



## Department of Energy

Idaho Operations Office  
1955 Fremont Avenue  
Idaho Falls, ID 83415

March 6, 2017

Attn: Document Control Desk  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

**SUBJECT: Submittal of Application for the Renewal of 10 CFR Part 72 Special Nuclear Materials License No. SNM-2508 for the Three Mile Island Unit 2 Independent Spent Fuel Storage Installation, Docket 72-0020 (EM-NRC-17-007)**

Dear Sir or Madam:

The Nuclear Regulatory Commission (NRC) issued Special Nuclear Materials License SNM-2508 for the Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI) to the United States Department of Energy Idaho Operations Office (DOE-ID) on March 19, 1999 with an expiration date of March 19, 2019. Pursuant to 10 CFR 72.42(a), DOE-ID hereby submits an application for renewal of the TMI-2 ISFSI license for a 20-year period of extended operation (PEO) to March 19, 2039.

Enclosed is one compact disc (CD), containing one optical storage media (OSM) version of the TMI-2 ISFSI license renewal application (LRA) and the supporting Environmental Report Supplement. There is no proprietary information included with this submittal. Because this LRA is being submitted in proper form more than two years in advance of the expiration date of license SNM-2508, in accordance with 10 CFR 72.42(c), we understand that the license will not expire until a final decision concerning the LRA has been made by the Commission. As such, DOE requests letter acknowledgement of the early submittal of the TMI-2 LRA in accordance with 10 CFR 72.42(c), from the NRC at its earliest convenience.

The format and content of this LRA follows NUREG-1927, "Standard Review Plan for Renewal of Specific Licenses and Certificates of Compliance for Dry Storage of Spent Nuclear Fuel," Revision 1 and is also informed by Industry Guidance NEI 14-03, "Format, Content, and Implementation Guidance for Dry-Cask Storage Operations-Based Aging Management," Revision 2. Section 1 of the LRA, "General Information" includes Table 1-1, which provides a cross-reference for information in the LRA to NUREG-1927 and the relevant 10 CFR 72 regulations. The LRA contains detailed analysis and supporting information related to the content and assumptions used for justification of Aging Management Activities, however, should the NRC staff reviewing the LRA desire additional information, DOE will provide those references.

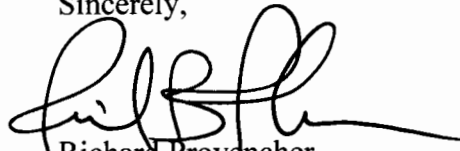
In preparing this license renewal application, DOE-ID has not changed or modified any technical parameters or licensed materials (quantities or types). In addition, this LRA has no proposed changes to the TMI-2 ISFSI physical security plan. The most recent biennial TMI-2 ISFSI 72.48 summary and FSAR Update Report was transmitted to the NRC on March 11, 2015, in accordance with 10 CFR 72.48 and 72.70.

We believe it is important to the NRC staff for us to note two overarching principles governing this LRA:

- 1) The original design life of the TMI-2 ISFSI, including the dry storage system (DSS) is 50 years. Fifty years bounds the 40-year cumulative license term being requested, which is comprised of the 20-year initial license term and the 20-year PEO. Thus, the structures, systems, and components at the TMI-2 ISFSI have been designed and analyzed to perform their intended safety functions through the PEO.
- 2) The material licensed to be stored at the TMI-2 ISFSI is limited to the TMI-2 core debris and related materials from the March, 1979 TMI-2 accident. This material is specified in Conditions 6A/B, 7A, and 8A of License SNM-2508. The last of this material was emplaced at the ISFSI in 2001 and no additional material will be added to the ISFSI under the license. Thus, the very low radiation source term and decay heat of the radioactive material being stored at the ISFSI will reflect an approximately 40-year cooling time at the start of the PEO.

Should you have questions or require additional information, please contact Steve Ahrendts at (208) 526-8888 or Scott Ferrara at (208) 526-5531.

Sincerely,



Richard Provencher  
Deputy Assistant Secretary  
for Idaho Site Operations and  
Office of Nuclear Energy

Enclosures (on CD): TMI-2 ISFSI License Renewal Application, Revision 0  
ER Supplement Report  
Services List  
EM-NRC-17-007 Cover Letter for Submittal of the TMI-2 License  
Renewal Application

cc: Kristina Banovac, NRC; One hardcopy and 10 CD's of enclosures  
Bernard White, NRC (w/o enclosure)  
Meraj Rahimi, NRC (w/o enclosure)  
Ben McCrae, DOE HQ (w/o enclosure)  
Nicholas Dinunzio, DOE HQ (w/o enclosure)  
Greg Sosson, DOE HQ (w/o enclosure)