



**CENTERIOR
ENERGY**

PERRY NUCLEAR POWER PLANT

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VICE PRESIDENT - NUCLEAR

July 28, 1992
PY-CEI/NRR-1527 L

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Perry Nuclear Power Plant
Docket No. 50-440
Corrections to Supplemental Information
on Snubber Optimization of the
Feedwater System

Gentlemen:

On May 20, 1992, The Cleveland Electric Illuminating Company (CEI) submitted letter PY-CEI/NRR-1499L, titled "Supplemental Information on Snubber Optimization of the Feedwater System" to the NRC staff. The letter contained information to support the staff's review of a CEI evaluation on application of Code Case N-411-1 to the snubber optimization efforts on the Perry Nuclear Power Plant (PNPP) Unit 1 Feedwater system during Refueling Outage 3. On the afternoon of May 21, 1992, CEI licensing and engineering personnel informed the NRC staff by telephone of corrections to information contained in Tables 2 and 3 of Attachment 1 to the May 20, 1992 letter. The corrected tables were provided to the staff by telecopy on May 21, 1992. This letter provides the staff with formal submittal of these tables.

If you have any questions, please feel free to call.

Sincerely,

Michael D. Lyster

MDL:CJF:ss

Enclosure

cc: NRC Project Manager
NRC Resident Inspector Office
NRC Region III

300071

Operating Companies
Cleveland Electric Illuminating
Iowa Edison

9208040049 920728
PDR ADDCK 05000440
P PDR

ADD 1/1

TABLE 2

PEP/OWATER PIPING LOOP A MAXIMUM STRESSES (After Snubber Optimization)

<u>Criteria</u>	<u>Loading</u>	<u>Limiting Stress Type</u>	<u>Allowable Stress (psi)</u>	<u>Maximum Calculated Stress (psi)</u>	<u>Node Location</u>
Based on ASME B & PV Code, Section III, Subsection NB for SA-106 GR B @ 575°F $S = 26,500$ psi $S^y = 17,700$ psi For Normal and Upset Condition: $S_{limit} = 1.5 S_x$	Normal and Upset Loads: 1. Weight of Structure 2. Pressure 3. Operating Basis Earthquake 4. SRV	Primary Membrane Plus Bending	26,550	18,580	110
For Emergency Condition: $S_{limit} = 1.5 S_y$	Emergency Loads: 1. Weight of Structure 2. Pressure 3. Loss of Coolant Accident 4. SRV	Primary Membrane Plus Bending	39,750	22,140	110
For Faulted Condition: $S_{limit} = 1.5 S_y$	Faulted Loads: 1. Weight of Structure 2. Pressure 3. Safe Shutdown Earthquake 4. Annulus Pressurization	Primary Membrane Plus Bending	39,750	33,090	110

Cumulative Usage Factor (Max) $U = 0.64$ Allowable: 1.0 Node Location: 110

COMPARISON OF FEEDWATER SNUBBER LOOP A DESIGN LOADS
(Prior to and After Snubber Optimization)

<u>Mark Number</u>	<u>Design Loads, Kips</u>	<u>Actual Loads, Kips (After Snubber Optimization)</u>	<u>Actual Loads, Kips (Before Snubber Optimization)</u>
1N27H0001	34.6 (U)	10.8	10.3
	45.0 (E)	19.3	4.6
	62.3 (F)	31.0	34.8
1N27H0004	34.6 (U)	22.3	14.0
	45.0 (E)	26.5	7.4
	62.3 (F)	47.0	54.4
1N27H0005	54.2 (U)	19.2	15.7
	72.0 (E)	26.0	6.0
	97.5 (F)	45.3	41.8
1N27H0006	45.8 (U)	15.8	16.6
	60.9 (E)	29.8	18.1
	82.5 (F)	48.6	47.2
1N27H0007	70.0 (U)	28.6	31.8
	93.1 (E)	30.4	21.7
	142.1 (F)	82.2	76.1

(U) = Upset
(E) = Emergency
(F) = Faulted