



Carolina Power & Light Company

SERIAL: NLS-84-004

January 12, 1984

Mr. Darrell G. Eisenhut, Director
Division of Licensing
United States Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324
LICENSE NOS. DPR-71 AND DPR-62
FAST COLD STARTS OF DIESEL GENERATORS

Dear Mr. Eisenhut:

Your letter dated December 16, 1983 (Generic Letter 83-41) requested Carolina Power & Light Company (CP&L) to provide information concerning fast cold starts of diesel generators for the Brunswick Steam Electric Plant. In response to your request, please find the enclosed information.

The Brunswick Steam Electric Plant diesel generators utilize a prewarning and prelubrication system while the generators are in standby. A heater circulating pump circulates the cooling jacket water through a 40 KW electric heaters and the cooling system to maintain the engine temperature between 130°F and 150°F. Additionally, a prelube pump is provided which directs engine lube oil to the engine's bearings for 20 minutes out of every hour, when the diesel generator is in standby. During the remaining 40 minutes, lube oil flow is directed through filters and a 15 KW electric heater to maintain the lube oil temperatures between 145°F and 155°F. Thus, the Brunswick Steam Electric Plant diesel generators are not subject to fast cold starts as described in your letter. However, the diesel generators are subjected to fast starts which require loading the diesel generators prior to stabilization of operating temperatures.

Enclosure 1 provides the total number of diesel generator start from December 1, 1982 to November 30, 1983. The diesel generator starts have been categorized from January 1, 1983 to May 31, 1983. The additional information on fast start frequency for the remaining months, along with CP&L's assessment of the effects of frequent fast cold starts on diesel generator reliability and availability, will be provided as soon as the data can be compiled.

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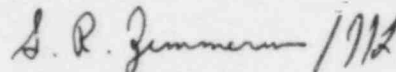
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Mr. Darreil G. Eisenhut

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Should you have any questions concerning this information, please contact a member of our Licensing staff.

Yours very truly,

A handwritten signature in dark ink, appearing to read "S. R. Zimmerman" followed by a stylized flourish or date "1/12".

S. R. Zimmerman
Manager

Nuclear Licensing Section

MAT/pgp (9230NLU)
Enclosure

cc: Mr. D. O. Myers (NRC-BSEP)
Mr. J. P. O'Reilly (NRC-RII)
Mr. M. Grotenhuis (NRC)
Mr. D. B. Vassallo (NRC)

ENCLOSURE 1

DIESEL GENERATOR STARTS

Total starts for each Diesel Generator from December 1, 1982 through November 30, 1983:

D/G #1	88 starts
D/G #2	100 starts
D/G #3	54 starts
D/G #4	84 starts

Categorized Diesel Generator starts from January 1, 1983 through May 31, 1983:

D/G #1	11 starts for surveillance activities	(55%)
	4 starts for maintenance activities	(20%)
	5 starts for actual demand	(25%)
	<u>20</u> starts total	
D/G #2	14 starts for surveillance activities	(66%)
	2 starts for maintenance activities	(10%)
	5 starts for actual demand	(24%)
	<u>21</u> starts total	
D/G #3	11 starts for surveillance activities	(58%)
	3 starts for maintenance activities	(16%)
	5 starts for actual demand	(26%)
	<u>19</u> starts total	
D/G #4	9 starts for surveillance activities	(45%)
	6 starts for maintenance activities	(30%)
	5 starts for actual demand	(20%)
	<u>20</u> starts total	