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Portland Cement Electric Company

November 19, 1979

Director of Nuclear Reactor Regulation  
ATTN: Mr. A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Sir:

The notification by the NRC Staff on November 13, 1979 to the Licensing Board and parties in the Trojan Control Building proceeding provided information concerning Licensee's LER 79-15. That notification indicated that, on the basis of information available to the NRC Staff, the problem addressed in LER 79-15 does not involve any walls relied upon to provide seismic resistance capability for the Control Building Complex and is not directly related to the design deficiencies which are the subject of the Control Building proceeding, although it may have an indirect bearing on the proceeding.

We have today submitted to the Staff Supplement No. 1 to LER 79-15, which provides a status report as well as additional information and criteria relevant to the evaluations being performed by Licensee. As explained below, the information we have developed to date confirms that the problem does not involve any shear walls relied upon to provide seismic resistance capability in the Complex and has no direct relationship to the design deficiencies which are the subject of the Control Building proceeding, and that any indirect bearing is minimal.

To analyze this issue from the standpoint of the structural adequacy of the walls, we first identified all masonry block walls with a thickness of 16 in. and under in the Control-Auxiliary-Fuel Building Complex. We then determined which of these walls could be subjected to significant reaction forces from piping attached to them<sup>\*/</sup>. Only one masonry wall potentially subjected to significant reaction forces was included in the STARDYNE model used in the seismic analysis for Interim Operation. That wall, a 14-in. mortared double wythe block wall located

<sup>\*/</sup> Piping loads are considered significant if the piping either is greater than 2 in. in diameter, or is required to be insulated because it carries high temperature fluids.

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on Elevation 61 ft in the Fuel Building, was not considered a shear wall in the original design of the Plant. However, since it will carry some load during an earthquake, it was included in the STARDYNE model in order to provide more realistic assessment of force distribution in the Complex. Our conclusion with respect to the seismic capacity of the Complex would not have been altered if that wall had not been considered in the STARDYNE analysis. Nevertheless, we have evaluated that wall in detail. Of the six Seismic Category 1 supports attached to the wall, three are adequate in their present condition. The remaining three supports will be modified prior to resumption of Plant operation by through-bolting in order to mobilize both wythes of block to resist piping reaction forces. These restraints were not through-bolted pursuant to License Condition 2.C.(10).c resulting from the Licensing Board's December 21, 1978 Order because prior evaluations considered both wythes to be mobilized to resist tensile forces. With the through-bolting, when the reaction forces on the wall are specifically considered, the wall still has adequate capacity to withstand all loads imparted by either a 0.25g SSE or a 0.15g OBE in accordance with FSAR criteria.

In addition, we are reviewing the support and restraint modifications performed pursuant to Condition 2.C.(10).c to determine whether any of those have been impacted by the problem identified in LER 79-15. To date we have reviewed those supports and restraints which are attached to 16-in. and under masonry block walls. Of these, two previously modified pursuant to Condition 2.C.(10).c will be further modified as a result of corrective action identified in LER 79-15. One will be modified merely to eliminate an interference with a newly-modified support. The other restraint to be modified will be through-bolted prior to resumption of Plant operation. This restraint was not through-bolted as a result of Condition 2.C.(10).c because prior evaluations considered both wythes to be mobilized to resist tensile forces.

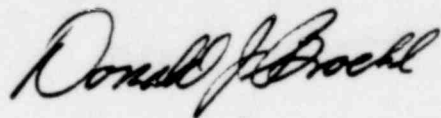
In accordance with the program described in LER 79-15, Supplement 1, we are conducting a review of supports and restraints attached to other structures. In light of the inherent capability of these support structures, we do not expect that any supports or restraints attached to these structures which were modified pursuant to Condition 2.C.(10).c will be impacted by the problem identified in LER 79-15. If any of these other supports or restraints are impacted, we will so inform the NRC Staff. In any event, operation of the Plant will not be resumed until any corrective action relating to such supports and restraints is completed.

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In taking actions to correct the deficiency identified in LER 79-15, the modifications to the Complex proposed in the Control Building proceeding are also being taken into account in order to assure that the supports and restraints satisfy both current and post-modification conditions.

Sincerely,



c: Mr. R. H. Engelken, Director  
Nuclear Regulatory Commission  
Region V

Mr. Lynn Frank, Director  
State of Oregon  
Department of Energy

Service List

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