

Exelon Generation Company, LLC www.exeloncorp.com
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, IL 61242-9740

SVP-03-033

February 28, 2003

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

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

Subject: Completion of Actions Associated With Supplement No. 1 to Generic Letter 87-02: Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46 (TAC Nos. M69476 and M69477)

References: (1) Letter, Commonwealth Edison Company to USNRC, "Response to Supplement 1 to Generic Letter (GL) 87-02, Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, SQUG Resolution of USI A-46," dated September 21, 1992.

(2) Letter, Commonwealth Edison Company to USNRC, "Summary Reports for Resolution of Unresolved Safety Issue A-46, Generic Letter 87-02, Quad Cities Nuclear Power Station Units 1 & 2," dated June 28, 1996.

Quad Cities Nuclear Power Station committed, via Reference 1, to use the methodology developed by the Seismic Qualification Utility Group (SQUG), as documented in the Generic Implementation Procedure (GIP) Revision 2 (GIP-2) for the resolution of Unresolved Safety Issue (USI) A-46. A Summary Report for the Resolution of USI A-46 was submitted in Reference 2. Reference 2 identified that all unresolved outliers would be resolved by the end of the second refueling outage, for each respective Unit, after receipt of the NRC's safety evaluation.

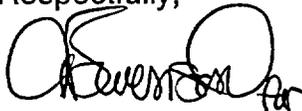
A025

In accordance with Supplement No. 1 to Generic Letter 87-02 and Section 9.5 of the GIP, we are informing the NRC that all of the outliers identified in the Summary Report have been resolved. The attachment to this letter identifies outliers that were resolved differently than previously planned in the Summary Report. These changes were made as a result of additional information that was not available at the time the Summary Report was submitted.

This submittal completes actions in response to Generic Letter 87-02, Supplement No. 1.

Should you have any questions or require additional information, please contact Wally Beck at (309) 227-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Timothy J. Tulon". The signature is stylized and includes a large loop at the end.

Timothy J. Tulon
Site Vice President
Quad Cities Nuclear Power Station

Attachment: Outliers Resolved Differently Than Previously Identified in the Summary Report or RAIs

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

Attachment 1

Outliers Resolved Differently Than Previously Identified in the Summary Report or RAIs

ID #	Equipment	A-46 Outlier Finding	Original Proposed Resolution	Final Resolution
A03	Nitrogen Bottle N/A (1), N/A (2)	Nitrogen bottle is restrained only by top chain.	Gas bottles need a second chain.	Justified acceptability of single <u>tight</u> chain. Station procedure Procedure QCAP 1500-15 (now SA-AA-122) "Handling and Storage of Compressed Gas Cylinders/Portable Tanks and Cryogenic Gas Dewars," was revised to incorporate this requirement.
A05B A07 A08 A09 A10 A14 A15 A16	480 VAC MCCs 250 VDC MCCs	Seismic demand exceeds capacity.	Develop realistic, median-centered response spectra.	Used the MCC seismic test contained in Equipment Qualification (EQ) Binder EQ-24D/Q.
A11	Panel 2201-32	Seismic demand exceeds capacity. 1/4" gapped anchorage on one side of panel.	Develop realistic, median-centered response spectra.	Panel braced to wall. Mod #: EC 24251
A12	Panel 2202-32	Seismic demand exceeds capacity.	Develop realistic, median-centered response spectra.	Panel braced to wall. Mod #: EC 24252
A21	Panel 2212-32	Adjacent gas bottle with single loose chain is an impact hazard.	Gas bottles need a second chain.	Justified acceptability of single <u>tight</u> chain. Station procedure Procedure QCAP 1500-15 (now SA-AA-122) "Handling and Storage of Compressed Gas Cylinders/Portable Tanks and Cryogenic Gas Dewars," was revised to incorporate this requirement.

Attachment 1

Outliers Resolved Differently Than Previously Identified in the Summary Report or RAIs

ID #	Equipment	A-46 Outlier Finding	Original Proposed Resolution	Final Resolution
A28-1	Switchgear SWGR 13 SWGR 14 SWGR 13-1 SWGR 14-1 SWGR 23-1 SWGR 24-1	Could not open units to determine if the units are plug welded at the base.	Schedule an internal inspection.	Switchgear (SWGR) was welded at rear to existing embedments. Mod #s: EC 24253; EC 24254 EC 24279; EC 24121 EC 24256; EC 24280
A29-1	Switchgear SWGR 23 SWGR 24	Could not open units to determine if the units are plug welded at the base.	Schedule an internal inspection.	SWGR was welded at rear to existing embedments. Mod #s: EC 24122; EC 24255
A32	2202-70B to 902-39	Panel is not bolted to adjacent panel.	Connect panels together.	Calculation QDC-0900-S-0693 determined adequate clearance based on natural frequencies from existing seismic test.
A35	Panel 902-33	Adjacent ductwork is 1/4" away (gap) from top of cabinet - interaction hazard.	Install neoprene or like material between duct and panel or connect duct to panel.	Duct angles trimmed, per Work Order (WO) 96117721, for clearance.
A37	Panel 901-33	Panel not bolted to adjacent panel 901-47 and adjacent ductwork supported on rod hangers is 1/4" away (gap) from top of cabinet.	Connect panels together. Install neoprene or like material between duct and panel.	Panels bolted together. Ductwork angles trimmed to increase gap. WO 97000098101
R0-20	GE HEA61B – in SWGR 13; 13-1; 14; 14-1; SWGR 23; 23-1; 24; 24-1	Demand greater than capacity. (DEMAND >CAP)	Refine amplification factors / evaluate circuit. As required, replace relay.	Used switchgear and relay seismic test lab data to accept. Calculation QDC-6700-S-0811

Attachment 1

Outliers Resolved Differently Than Previously Identified in the Summary Report or RAIs

ID #	Equipment	A-46 Outlier Finding	Original Proposed Resolution	Final Resolution
R0-22a	GE HGA11 – in 2201-32; 2202-32; SWGR 14-1; SWGR 24-1	DEMAND >CAP; Contact configuration not specified.	Panel mounting improvement (Relay Report Att. G). Refine amplification factors / evaluate circuit. As required, replace relay.	Reduced Amplification Factor (AF), due to panel bracing. Used switchgear and relay seismic test lab data to accept. Mod #: EC 24113 Calculation QDC-0200-S-0980 Calculation QDC-6700-S-0811
R0-22b	GE HGA11 – 2212-50 0-5203-127 FO	Contact configuration not specified.	Evaluate circuit; as required, replace relay.	Resolved via additional evaluation. NDIT QC-SW-00-017
R0-25	GE IAC51A – in SWGR 13; 13-1; 14; 14-1; 23; 23-1; 24; 24-1	DEMAND >CAP.	Refine amplification factors / evaluate circuit. As required, replace relay.	Used switchgear and relay seismic test lab data to accept. Calculation QDC-6700-S-0811
R0-26	GE IAC51B – in SWGR 13-1; SWGR 14-1; SWGR 23-1 SWGR 24-1	DEMAND >CAP.	Refine amplification factors / evaluate circuit. As required, replace relay.	Used switchgear and relay seismic test lab data to accept. Calculation QDC-6700-S-0811
R0-28b	GE IAV69A – in SWGR 13; SWGR 13-1; SWGR 14; SWGR 14-1; SWGR 23; SWGR 23-1; SWGR 24; SWGR 24-1	DEMAND >CAP.	Refine amplification factors / evaluate circuit. As required, replace relay.	Used existing switchgear and relay seismic test lab data to accept. Calculation QDC-6700-S-0811
R0-31	GE PJC11 – in SWGR 13-1; SWGR 14-1; SWGR 23-1; SWGR 24-1	Capacity exceeded.	Refine amplification factors / evaluate circuit. As required, replace relay.	Used existing switchgear seismic test data, 1.5 x realistic, median- centered spectra and contact state to accept. Calculation QDC-6700-S-0827