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Docket Number 50-346

License Number NPF-3

Serial Number 2665

July 17, 2000

U.S. Nuclear Regulatory Commission  
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Subject: Completion of Planned 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 No. M69441)

Ladies and Gentlemen:

The Davis-Besse Nuclear Power Station (DBNPS), in letter Serial Number 2090 dated September 17, 1992, committed to use the methodology developed by the Seismic Qualification Utility Group (SQUG) as documented in the Generic Implementation Procedure 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 by the DBNPS in letter Serial Number 2316 dated August 29, 1995. In Section 8 of the Summary Report, the DBNPS identified that all unresolved Outliers would be resolved by the end of the 12<sup>th</sup> Refueling Outage, which ended on May 18, 2000. In accordance with Supplement No. 1 to Generic Letter 87-02 and Section 9.5 of the GIP, a completion letter is required to be sent to the NRC advising that the corrective actions to resolve the Outliers identified in the Summary Report have been completed.

This letter informs the NRC that all of the Outliers identified in the Summary Report have been resolved. Attachment 2 identifies Outliers that were resolved differently than what was 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. Testing referenced in Attachment 2 was conducted in accordance with the GIP which states that the use of seismic qualification methods currently specified in NRC-approved IEEE standards (e.g., IEEE 344-1975, -1987) and current licensing criteria (e.g., NRC Standard Review Plan and Regulatory Guides) are acceptable means for evaluating the seismic adequacy of relays.

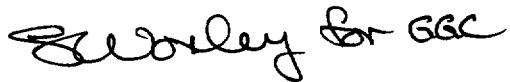
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The submittal of this summary report completes the DBNPS actions in response to Generic Letter 87-02, Supplement No. 1.

Should you have any questions or require additional information, please contact Mr. David H. Lockwood, Manager – Regulatory Affairs,  
at (419) 321-8450.

Sincerely yours,

A handwritten signature in black ink, appearing to read "G. G. G. for GGC". The signature is fluid and cursive.

AWB/s

Attachments

cc: J. E. Dyer, Regional Administrator, NRC Region III  
S. P. Sands, DB-1 NRC/NRR Project Manager  
K. S. Zellers, DB-1 Senior Resident Inspector  
Utility Radiological Safety Board

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Attachment 1  
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### **COMMITMENT LIST**

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station (DBNPS) in this document. Any other actions discussed in this document represent intended or planned actions by the DBNPS. They are described only as information and are not regulatory commitments. Please notify the Manager - Regulatory Affairs (419-321-8450) at the DBNPS of any questions regarding this document or associated regulatory commitments.

#### **COMMITMENTS**

None

#### **DUE DATE**

N/A

## Outliers Resolved Differently Than Previously Identified In The Summary Report

<b>Equipment No</b>	<b>Equipment Description</b>	<b>Outlier</b>	<b>Original Outlier Resolution</b>	<b>Final Outlier Resolution</b>
C-1	4.16 KV Switchgear	Seismic capacity of GE HFA relay is unknown.	Modification (MOD) 95-0026 is to replace the relay if test shows low seismic capacity.	MOD 95-0026 has been voided. Seismic testing of the relay per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.
C-3615	EDG 1 Control Panel	Seismic capacity of GE HFA relay is unknown.	MOD 95-0025 is to replace the relay if test shows low seismic capacity.	MOD 95-0025 has been voided. Seismic testing of the relay per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.
C-3616	EDG 2 Control Panel	Seismic capacity of GE HFA relay is unknown.	MOD 95-0025 is to replace the relay if test shows low seismic capacity.	MOD 95-0025 has been voided. Seismic testing of the relay per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.
C-5755C & D	Safety Features Actuation System (SFAS) Cabinets	Seismic capacity of the K1 relay and the power supply thermal switch are unknown.	MOD 95-0018 is to replace the relay and switch if test shows low seismic capacity.	MOD 95-0018 has been voided. Seismic testing of the relay and switch per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.
C-5756C & D	Safety Features Actuation System (SFAS) Cabinets	Seismic capacity of the K1 relay and the power supply thermal switch are unknown.	MOD 95-0018 is to replace the relay and switch if test show low seismic capacity.	MOD 95-0018 has been voided. Seismic testing of the relay and switch per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.

## Outliers Resolved Differently Than Previously Identified In The Summary Report

<b>Equipment No</b>	<b>Equipment Description</b>	<b>Outlier</b>	<b>Original Outlier Resolution</b>	<b>Final Outlier Resolution</b>
C5759D	Control Room Non-Nuclear Instrument X	Essential relay located in a cabinet with no existing documentation to establish seismic capacity.	MOD 95-0019 is to relocate relay to a different cabinet.	MOD 95-0019 replaced the relay with a solid state relay. Since solid state relays are considered inherently rugged, no seismic capacity evaluation is required. Therefore, this cabinet can be removed from the Safe Shutdown Equipment List (SSEL).
C-5762C & D	Safety Features Actuation System (SFAS) Cabinets	Seismic capacity of the K1 relay and the power supply thermal switch are unknown.	MOD 95-0018 is to replace the relay and switch if test shows low seismic capacity.	MOD 95-0018 has been voided. Seismic testing of the relay and switch per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.
C-5763C & D	Safety Features Actuation System (SFAS) Cabinets	Seismic capacity of the K1 relay and the power supply thermal switch is unknown.	MOD 95-0018 is to replace the relay and switch if test shows low seismic capacity.	MOD 95-0018 has been voided. Seismic testing of the relay and switch per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.
D-1	4.16 KV Switchgear	Seismic capacity of GE HFA relay is unknown.	MOD 95-0026 is to replace the relay if test shows low seismic capacity	MOD 95-0026 has been voided. Seismic testing of the relay per IEEE 344-1975 demonstrated seismic capacity exceeds seismic demand.

## Outliers Resolved Differently Than Previously Identified In The Summary Report

Equipment No	Equipment Description	Outlier	Original Outlier Resolution	Final Outlier Resolution
D1N	Essential -125VDC Distribution Panel Ch1	Due to either a small or no gap, and the presence of essential relays, striking with an adjacent cabinet could exist.	MOD 95-0043 to provide restraint. (Note: MOD number was incorrectly identified as MOD 95-0039 in Serial 2316)	MOD 95-0043 has been voided. FCR 86-0272 replaced the cabinet with seismically acceptable cabinets.
D2P	Essential +125VDC Distribution Panel Ch2	Due to either a small or no gap, and the presence of essential relays, striking with an adjacent cabinet could exist.	MOD 95-0038 to provide restraint.	MOD 95-0038 has been voided. FCR 86-0272 replaced the cabinet with seismically acceptable cabinets.
E-1	480V Essential Unit Substation	1) Anchor bolts do not meet GIP allowables. 2) Lifting hoist is free to slide.	MOD 95-0030 will modify existing anchorage and restrain the lifting hoist.	MOD 95-0030 has been voided. Further evaluation shows existing anchorage is acceptable. Procedure change made to address securing the hoist.
F-1	480V Essential Unit Substation	1) Anchor bolts do not meet GIP allowables. 2) Lifting hoist is free to slide.	MOD 95-0030 will modify existing anchorage and restrain the lifting hoist.	MOD 95-0030 has been voided. Further evaluation shows existing anchorage is acceptable. Procedure change made to address securing the hoist.
T-18	Spent Fuel Pool Demineralizer Tank	Applied loads exceed the anchor bolt allowables	Re-evaluate the loads on the anchors.	The inclusion of T-18 in the SSEL has been re-evaluated and found not to be required. Therefore, T-18 has been deleted from the SSEL.

## Outliers Resolved Differently Than Previously Identified In The Summary Report

Equipment No	Equipment Description	Outlier	Original Outlier Resolution	Final Outlier Resolution
YV2	125VDC 120VAC Inverter Ch2	Due to either a small or no gap, and the presence of essential relays, striking with an adjacent cabinet could exist.	MOD 95-0038 to provide restraint.	MOD 95-0038 has been voided. FCR 86-0272 replaced the cabinet with seismically acceptable cabinets.
YV3	125VDC 120VAC Inverter Ch3	Due to either a small or no gap, and the presence of essential relays, striking with an adjacent cabinet could exist.	MOD 95-0043 to provide restraint.	MOD 95-0043 has been voided. FCR 86-0272 replaced the cabinet with seismically acceptable cabinets.
YVA	UPS "YVA" Inverter	<ol style="list-style-type: none"> <li>1) Seismic Capacity of the undervoltage relay does not exceed seismic demand.</li> <li>2) 1/8" gap located under the base and load path to the floor is not adequate.</li> </ol>	<ol style="list-style-type: none"> <li>1) Replace relay. Ref. MOD 95-0027</li> <li>2) Modify existing base. Ref. MOD 95-0033</li> </ol>	MOD 95-0027 and MOD 95-0033 have been voided. The undervoltage trip function on the relay has been disabled. Therefore, this relay is no longer essential and YVA has been removed from the SSEL.
YVB	UPS "YVB" Inverter	<ol style="list-style-type: none"> <li>1) Seismic Capacity of the undervoltage relay does not exceed seismic demand.</li> <li>2) Load path to the floor is not adequate.</li> </ol>	<ol style="list-style-type: none"> <li>1) Replace relay. Ref. MOD 95-0027</li> <li>2) Modify existing base. Ref. MOD 95-0033</li> </ol>	MOD 95-0027 and MOD 95-0033 have been voided. The undervoltage trip function on the relay has been disabled. Therefore, this relay is no longer essential and YVB has been removed from the SSEL.