ACCID 6420

50-344

Department of Energy
Washington, D.C. 20461

JUN 27 1980

Mr. Darrell G. Eisenhut
Director, Division of Licensing
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Eisenhut:

This letter summarizes the views of the Economic Regulatory Administration's Division of Power Supply and Reliability, regarding the electric power system reliability impacts in the Pacific Northwest and in northern California should an outage of the Trojan Nuclear Unit extend from now through early September 1980.

The Trojan unit has a 1080 MW summer rating and is operated by the Portland General Electric Company (PGE). The unit is located in Northwest Oregon 42 miles north of Portland, Oregon. This nuclear unit is currently the only base load unit, other than some hydro electric capacity, on the PGE system. The utility is completing construction of a coal-fired unit with a rating of 530 MW at the Boardman site. This Boardman unit is expected in service in early July with commercial operation projected for August.

The current and prospective power supply situation in the Pacific Northwest is expected to be adequate. Exceptionally high rainfall occurred in the region in May and early June and the temperatures at that time were cooler than normal. These factors cause the electric supply situation to be much better than had been expected. Load levels in the Pacific Northwest are continuing to be lower than those forecast. The volcanic activity and the general economic recession are cited as the cause. At this time, the greatest possible amount of power and energy exports are being made from the Northwest to utilities in California. This level of transfer to the South is expected to continue into early July.

A001
S/O

8007170390 P

The current uncertainties as to load levels and prospective hydro conditions make it necessary that a further evaluation of the region's power system reliability situation be made in late July if the Trojan unit is not in service. If it is determined that this Plant will be out of service the entire summer, there is the possibility of reliability problems in the Pacific Northwest in August. These problems can be resolved only through the use of hydro electric resources that are likely to be needed in the forthcoming winter load period.

The power supply situation for the summer in northern California is in significant contrast to the Pacific Northwest. Generation expected to be available in this region during the 1980 summer is inadequate. The California utilities will have significant dependence on imported power during this period. At present, delivery of 1514 MW of peaking power is being provided from the Pacific Northwest to northern California. A reduction in power delivery from the Pacific Northwest could have a significant reliability impact in northern California. Additional quantities of power are also being sold to southern California utilities to assure power supply adequacy. At the present time, there is 1100 MW of coal-fired capacity available in the Pacific Northwest but is not operating due to the lack of regional load and/or transmission capability to export any additional electricity. The hydro surplus situation in the Pacific Northwest is expected to decline sharply and soon reach normal levels. The snow pack runoff has occurred and only the unseasonal May and June rains are causing the current surplus. As the stream flows return to normal, the amounts of energy available for export will decline rapidly. The Northwest region has projected continued deliveries to California over the summer based upon a late June return to service for the Trojan unit. If this unit does not return to service by mid-July, the Northwest utilities would likely have to utilize their storage reservoirs to supply California. This would impact the Northwest; 1980-81 winter power supply situations.

There are a few system problems relevant to the reliability and adequacy of the Northwest supply situation.

- As reservoir levels decline the output of the generating units will be reduced as much as 15 percent.

- Four 800 MW pumped storage hydro units at the Grand Coulee Dam are expected to be out of service for major repairs during the summer.

- Portland General Electric's Harborton Combustion Turbine units (240 MW) are prohibited from operation by a state environmental rule.

- Pacific Power and Light Company has indicated flashover of insulators and problems with small hydro units are being experienced due to volcanic dust accumulations.

In summary, there appears to be no immediate reliability impact if the Trojan unit is not available until mid-July. It is significant to note that to assure an adequate energy supply for this winter in the region, there will most likely be a need for the operation of Trojan unit when the stream flows return to normal in mid-July. The uncertainity of the load and capacity situation in the Northwest will make it necessary to re-evaluate the power supply adequacy and relaibility situation later in the summer, if the Trojan unit does not return to service. This evaluation will be initiated upon your request. We would suggest that a late July review would offer the most practical results.

This analysis had dealt only with electric system reliability; it does not consider the need to conserve oil or natural gas. Reduced electricity transfers to California will obviously cause increased oil use in California. This increased oil use will result in higher consumer costs in California. I would appreciate being notified of the decision regarding the Trojan unit.

Sincerely,

Richard E. Weiner

Richard E. Weiner, Director
Division of Power Supply
and Reliability
Office of Utility Systems
Economic Regulatory Administration

cc: Jerry Pfeffer
Dave Bodde