC submittals.



# Background

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- NOED and TSCR development relied on information in the 50.59 evaluation for EAR 2000-0064.
  - Information in the 50.59 with the error was transferred into the NOED and TS change submittals.
  - NOED and TSCR were not revised as outcome of C-PAL-00-0496 conclusion because of the lack of linkage and inadequate management oversight of the corrective action process.
  - NRC issued NOED verbally on February 16, 2000 and in writing February 18, 2000.
  - NRC issued TS Amendment 190 on March 14, 2000.



# Information Requested by NRC Letter dated April 19, 2001

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- Information to determine whether a violation occurred.
  - Licensee acknowledges incomplete and inaccurate information was provided to the NRC contrary to 10CFR50.9.
  
- Information to determine the significance of a violation.
  - Corrected information resulted in no change to conclusions supporting NOED and TS change requests.
  - Low safety significance to incomplete and inaccurate information provided.
  - Licensee acknowledges providing complete and accurate information to NRC is critical to an effective regulatory process.
  
- Information related to identification of a violation.
  - NRC resident identified discrepancies in submittals and plant documents.
  - Subsequent licensee review identified other conflicting documents.



# Information Requested by NRC Letter dated April 19, 2001

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- Information related to any corrective actions taken or planned.
  - January 2001
    - Management oversight of corrective action process improved. Daily review by management added to provide perspective on significance and identification of trends and other related information.
  - January 2001
    - Palisades implemented validation process for NRC submittals.
    - Implementation was independent from identification of 50.9 violation and was result of licensee efforts to improve NRC submittal quality.
  - March 2001
    - Independent review of validation process was conducted.



# Information Requested by NRC Letter dated April 19, 2001

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- Information related to any corrective actions taken or planned (cont.)
  - March 2001
    - Individuals involved with the EAR and 50.59 preparation were counseled.
  - May 2001
    - Validation packages retroactively prepared for NRC submittals still under NRC review.
  - May 2001
    - Lessons learned shared with Engineering and Licensing staffs.
  - May 2001
    - Validated implementation of NRC commitments (1995 to present).

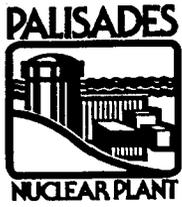


# Information Requested by NRC Letter dated April 19, 2001

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- Information related to any corrective actions taken or planned (cont.)
  - May 2001
    - Completed Root Cause Evaluation.
      - Areas identified for improvement include:
        - Quality Verification and Validation (QV&V) by Palisades engineering and licensing personnel.
        - Independent review of design inputs from technical programs.
      - Prior opportunities to detect and correct incomplete and inaccurate information included:
        - Resolution of comments during EAR 2000-0064 reviews.
        - NOED and TSCR submittal preparation.
        - C-PAL-00-0496 disposition.
      - Extent of condition.
        - Validated implementation of commitments in NRC submittals (1995-present).
        - Validated license change requests under NRC review.
        - Searched corrective action data base (1995 to present) to identify potential discrepancies in 50.59 evaluations or engineering calculations.

May 8, 2001



# Information Requested by NRC Letter dated April 19, 2001

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- Information related to any corrective actions taken or planned (cont.)
  - May 2001
    - Corrected errors in documents leading to submittal of incomplete and inaccurate information.
  - May 2001
    - Supplementary information docketed (50-255) to correct incomplete and inaccurate information.



# Information Requested by NRC Letter dated April 19, 2001

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- Effectiveness of corrective actions.
  - Validation process for recent revision to Valve Relief Request No. 7 identified inaccuracies in previous submittals. Corrections docketed April 23, 2001.
  - Management oversight of corrective action program has improved effectiveness. Management reviews and insights have resulted in:
    - Identification of previously unrecognized performance trends.
    - Changes to significance level determinations.
    - Identification of links between issues.



# Enforcement Policy Considerations

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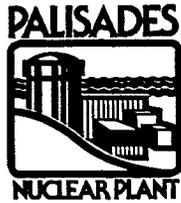
- Enforcement Policy Section IV "Significance of Violations."
  - IV.A.1 Actual Safety Consequences.
    - Low safety consequences.
  - IV.A.2 Potential Safety Consequences.
    - Low safety consequences.
  - IV.A.3 Impact on Regulatory Process.
    - Addressed under Section IX (see below).
  - IV.A.4 Willfulness.
    - Not willful.
  - IV.A.5 Significance Determination Process.
    - Not Applied.



# Enforcement Policy Considerations

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- Enforcement Policy Section IX "Inaccurate and Incomplete Information."
  - Information provided on docket was incomplete and inaccurate.
  - NRC identified the incomplete and inaccurate information.
  - Incomplete and inaccurate information was corrected and docketed on May 2, 2001.
  - Incomplete and inaccurate information did not affect licensee conclusions on which the requests for NOED and TS Change were based.



# Enforcement Policy Considerations

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- Enforcement Policy Supplement VII "Miscellaneous Matters."
  - Submittal of incomplete and inaccurate information was not result of careless disregard for completeness or accuracy.
  - Submittal of incomplete and inaccurate information was not result of inadequate actions on the part of licensee officials.
  - Had information been complete and accurate at the time provided, it would not have resulted in "...reconsideration of a regulatory position or substantial further inquiry..."
  
- Enforcement Policy Section VI "Disposition of Violations."
  - Providing incomplete and inaccurate information was not willful.
  - Last escalated enforcement >2 years ago (Level III violation cited December 11, 1998 – EA 98-433).
  - Credit is warranted for corrective actions completed prior to the NRC identification of this issue.



# Summary

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- Licensee acknowledges incomplete and inaccurate information was provided in the Requests for Enforcement Discretion and Technical Specifications Change in February 2000, contrary to 10 CFR 50.9.
- Conclusions leading to issuance of NOED and TS change were valid.
- Timely corrective actions have been completed.

# 2000

# 1996

(Mar. 27, 1996)  
Engineering Analyses (including EA-APR-95-007) purpose: Document Appendix R Safe Shutdown compliance strategies.

(Apr. 16, 1996)  
PSSA report created to summarize Appendix R results (including EA-APR-95-007). Conflicts with Appendix R calculations by stating P-8C can not be relied upon in Turbine Building fire.

(1996)  
DBD 1.03, Auxiliary Feedwater, updated using PSSA report.

3/27/96  
4/16/96  
1996

(Feb. 5, 2000)  
Underground Pipe Breaks. Options considered:  
•Repair  
•Replace - Same routing  
•Replace - new above ground routing  
•Abandon in place - required NOED / TSCR

(Feb. 7, 2000)  
Appendix R Summary Table created (with error) to support EAR-2000-0064.

(Feb. 7, 2000)  
EAR-2000-0064, and supporting documentation (including Safety Evaluation) prepared (using Appendix R Summary table containing error).

(Feb. 11, 2000)  
Technical Review notes difference between Design Basis Document (DBD 1.03) and EAR-2000-0064 50.59 Evaluation on comment resolution form. Resolution incorrectly determines DBD is incorrect and 50.59 Evaluation is correct.

(Feb. 11, 2000)  
Condition Report (C-PAL-00-0496) written to formally resolve difference in Design Basis Document and EAR-2000-0064 Safety Evaluation.

(Feb. 16, 2000)  
NRC submittal for NOED to restart plant without compliance with Technical Specification Surveillance Requirement 4.9.a.2 for manual backup steam supply line to AFW pump P-8B (Relied on 50.59 evaluation).

(Feb. 16, 2000)  
NRC approved NOED verbally. Written confirmation issued 2/18/00.

(Feb. 18, 2000)  
NRC submittal for Technical Specification Change to remove the Technical Specification Surveillance Requirement 4.9.a.2 for manual backup steam supply line to AFW pump P-8B (Relied on 50.59 evaluation).

(Feb. 19, 2000)  
Implemented Temporary Modification TM-2000-06 to isolate the manual backup steam supply line to AFW pump P-8B.

(Mar. 3, 2000)  
EA-PSSA-00-001 written to create formal summary of Appendix R results (using PSSA report as basis).

(Mar. 9, 2000)  
Condition Report (C-PAL-00-0496) Evaluated:  
• Design Basis Document is correct, Safety Evaluation in error, however no change in conclusion.  
• No connection made to NRC submittals.

(Mar. 14, 2000)  
Technical Specification Amendment 190, approved eliminating Technical Specification Surveillance 4.9.a.2.

2/5/00  
2/7/00  
2/7/00  
2/11/00  
2/11/00  
2/16/00  
2/16/00  
2/18/00  
2/19/00  
3/3/00  
3/7/00  
3/7/00

# 2001

(Jan. 23, 2001)  
NRC Resident questions discrepancy between EA-PSSA-00-001 and EAR-2000-0064, NOED and Technical Specification Change Request. C-PAL-01-0259 written. Identified P-8C for safe shutdown path for Turbine Building.

(Feb. 15, 2001)  
NRC questions ability of P-8C for Turbine Building fire as presented in EA-PSSA-00-001. C-PAL-01-0531 written for lack of Appendix R documentation on Turbine Building safe shutdown path.

(Mar. 2, 2001)  
Completed Engineering Analyses and procedure revisions to show compliance with Appendix R.

(Mar. 2001)  
Individuals involved with the EAR-2000-0064 and 50.59 were counseled.

(May 2001)  
Validation packages retroactively prepared for NRC submittals still under NRC review.

(May 2001)  
Lessons learned shared with Engineering and Licensing staffs.

(May 2001)  
Validated implementation of NRC commitments (1995 to present).

(May 2001)  
Completed Root Cause Evaluations

(May 2001)  
Corrected errors in documents leading to submittal of incomplete and inaccurate information.

(5/2/01)  
Incomplete and inaccurate information corrected on docket.

(5/8/01)  
Enforcement Conference.

1/23/01  
2/15/01  
3/02/01  
3/01  
5/01  
5/01  
5/01  
5/01  
5/01  
5/8/01