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 SORESEN, G.C.      Washington Public Power Supply System  
 RECIP. NAME      RECIPIENT AFFILIATION  
 SCHWENCER, A.      Licensing Branch 2

SUBJECT: Forwards Table 3.9-2b, "Reactor Internals & Associated Equipment," to be submitted in Amend 32 of FSAR. SER Confirmatory Issues 9 & 10 closed.

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## Washington Public Power Supply System

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July 26, 1983  
G02-83-661

Docket No. 50-397

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

Dear Mr. Schwencer:

Subject: NUCLEAR PROJECT NO. 2  
SAFETY EVALUATION REPORT (NUREG-0892)  
CONFIRMATORY ISSUES (9) FUEL ROD MECHANICAL  
FRACTURING, AND (10) FUEL ASSEMBLY STRUCTURAL  
DAMAGE FROM EXTERNAL SOURCES; CLOSURE OF

The Licensing Review Group (LRG) generic response to the subject issues, NEDE-21175-3-P, was submitted to the NRC in July, 1982. Subsequent correspondence and meetings lead to a final meeting with the staff on June 10, 1983, at which the generic response was accepted. Additionally, it was agreed that plant specific closure would be contingent on a plant unique assessment of vertical displacement and combined loads. The attached table, to be submitted in FSAR Amendment No. 32, provides these values. With this submittal NUREG-0892 confirmatory issues (9) and (10) are closed.

Should you have any further questions, please contact Mr. P. L. Powell, WNP-2 Licensing.

Very truly yours,

*Alan Hooke for*

G. C. Sorensen, Manager (Acting)  
Nuclear Safety & Regulatory Programs

PLP/tmh  
Enclosure

cc: R Auluck - NRC  
WS Chin - BPA  
A Toth - NRC Site

*Boo!*  
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TABLE 3.9-2b (Continued)

REACTOR INTERNALS & ASSOCIATED EQUIPMENT  
(v) FUEL ASSEMBLY (INCLUDING CHANNEL)

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| Acceptance Criteria   | Loading  | Primary Load Type                  | Calculated<br>Peak<br>Acceleration | Evaluation Basis<br>Acceleration <sup>(1)</sup> |
|-----------------------|--|------------------------------------|------------------------------------|---|
| Acceleration Envelope | Horizontal Direction:  | Horizontal Acceleration<br>Profile | 1.5 G                              | 3.6 G   |
|                       | 1. Peak Pressure<br>2. Safe Shutdown Earthquake<br>3. Annulus Pressurization             |                                    |                                    |   |
|                       | Vertical Direction:  | Vertical Accelerations             | 5.4 G                              | 12.0 G  |
|                       | 1. Peak Pressure<br>2. Safe Shutdown Earthquake<br>3. Safety Relief Valve<br>4. Chugging |                                    |                                    |   |

## 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 increased from 8 to 12 G's.
- (2) The calculated maximum fuel assembly gap opening for the most limiting load combination is 0.25 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.

