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Writer's Direct Dial Number:

D. Pershinko  
SEP Branch  
Nuclear Regulatory Commission  
7920 Norfolk Avenue  
Bethesda, Md. 20014

Dear Mr. Pershinko:

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
SEP Topic No. III-3A, Effects of High Water  
Level on Structure

As per your phone request on February 3, 1984, I am providing the following information concerning the subject SEP topic.

The construction of the Turbine Building utilizes the walls as rigid frame members and this subjects the walls to moments due to floor dead and live loads. Analysis of the Turbine Building walls for hydrostatic pressure included the effects of floor live loads wherever their inclusion was additive to the hydrostatic pressure design loadings.

Soil allowable bearing pressure is indicated on Burns and Roe design drawing 4075 (W.O. 2299) as 13 KSF based on soil investigations. The actual soil pressures as indicated on the design drawings are as follows:

Turbine Building (per dwg. 4075)  
Dead +80% live = 4.84 KSF  
Reactor Building (per dwg. 4049)  
Dead +80% live = 8.2 KSF

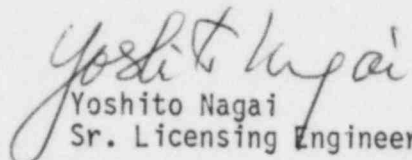
The imposed soil loading values have not been reduced to account for buoyancy due to elevated water table.

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It is recognized that an increase in ground water elevation may cause a slight decrease in allowable soil bearing pressure from the 13 KSF value. However, since the actual imposed loadings leave a substantial reserve capacity, adequate factors of safety will be maintained.

Sincerely yours,

  
Yoshito Nagai  
Sr. Licensing Engineer

1r/0144e

cc: L. Garibian  
P. Huebsch  
J. Knubel  
E. McKenna (NRC)