



Caroline Power & Light Company

SERIAL: NLS-89-308

NOV 27 1989

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & LPR-62

RESPONSE TO NRC GENERIC LETTER 89-21: REQUEST FOR INFORMATION CONCERNING
STATUS OF IMPLEMENTATION OF UNRESOLVED SAFETY ISSUE (USI) REQUIREMENTS

Gentlemen:

The information attached is provided in response to your Generic Letter 89-21 dated October 19, 1989 regarding the status of implementation of Unresolved Safety Issue (USI) requirements. Please note that the time provided to determine the status of implementation of all USIs as required by your request has been short. Therefore, the attached notations regarding the status of individual items are necessarily brief and cannot address all of the details of the more complex issues. The attached status has been compiled based upon a review of correspondence between CP&L and the NRC such as Safety Evaluation Reports (SER) and Inspection Reports, as well as other plant-specific documents.

If you have any questions concerning this information, please contact Mr. M. R. Oates at (919)546-6063.

Yours very truly.

L. I. Loflin
Manager
Nuclear Licensing Section

LIL/LSR/lbf (539CRS)
Attachment

cc: Mr. S. D. Ebner
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ENCLOSURE 1

UNRESOLVED SAFETY ISSUES FOR WHICH A FINAL TECHNICAL RESOLUTION HAS BEEN ACHIEVED

<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-1	Water Hammer	SECY 84-119 NUREG-0927, Rev. 1 NUREG-0953, Rev. 1 NUREG-0737 Item I.A.2.3 SRP revisions	ALL	C 3/81 (U1&2)	Note A1
A-2/ MPA D-10	Asymmetric Blowdown Loads on Reactor Primary Coolant Systems	NUREG-0609 GL 84-04, GDC-4	PWR	NA	
A-3	Westinghouse Steam Generator Tube Integrity	NUREG-0844 SECY 86-97 SECY 88-272 GL 85-02 (No requirements)	W-PWR	NA	
A-4	CE Steam Generator Tube Integrity	NUREG-0844, SECY 86-97 SECY 88-272 GL 85-02 (No requirements)	CE-PWR	NA	
A-5	B&W Steam Generator Tube Integrity	NUREG-0844, SECY 86-97 SECY 88-272 GL 85-02 (No Requirements)	B&W-PWR	NA	
E A-6	Mark I Containment Short-Term Program	NUREG 0408	Mark I-bWR	C 5/83 (U1) 6/80 (U2)	Note A6

* C - COMPLETE
 NC - NO CHANGES NECESSARY
 NA - NOT APPLICABLE
 I - INCOMPLETE
 E - EVALUATING ACTIONS REQUIRED

<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-7/ D-01	Mark I Long-Term Program	NUREG-0661 NUREG-0661 Suppl. 1 GL 79-57	Mark I-BWR	C 11/85 (U1) 10/84 (U2)	Note A7
A-8	Mark II Containment Pool Dynamic Loads	NUREG-0808 NUREG-0487, Suppl. 1/2 NUREG-0802 SRP 6.2.1.1C GDC 16	Mark II-BWR	NA	
A-9	Anticipated Transients Without Scram	NUREG-0460, Vol. 4 10 CFR 50.62	All	I 12/90 (U1) 2/90 (U2)	Note A9
A-10/ MPA B-25	BWR Feedwater Nozzle Cracking	NUREG-0619 Letter from DG Eisenhut dated 11/13/80 GL 81-21	BWR	I 3/90 (U1&2)	Note A10
A-11	Reactor Vessel Material Toughness	NUREG-0744, Rev. 1 10 CFR 50.60/ 82-26	All	NA	Note A11
A-12	Fracture Toughness of Steam Generator and Reactor Coolant Pump Supports	NUREG-0577, Rev. 1 SRP Revision 5.3.4	PWP	NA	
A-17	Systems Interactions	Ltr: DeYoung to licensees - 9/77 NUREG-1174, NUREG-1229, NUREG/CR-3922, NUREG/CR-4761, NUPEG/CR-4470, GL 89-18 (No requirements)	All	I 8/92 (U1&2)	Note A17
A-24/ MPA B-60	Qualification of Class 1E Safety-Related Equipment	NUREG-0588, Rev. 1 SRP 3.11 10 CFR 50.49 GL 82-09, GL 84-24 GL 85-15	All	C 11/85 (U1&2)	Note A24

<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-26/ MPA B-04	Reactor Vessel Pressure Transient Protection	DOP Letters to Licensees 8/76 NUREG-0224 NUREG-0371 SRP 5.2 GL 88-11	PWR	NA	
A-31	Residual Heat Removal Shutdown Requirements	NUREG-0606 RG 1.113, RG 1.139 SRP 5.4.7	All OLs After 01/79.	NA	
A-36/ C-10, C-15	Control of Heavy Loads Near Spent Fuel	NUREG-C612 SRP 9.1.5 GL 81-07, GL 83-42, GL 85-11 Letter from DG Eisenhut dated 12/22/80	All	C 5/84 (U1&2) 6/85 (U1&2)	Note A36
A-39	Determination of SRV Pool Dynamic Loads and Pressure Transients	NUREG-0802 NUREGs-0763,0783,0802 NUREG-0661 SPP 6.2.1.1.C	BWR	C 10/85 (U1) 9/84 (U2)	Note A39
A-40	Seismic Design Criteria	SRP Revisions, NUREG/ CR-4776, NUREG/CR-0054, NUREG/CR-3480, NUREG/ CR-1582, NUREG/CR-1161, NUREG-1233, NUREG-4776 NUREG/CR-3805 NUREG/CR-5347 NUREG/CR-3509	All	NA	Note A46
A-42/ MPA B-05	Pipe Cracks in Boiling Water Reactors	NUREG-0313, Rev. 1 NUREG-0313, Rev. 2 GL 81-03, GL 88-01	BWR	I 12/90 (U1) 2/90 (U2)	Note A42

<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-43	Containment Emergency Sump Performance	NUREG-0510, NUREG-0859, Rev. 1 NUREG-0897, R.G.1.82 (Rev. 0), SRP 6.2.2 to 85-22 No Requirements	All	NC	
A-44	Station Blackout	RG 1.155 NUREG-1032 NUREG-1109 10 CFR 50.63	All	I	Note A44
A-45	Shutdown Decay Heat Removal Requirements	SECY 88-260 NUREG-1269 NUREG/CR-5230 SECY 88-260 (No requirements)	All	E 8/92 (U1&2)	Note A45
A-46	Seismic Qualification of Equipment in Operating Plants	NUREG-1030 NUREG-1211/ GL 87-02, GL 87-03	All	I 5/92 (U1) 1/93 (U2)	Note A46
A-47	Safety Implication of Control Systems	NUREG-1217, NUREG-1218 GL 89-19	All	E	Note A47
A-48	Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment	10 CFR 50.44 SECY 89-122	All, except PWRs with large dry containments	C 10/88 (U1) E 4/90 (U2)	Note A48
A-49	Pressurized Thermal Shock	RGs 1.154, 1.99 SECY 82-465 SECY P3-288 SECY 81-687 10 CFR 50.61/ GL 88-11	PWR	NA	

COMMENTS

- A-1 Operator awareness training was action for closing issue . . . keepfills were not backfit or add-ons.
- A-6 Vent header deflectors installed to reduce loads as interim measure pending A-7 resolution.
- A-7 Dates show modifications completed, SER dated 3/19/84 accepts our 10/1/82 analysis report.
- A-9 The remaining modifications for each unit consist of replacing the existing ARI ATTUs manufactured by Rosemount with ATTUs made by GE. The modifications are scheduled for Brunswick-1 Reload 7 and Brunswick-2 Reload 8. The completion dates provided are the currently scheduled end dates for these outages. Design and schedule were approved by the NRC in a letter dated August 8, 1988.
- An additional design question was raised by the NRC in a letter dated August 21, 1989. CP&L responded to this question in a letter dated October 23, 1989. It is the Company's position that the ARI system as designed fulfills the requirements of the ATWS Rule and, as such, no further modifications will be necessary. Resolution of this item is pending.
- A-10 Instrumentation to evaluate the need for feedwater low flow controller installation and RWCU Re-route installed. Data collection is in progress with evaluation of the need to install modifications currently scheduled to be completed by 3/31/90. If modifications are required, the schedule will be determined.
- Spargers (Feedwater Nozzles) are being inspected in accordance with the schedule established in NUREG-0619, Table 2. No sparger replacement made to date. If inspections indicate the need for replacement, it will be scheduled.
- This plan and schedule is based on our letter dated March 22, 1985. No response from the NRC was received.
- A-11 Charpy and drop weight tests applied to BSEP Units 1 and 2 design were considered adequate to assure sufficient fracture toughness for the design life of the plant where the peak fast neutron fluence will be less than 2×10^{18} . Confirmation will be provided by the use of full Charpy curves at 8 EFPY for Unit 1 and 10 EFPY for Unit 2.
- A-17 Guidance of Generic Letter 89-18 to be considered in completion of the Brunswick IPEs. The status date is the currently scheduled completion date for the Brunswick IPEs as committed to in our letter (NLS-89-290) dated 10/31/89.
- A-24 Compliance required in November, 1985 or shutdown until compliance is met. Unit 1 down for scheduled outage . . . Unit 2 shutdown until compliance was achieved.

COMMENTS (cont'd)

- A-36 The completion date for Phase 1 represents the NRC's SER for Brunswick Phase 1. The Phase 2 completion date is the date of Generic Letter 85-11, 6/28/85, which informed licensees that Phase 2 was not necessary due to implementation of Phase 1.
- A-39 7/85 SER for Amendment 85/111 issued; incorporates suppression pool temp monitoring . . .
- A-40 Enveloped by USI A-46.
- A-42 Inlet Riser Piping & Nozzle Safe End Replacement in process for U2: U1 replacement scheduled for 1990 outage. HWC system in place to help mitigate IGSCC . . . awaiting amendment for HWC from NRC.
- A-44 Implementation of modifications and procedure changes is required within 2 years after notification provided by the Director, NRR of acceptance of Brunswick proposal. This schedule is in accordance with 10CFR50.63(c)(3). The Brunswick response was submitted on 3/3/89 and revised on 10/10/89.
- A-45 This issue will be addressed through completion of plant specific IPEs. The Brunswick IPEs are scheduled for completion by 8/92 as committed to in our letter (NLS-89-290) dated October 31, 1989.
- A-46 The NRC and SQUG are working jointly in the development of Generic Implementation Procedures (GIP). The implementation schedule for Brunswick is contingent on NRC approval of Revision 3 to the GIP. Currently, Revision 2 is in review with the NRC. In a letter dated October 6, 1988, CP&L committed to complete walkdowns for Brunswick-1 during Reload 8 (scheduled to begin 2/92 and end 5/92) and for Brunswick-2 during Reload 10 (scheduled to begin 9/92 and end 1/93). This schedule may be delayed if NRC approval of the GIP is not completed on a timely schedule. Any work resulting from the walkdowns will be prioritized and scheduled for action as appropriate.
- A-47 Response to GL89-19 will be submitted by March 19, 1990.
- A-48 The NRC SER was issued on 8/18/89 with a supplement on 10/27/89. The installation schedule was approved in an NRC letter dated 12/17/87. The BSEP-1 completion date was the end of Reload 6 plus 2 months. The projected BSEP-2 completion date is the end of Reload 8 plus 2 months.

DBB/rlj (534CRS)