



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 16, 2016

MEMORANDUM TO: Bo Pham, Acting Deputy Director  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

FROM: Kristina L. Banovac, Project Manager **/RA/**  
Renewals and Materials Branch  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: SUMMARY OF APRIL 5, 2016, MEETING WITH PORTLAND GENERAL  
ELECTRIC COMPANY AND HOLTEC INTERNATIONAL TO DISCUSS  
THE UPCOMING SUBMITTAL OF THE APPLICATION FOR RENEWAL  
OF THE TROJAN INDEPENDENT SPENT FUEL STORAGE  
INSTALLATION LICENSE (TAC NO. L25093)

Background

On April 5, 2016, a meeting was held in Rockville, MD, between representatives of Portland General Electric Company (PGE), Holtec International (Holtec), and the U.S. Nuclear Regulatory Commission (NRC) to discuss the upcoming submittal of the application for renewal of the Trojan Independent Spent Fuel Storage Installation (ISFSI) license. The list of meeting attendees is provided in Enclosure 1.

The meeting was noticed on March 23, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16084A862).

Discussion

The meeting discussion followed the meeting agenda, which is provided in Enclosure 2. PGE and Holtec gave a presentation on the planned Trojan ISFSI license (SNM-2509) renewal application, which is included in Enclosure 3. The presentation covered background information on the Trojan ISFSI; past inspections of the concrete cask interior and the multi-purpose canister (MPC) exterior; preliminary information on the planned license renewal application, including the scoping evaluation and aging management programs (AMPs); how the existing inspections and procedures support the planned AMPs; and the use of previous inspections to serve as the pre-application inspection for the license renewal. PGE plans to submit the license renewal application in early 2017.

During and following the PGE and Holtec presentation, the NRC staff asked several questions, to which PGE and Holtec provided the following information and clarifications:

- PGE noted that the natural berms near the ISFSI are not part of the licensing bases and will not be discussed in the renewal application.
- There is one final safety analysis report (FSAR) for the Trojan ISFSI that covers the dry storage system and the site. The FSAR does include some references to the HI-STORM 100 final safety analysis report, as some of the Trojan ISFSI components are based on a similar design as HI-STORM 100 components.
- The renewal application will list all of the ISFSI subcomponents and will identify which subcomponents scoped-in or did not scope-in to the renewal.
- PGE is already conducting visual inspections with a borescope of the concrete cask interior, which includes a visual inspection of the MPC exterior, at 5-year intervals. PGE plans to use this existing inspection for the MPC AMP and inspect the same canister to allow for trending. The current acceptance criterion for the MPC exterior is no indications. PGE noted that the two inspections conducted in 2008 and 2013 showed no indications. The inspection reports for these prior inspections were provided to the NRC, and PGE will reference these reports in the renewal application. PGE notes that the prior inspections achieve the same intent and can serve as the pre-application inspection for license renewal. PGE did not recall if the prior inspections met American Society of Mechanical Engineers (ASME) Code VT-1 visual inspection standards, but PGE did recall that the inspection was conducted by Level 3 nondestructive examination inspectors.

The 2023 inspection will serve as a baseline inspection for the AMPs. As PGE plans for its next scheduled inspection in 2018, the NRC staff encouraged PGE to discuss its inspection plans with the NRC. The staff also noted that PGE should maintain awareness of the ongoing Electric Power Research Institute work on stress corrosion cracking and also the work of the ASME Section XI task group to develop a code case to establish requirements for inservice inspection and acceptance criteria for dry storage canisters.

- PGE noted that it conducts quarterly surveys of gamma radiation around the casks, in addition to the continuous monitoring via thermoluminescent dosimeters at the site. The quarterly surveys do not measure neutron radiation. The staff noted that PGE may want to consider including neutron fluence rate surveys in its AMP as means to identify degradation of the concrete overpack, since the inner surfaces of the structure are concealed by a steel liner (preventing visual inspection).
- Some of the preliminary AMPs contain acceptance criteria of no structurally significant corrosion or loss of material. The NRC staff noted that PGE should try to quantify or otherwise define the acceptance criteria in the application, to have clear, actionable acceptance criteria. The staff also noted that the acceptance criteria should be linked to the intended function(s) of the structure, system, or component, which may include shielding, as well as structural functions.

The NRC staff provided information on its ongoing work to develop guidance for spent fuel storage renewals. The staff noted that NUREG-1927, Revision 1, "Standard Review Plan for Renewal of Specific Licenses and Certificates of Compliance for Dry Storage of Spent Nuclear Fuel," is expected to be issued as final in summer 2016. The staff is currently developing a draft

Managing Aging Processes in Storage (MAPS) report, which will provide an acceptable generic approach to the identification of credible aging effects in dry storage systems and appropriate aging management activities needed to address these aging effects. Although the staff does not expect to publish the draft MAPS report for public comment until summer 2016, it expects to have a staff working version of the draft MAPS report publicly available in ADAMS within a couple months.

After PGE, Holtec, and NRC representatives completed their discussion, the meeting was opened to public comments or questions for the NRC.

Marvin Lewis requested that MPC be added to NRC's glossary. Mr. Lewis asked about water leaking into underground dry storage systems and if this was a concern for Trojan. The staff noted that the Trojan ISFSI has above ground dry storage systems. Mr. Lewis asked who inspects the Trojan ISFSI. The NRC staff noted that it currently conducts periodic inspections of the Trojan ISFSI operations and will also inspect the licensee's implementation of the aging management programs when the ISFSI enters the period of extended operation. Mr. Lewis commented that there is no spent fuel pool at the site if a canister needed to be unloaded.

Carlyn Greene asked whether the concrete overpack in use at the Trojan ISFSI is the same as the VSC-24 overpack in the Certificate of Compliance No. 1007. PGE noted it did not know the particular differences in the designs, but the design details of the overpack are in the Trojan ISFSI FSAR.

### **Action Items/Next Steps**

PGE may request another pre-application meeting as it continues to plan and develop its license renewal application. PGE plans to submit the Trojan ISFSI license renewal application in early 2017.

Docket No. 72-17  
TAC No. L25093

#### Enclosures:

1. Meeting Attendees
2. Agenda
3. Handout – PGE Presentation on Trojan ISFSI License Renewal Application

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**ADAMS Package No.: ML16138A390 ADAMS Accession No.: ML16138A402**

#### **Enclosure 3: ML16138A452**

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<b>NAME</b>	KBanovac	WWheatley via email	ACsontos via email
<b>DATE</b>	5 / 10 / 16	5 / 16 / 16	5 / 12 / 16

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## MEETING ATTENDEES

Public Meeting with Portland General Electric Company and Holtec International to discuss the upcoming submittal of the application for renewal of the Trojan Independent Spent Fuel Storage Installation license

April 5, 2016, 1:00 – 3:00 p.m.

Kristina Banovac	NRC/NMSS/DSFM
Tae Ahn	NRC/NMSS/DSFM
John Wise	NRC/NMSS/DSFM
Wendy Reed	NRC/NMSS/DSFM
Ricardo Torres	NRC/NMSS/DSFM
Al Csontos	NRC/NMSS/DSFM
Mark Lombard	NRC/NMSS/DSFM
Mark Tursa	Portland General Electric
Jim VanLooven	Portland General Electric
Kimberly Manzione	Holtec International
Jordan Landis	Holtec International
Philippe Soenen	Pacific Gas & Electric
Carlyn Greene (via teleconference)	UxC
Marvin Lewis (via teleconference)	public

## MEETING AGENDA

Meeting with Portland General Electric Company

April 5, 2016

1:00 – 3:00 p.m. (Eastern Daylight Time)

One White Flint North Building, O-7B4

**Purpose:** Portland General Electric Company and Holtec International to discuss the upcoming submittal of the application for renewal of the Trojan Independent Spent Fuel Storage Installation license.

**Agenda:**

- Welcome, introductions, and meeting objectives
- Portland General Electric Company and Holtec International presentation and discussion
- Public questions or comments
- Wrap-up and closing remarks
- Meeting adjourned

HANDOUTS