

## PMSTPCOL PEmails

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**From:** Umana, Jessica  
**Sent:** Thursday, December 26, 2013 3:30 PM  
**To:** Scott Head  
**Cc:** Bill Mookhoek; Richard Bense  
**Subject:** Draft RAIs 7374  
**Attachments:** RAI\_7374.docx

Scott,

Attached for you are draft RAIs pertaining to Section 3 of Holtec Report No. HI-2135462. I plan to issue these next week. If you have any questions please feel free to contact me.

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*U.S. Nuclear Regulatory Commission*

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**Subject:** Draft RAls 7374  
**Sent Date:** 12/26/2013 3:30:11 PM  
**Received Date:** 12/26/2013 3:30:00 PM  
**From:** Umana, Jessica

**Created By:** Jessica.Umana@nrc.gov

**Recipients:**

"Bill Mookhoek" <WEMookhoek@ninallc.net>  
Tracking Status: None  
"Richard Bense" <RHBense@ninallc.net>  
Tracking Status: None  
"Scott Head" <SMHead@ninallc.net>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

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## **Request for Additional Information 441**

Issue Date:

Application Title: South Texas Project Units 3 and 4 - Dockets 52-012 and 52-013

Operating Company: South Texas Project Nuclear Operating Co

Docket No. 52-012 and 52-013

Review Section: 09.01.02 - New and Spent Fuel Storage

Application Section:

### **QUESTIONS**

Holtec Report No. HI-2135462, Section 3.4, "Compatibility with Environment," mentions that the neutron absorbing material, Metamic, has a design life in the fuel storage racks of 60 years. The applicant also states that they will use a coupon surveillance program to assess the performance of the Metamic through its design life. However, spent fuel pools are expected to contain spent fuel for longer than 60 years and the coupon surveillance program, as describe in the report, would only have coupons for the first 60 years. Therefore, the staff requests that the applicant explain how they will accurately assess the neutron absorbing material after 60 years or after all the coupons have been withdrawn from the pool.

Holtec Report HI-2135462, Section 3.5, "In-Service Surveillance of Neutron Absorber," contains table 3.5.1 which describes the recommended coupon withdrawal schedule for the Metamic surveillance program. In this table after coupon #8 is withdrawn, the applicant recommends that the next coupon be withdrawn for testing 12 years later. Metamic has been previously approved by the Commission for use on operating reactors' spent fuel pool. However, the staff has not approved a surveillance program with more than 10 years between coupon testing. Therefore, the staff requests that the applicant provide an explanation on the reasoning behind their recommended coupon measurement schedule.

Holtec Report No. HI-2135462, Section 3.4, "Compatibility with Environment," mentions that the spent fuel pool environment will not corrode the neutron absorbing material, Metamic, and for that reason will not release aluminum debris to the pool. However, the spent fuel pool needs to be monitored for aluminum and other chemical substances that could be damaging to the fuel. Therefore, the staff requests that the applicant provide additional information on the monitoring of the spent fuel pool water.