

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL  
(TEMPORARY FORM)

CONTROL NO: 7868

FILE: \_\_\_\_\_

FROM: Carolina Power & Light Company Raleigh, N. C. 27602 E. E. Utley			DATE OF DOC 10-23-73	DATE REC'D 10-29-73	LTR X	MEMO	RPT	OTHER
TO: J. F. O'Leary			ORIG 3 signed	CC	OTHER	SENT AEC PDR X SENT LOCAL PDR X		
CLASS	UNCLASS XXXX	PROP INFO	INPUT	NO CYS REC'D 40		DOCKET NO: 50-261		
DESCRIPTION: Ltr requesting change in Tech Specs, regarding current precautions, Limitations & Setpoints... .....w/ATTACHED ( table 3.5-1 )				ENCLOSURES:				
PLANT NAME: H. B. Robinson Unit 2								

FOR ACTION/INFORMATION 10-29-73 GC

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INTERNAL DISTRIBUTION

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EXTERNAL DISTRIBUTION

✓1 - LOCAL PDR Hartville, S. C.	(1)(2)(10)-NATIONAL LAB'S	1-PDR-SAN/LA/NY
✓1 - DTIE(ABERNATHY)		1-GERALD LELLOUCHE
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1 - ASLB(YORE/SAYRE/ WOODARD/"H" ST.	1-W. PENNINGTON, Rm E-201 GT	1-AGMED(Ruth Gussman)
✓16 - CYS ACRS <del>XXXXXX</del> SENT TO LIC. ASST. 10-29-73 TEETS	1-CONSULTANT'S NEWMARK/BLUME/AGBABIAN	RM-B-127, GT.
	1-GERALD ULRIKSON...ORNL	1-RD..MULLER..F-309 GT



Carolina Power & Light Company

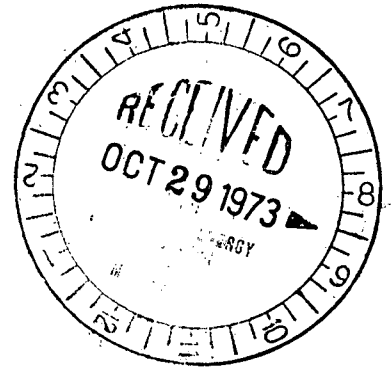
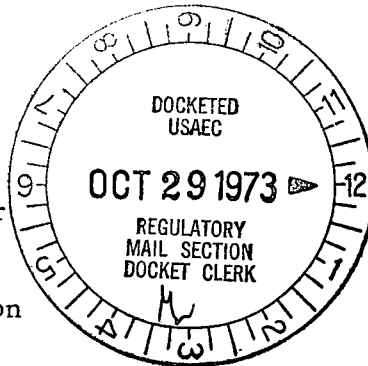
October 23, 1973

Regulatory Docket File

File: NG 3514

Serial: NG-73-508

Mr. John F. O'Leary, Director  
Directorate of Licensing  
Office of Regulation  
U. S. Atomic Energy Commission  
Washington, D. C. 20545



Dear Mr. O'Leary:

50-261

H. B. ROBINSON UNIT NO. 2

LICENSE DPR-23

TECHNICAL SPECIFICATIONS CHANGE REQUEST

In the operation of the Robinson Plant, we have experienced spurious safety injections during plant shutdown and startup due to steam line flow differential pressure signal variations caused by instrument drift at very low power levels. A recent letter from the reactor vendor, Westinghouse, states that other Westinghouse PWR plants have had similar problems.

The current "Precautions, Limitations and Setpoints" document and the Technical Specifications set the limiting values at a differential pressure equivalent to 20% above the normal steam flow values at zero and full turbine load. A flow exceeding this condition coincident with either a "Low Tavg," or a "Low Steam Line Pressure" will actuate safety injection.

To eliminate the problem of spurious safety injection actuations during plant startups or unloadings, Westinghouse has developed a new "High Steam Flow" setpoint curve which can be accommodated by the present hardware (see figure). The setting for the differential pressure would be a constant from zero to 20% turbine load and a linear function from 20% to 100% turbine load. The zero and 20% load settings would represent a differential pressure equivalent to 40% steam flow at zero load steam pressure; the 100% load setting would represent a differential pressure equivalent to 110% steam flow at 100% load steam pressure. This new setting would be more conservative than the current values throughout the higher load range while through low and zero load conditions the new setpoints will be outside the range of normal differential pressure signal variation and will therefore eliminate spurious actuation of safety injection. This change does not affect the results of steam line break analyses of the Final Safety Analysis Report or the Fuel Densification Report for H. B. Robinson Unit No. 2.

7868

In order to allow for implementation of this setpoint change, Carolina Power & Light Company requests the following revision to the Technical Specifications:

Section

Requested Changes

3.5 Under Setting Limits, change the first sentence of Paragraph 5 on Page 3.5-4 to read as follows: "The high steam line flow limit is set at approximately 40% of the steam flow from no load to 20% load and at 110% of full steam flow at full load, with the steam flow differential pressure measurement linearly programmed between 20% load and 100% load in order to protect against large steam line break accidents."

Under Engineered Safety Feature System Initiation Instrument Setting Limits (Table 3.5-1), change Item No. 5 to read as follows:


<u>"No.</u>	<u>Functional Unit</u>	<u>Channel Action</u>	<u>Setting Limit</u>
5	High Steam Flow in 2/3 Steam Lines	a. Safety Injection* b. Steam Line Isolation	<ΔP Equivalent to 40% of full steam flow (at zero load), <ΔP equivalent to 40% of full steam flow (at 20% load), <ΔP equivalent to 110% of full steam flow (at full load), ΔP Linear from 20% to 100% load.
	Coincident with Low Tavg or Low Steam Line Pressure		>541°F Tavg >600 psig steam line pressure"

Your consideration of this proposal is appreciated.

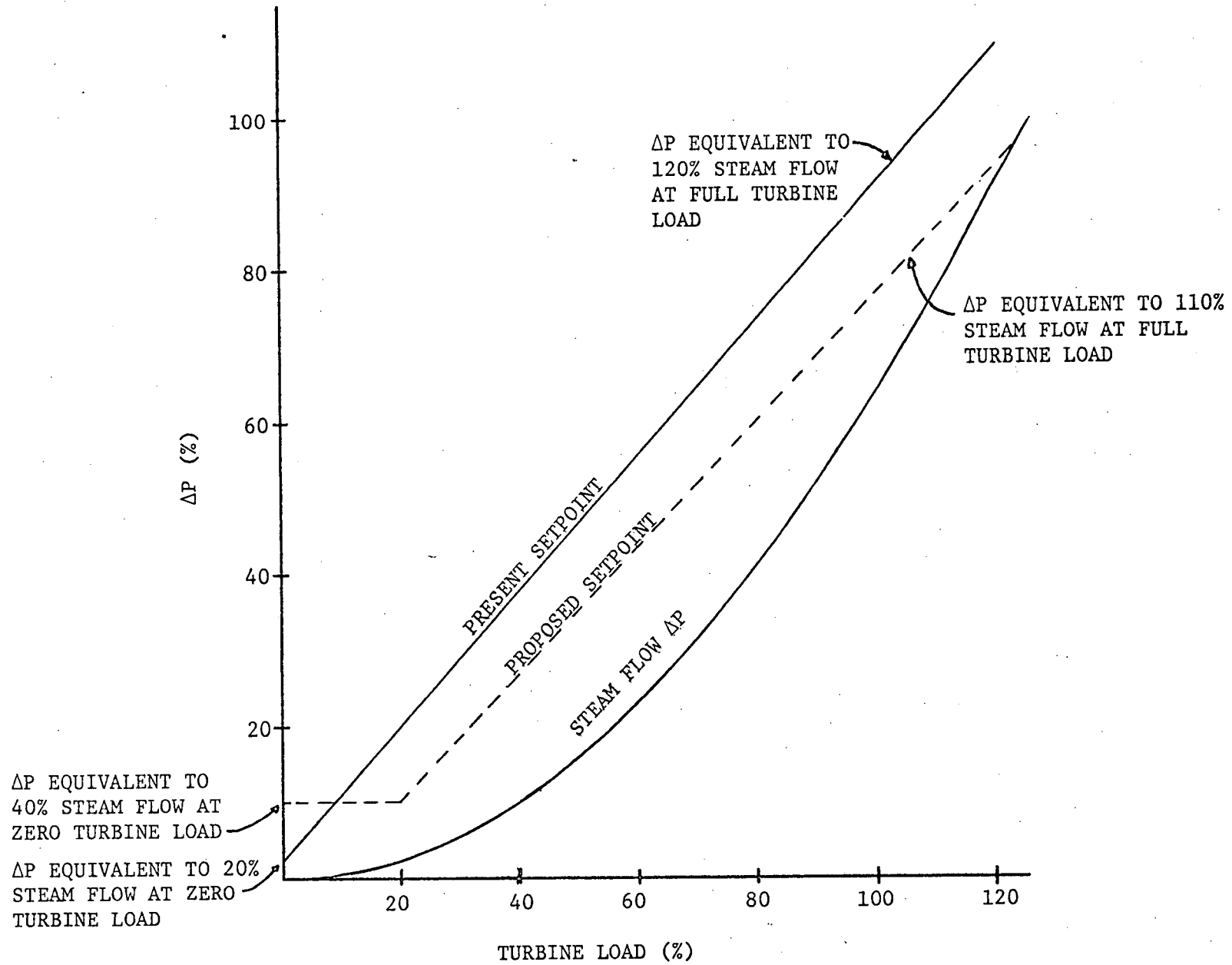
NR:DBW:mvp  
Attachment

Yours very truly,

- cc: Messrs. C. D. Barham  
N. B. Bessac  
T. E. Bowman  
B. J. Furr  
D. V. Menscer  
D. B. Waters

  
E. E. Utley  
Vice-President  
Bulk Power Supply

SETPOINTS AND  $\Delta P$  FOR STEAM FLOW



Approved w/Ltr dated 10-23-73

Regulatory Docket File