

## Telephone Call Summary

Subject: Additional information needed for AP1000 COL review

Date of Call: March 29, 2006

### Participants

#### NRC

Steven Bloom

#### Applicant

George Zinke  
Peter Hastings

### Other Discussion

The NRC emailed the attached additional information needed for AP1000 combined license (COL) review prior to the start of the telephone call. The NuStart members stated that they had reviewed the additional information and felt that this information could be incorporated into the applicable topical report. Also, NuStart informed the NRC that the lead point of contact for the AP1000 COL pre-application review will become Peter Hastings in the near future. NuStart will be submitting a letter to the NRC when this becomes official. NuStart also stated that the Bellefonte COL application will be the AP1000 reference plant application.

Below are some areas where the staff wants to make sure information is in the applicable technical report.

#### 1. Technical Report No. 3 (DCD Section 3.7.2)

As described in Attachment 2, the outline of Report No. 3, "Extension of Seismic Analysis to Soil Sites," indicates design areas that need to be updated and new analyses will be performed. In addition to those areas, the staff identified the following design areas that also need to be considered and included in the application:

The use of finite element model for the NI foundation mat and side walls. (The analysis results should be included in the design of these structural elements.)

Dynamic stability (sliding and overturning) evaluation of the NI structures.

Consideration of lateral soil pressure in the design of embedded walls.

Bearing capacity of foundation soil (both Tier 1 and Tier 2).

#### 2. Technical Report No. 9 (COL Action Item 3.8.2.4.1.2-1):

Attachment 1 of NuStart Letter states that this is not a site specific issue. The staff's concern is that the design of the containment vessel adjacent to large penetration is to be affected by the earthquake induced loading. Since the seismic ground motion is highly site specific, NuStart should not consider this COL action item as a generic COL action item. There are other design areas similar to this item, such as structural analysis and design of fuel racks, reconciliation of

seismic analyses of NI structures, as-built structures, systems, and components (SSC) high confidence that the particular SSC will have a low probability of failure (HCLPF) comparison to seismic margin evaluation, etc.

3. Technical Report No. 36 (Pressurizer Configuration)

The staff would like to know: (1) are there any structural design changes expected as a result of the change of pressurizer size?, (2) are the design loads (thermal, temperature, seismic, etc.) remain no change?, and (3) how the site specific seismic loads will affect the compartment design?