CP&L

Carolina Power & Light Company

AUG 3 0 1984

SERIAL: NLS-84-388

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-324/LICENSE NO. DPR-62
ENVIRONMENTAL QUALIFICATION OF SAFETY-RELATED ELECTRICAL EQUIPMENT
SUPPLEMENTAL EXTENSION REQUEST PER 10 CFR 50.49(g)

Dear Mr. Denton:

SUMMARY

By letter dated April 25, 1984 (Serial No. NLS-84-126), Carolina Power & Light Company (CP&L) submitted a request for a schedular extension to the requirements of 10 CFR 50.49(g) for the Brunswick Steam Electric Plant, Unit No. 2. The letter requested an extension until November 30, 1985 to complete the environmental qualification of certain Brunswick-2 equipment. The purpose of this letter is to supplement our April 25, 1984 request to include additional items for which an extension until November 30, 1985 is needed to complete the qualification.

DISCUSSION

Since the submittal of our April 25, 1984 extension request, CP&L has continued to follow a deliberate path to complete final environmental qualification of safety-related electrical equipment as required by 10 CFR 50.49. The items listed in Attachment 1 were not included in our April 25, 1984 request because CP&L anticipated completion of qualification testing or receipt of qualification documentation by the end of the current outage. Due to the reasons stated more fully in Attachment 2, CP&L now finds it necessary to request an extension of these additional items.

During recent review of our April 25, 1984 deferral request, CP&L identified several items in our original request for deferral due to installation problems for which further clarification is needed, one item which was inadvertently omitted from our original request, and a number of solenoid valves and position switches for which our approach has changed to replacement in lieu of testing. A new list of replacement items to be deferred due to installation problems is provided as Attachment 3 with the revisions indicated by change bars in the right-hand margin. A brief description of these changes is provided in Attachment 4.

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Carolina Power & Light Company has proceeded with the installation of plant modifications, testing of certain equipment, and acquisition of documentation necessary to establish the qualification of certain safety-related electrical equipment during the current Brunswick-2 refueling outage. Brunswick-2 is presently scheduled to begin start-up on or about September 21, 1984. However, CP&L will be unable to complete the qualification efforts for the items identified in this request by the end of the current outage and, therefore, requests an extension until November 30, 1985 to complete qualification of this equipment.

CONCLUSION

Carolina Power & Light Company believes it has made a good faith effort to complete work required by 10 CFR 50.49 within the schedule provided in paragraph (g) of the rule. However, based on the reasons provided in Attachments 2 and 4, CP&L requests that the additional items identified be included in our previous extension request of April 25, 1984.

In support of this supplemental request for deferral, a reference to previously submitted justifications for continued operation (for each piece of equipment) is also included in Attachments 1 and 3. Since nothing in this supplemental extension request serves to change the plant conditions or parameters from those previously justified, CP&L reaffirms the previously submitted justifications for continued operation.

Brunswick-2 start-up is presently scheduled to begin on or about September 21, 1984; therefore, CP&L requests your approval of our schedule extension request before this date in order to preclude impacting start-up of the unit. Should you have any questions concerning this submittal, please contact Mr. S. R. Zimmerman at (919) 836-6242.

Yours very truly,

A. B. Cutter - Vice President Nuclear Engineering & Licensing

WRM/ccc (528WRM)

Attachments

cc: Mr. D. O. Myers (NRC-BNP)

Mr. J. P. O'Reilly (NRC-RII)

Mr. M. Grotenhuis (NRC)

BRUNSWICK 2 ADDITIONAL ITEMS TO BE DEFERRED DUE TO PROCUREMENT AND TESTING PROBLEMS

ITEM	PLANT ID #	5-20-83 SCEWS #	REMARKS	JCO INDEX NUMBER
Terminal Lug	Terminations Outside Containment	2004, 5	Amp	151
Terminal Block	Terminations Outside	2117, 8	GE	179, 181
	Containment	2096	Curtis	182
Electric Motor (Pump Drives)	E11-C001A-D	2112	GE	138
Motor Control Centers, including Switches and Relays	Motor Control Centers and Various Switches and Relays Ontside Containment	2121 2123–38	GE	132,142,144,145, 146,147
Position Switch	CAC-V47,8,55,6 B32-F020	2153, 4 2144	Honeywell Honeywell	125,128 127
	Various for RIP System	2145-52	Honeywell	126,128,129
	CAC System	2079-84	Honeywell/ Bettis	116,117,118
Control Switches	DL8-RS1, DL9-RS1 DM2-RS1, DM4-RS1 DM5-RS1, DM7-RS1 DM8-RS1, DN6-RS1 DK8-RS1, DK9-RS1 DL0-RS1, DL1-RS1 DL2-RS1, DL7-RS1 DS4-RS1, DH3-RS1 DH2-RS1, B43-RS1 B50-RS1, B49-RS1 B11-RS1, B41-RS1 B45-RS1, B46-RS1 B47-RS1, B11-RS and Various Valve Control Switches	2123-35	Honeywell	130,131,133,134
Control Switches	B21-CS-3327, 3329,3345,3412	2141, 2	Honeywell	135

ITEM	PLANT ID #	5-20-83 SCEWS #	REMARKS	JCO INDEX NUMBER
Cable	Raychem Control Cable	2239	Kaychem	Justified in our letter of 12/31/82 (Eury- Vassallo) 164
HPCI System Components consisting of valves, switches, motors, and controls	l Solenoid l Motor various switches and controls attached to HPCI skid	2275	Terry, Tuthill	141,155

TERMINAL LUGS, TERMINAL BLOCKS, POSITION SWITCHES, AND CONTROL SWITCHES

Carolina Power & Light Company requests that these items be deferred due to testing problems. The testing work has not progressed as CP&L originally anticipated and will not be completed by the end of the current outage.

Carolina Power & Light Company has entered into a contract for testing, and test plans are in the second review and approval stage. We presently expect the first phase of testing to begin within 30 days. At present, CP&L anticipates receipt of the testing reports by June 1985.

ELECTRIC MOTORS, MOTOR CONTROL CENTERS, SWITCHES, RELAYS, AND HIGH PRESSURE COOLANT INJECTION SYSTEM COMPONENTS

Carolina Power & Light Company requests that these items be deferred due to procurement problems. We have requested the equipment supplier (General Electric) to provide qualification reports and analyses for the above original plant equipment. Carolina Power & Light Company expected to receive the information prior to the end of the current outage; however, it no longer appears that the necessary qualification information will be available by that time. At present, CP&L anticipates that the necessary qualification information will be available by April 1985.

CABLES

Carolina Power & Light Company requests that these items be deferred due to testing problems. Although the actual testing has been successfully completed for the Raychem cable, the final testing reports and other supporting information have not been received by CP&L. At present, CP&L anticipates receiving the final testing reports by the end of 1984.

UNIT 2
REPLACEMENT ITEMS TO BE DEFERRED DUE TO INSTALLATION PROBLEMS

ITEM	PLANT ID #	5-20-83 SCEWS #	REMARKS	JCO INDEX NUMBER
Time Delay Relay	DBO-74-17	2123	Agastat	143
Solenoid Valve	B32-F020	2012	ASCO	45
Solenoid Valve	CAC-PV-1260-1,2	2013	ASCO	35
Solenoid Valve	CAC-PV-3439,40	2014,14-1	ASCO	22 (Note 1)
Solenoid Valve	CAC-SV-4222,3	2015	ASCO	23,24
Solenoid Valve	CAC-V4,5,8	2010,7	ASCO	25, 26, 53
Solenoid Valve	CAC-V6	2018,9	ASCO	36,38
Solenoid Valve	CAC-V7	2020	ASCO	52
Solenoid Valve	CAC-V9	2021	ASCO	49
Solenoid Valve	CAC-V10	2022	ASCO	37
Solenoid Valve	CAC-V15	2023	ASCO	36
Solenoid Valve	CAC-V47,55,56	2024,5	ASCO	29,30
Solenoid Valve	CAC-V48	2026,7	ASCO	45,50
	CAC-V49,50	2028	ASCO	44
Solenoid Valve	C12-F110A, B	2030	ASCO	44
Solenoid Valve	E11-F053A,B	2032	ASCO	30
Solenoid Valve	G16-F003,04,19,30	2033	ASCO	45
Solenoid Valve	TD-SV-3598,3601	2051	ASCO	22 (Note 1)
Solenoid Valve	2(A-D)-BFIV-RB	2052	ASCO	39
Solenoid Valve	Z(A-D)-Briv-RB	2032	11000	
Pressure Transmitter	CAC-PT-1257-2	2055	Bailey	67
Flow Transmitter	VA-FT-2577	2056	Bailey	93
Terminal Blocks	Penetration Boxes	2097	Curtis	182
Motor and Breaker	NP6,7-MOT-M1	2098, 2155-56	Doerr/ITE	(Note 2)
Motor	NP6,7-MOT-M2	2099	Doerr	(Note 2)
Temperature Switch	B21-TS-N010A-D	2101	Fenwall	109
Temperature Switch	E41-TS-3314	2102	Fenwall	110
Temperature Switch	E41-TS-3315-8,3354	2103	Fenwall	112
Temperature Switch	E41-TS-3488,9	2104	Fenwall	107
Temperature Switch	E51-TS-3319-23, 3355	2105,6	Fenwall	108,111
Temperature Switch	E51-TS-3487	2107	Fenwall	108

ITEM	PLANT ID #	5-20-83 SCEWS #	REMARKS	JCO INDEX NUMBER
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Pressure Transmitter	C32-PT-N005A,B	2110	GE	68
Radiation Detector	D12-RE-NOIOA, B	2111	GE	148
Pressure Transmitter	E11-PDT-NOO2A,B	2114	GE	69
Flow Transmitter	E41-FT-N008	2116	GE	95
Terminal Block and	Penetration Boxes	2119	GE	180
Lugs	Inside Containment	2006	Amp	151
Solenoid Valve	VA-SV-936A,B	2157	Johnson Svcs.	34
Temperature Switch	VA-TS-936A-F	2158	Johnson Svcs.	113,114
Position Switch	VA-ZS-936A,B	2159	Johnson Svcs.	123
Limit Switch	C12-F010-L	2164-1	NAMCO	(Note 3)
Limit Switch	E51-C002-LS4	2166	National ACME	(Note 5)
Accelerometer	B21-FT-4157 to 67	2168	NOT	(Note 4)
		International		
Motorized Vlv Actuator	B21-F016	2184	Limitorque	20
Motorized Vlv Actuator	E11-F022	2184	Limitorque	20
Motorized Vlv Actuator	CAC-V22	2188	Limitorque	1
Motorized Vlv Actuator	E51-F007	2222	Limitorque	20
Motorized Vlv Actuator	E51-F019	2225	Limitorque	17
Motor Termination	5KV Outside	2092	Okonite/	172
11000	Containment		Burndy	
RTD	CAC-TE-1258-1 to 13 & 22,23,24	2235	PYCO	100
RTD	CAC-TE-1258-14,21	2236	PYCO	100
KTD	CAC-TE-1258-17,18, 19,20	2237	PYCO	100
Float Switch	E51-C002-H	2263	Square D	(Note 5)
Pressure Switch	E51-PSL-N006	2270	Static-O- Ring	62
Level Transmitter	B21-LITS-N026A,B	2279	Yarway	85

LTEM	PLANT ID #	5-20-83 SCEWS #	REMARKS	JCO INDEX NUMBER
Reactor Instrument Penetration System Components Consisting of; Solenoid Vlvs. Pressure Switches, Position Switches and Flow Switches	151 Solenoids 25 Press. SW 95 Pos. SW 42 Flow SW	2034-47 2069,70 2094,5 2145,-9 2150,-2 2160,1	Manuf. by ASCO, Barksdale, Cherry Electric Magnetrol and Honeywell	27,28,35,41,42, 47,48, ASCO; 77, 78, Barksdale; 94,122, Cherry Elec.; 91, Magnetrol; 126, 128,129, Honeywell
Standby Gas Treatment System Components consisting of; Switches, Indicator Lights, Various MCC Components, Limit Switches	4 Switches 8 Indicator Lights 8 MCC Components 4 Limit Switches	2084 2090 2100 2165	Manuf. by; Bettis, Bradley, Farr, NAMCO	116, Bettis; 156, Farr, Bradley; 115, NAMCO

NOTES:

- As noted in previous submittals, the same justification is applicable to all existing installed ASCO solenoid valves.
- 2. JCO supplied as page VII-17 of CP&L's 5/20/83 submittal.
- 3. JCO supplied as page VII-11 of CP&L's 5/20/83 submittal.
- 4. JCO supplied as page VII-12 of CP&L's 5/20/83 submittal.
- 5. JCO supplied as page VII-18 of CP&L's 5/20/83 submittal.

MOTOR AND BREAKER

Carolina Power & Light Company previously provided a justification for continued operation for both the motor and associated power supply (breaker). Our intent was to imply that the extension request applied to both the motor and power supply. During our recent review of the April 25, 1984 request, we determined that clarification of this position might be needed. Therefore, Attachment 3 has been revised to more clearly refer to both the motor and power supply.

TERMINAL BLOCK AND LUGS

Carolina Power & Light Company requests that the terminal lugs be deferred due to installation problems. Our intent was to imply that the extension request applied to both the terminal blocks and associated lugs. During our recent review of our April 25, 1984 request, we determined that clarification of this position might be needed. Therefore, Attachment 3 has been revised to more clearly refer to both the terminal block and lugs.

RIP SYSTEM SOLENOIDS VALVES AND POSITION SWITCHES

Carolina Power & Light Company requests that these items be deferred due to the installation problems described in our April 25, 1984 request. We intended at the time of our April 25, 1984 submittal to establish, via testing, a qualified life for the reactor instrumentation penetration (RIP) system solenoid valves and position switches. The approach would have permitted a phased replacement of the approximately 66 RIP system isolation valves (and associated 124 solenoid valves and 33 position switches) with nonelectrical excess flow check valves (EFCVs). This effort would have extended over an approximate five year period with the solenoid valves and position switches within a qualified status. However, CP&L has recently determined that it will be more effective to expedite replacement of the RIP system valves with non-electrical EFCVs in conjunction with our planned Environmental Qualification program. As this work cannot be completed during the current outage, due to installation problems described in our April 25, 1984 submittal, CP&L requests these additional solenoid valves and position switches be included in our extension request.

MOTOR TERMINATIONS (5 kV OUTSIDE CONTAINMENT)

Carolina Power & Light Company requests that these items be deferred due to the installation problems as described in our April 25, 1984 submittal. Carolina Power & Light Company inadvertently omitted these items from our April 25, 1984 request.