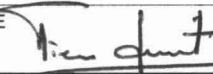


NRC FORM 699 (9-2003)		U.S. NUCLEAR REGULATORY COMMISSION		DATE <b>06/11/2009</b>
<b>CONVERSATION RECORD</b>				TIME <b>11:00am</b>
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU <b>Stefan Anton, Luis Hinojosa</b>		TELEPHONE NO. <b>856-797-0900</b>		TYPE OF CONVERSATION <input type="checkbox"/> VISIT <input type="checkbox"/> CONFERENCE <input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> INCOMING <input checked="" type="checkbox"/> OUTGOING
ORGANIZATION <b>Holtec International</b>				
SUBJECT <b>Shielding and Criticality RAIs for the HI-STAR 180 package application</b>				
SUMMARY (Continue on Page 2)				
NRC Attendees: Andrew Barto, Jeremy Smith, Pierre Saverot				
The teleconference call was scheduled to allow Holtec the opportunity to discuss the shielding and criticality RAIs for the HI-STAR 180 package.				
RAI 5-1: This RAI is similar to the Open Technical Issue numbered 5-3 from the previously rejected application. Staff said that it did not see any justification for the use of SAS2H/ORIGEN-S codes for high burnup fuels. Holtec explained that an evaluation of uncertainties was added to Section 5.2.3 of the SAR while section 5.4.6 provides for a comparison with other conservatisms in the analysis. Holtec also said that, like for the licensed HI-STORM 100 system, it takes a 5% penalty on heat loads and source terms. Staff said that it will take another look at section 5.4.6 of the application.				
RAI 6-1: Holtec will either revise the criticality analysis results to include the reactivity effect of the potential gaps in the neutron absorber panel walls or add a bias. Staff said that RAI 6-1 is related to RAI 6-4 in the sense that even small effects need to be included to be conservative.				
RAI 6-2: Holtec agrees and will provide the reference.				
RAI 6-3: Staff said that this RAI was triggered by the words "control components" which "have a small if not negligible effect on reactivity". Staff is looking for clarification because control rods do have an effect on reactivity. Staff also stated that Holtec should come up with a limiting criterion to put into the CoC, e.g. a 19 cm bounding criteria. If outside the limit, the fuel will be put into a fresh fuel assembly location. Holtec agreed to provide information on a control rod inserted into the upper 19 cm of the assembly for the entire irradiation of the assembly that would show a negligible effect on reactivity.				
<b>Continue on Page 2</b>				
ACTION REQUIRED <b>None</b>				
NAME OF PERSON DOCUMENTING CONVERSATION <b>Pierre Saverot</b>		SIGNATURE 		DATE <b>06/11/2009</b>
ACTION TAKEN				
TITLE OF PERSON TAKING ACTION		SIGNATURE OF PERSON TAKING ACTION		DATE

**CONVERSATION RECORD (Continued)**

SUMMARY (Continue on Page 3)

**RAI 6-4:** Holtec agreed, said that it understood the question, and will revise the burnup credit analysis.

**RAI 6-5:** Holtec agreed that some text is missing in Section 6.B.3 of the application.

**RAI 6-6:** Holtec will revise the application to state the cycle lengths and down times assumed in the isotopic depletion analysis for burnup credit and perform a one cycle evaluation.

**RAI 6-7:** Holtec agreed to revise the application and discuss how uncertainties in the recorded burnup values are accounted for in the alternative burnup confirmation method.

**RAI-7-2:** The loading procedure will be revised to include steps related to the verification of the assembly burnup.

**Continue on Page 3**