

UNITED STATES VUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

MAY 2 7 1976

Docket No. 50-293

Dennis L. Ziemann, Chief, Operating Reactors Branch #2, DPM THRU: Zoltan R. Rosztoczy, Chief, Analysis Branch, DSS

REQUEST FOR ADDITIONAL INFORMATION - PILGRIM UNIT 1

Document Name: Pilgrim Unit 1 Docket No.: 50-293 Licensing Stage: Post OL Milestone No.: 5 Additional Information Requests Responsible Branch and Project Manager: LWR-2, P. O'Connor Technical Review Branch Involved: Analysis Branch Description of Review: Supplemental Questions Requested Completion Date: N/S Review Status: Additional Information Requested

To assist completion of our review of the proposed single loop operation for the Pilgrim Unit 1 plant, the additional information requested in the anclosure will be needed.

P. 1 nous

Paul E. Norian, Section Leader Systems Analysis Section Analysis Branch Division of Systems Safety

cc: D. Ross T. Novak P. O'Connor R. Frahm R. Audette

8406070136 840319 PDR FDIA BELL84-105 PDR BOSTON EDISON COMPANY PILGRIM UNIT 1

DOCKET NO. 50-293

REVIEW OF SINGLE LOOP OPERATION

REQUEST FOR ADDITIONAL INFORMATION

1. Furnish, in graphical form, the results of a complete DBA LOCA calculation for Pilgrim when operating in the single recirculation loop mode. Also, provide the results of a complete break spectrum analysis to demonstrate that the DBA is the limiting case. The parameters of interest are as follows:

> Peak Clad Temperature (ruptured and unruptured nodes) Reactor Vessel Pressure

Water Level Inside the Shroud

Thermal Power

Heat Transfer Coefficients

2. Prôvide a set of calculations as a function of core life for Pilgrim to justify selection of the MAPLHGR curve. The above parameters should be provided in graphical form. JUN 8 1962

Docket No. 50-298

TAC Humber:

42418

MEHORANDUM FOR:	Thomas N. Novak, Assistant Director for Operating Reactors, DL
FROM:	Themis P. Speis, Assistant Director for Reactor Safety, DSI
SUBJECT:	COOPER NUCLEAR STATION SINGLE LOOP OPERATION, NEBRASKA PUBLIC POWER DISTRICT
Plant Name: Docket Number: NSSS Supplier: Responsible Branc Project Manager; Review Status:	Cooper Nuclear Station 50-298 General Electric h: ORB-2 B. L. Siegel Complete

Cooper SER for Single Loop Operation (SLO) with power operation limited to 50% was issued on December 10, 1931. The following requirements were among the conditions for SLO. a) APRM flux noise will be measured once per shift and the recirculation pump speed will be reduced if the flux noise exceeds 5-percent peak to peak. b) The core plate delta noise be measured once per shift and the recirculation pump speed will be reduced if the noise exceeds 1 psi peak to peak.

The staff requires that the licensee perform daily surveillance on the jet pumps to ensure that the pressure drop for one jet pump in a loop does not vary from the mean of all jet pumps in that loop by more than 5%.

The above requirements were imposed based on SLO experience of other BWRs especially Browns Ferry-1. But the licensee (Nebraska Public Power District) during a tele-conference on February 11, 1982 has indicated that the operating margins we imposed for APRM flux noise and core plate delta noise are too stringent and too difficult to conform during SLO. The licensee requested relief from the 5% margin we specified. The licensee proposed that they will monitor the noises at about 40% of power for a reasonable time period of 1/2 hour to 1 hour and the operating margin they get will be increased by a maximum of 50% to get the allowable margin at 50% power.

8246170023

OFFICE

DATE

JUH 0 1002

The noise levels at Cooper during SLO may not be same as other BWRs, and it may vary during different power and flow conditions. We believe the proposed method to determine the operating margins for the flux nosie and core plate delta noise during SLO give sufficient conservatism to satisfy our BF-1 concerns hence is acceptable. The licensee may be informed accordingly.

> Original Signed By Themis P. Speis

Themis P. Speis, Assistant Director for Reactor Safety, DSI

cc: B. Siegel D. Vassallo R. Clark C. Berlinger RSB Section Leaders RSB Section B Members G. Thomas

Distribution Docket File RSB C/F RSB Plant File: Cooper GThomas R/F TSpeis BSheron GThomas

		all it	delle -		
ce}	DSI :RSB	DSI RSB V	BSheron	DSI:AD:RS)	1
	GThenas/bg	WHodges	BSheron	TSpels	
= += = }	6/2 /82	6/4 /82	6/ 4/82	6/B /82	

· · · ···