From: English, Elizabeth W
Sent: Wednesday, May 25, 2011 1:12 PM
To: Whitacre, Thomas J
Cc: Fong, Stephen C
Subject: Weight of NF
Importance: High

Seismic Mass of the building (Self Weight + 100% Dead Load + 25% Live Load) of the NF = 490,000,000 lbs <- this number is used in seismic analysis

The breakout of only building structure weight = 440,000,000 lbs.

If the question is about bearing capacity of soil (amount of load/pressure that the soil is capable of supporting) and the actual pressure due to the building here is the response:

The seismic mass of the building is 490,000,000 lbs. The total area (or footprint) of the base slab is 101,000 ft^2. The load will be distributed over the area of the slab, therefore:
490,000,000 lbs / 101,000 ft^2 = 4850 psf (pounds per square foot).

From the geotechnical engineering report, the allowable bearing pressure of the soil is 20,000 psf. The allowable (20,000 psf) is much greater than the pressure due to the building (4850 psf).

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