Mr. David Lochbaum
865 Tradition Drive
Chattanooga, TN 37415

Dear Mr. Lochbaum:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your September 27, 2021, letter in which you express concern about the potential vulnerability of the spent fuel in dry cask storage at the San Onofre Nuclear Generating Station (SONGS) should a beyond design basis flooding event occur. To address this, you ask that the NRC require the owner of the Independent Spent Fuel Storage Installation (ISFSI) at SONGS to take similar steps as those of operating reactors to mitigate beyond design basis events and to consider the applicability of this requirement to all ISFSIs. We appreciate you sharing your concern and request.

The NRC requires general license holders for ISFSIs, such as those at SONGS, to comply with Title 10 of the Code of Federal Regulations Section 72.122(b), which requires consideration of natural phenomena and the design bases for structures, systems, and components important to safety with appropriate consideration of the most severe of the natural phenomena reported for the site and surrounding area. In addition, the NRC staff assessed the applicability of the Fukushima lessons learned from the accident to non-operating reactors and non-reactor facilities\(^1\). The staff considered a scenario similar to the one you describe, in which a hypothetical flooding event causes debris to block all vents in the dry cask storage canisters designed to passively cool the spent fuel. Through this evaluation, the NRC staff concluded that the existing regulatory framework for non-reactor facilities, including ISFSIs, continues to provide for reasonable assurance of adequate protection of public health and safety.

The NRC staff has also reviewed similar issues specifically at SONGS in response to recent petitions for enforcement action. Additional information regarding those petitions can be found in the staff’s responses to the petitioner dated September 1, 2020 (ADAMS Accession No. ML20216A610), and June 2, 2021 (ADAMS Accession No. ML21117A424), respectively, and the general correspondence dated August 30, 2021 (ADAMS Accession No. ML21132A096).

For these reasons, the NRC remains confident that its current regulatory framework provides for reasonable assurance of adequate protection of public health and safety at SONGS and all other ISFSIs in the United States. The NRC staff has independently evaluated the dry cask storage systems used at SONGS to ensure that they meet safety requirements. The NRC will also continue to provide oversight of these storage systems and ISFSI sites.

\(^1\) SECY-15-0081, “Staff Evaluation of Applicability of Lessons Learned from the Fukushima Dai-Ichi Accident to Facilities Other Than Operating Power Reactors” (Agencywide Documents Access and Management System Accession (ADAMS) No. ML15050A066)
The NRC is committed to its mission of protecting public health and safety. If you believe that you have new information that we have not previously considered, I encourage you to contact Ms. Shana Helton, Director, Division of Fuel Management of the Office of Nuclear Material Safety and Safeguards, at Shana.Helton@nrc.gov or (301) 287-9104.

Sincerely,

Christopher T. Hanson