



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

50-237/249  
254/263  
373/374

July 18, 1997

Ms. Irene Johnson, Acting Manager  
Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III  
1400 Opus Place, Suite 500  
Downers Grove, IL 60515

SUBJECT: NRC INSPECTION OF SIEMENS POWER CORPORATION LOSS-OF-COOLANT ACCIDENT  
(LOCA) ANALYSES

Dear Ms. Johnson:

The NRC recently completed an inspection of Siemens Power Corporation - Nuclear Division (SPC) in Richland, Washington. Technical issues were raised, resulting from the inspection, that require action by SPC. The exit meeting was conducted with SPC at NRC headquarters on May 13, 1997. A copy of the inspection report will be provided to you when it is available. This letter is to alert Commonwealth Edison Company (ComEd) of the need to compile and maintain specific information pursuant to regulatory requirements pertaining to the computer codes used to perform LOCA analyses for ComEd plants.

The NRC inspection team found significant deficiencies in SPC's documentation of its analysis codes and models, and determined that SPC performed inadequate verification and validation (V&V) of approved codes after changes were made. Regulatory requirements for documentation and V&V of LOCA codes are contained in 10 CFR Part 50, Appendix K, Section II. These requirements are imposed on licensees, since licensees are ultimately responsible for ensuring that the LOCA analyses for their plants comply with applicable regulations. In addition, general requirements with regard to quality assurance, which are related to licensee responsibilities in ensuring that LOCA codes and analyses comply with applicable regulations, are discussed in 10 CFR Part 50, Appendix B; for example, Criterion III (Design Control), Criterion V (Instructions, Procedures, and Drawings), Criterion VII (Control of Purchased Material, Equipment, and Services), Criterion X (Inspection), Criterion XVII (Quality Assurance Records), and Criterion XVIII (Audits).

Licensees must maintain documentation that provides adequate assurance that their LOCA analyses comply with the appropriate provisions of 10 CFR Part 50, Appendix B and Appendix K, and that they meet the acceptance criteria of 10 CFR 50.46. This documentation should consist of (but is not limited to) reports of internal or external reviews of LOCA methodologies and results; audit or inspection reports; or independent confirmatory analyses. While the staff does not require, at this time, that licensees submit this information, the staff will review the documentation as part of its inspections of licensees; such as those conducted in support of the core performance action

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plan. Failure of licensees to provide adequate oversight of their contractors or to maintain adequate documentation could result in enforcement action.

Also, it is the licensee's responsibility to conduct meaningful audits of their contractors. This is discussed in the context of requirements related to LOCA analyses in NRC Information Notice (IN) 97-15; however, it is generally applicable to other contractor activities, as well. If the staff determines that contractor technical and quality assurance deficiencies should have been discovered by licensees' audits, the staff will generally initiate enforcement action against the licensees.

Dresden and Quad Cities Stations currently use, and LaSalle Station has been approved to use, SPC methodologies for their LOCA analyses. As a follow-up to the inspection at SPC, the staff may inspect ComEd's documentation related to the oversight of SPC LOCA analyses performed for ComEd plants.

Sincerely,



Stewart N. Bailey Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-237, 50-249, 50-254,  
50-265, 50-373, 50-374

cc: see next page

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Dresden and Quad Cities Stations currently use, and LaSalle Station has been approved to use, SPC methodologies for their LOCA analyses. As a follow-up to the inspection at SPC, the staff may inspect ComEd's documentation related to the oversight of SPC LOCA analyses performed for ComEd plants.

Sincerely,

Original Signed By:

Stewart N. Bailey, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-237, 50-249, 50-254,  
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Sincerely,

Stewart N. Bailey, Project Manager  
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Division of Reactor Projects - III/IV  
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