

April 11, 2007

The Honorable Larry E. Craig
United States Senate
Twin Falls Regional Office
560 Filer Avenue, Suite A
Twin Falls, ID 83301

Dear Senator Craig:

I am responding to your December 28, 2006, letter to Mr. Dennis K. Rathbun of the U.S. Nuclear Regulatory Commission (NRC). You forwarded correspondence from your constituent, Mr. Robert H. Leyse, and asked that NRC investigate the matter and provide any appropriate information and comments that you could use to respond to his concerns. Mr. Leyse asked that you direct the NRC Chairman to: (a) respond to his email of October 13, 2006; and (b) require the Idaho National Laboratory to respond to Ms. Kathleen Trever's emailed inquiries. These two issues are discussed below.

Your constituent, in an email dated October 13, 2006, expressed concerns over statements that the NRC made regarding contractor-performed tests by National Research Universal (NRU) at Chalk River, Ontario, Canada, in the agency's denial of Mr Leyse's petition for rulemaking 50-76 (70 FR 52893). The NRC indicated that more than 50 tests were conducted to evaluate the thermal-hydraulic and mechanical behavior of a full-length nuclear fuel bundle during a large-break loss-of-coolant accident in a nuclear reactor. The NRC also stated that it was reviewing the data from this program to determine its value for assessing the current generation of codes that are used to model nuclear reactors.

The NRC is assessing the TRAC/RELAP Advanced Computational Engine (TRACE) thermal-hydraulics code by comparing its predictions against a large number of experiments. The agency intends to compare the data from two of the NRU tests to TRACE predictions of those experiments as part of its overall assessment of the code. Because the NRC has other suitable experiments as part of its code development program, the agency does not anticipate the need to make use of additional NRU tests at this time.

Based on your constituent's interest in the NRU experiments, the NRC is providing a list of references of test program descriptions and the experimental data that he may find useful (see enclosed References 1 through 11). These references include information on thermal-hydraulic, materials, and severe accident tests performed at NRU. These reports are available for a fee through the NRC's Public Document Room, at phone number 1-800-397-4209.

The NRC regulates the civilian use of nuclear material. The Idaho National Laboratory is one of the Department of Energy's (DOE) national laboratories, therefore, the NRC does not have oversight of the laboratory. Since the laboratory is a DOE laboratory, I would suggest that Ms. Trever contact the DOE.

L. Craig

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I trust this information will enable you to respond to Mr. Leyse's concerns. Please contact me if you have any further questions regarding this matter.

Sincerely,

/RA/

Luis A. Reyes
Executive Director
for Operations

Enclosure:
References

L. Craig

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I trust this information will enable you to respond to Mr. Leyse's concerns. Please contact me if you have any further questions regarding this matter.

Sincerely,

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** See previous concurrence

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References

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- 2) Mohr, C.L.; Hesson, G.M.; King, L.L., "LOCA simulation in NRU program: Data report for thermal-hydraulic experiment 2 (TH-2)," NUREG/CR--2526; PNL--4164, November 1982.
- 3) Mohr, C.L.; Hesson, G.M.; King, L.L., "LOCA simulation in NRU program: Data report for thermal-hydraulic experiment 3 (TH-3)," NUREG/CR--2527; PNL--4165, March 1983.
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- 7) Wilson, C.L.; Hesson, G.M.; Pilger, J.P.; King, L.L.; Panisko, F.E., "Large-break LOCA, in-reactor fuel bundle Materials Test MT-6A," PNL--8829, September 1993.
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- 10) Lanning, D.D., Lombardo, N.J., Hensley, W.K., Fitzsimmons, D.E., Panisko, F.E., Hartwell, J.K., "Full-length high-temperature severe fuel damage test No. 5," PNL--6540, September 1993.
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