

July 20, 2001

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

SUBJECT: DRESDEN AND QUAD CITIES NUCLEAR POWER STATIONS - NUCLEAR REGULATORY COMMISSION (NRC) STAFF AUDIT OF THE USE OF PROBABILISTIC SAFETY ASSESSMENT (PSA) IN RECENT APPLICATIONS (TAC NOS. MB0362, MB0363, MB0721, MB0722, MB0842, MB0843, MB0844, MB0845, MB2287, AND MB2288)

Dear Mr. Kingsley:

We are planning to conduct an audit on July 24-26, 2001, at your offices in Warrenville, Illinois, as part of our review of your applications dated December 27, 2000, for extended power uprate (EPU) of the Dresden, Units 2 and 3, and Quad Cities, Units 1 and 2, Nuclear Power Stations, and your risk-informed in-service inspection (RIISI) relief requests dated October 18, 2000, and November, 30, 2000, for Dresden and Quad Cities. The audit will review the PSA models and results associated with your EPU and RIISI submittals for Dresden and Quad Cities. The audit will include a review of your peer review process, maintenance, and updating of the PSAs for Dresden and Quad Cities including related issues addressed in Quad Cities Inspection Report 2001-05.

The audit team will consist of Donald Harrison and Stephen Dinsmore from the Probabilistic Safety Assessment Branch in the Office of Nuclear Reactor Regulation. A copy of our audit plan is attached. This audit plan and schedule were discussed previously with your staff.

Please contact me (301-415-2863), if you have any questions about this audit.

Sincerely,

/RA/

Lawrence W. Rossbach, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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

Enclosure: Audit Plan

cc w/encl: See next page

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Quad Cities, Units 1 and 2

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Dresden, Units 2 and 3
Quad Cities, Units 1 and 2

- 2 -

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50-254, 50-265

Enclosure: Audit Plan

cc w/encl: See next page

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DATE	07/18/01		07/18/01		07/18/01	07/19/01	

OFFICIAL RECORD COPY

DRESDEN & QUAD CITIES PSA RISK-INFORMED APPLICATIONS AUDIT

Exelon Offices
Cantera Office Complex
Ferry Road
Warrenville, IL

SCHEDULE

Start Audit with Exelon - Morning of July 24, 2001

Discuss purpose and plan of audit

Overview by Exelon of their PSA, PSA peer review findings and observations, and their PSA maintenance, quality program, and update processes

Audit - July 24 & 25 (Exelon staff should be available if needed)

Conclude Audit with Exelon - Morning of July 26, 2001

Discuss general results of audit

Discuss follow-on activities

SCOPE OF AUDIT

Determine that the PSA peer review process was fully utilized and that the PSA update procedures and practices provide assurance that the PSA results used in support of risk informed licensing actions represent the current construction and operational experience of the plant. To the extent practicable, the PSA models and results associated with the following submittals will be selected to illustrate the use of the peer review and PSA update processes:

1. Extended power uprate risk insights
2. Risk-Informed Inservice Inspection

NEEDED REFERENCE MATERIALS FOR BOTH DRESDEN AND QUAD CITIES

1. Current PSA models and supporting documentation (including system notebooks, human error probabilities methods and documentation, plant-specific data documentation, success criteria documentation, and related thermal-hydraulic analyses)
2. Extended power uprate PSA models and supporting documentation (including evaluations of initiating event frequencies, success criteria, operator responses, component reliability, shutdown risks, external events, supporting thermal-hydraulic analyses, and the overall change in risk)
3. PSA models used in risk-informed licensing actions (if different than last PSA update model) and supporting documentation
4. PSA Peer Review/Certification documentation
5. Plant/Corporate PSA-related procedures and processes (covering documentation, quality program, maintenance and update, data, and plant - PSA interfaces)

6. Documentation of revisions made to (or planned for) PSA models
7. Documentation of plant modifications or operational changes identified, screened, and considered in (or planned for) updating PSA
8. Documentation of and data sources used to update initiating event frequencies, component failure rates, and maintenance/testing outage rates (including relationship with plant maintenance rule performance criteria).