

FROM: Carolina Power & Light Company
Raleigh, N.C. 27602
E.E. Utley

TO: Dr. Peter A. Norris

CLASSIF: U POST OFFICE
REG. NO:

DESCRIPTION: (Must Be Unclassified)
Ltr re their 9-29-71 ltr...providing
addl info re ECCS Performance Rpt for
H.B. Robinson Unit 2.....

ENCLOSURES:

REMARKS:

DATE OF DOCUMENT: Nov. 5, 1971		DATE RECEIVED: Nov. 9, 1971		NO.:	
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ACTION NECESSARY <input type="checkbox"/>		CONCURRENCE <input type="checkbox"/>		DATE ANSWERED:	
NO ACTION NECESSARY <input type="checkbox"/>		COMMENT <input type="checkbox"/>		BY:	
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DISTRIBUTION:				Dr. Hanauer	
Reg File Cy				Dr. Mann	
AEC PDR				E.G. Case	
Compliance (2)				Rosen	
OGC-Rm-P-506-A				N. Lauben	
Muntzing & Staff				B. Colmar	
D. Thompson				K. Kniel	
Morris/Schroeder				DO NOT REMOVE	
Skovholt					
DTIE (Laughlin)				ACKNOWLEDGED	
NSIC (Buchanan)					
DeYoung				20113	
Novak					
Ross					

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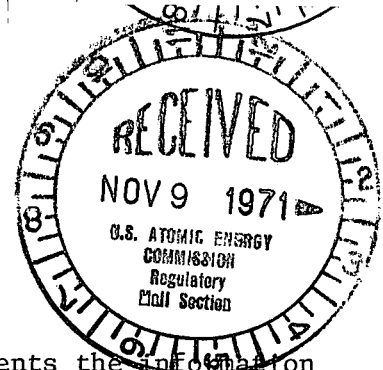
Carolina Power & Light Company

Raleigh, North Carolina 27602

November 5, 1971

Dr. Peter A. Morris
Division of Reactor Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

H. B. ROBINSON UNIT NO. 2
LICENSE DPR-23
EMERGENCY CORE COOLING SYSTEM



Dear Dr. Morris:

As requested by your staff, this letter supplements the information submitted in Carolina Power & Light Company's letter of September 29, 1971 concerning the Emergency Core Cooling System of H. B. Robinson Unit No. 2.

The report titled "H. B. Robinson Unit No. 2 Emergency Core Cooling Performance" forwarded by the September 29, 1971 letter assumed no hot leg injection for the large break spectrum. This assumption was necessary because the phenomena of steam-water counterflow and steam condensation associated with hot leg injection is not defined sufficiently to allow a precise and quantifiable evaluation of the effect of hot leg injection on the clad temperature transient of the peak power fuel rod.

It is, therefore, proposed that the automatic safety injection circuit be modified to eliminate hot leg injection during the accident phase but to retain the capability for long-term post-accident injection. The automatic "S" signal would be removed from valves 866A and 866B; however, the remote manual capability using control room switches would be retained. To prevent inadvertent actuation of these valves prior to or during the accident phase, the breakers could be administratively locked out at the load centers.

The elimination of the automatic hot leg injection will not make the consequences of small breaks in the reactor coolant system unacceptable. A complete re-analysis of small breaks with the hot leg injection valved off is in progress and will be completed by mid-November, 1971 and submitted to the AEC for review.

As suggested by your staff and in the interest of resolving the Emergency Core Cooling System concerns expeditiously, the following Technical Specification changes are requested. These changes will ensure that, at a core power rating of 2200 MWt, the plant can operate without exceeding the interim acceptance criteria.

November 5, 1971

<u>Section</u>	<u>Requested Change</u>
Basis of Section 2.0 on bottom of page 2.1-3	$F_q^N = 2.75 : F_{\Delta H}^N = 1.66$
3.10.2.1.b	$F_q^N = 2.75 : F_{\Delta H}^N = 1.66$
3.3.1.2.e	Add at end of paragraph. "To comply with AEC interim acceptance criteria for the performance of the emergency core cooling system, automatic initiation of the two hot leg injection paths by a "S" signal was de-activated. Remote manual capability using control room switches has been retained for post-accident injection (8)."
Basis of Section 3.3 in third paragraph on page 3.3-8	Add to end of third paragraph after "Figure 6.2-8 of FSAR and supplemental material filed with AEC concerning interim acceptance criteria for emergency core cooling system."
Basis of Section 3.3 in list of references on page 3.3-9	Add "(8) CP&L letter of November 5, 1971, et al".
Basis of Section 4.5, second paragraph on page 4.5-3	Modify numbers in parentheses to (1, 2, 4).
Basis of Section 4.5 in list of references on page 4.5-4	Add "(4) CP&L letter of November 5, 1971, et al".

Yours very truly,

E. E. Utley
Manager

Generation & System Operations

EEU:lgb

cc: Mr. C. D. Barham
Mr. G. P. Beatty
Mr. N. B. Bessac
Mr. J. A. Jones