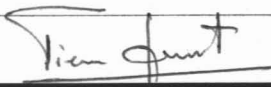


NRC FORM 699 (9-2003)		U.S. NUCLEAR REGULATORY COMMISSION		DATE 06/08/2009
CONVERSATION RECORD				TIME 1:00pm
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU Luis Hinojosa, Debu Majumdar, Indresh Rampall		TELEPHONE NO. 800-501-8979		TYPE OF CONVERSATION <input type="checkbox"/> VISIT <input type="checkbox"/> CONFERENCE <input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> INCOMING <input checked="" type="checkbox"/> OUTGOING
ORGANIZATION HOLTEC INTERNATIONAL				
SUBJECT Thermal RAIs for the HI-STAR 180 package				
SUMMARY (Continue on Page 2)				
NRC Attendees: Jorge Solis, Pierre Saverot				
This teleconference call was scheduled to listen to Holtec's proposed responses to the RAI letter for the HI-STAR 180 package and obtain staff's comments for a potential resolution of these issues:				
RAI 3-1: Holtec will provide all material properties used for the package thermal evaluation that may be missing from the application and also reference them in Chapter 1, if necessary.				
RAI 3-2: Holtec will make sure that values reported for Metamic HT match those used in the Fluent CFD case files.				
RAI 3-3: Holtec stated that ambient conditions are different at each loading and that reference conditions must be defined for Time To Boil calculations so that the utility does not have to perform a specific calculation each time. Staff said that this was reasonable and agreed with Holtec on an initial reference temperature of 120 F. The Time To Boil calculations will be added to the calculation package, i.e. not to the SAR. Holtec will perform a full CFD transient analysis.				
RAI 3-4: Holtec explained that there was a 0.4 mm gap on each side of the panel, hence a total gap of 0.8 mm for the maximum possible clearance at the notch location of the intersecting panel. Holtec also stated that no credit is taken for the gap due to thermal expansion. Holtec will send a sketch to better explain the conditions of calculations and staff will revisit the issue, if necessary.				
RAI3-5: Holtec explained that there is a significant contact with the stacked panels which are welded on the edges and that the 2 mm gap does not really exist because it was put in for the criticality analysis only. From a fabrication standpoint, there is full contact between the panels. Holtec will calculate an effective thermal conductivity of the basket panel and the 2 mm gap between two stacked panels. The calculated effective thermal conductivity will include all the panels stacked axially,				
Continue on Page 2				
ACTION REQUIRED None				
NAME OF PERSON DOCUMENTING CONVERSATION Pierre Saverot		SIGNATURE 		DATE 06/09/2009
ACTION TAKEN				
TITLE OF PERSON TAKING ACTION		SIGNATURE OF PERSON TAKING ACTION		DATE

CONVERSATION RECORD (Continued)

SUMMARY (Continue on Page 3)

(and the gap between them) needed to build the entire basket. Using the effective thermal conductivity of the basket, Holtec will perform additional thermal calculations to see the effect on the peak cladding temperature.

RAI 3-6: Holtec will perform a fire and post-fire calculation using an emissivity of 0.8 or greater. For the post-fire analysis, staff told Holtec to do "what is realistic". Holtec said that they will use the emissivity of the bare carbon steel and not the emissivity of the painted surface.

RAI 3-7: Holtec will calculate and report as requested the new MNOP for the package inter-lid space. Holtec stated that there is only one "official" MNOP for the cavity space and that the package inter-lid space cannot also be called MNOP. Staff agreed that two MNOPs cannot "coexist" but there is no specific guidance for this issue.

RAI 3-8: Holtec will revise Tables 3.1.1. and 3.1.3 of the application to include all containment boundary seals.

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