Question 119:

119. Please indicate whether SCE considered concrete degradation in estimating the lifespan of the dry storage system and developing the cost estimate.

Response to Question 119:

SCE objects to the request on the ground that it is vague and ambiguous. SCE assumes that the questions applies only to the Holtec system. SCE also objects to the request on the ground that it is argumentative, and poses an incomplete hypothetical. Subject to and without waiving these objections, SCE responds as follows:

The NRC has exclusive jurisdiction over the radiological aspects of the Proposed Project. Therefore, consideration of the structural integrity of the proposed technology is outside the scope of this proceeding. In addition, SCE does not believe that consideration of impacts beyond 2049 is reasonable or necessary. Nevertheless, SCE provides the following for informational purposes:

**Holtec Portion of Dry Storage System**

The DCE did not specifically consider concrete degradation. However, as stated in the HI-STORM UMAX Final Safety Analysis Report (FSAR), the design life for all components (including the Multi-Purpose Canisters (MPCs), cavity enclosure containers (CECs), closure lids, ISFSI pads, subgrade materials, etc.) of the HI-STORM UMAX system is 60 years. This is accomplished by using materials of construction with a long proven history in the nuclear industry, specifying materials known to withstand their operating environments with little to no degradation and protecting material from corrosion by using appropriate mitigation measures.

In addition to this 60-year design life, the HI-STORM UMAX system has a comprehensive maintenance program that is implemented to ensure that the service life of the system exceeds the design life. Based on the maintenance program outlined in the FSAR, the HI-STORM UMAX service life is expected to be at least 100 years. An Aging Management Plan (AMP) will also be developed as a condition of license renewal beyond the initial 20-year licensing term. The detailed AMP will follow NRC guidance, including NUREG-1927.