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July 22, 1983

Mr. Robert Gilbert
Project Manager, Integrated Assessment
Operating Reactors Branch No. 5
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Dresden Station Unit 2
SEP Topic III-6, Section No. 4.9.2(3)
Integrated Plant Safety Assessment
Docket No. 50-237

Reference: (1) T.J. Rausch March 10, 1982 letter to P. O'Connor

Dear Mr. Gilbert:

The subject topic is concerned with the Seismic Design Considerations of structures, systems, and components and that they be designed to withstand the effects of earthquakes. The subject section refers specifically to the recirculation pump and supports, and their capability to withstand the SEP defined earthquake without loss of structural integrity.

Question: The Staff lacks sufficient information to evaluate the structural integrity of the recirculation pump and supports. Therefore, the staff will require the licensee to provide further information regarding the capability of the recirculation pump and supports to withstand the SEP-defined earthquake without loss of structural integrity.

We have completed an analytical analysis of the recirculation pump supports. The results are as follows:

Response: To determine the loads on the recirculation pump supports an analysis of the recirculation loop piping and branches was performed using the NUPIPE computer program. The pipe stress results indicate that the recirculation loop piping and branches meet the ANSI B31.1-1967 Code requirements.

In addition, the analytical analysis shows that the calculated snubber loads on the recirculation pump and motor are within the allowable Service Level Limits. These limits are 54.6 kips for Service Level B and 91.0 kips for Service Level D (Ref. 1). The snubber loads are summarized in Table 1, attached.

By this analysis we conclude that the recirculation pump supports are within design limits.

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We consider the above information adequate to resolve the concerns of SEP Section 4.9.2(3). If you have any questions concerning, this please contact this office.

One (1) signed original and forty (40) copies of this transmittal and the attachment are enclosed for your use.

Sincerely,



B. Rybak
Nuclear Licensing Administrator

DSS/ji

Attachment

cc: RIII Resident Inspector, Dresden (w/attachment)
Don Chery, SEP Integrated Assessment Project Manager (w/attachment)

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RECIRCULATION PUMP SUPPORT SYSTEM LOADS

TABLE 1

Pump	Snubber #	Snubber Loads (Kips)	
		Level B (1)	Level D (2)
2A-202	1	35.5	58.4
	2	37.6	63.7
	3	43.9	74.1
	4	20.3	34.1
	5	43.9	74.5
	6	23.2	39.6
2B-202	7	37.2	62.4
	8	34.7	58.8
	9	21.1	34.7
	10	24.1	39.9
	11	12.2	20.3
	12	29.8	51.2

Allowable Snubber Loads: Level B = 54.6 Kips
Level D = 91.0 Kips

(1): OBE = (2% Damping, 0.127 g PGA) x 0.5

(2): DBE = (3% Damping, 0.127 g PGA)