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HUG MEMORANDUM

To: David Larkin
Chairman, Holtec User Group (HUG)

Jodi Furr
Vice Chairman, Holtec User Group (HUG)

From: K.P. Singh
President and CEO
Holtec International

cc: Holtec User Group Membership
Dr. Ken Sorenson (Sandia National Laboratory)
Dr. Doug Ammerman (Sandia National Laboratory)
Dr. Andrew J. Murphy (USNRC)
Mr. Wayne Hodges (SFPO)
Mr. Jack Guttman (SFPO)
Holtec Distribution: Groups 1, 2 and 4

Subject: Package Performance Study Program (NUREG-1768)

Reference: Holtec H-1031

Chris Blessing and I visited Sandia National Laboratory's headquarters in Albuquerque, New Mexico on February 12, 2003 at SNL's invitation. We received well composed presentations on the scoping analyses performed by SNL to prognosticate the performance of the HI-STAR 100 dual-purpose cask under postulated high kinetic energy impacts and prolonged engulfing fire events. This work was performed by Sandia to develop recommendations for testing under NRC's Package Performance Study (PPS) program initiated in 1999. The details of Sandia's work and their recommendation are contained in NUREG-1768, available on Sandia's website. SNL is soliciting input from all interested parties: the NUREG document provides direction for submitting comments.

NUREG-1768 recommends that the impact and fire test be performed on the HI-STAR 100 transport package containing an MPC-24. Impact test at 75 mph incident speed (C.G. over corner, top lid down) onto an essentially rigid surface and a calorimetric test involving optically



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dense 800°C engulfing fire are planned for 2005. Subsequent to receiving SNL's briefing, I have carefully reviewed the NUREG document with an eye to providing comments/inputs. I have not discerned any item that needs to be brought to SNL/NRC's attention. Their test protocol, in my opinion, is well conceived and technically robust. I suggest that our clients (HUG members) review this document also and provide their inputs, because if SNL's recommendations are accepted, the data obtained from this program will apply to the overpacks that you currently own or shall own in the future. I personally believe that HI-STAR will perform splendidly in the tests, including the fire test. Thanks to the MPC and the crack-resistant and rigid design of the HI-STAR overpack, however, the potential of radiological release from the cask in the simulation test, in my view, is nil. The test, however, will be a giant step towards allaying the public's concern regarding transport of high-level waste and, therefore, it warrants our collective attention and our engagement. I hope you agree.

SNL's program is managed by Dr. Ken Sorenson (e-mail address: kbsoren@sandia.gov) with Dr. Doug Ammerman (email address: djammer@sandia.gov) serving as the lead specialist. NRC research team is led by Dr. Andrew Murphy (e-mail address: ajm1@nrc.gov).