

**From:** Lawrence Rossbach  
**To:** Allan.haeger@Exeloncorp.com  
**Date:** 7/12/01 5:11PM  
**Subject:** Additional Plant Systems EPU questions

Attached are a new question 19 and a question number 33 from our plant systems reviewers on your EPU submittals for Dresden and Quad Cities. We are withdrawing the previous question 19. Our plant systems review is continuing and may result in additional questions in the plant systems area. Please let me know if you would like a call to discuss the attached questions.

**CC:** Anthony Mendiola; Ralph Architzel; Stewart Bailey

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

DRESDEN AND QUAD CITIES EXTENDED POWER UPRATE  
REQUEST FOR ADDITIONAL INFORMATION - PLANT SYSTEMS

The following questions apply to both Dresden and Quad Cities:

19. PUSAR Section 4.1.1.1.(b), Local Pool Temperature with RV plus SRV Discharge, notes that because these plants have quenchers no evaluation nor limit is necessary as long as steam ingestion into the ECCS suction is not a concern. The NRC approved elimination of the local temperature limit provided quenchers were at an elevation above the ECCS suction. Since Dresden and Quad Cities have quenchers and suction strainers located in the same bays; an evaluation of the behavior of the steam plumes from the quenchers, relative to the entrainment flow path to the ECCS strainers was performed. Provide the details of this evaluation demonstrating that steam ingestion is not a concern. Include a description of the units' ECCS suction elevation relative to the suction strainers.
  
33. Section 4.7 on post-LOCA combustible gas control notes margin changes in various parameters associated with the EPU and additional impact of GE14 fuel introduction on metal-water hydrogen production. The 5% oxygen limit is reached in 19 hours, versus 25 hours pre-EPU. The minimum stored volume of nitrogen to maintain containment atmosphere below the 5% flammability limit for seven days will be 141,000 scf following EPU. Considering the increased nitrogen storage requirement and the reduced time to reach oxygen flammability concentrations following a design basis accident, address why technical specifications should not be added for the operability and surveillance of the containment atmosphere dilution system, including nitrogen storage (Reference BWR/4 STS 3.6.3.4, in accordance with 10 CFR 50.36(c)(2)(ii) criterion 3 - A system that is part of the primary success path and which functions to mitigate a design basis accident that presents a challenge to the integrity of a fission product barrier).