

Commonwealth Edison Company
Quad Cities Generating Station
22710 206th Avenue North
Cordova, IL 61242-9740
Tel 309-654-2241



September 22, 1999

SVP-99-189

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

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

Subject: Completion of Committed Actions Identified during Review of ComEd's
Program for Resolution of Bulletin 96-03

- References:
- (1) Letter from J. Hosmer (ComEd) to NRC "Initial Response to Bulletin 96-03," dated October 31, 1996.
 - (2) Letter from J. P. Dimmette, Jr. (ComEd) to NRC "Results of the Review of the NRC's Safety Evaluation of the Boiling Water Reactor Owners' Group Report, 'Utility Resolution Guidance for Resolution of ECCS Suction Strainer Blockage,'" SVP-98-369, dated December 18, 1998.
 - (3) Letter from J. P. Dimmette, Jr. (ComEd) to NRC "Hydrodynamic Test Report," SVP-99-024, dated February 26, 1999.

The purpose of this letter is to confirm completion of actions identified during review of the NRC's Safety Evaluation of the Boiling Water Reactor Owners' Group (BWROG) Report, "Utility Resolution Guidance for Resolution of ECCS Suction Strainer Blockage."

ComEd's required 180-day response to NRC Bulletin 96-03, "Potential Plugging of Emergency Core Cooling Suction Strainers By Debris in Boiling-Water Reactors" for Quad Cities Nuclear Power Station Units 1 and 2 was provided in Reference 1. The response stated that Quad Cities Nuclear Power Station evaluated its options and elected to install large capacity passive strainers and reduce fibrous insulation as the optimum method to resolve the ECCS suction strainer plugging issues. In Reference 2 we stated that our commitments to resolve Bulletin 96-03 were completed.

9909280239 990922
PDR ADOCK 05000254
P PDR

990928

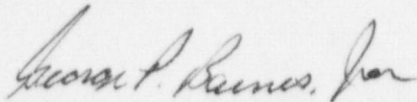
IE73

September 22, 1999
U. S. Nuclear Regulatory Commission
Page 2

We also stated in Reference 2 that the methodology for sizing the ECCS suction strainers was based on the BWROG guidance document. After review of the NRC's safety evaluation, of the guidance document, seven actions were identified which required resolution. The seven actions are listed in Attachment A of Reference 2 and a completion summary of each action is provided.

Should you have any questions concerning his letter, please contact Mr. C.C. Peterson at (309) 654-2241, extension 3609.

Respectfully,



Joel P. Dimmette, Jr.
Site Vice President
Quad Cities Nuclear Power Station

Attachment: Completion of NRC Bulletin 96-03 Closure Commitments

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

ATTACHMENT
Completion of NRC Bulletin 96-03 Closure Commitments
(Page 1 of 2)

A review of Quad Cities Nuclear Power Station's (QCNPS) program response to NRC Bulletin 96-03 identified seven actions needed to complete/maintain the Emergency Core Cooling System (ECCS) suction strainer design basis. The seven actions listed in Attachment A to Reference 2 are repeated below with a completion summary.

- 1) Quad Cities Nuclear Power Station shall revise the UFSAR to change the design basis of the ECCS Suction Strainers so that all of the new strainers are considered to be partially clogged. The supporting calculations will be revised as appropriate.

Summary: UFSAR, Section 6.2.2.3, was revised to state that the strainer design basis is based on the clean head loss plus debris head loss resulting from flow through four strainers in lieu of head loss resulting from flow through only three clean strainers. Net Positive Suction Head (NPSH) calculations have been revised based on the new strainer design basis.

- 2) Quad Cities Nuclear Power Station shall revise the UFSAR to incorporate NRC Bulletin 96-03 considerations.

Summary: UFSAR, Section 6.2.2.3, was revised to incorporate a description of debris sources/analysis that was used in response to NRC Bulletin 96-03.

- 3) We have 'base-lined' the cleanliness of the Suppression Chamber as discussed above. Quad Cities Nuclear Power Station shall de-sludge and inspect the wet well during the next refueling outage on Unit 2 (Q2R15) based on our current design basis sludge generation rate and frequency of one operating cycle. Since we are a RMI plant, we believe that the frequency can be changed to two operating cycles with only a minor effect on head loss. If Primary Containment Foreign Material Exclusion (FME) controls continue to be demonstrated to be effective during this future inspection, then Quad Cities Nuclear Power Station may perform de-sludging on an alternating refueling outage frequency.

Summary: Every refueling outage we will inspect the wet well and strainers in accordance with our design basis analysis. We will also de-sludge the wet well each refueling outage. If future inspection results support a change in frequency of de-sludging the wet well, we will consider a reanalysis of our current design basis.

- 4) Quad Cities Nuclear Power Station shall define and implement an Administrative Program to ensure that the potential for debris to be generated and transported to the strainer surface does not, at any time, exceed the calculated capacity of the replacement strainers.

Summary: A new administrative procedure, QCAP 0400-027, "Containment Debris Material Control Program," has been issued which defines a Containment

ATTACHMENT
Completion of NRC Bulletin 96-03 Closure Commitments
(Page 2 of 2)

Debris Material Control Program. This procedure, in conjunction with other station and corporate procedures and design documents, will ensure that potentially loose debris/LOCA debris quantities inside the drywell and suppression chamber do not exceed design-basis limits.

- 5) Quad Cities Nuclear Power Station shall define and implement a surveillance procedure(s) to inspect the torus and strainers for cleanliness. This procedure shall contain detailed acceptance criteria consistent with our ECCS suction strainer head loss analysis and required actions if the acceptance criteria is not met.

Summary: The intent of this commitment has been completed as follows; Our outage scheduling process now requires a work request to be issued each refueling outage. This work request contains the required steps to inspect the torus for cleanliness and the strainers for both cleanliness and structural integrity. Included are detailed acceptance criteria consistent with our ECCS suction strainer head loss analysis and required actions if the acceptance criteria are not met. This work request references this commitment to the NRC.

- 6) Quad Cities Nuclear Power Station shall re-evaluate the RMI head loss using the methodology endorsed by the NRC in Appendix K of the SER including a small fraction of stainless steel foil.

Summary: Calculations for determining the ECCS strainer head loss due to debris have been revised using the above methodology. The resulting head loss is essentially the same as calculated using the BWROG methodology.

- 7) Quad Cities will provide the Hydrodynamic test report for the new strainers under separate cover.

Summary: Hydrodynamic Test Report TR-VQ1500-01 was transmitted to the NRC by ComEd in Reference 3.