

RS-05-161

November 18, 2005

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Commitments and Plans Related to Extended Power Uprate Operation

- References:**
1. Letter from K. R. Jury (Exelon Generation Company, LLC) to U. S. NRC, "Commitments for Resolution of Steam Dryer Degradation Issue," dated June 27, 2003
 2. Letter from J. A. Benjamin (Exelon Generation Company, LLC) to U. S. NRC, "Commitments and Information Related to Extended Power Uprate," dated April 2, 2004
 3. Letter from K. R. Jury (Exelon Generation Company, LLC) to U. S. NRC, "Commitments and Plans Related to Extended Power Uprate Operation," dated May 12, 2004
 4. Letter from D. Bost (Exelon Generation Company, LLC) to U. S. NRC, "Commitments and Plans Related to Extended Power Uprate Operation," dated December 10, 2004
 5. Letter from D. Bost (Exelon Generation Company, LLC) to U. S. NRC, "Revised Commitments and Plans Related to Extended Power Uprate Operation," dated January 31, 2005
 6. Letter from J. A. Benjamin (Exelon Generation Company, LLC) to U. S. NRC, "Commitments and Plans Related to Extended Power Uprate Operation," dated May 13, 2005

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7. Letter from P. R. Simpson (Exelon Generation Company, LLC) to U. S. NRC, "Clarification of Regulatory Commitments Related to Extended Power Uprate (EPU) Operations," dated June 13, 2005
8. Letter from P. R. Simpson (Exelon Generation Company, LLC) to U. S. NRC, "Commitments and Plans Related to Extended Power Uprate Operation," dated July 26, 2005
9. Letter from K. R. Jury (Exelon Generation Company, LLC) to U. S. NRC, "Commitments and Plans Related to Extended Power Uprate Operation," dated September 23, 2005
10. NRC Summary of the August 29, 30, 31, and September 1, 2005, Meeting with Exelon Generation Company, LLC on the Results of the Testing and Evaluation of the Steam Dryer Performance at Quad Cities, Units 1 and 2, dated October 3, 2005

In References 1 through 9, Exelon Generation Company, LLC (EGC) made regulatory commitments regarding operation of Dresden Nuclear Power Station (DNPS), Units 2 and 3, and Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2, at extended power uprate (EPU) conditions. EGC has completed many of the commitments outlined in the referenced letters through engineering evaluations, inspections, equipment modifications, meetings with the NRC, and submittal of various responses to NRC requests for additional information and technical documentation. Specifically, commitments 3, 5, and 8 through 11a in Reference 9 are complete and, therefore, are not continued as commitments in this letter.

EGC completed detailed evaluations of the QCNPS replacement steam dryers in accordance with commitments 9 and 10 of Reference 8, and submitted the results of these evaluations to the NRC. On August 29, through September 1, 2005, EGC met with the NRC technical staff to discuss the results and conclusions of these evaluations, and the decision and basis regarding scale model testing of the DNPS steam dryers. Prior to meeting adjournment, the NRC technical staff detailed a list of questions that remained to be resolved with respect to evaluation of the QCNPS steam dryers and their suitability for long-term EPU operation. EGC agreed to address these questions to resolve the issue of steam dryer performance for QCNPS. Subsequently, the NRC documented these open items in a meeting summary issued on October 3, 2005 (i.e., Reference 10).

In response to the remaining open technical issues, EGC performed additional analytical work, and submitted the results of these evaluations to the NRC. Subsequently, EGC met with the NRC on November 8 and 9, 2005, to discuss the additional technical evaluations. At the conclusion of this meeting, the NRC requested that EGC provide additional detailed analysis to support the conclusion that the QCNPS Unit 1 steam dryer is structurally adequate for long-term EPU operation. Due to this request for additional analysis, the associated time required to complete these efforts, and EGC's and the NRC's desire to reach closure on the remaining technical issues prior to meeting with NRC management, EGC is revising the committed dates for meeting with NRC management and submitting a formal request for returning the affected units to long-term EPU operation, as outlined in commitments 12 and 13 of Reference 9.

During the technical meetings held on August 29, through September 1, 2005, and November 8 and 9, 2005, EGC provided detailed discussions that support the operation of the QCNPS units at EPU power levels for both short-term (i.e., prior to meeting with NRC management) and continuous operation. In summary, the detailed evaluations of the QCNPS replacement steam dryers, using the acoustic circuit model and finite element analysis of derived steam dryer loads, demonstrated that adequate structural margin exists for the replacement steam dryers at all operating conditions, up to and including the full licensed power level of 2957 megawatts-thermal (MWt).

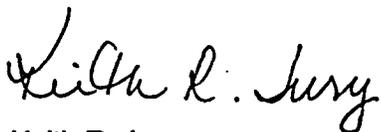
In the short term, thermal power levels on the QCNPS units are expected to remain below the levels experienced during the summer months because condenser backpressure has decreased over the past weeks due to seasonal variations in circulating water temperature. Therefore, the QCNPS units have operated at their maximum thermal power levels expected for 2005; there has not been any indication of dryer degradation or EPU extent of condition issues.

In summary, EGC has conducted extensive detailed quantitative assessments of the structural adequacy of the Quad Cities replacement steam dryers. The results of this analytical work have been, and continue to be, shared with the NRC. Based on the data collected on the Quad Cities units during startup and power ascension testing, data collected during EPU operation on the units throughout the Summer and Fall of 2005, and the results of the detail engineering evaluations performed to date, EGC has concluded that the Quad Cities replacement dryers are structurally adequate to support continuous EPU operation, that they are similar in structural response to steam dryer loading, and that the analytical conclusions supporting long-term EPU operation are applicable to both units.

The attachment to this letter outlines the remaining committed actions that support operation of the DNPS and QCNPS units at EPU conditions. The commitments contained in the attachment reflect the status of the QCNPS steam dryer replacement effort. The commitments in the attachment supersede those described in the referenced letters, and represent our commitments in their entirety.

If you have any questions concerning this submittal, please contact Mr. Thomas G. Roddey, at (630) 657-2811.

Respectfully,



Keith R. Jury
Director, Licensing and Regulatory Affairs

Attachment: Summary of Commitments

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Summary of Commitments

The following table identifies commitments being made by Exelon Generation Company, LLC (EGC). Any other actions discussed in this letter represent intended or planned actions by EGC. They are described for the NRC's information and are not regulatory commitments.

	Commitment	Committed Date or Outage
1	EGC will continue to conduct daily monitoring of moisture carryover and other key reactor and plant parameters while operating at full power at Dresden Nuclear Power Station (DNPS) Units 2 and 3, and Quad Cities Nuclear Power Station (QCNPS) Units 1 and 2, to provide an early indication of potential dryer structural integrity issues. If indications of steam dryer damage or structural integrity concerns are identified, EGC will reduce power at a minimum to the pre-extended power uprate (EPU) level on the affected unit and evaluate and disposition the issue in accordance with the corrective action process.	Ongoing
2	During the next scheduled refueling outage on QCNPS Unit 2, EGC will perform a general visual inspection of the reactor pressure vessel internals, steam, and feedwater systems, including inspection and disassembly if needed of the most susceptible components, which include electromatic relief valves. The scope of the inspections will be based upon the results of the EPU vulnerability team effort. If the inspections indicate potential degradation of the reactor pressure vessel internals, steam, or feedwater systems and components, EGC will evaluate and disposition the issue in accordance with the corrective action process. EGC will implement the lessons learned and recommendations from assessment of the vulnerability of other plant equipment to adverse flow effects from EPU operation at DNPS and QCNPS.	Spring 2006 refueling outage for QCNPS Unit 2
3	EGC will perform future inspections of the DNPS and QCNPS steam dryers using guidance contained in BWRVIP-139, "BWR Vessel and Internals Project Steam Dryer Inspection and Flaw Evaluation Guidelines," dated April 2005.	Ongoing
4	EGC will evaluate results of the Spring 2006 QCNPS Unit 2 steam dryer inspection, and determine appropriate action for QCNPS Unit 1. The acceptance criteria will be that no structurally significant cracking is identified that would limit operation.	Within 30 days of completing the Spring 2006 refueling outage for QCNPS Unit 2

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	Commitment	Committed Date or Outage
5	Where lessons learned from evaluations or inspections conducted pursuant to commitments described in this letter indicate significant potential degradation of the steam dryer, EGC will take appropriate actions up to and including shutting down the applicable unit to conduct inspections or modifications on an expedited basis.	Fall 2006 refueling outage for DNPS Unit 3 Spring 2007 refueling outage for QCNPS Unit 1
6	Following resolution of the remaining open items from the November 8 and 9, 2005, technical meeting, EGC will meet with NRC management to discuss the results and conclusions of evaluations performed supporting EPU operation for QCNPS Units 1 and 2. Where NRC management leading the meeting is not satisfied with the results and conclusions of those evaluations, EGC will voluntarily return the affected QCNPS unit(s) to pre-EPU power levels if EGC is unable to resolve those concerns within a timeframe agreed to by the NRC, but no sooner than 14 days (which would allow the requisite time for further technical analysis and independent reviews).	By December 15, 2005
7	Within 21 days following resolution of any concerns identified as part of commitment 6, EGC will formally request the return of the affected unit(s) to EPU operation. Where no concerns are identified under commitment 6, EGC will formally request NRC acceptance for continuous EPU operation of the QCNPS units by January 13, 2006.	Within 21 days following resolution of any concerns identified as part of commitment 6, or by January 13, 2006, whichever is sooner