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May 19, 1983

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station Units 1 and 2
Fuel Lift Model and Results
NRC Docket Nos. 50-373 and 50-374

Reference (a): LaSalle County Station Unit 1
License NPF-11, Condition 2.C.(12).

Dear Sir:

Provided herewith are two Tables 3.9.4 and 3.9-4A for LaSalle Units 1 & 2 respectively. These Tables compare the NRC load combinations in the horizontal plane and in the vertical plane and design basis loads resulting from the ABS of SSE + SRV + CO + peak pressure input loads (Load Case 2). The indicated results confirm the earlier docketed LaSalle conclusions, and those in the NEDE-21175-3-P report.

From the maximum input loads, a maximum fuel assembly gap opening for the most limiting ABS load combination is derived and then compared to the 0.520 inch gap needed to initiate disengagement of the lower tie plate from the fuel support casting. The decoupling results for LaSalle are:

	Unit 1	Unit 2
Calculated gap	0.186 in.	0.160 in.
Acceptable gap	0.520 in.	0.520 in.
Margin	2.8X	3.20X

The results acknowledge the slight differences between Unit 1 and Unit 2 RPV pedestals and attachment positions for major nozzles; moreover, the results indicate acceptability and consistency with the generic report. The LaSalle evaluations were made with the GE Model II fuel lift model represented in NEDE-21175-3-P. Both units were treated equivalently by the model and by the input load definitions; these latest results supercede all others.

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Obviously, the generic treatment is adequate to obviate the need for any plant specific treatment because of the built-in conservatism in both the selection of loads and the method for load combinations. A realistic estimate of margin is ten-fold greater. There is no safety issue in this subject and all pertinent LaSalle data is already on the record except these Tables which will be included in FSAR Amendment 63. That amendment is expected to be submitted to the NRC by June 30th, 1983.

To the best of my knowledge and belief the statements contained herein and in the attachment are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison employees and consultants. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

One (1) signed original and forty (40) copies of this letter and the enclosure are provided for your use.

If there are any further questions regarding this matter, please contact this office.

Very truly yours,

B. Rybak for

C. W. Schroeder
Nuclear Licensing Administrator

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cc: Region III Inspector - LSCS

Enclosure

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LA SALLE, UNIT 1

TABLE 3.9-4

FUEL ASSEMBLY (INCLUDING CHANNEL)

Acceptance Criteria	Loading	Primary Load Type	Calculated Peak Acceleration	Evaluation Basis Acceleration (1)
Acceleration Envelope	Horizontal Direction: 1. Peak Pressure 2. Safe Shutdown Earthquake 3. Annulus Pressurization	Horizontal Acceleration Profile	2.9 G	3.6 G
	Vertical Direction: 1. Peak Pressure 2. Safe Shutdown Earthquake 3. Safety Relief Valve 4. CONDENSATION OSCILLATION	Vertical Accelerations	5.0 G	12.0 G

NOTES:

(1) Evaluation Basis Accelerations and Evaluations are contained in NEDE-21175-3-P. The evaluation basis acceleration envelope is defined by a coincident 8G vertical acceleration with the 3.6G horizontal acceleration. The 3.6G horizontal value is reduced linearly to zero as the corresponding vertical acceleration increases from 8 to 12 G's.

(2) The calculated maximum fuel assembly gap opening for the most limiting load combination is 0.186 inch. This is less than the gap (0.52 inch) required to start the disengagement of the lower tie plate from the fuel support casting.

(3) The fatigue analysis indicates that the fuel assembly has adequate fatigue capability to withstand the loadings resulting from multiple SRV actuations ~~during the SRV event~~ OVER THE LIFETIME OF THE FUEL.

LA SALLE, UNIT 2

TABLE 3.9-4a

FUEL ASSEMBLY (INCLUDING CHANNEL)

Acceptance Criteria	Loading	Primary Load Type	Calculated Peak Acceleration	Evaluation Basis Acceleration (1)
Acceleration Envelope	Horizontal Direction:	Horizontal Acceleration Profile	1.3 G	3.6G
	1. Peak Pressure 2. OPERATIONAL BASIS EARTHQUAKE 3. SAFETY RELIEF VALVE 4. CHUGGING			
	Vertical Direction:	Vertical Accelerations	4.7 G	12.0 G
	1. Peak Pressure 2. Safe Shutdown Earthquake 3. Safety Relief Valve 4. CONDENSATION OSCILLATION			

NOTES:

(1) Evaluation Basis Accelerations and Evaluations are contained in NEDE-21175-3-P. The evaluation basis acceleration envelope is defined by a coincident 8G vertical acceleration with the 3.6G horizontal acceleration. The 3.6G horizontal value is reduced linearly to zero as the corresponding vertical acceleration increases from 8 to 12 G's.

(2) The calculated maximum fuel assembly gap opening for the most limiting load combination is 0.16 inch. This is less than the gap (0.52 inch) required to start the disengagement of the lower tie plate from the fuel support casting.

(3) The fatigue analysis indicates that the fuel assembly has adequate fatigue capability to withstand the loadings resulting from multiple SRV actuations and the OBE+SRV event.