

LOFT L2-3 test completed successfully

INEL scientists termed the May 12 LOFT L2-3 loss of coolant test a "total success" after looking at initial data.

The test involved a simulated pipe break in the primary cooling system with the reactor operating at 35 megawatts, triggering the emergency cooling system. After the initial pipe "break," temperatures rose to about 1,185 degrees F inside the reactor, well below predictions by computer models. Temperatures were quickly brought down, initially by flow occurring during decompression, and subsequently by the emergency cooling system.

This is the second in a series of nuclear tests at LOFT. The first, last December, was conducted at 50 per cent less power. The May test was conducted with the reactor power density at 12 kilowatts per foot, typical of most commercial power plants when at full power. The reactor core thus dried out more rapidly than in the earlier test, but the initial, rapid cooldown occurred at about the same time following blowdown.

The Nuclear Regulatory Commission (NRC) and INEL officials are now reassessing the schedule for future large break simulations and already-planned tests to study the effects of small pipe breaks because of the success of the first two nuclear tests and the problems at Three Mile Island, according to Don McPherson, NRC branch chief of reactor safety.



LOFT SCIENTISTS study preliminary data from the L2-3 test conducted May 12. The test simulated a break in a reactor coolant pipe and researchers termed it a complete success.

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The large break tests conducted and planned, and future smaller break tests will give scientists valuable information which will be included in the computer codes used to design commercial reactors.

The LOFT facility is operated by EG&G Idaho for the Department of Energy. The NRC is funding the current tests and will use the information as a guide for licensing future commercial nuclear power reactors.

EG&G scientists present papers at ANS annual meeting in Atlanta

Several EG&G Idaho employees are presenting papers in sessions at the American Nuclear Society's annual meeting in Atlanta being held June 3-8.

Papers being presented and their authors are: "On the Desintering of Unstructured Uranium Dioxide Fuel During Film Boiling," A. W. Cronenberg, T. R. Yackle. "Fuel Rod Behavior in a Nine-Rod Bundle Tested in Film Boiling," D. K. Kerwin, R. R. Hobbins, A.S. Mehner.

"Behavior of a Failed Fuel Rod During Film Boiling Operation," B. A. Cook, R. R. Hobbins, D. T. Sparks. "An Improved RELAP4 BWR Jet Pump Model," E. E. Ross, T. R. Charlton. "Risk Projection and Human Factors as Related to Nuclear Systems," R. J. Nertney.

"Practical Risk Analysis," G. J. Briscoe. "The Human Component: An Off-the-Shelf Subsystem," M. C. Steward. "Actinide Decay Power," W. B. Wilson, T. R. England (LASL), O. Ozer (EPRI), D. E. Wessol. "Sensitivity of Decay Power to Uncertainties in Estimated Decay Data," K. Tasaka.

"Pre-LOCE Thermal Safety Analysis of the LOFT Reactor L2-2 Experiment," S. A. Atkinson, D. F. Elger, J. E. Fisher. "Fuel Rod Response During LOFT Test L2-2," D. A.

Niebruegge, E. L. Tolman. "Doppler Effect Measurements on Solid and Liquid Sn," F. Y. Tsang, Robert M. Brugger (U. of Mo.-Columbia).

"Analysis of the General Electric Company Swell Tests with RELAP4/MOD7," S. R. Fischer, C. E. Hendrix. "Steam Generator Tube Rupture Effects on a LOCA," J. L. LaChance. "Evaluations of Alternatives for Management of INEL Transuranic Waste," T. H. Smith.

"An Operating Contractor's View of LOFT," N. C. Kaufman. "LOFT Fuel Design and Operating Experience," M. L. Russell. "Unique Features of the LOFT Startup Experience," J. W. Cannon, M. D. Peters. "LOFT Reactor Advanced Instrumented Center Fuel Bundle," T. E. Howell, H. S. Selcho.

Dog training registration set for June 6 at Tautphaus

INEL employees are invited to enroll their dogs in training classes.

Enrollment will be June 6 at 7 p.m. at Tautphaus Park, across from Parkview Hospital. For more information, call 522-9233, 522-2281 or 523-3192.

Germeshausen retains contact with company he helped found

(Editor's note: This is the third in a series on the founders of EG&G, Inc., and the current top management.)

Kenneth J. Germeshausen is a co-founder of EG&G, Inc. He is still actively associated with the company, serving as a consultant in both the technical and managerial areas. He served as vice president and treasurer from 1947 to 1954, president from 1954 to 1965 and chairman of the board from 1965 to 1972. Germeshausen remained a board member until his retirement in April of this year.

Germeshausen graduated from MIT in 1931 and formed a partnership with Dr. Harold Edgerton. Herbert Grier joined them two years later. This early partnership was a consulting firm giving technical services on high-speed measurement and control techniques to solve industrial problems. Germeshausen worked with his partners in high-speed photographic and stroboscopic areas advancing knowledge in these technologies.

Germeshausen was appointed to the MIT staff as a research associate and retains the position today. During World War II, the three men worked on the development of atomic weapons. After the war, they worked under contract to the Atomic Energy Commission and, in 1947, formed their own corporation.

The corporation branched into weapons testing and developing related systems and components for the AEC. Germeshausen helped manage these programs and participated in most of the AEC tests.

Germeshausen holds nearly 50 patents covering electronic circuits, electron tubes, flash lamps basic to all stroboscopic lighting, and hydrogen thyratrons, basic to radar transmitters. He invented two of the 34 basic new electron tubes developed between 1930 and 1950.

The EG&G co-founder, and his wife, Pauline, live in Weston, Mass., in a home Germeshausen designed. In addition to his interest in ar-

chitecture, he is a student and collector of the modern arts and confesses to many hobbies, including wood working, raising dogs and cooking. He is considered an authority on the latter and has lectured before large groups on the subject.

Germeshausen admits to being one of the first miniature camera bugs in his student days at MIT and remembers becoming one of the first "hi-fi" enthusiasts in the days when "you had to be an engineer to be a 'hi-fi' addict."



Kenneth J. Germeshausen