

From: Guzman, Richard
Sent: Wednesday, July 14, 2010 2:11 PM
To: Darling, Theresa H
Cc: Dosa, John J
Subject: NMP Unit 2 RAI - LICENSE AMENDMENT REQUEST FOR EPU OPERATION: HEALTH PHYSICS REVIEW (TAC NO. ME1476)

Theresa,

By letter dated May 27, 2009, Nine Mile Point Nuclear Station, LLC, submitted for Nuclear Regulatory Commission (NRC) staff review and approval, a proposed license amendment requesting an increase in the maximum steady-state power level from 3467 megawatts thermal (MWt) to 3988 MWt for Nine Mile Point Unit No. 2 (NMP2) extended power uprate operation.

The NRC staff is reviewing the information provided in that letter and has determined that additional information requested below is needed to support its review. Enclosed is the NRC staff's request for additional information (RAI). The RAI was discussed with your staff on July 14, 2010, and it was agreed that your response would be provided by August 4, 2010.

1. Provide an analysis demonstrating that there will be continued access to vital areas within the plant (consistent with NUREG-0737 item II.B.2) under EPU accident conditions. This analysis should include the full mission dose to each vital area necessary during the course of the accident.
2. Table 2.10-2 lists current annual dose at the NMP2 site boundary. Describe the basis for the "current" dose numbers listed. Verify that these doses are for the site boundary location with the maximum dose. Provide a rationale for why the combined dose from NMP Unit 1 and Fitzpatrick plants is less than one third of the NMP2 dose contribution.
3. Provide a justification for using 2004 reporting data for offsite doses listed in Table 2.10. These values appear low compared to the 2007 & 2008 NMP2 Effluent Reports (both reported greater than 0.4 millirem (mrem) whole body dose vice the 0.02 mrem listed in Table 2.10).
4. Page 2-366 of the Safety Analysis Report (SAR) indicates that moisture carryover in the steam is estimated to double. Discuss the potential impact of this increased carryover of non-volatile radionuclides (e.g., soluble iodines, and cesiums; and non-soluble activated corrosion and wear products) on dose rates around the balance-of-plant systems.
5. Page 2-367 of the SAR indicates that NMP2 has already implemented Hydrogen Water Chemistry (HWC) with noble metal injection. How long has NMP2 been using HWC? Verify that the current site boundary doses listed in Table 2.10 reflect the increased Nitrogen-16 release from the reactor resulting from the associated hydrogen injection.

Rich Guzman
Sr. Project Manager
NRR/DORL
US NRC
301-415-1030
Richard.Guzman@nrc.gov