



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Water Resources Division  
1201 Pacific Avenue - Suite 600  
Tacoma, Washington 98402

April 5, 1984

Mr. Ron Ballard, Chief  
Environmental and Hydrologic  
Engineering Branch  
Division of Engineering  
Nuclear Regulatory Commission  
Washington, D.C. 20555

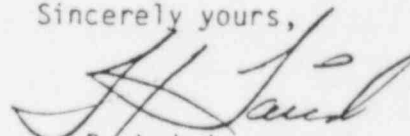
Dear Mr. Ballard:

As requested, we are transmitting a comparison of two analyses of the potential mudflow flood resulting from the failure of the debris dam in front of Spirit Lake near Mount St. Helens. The U.S. Geological Survey analysis is published under the title "Preliminary estimate of possible flood elevations in the Columbia River at Trojan nuclear power plant due to failure of debris dam blocking Spirit Lake, Washington." The second analysis was made by Simons and Li of Colorado State University for Portland General Electric Company. Their analysis is furnished as a supplement to our discussions held in your office on February 23, 1984.

In summary, we believe that the Geological Survey results are higher than what would be normally expected if a failure of the debris dam should occur, and the Simons and Li values are too low. We are working on a subsequent analysis for the Federal Emergency Management Agency and should complete that in one or two months. We will advise you of those results when available.

If further information is needed we will try our best to furnish it.

Sincerely yours,

  
L. B. Laird  
District Chief

Enclosures

cc:

Kellogg V. Morton, Division of  
Contracts, NRC, w/o enc.

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