

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

December 18, 1985
RWW-85-94

Handwritten signature: Ted B. Jackson

Mr. H. N. Berkow, Chief
Standardization and Special Projects Directorate
Division of Pressurized Water Reactor Licensing-B
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Small Break LOCA Methods Verification (Action Plan Item II.K.3.30)
Post Test Analysis of Semiscale Test S-UT-8

- References:
- (1) C. O. Thomas letter to R. W. Wells, dated June 20, 1985, Re: Conditional Acceptance for Referencing of Licensing Topical Report CEN-203-P, Revision 1, "Response to NRC Action Plan Item II.K.3.30 Justification"
 - (2) R. W. Wells letter to C. O. Thomas, RWW-85-16, dated March 11, 1985, Re: Small Break LOCA Methods Verification (Action Plan Item II.K.3.30) Commitment to Perform Post Test Analysis of Semiscale Test S-UT-8
 - (3) "Communication Between the Combustion Engineering Owners Group and the Nuclear Regulatory Commission," dated October 19, 1985

Dear Mr. Berkow:

In response to the NRC's conditional Safety Evaluation Report, Reference (1), on TMI Action Plan Item II.K.3.30--Justification of Small Break LOCA Methods, this letter transmits a post-test analysis (enclosed) of Semiscale Test S-UT-8. This analysis also fulfills a Combustion Engineering Owners Group commitment (CEOG) commitment to NRC, Reference (2), made prior to the issuance of the Safety Evaluation Report, to submit a post-test analysis of Test S-UT-8. The results of the post-test analysis confirm that CE's Small Break LOCA thermal-hydraulic computer code, CEFLASH-4AS, can acceptably calculate core level depression, prior to clearing of the reactor coolant pump loop seals, as observed in the data from Semiscale Test S-UT-8. These results were discussed with NRC representatives (R. Jones, et al.) in a meeting on October 30, 1985.

The post-test analysis included first, a best estimate analysis, which showed overall excellent agreement with the Test S-UT-8 data. Then, specific best estimate component models important for steam generator (SG) liquid holdup and preloop seal clearing core uncover were replaced by their CE Small Break LOCA Evaluation Model counterparts. This best estimate/evaluation model analysis compared well to the depth and duration

8512270186 851218
PDR TOPRP EMVC-E
C PDR

Handwritten: 1007 1/5

December 18, 1985

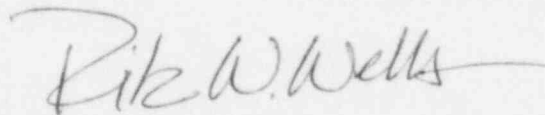
of the core uncover data and conservatively underpredicts the core coolant levels after loop seal clearing. This demonstrates that the CE Small Break LOCA Evaluation Model incorporates component modes which permit acceptable prediction of test S-UT-8 type core uncover. Thus, the condition in the Safety Evaluation Report is satisfied and TMI Action Plan Item II.K.3.30 can now be considered closed.

As with the reports submitted earlier in response to TMI Action Plan Item II.K.3.30, the analysis provided herewith continues to show that using the currently approved CE Small Break LOCA Evaluation Model results in conservatively high cladding temperatures for the break spectrum analysis of an NSSS. Therefore, the need for submittal of new small break analyses in accordance with TMI Action Plan Item II.K.3.31 is obviated and this item can also be considered closed.

This letter is provided according to terms stated in Reference (3), a copy of which is enclosed for your convenience. In particular, this submittal is not applicable to any individual licensee or license applicant until the submittal is referenced by that licensee or license applicant on his docket. Please send copies of any correspondence concerning this submittal to the individuals identified on the enclosed list.

Please feel free to call me at (203) 665-3614 if you have any questions on this information.

Very truly yours,



Rik W. Wells, Chairman
CE Owners Group

RWW/drg

Enclosures

cc: D. M. Crutchfield, NRC (w/o)
R. Jones, NRC (w/o)
N. Lauben, NRC (w/o)
F. J. Miraglia, NRC (w/o)
B. Sheron, NRC (w/o)
C. O. Thomas, NRC (w/o)

Enclosure: CEN-203-P, Revision 1-P, Supplement 3, "Post-Test Analysis of Semiscale Test S-UT-8; Response to NRC's Conditional SER Issued on June 20, 1985 on Justification of C-E Small Break LOCA Methods" (five copies are enclosed)

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
MASSACHUSETTS ELECTRIC COMPANY
NEW YORK STATE POWER COMPANY
NORTHWEST UTILITIES SERVICE COMPANY
NORTHEAST UTILITY ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 686-8811

October 19, 1982
RW-82-61

Mr. Harold Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Denton:

Subject: Communications between the Combustion Engineering Owners Group
and the Nuclear Regulatory Commission

The purpose of this letter is to inform you that I have recently replaced Mr. K. P. Baskin of Southern California Edison as Chairman of the Combustion Engineering Owners Group (CEOG). Concurrent with informing you of my appointment, the CEOG has requested that I take this opportunity to reaffirm its established policy regarding the subject communications. This policy has assisted in reducing the uncertainty in determining the communicants on issues and thereby improved the effectiveness of all parties concerned.

Submittals made by the CEOG to the NRC are not applicable to any individual licensee until the submittal is referenced by that licensee for use on his docket. Should the NRC have questions within the scope of any CEOG submittal, they should be addressed to the Owners Group chairman with copies to the appropriate Owners Group Subcommittee chairman, CE and each Owners Group member. The individuals to whom copies should be addressed will be identified with each Owners Group submittal.

Questions from the NRC on issues beyond the scope of previous submittals made by the CEOG should be addressed only to the individual licensees. The licensees will then consider the extent of the CEOG involvement, if any, in an appropriate response.

The CEOG feels that this communication policy serves the best interests of the Owners Group, individual licensees, and the NRC.

If you or your staff have any questions concerning this topic, or any topic pertaining to this CEOG, please contact me at extension 3871. If sending Federal Express our street address is 107 Selden Street, Berlin, CT 06037.

Sincerely,

R. W. Wells
Chairman
CE Owners Group

RWW/djr

cc: D. G. Eisenhut--NRC
R. J. Mattson--NRC
H. L. Thompson--NRC

R. H. Vollmer--NRC
S. S. Hanauer--NRC

821242272

12/02/85

COMBUSTION ENGINEERING OWNERS GROUP
UTILITY REPRESENTATIVES

Mr. Edward Sterling
ARIZONA PUBLIC SERVICE CO.
11226 N. 23 Avenue
Phoenix, AZ 85029

Mr. G. Douglas Whittier
MAINE YANKEE ATOMIC POWER COMPANY
Edison Drive
Augusta, ME 04336

Mr. Thomas Cogburn
ARKANSAS POWER & LIGHT COMPANY
First Commercial Bank Building
Capitol and Broadway
Little Rock, AR 72203

Mr. Rik W. Wells
NORTHEAST UTILITIES SERVICE COMPANY
107 Selden Street
Berlin, CT 06037

Mr. Robert F. Ash
BALTIMORE GAS & ELECTRIC COMPANY
Room 922 - Gas & Electric Bldg.
Charles Center
Baltimore, MD 21203

Dr. Joseph K. Gasper
OMAHA PUBLIC POWER DISTRICT
1623 Harney Street
Omaha, NE 68102

Mr. Kenneth Berry
CONSUMERS POWER COMPANY
1945 W. Parnall Road
Jackson, MI 49201

Mr. Ralph L. Phelps
SOUTHERN CALIFORNIA EDISON COMPANY
2244 Walnut Grove Avenue
Rosemead, CA 91770

Mr. Donald K. James, Jr.
FLORIDA POWER & LIGHT COMPANY
9250 West Flager Street
Miami, FL 33102

Mr. Dewey I. Hulbert
WASHINGTON PUBLIC SUPPLY SYSTEM
Workman's Creek Road
Elma, WA 98541

Mr. Michael Meisner
LOUISIANA POWER & LIGHT COMPANY
317 Barronne Street
New Orleans, LA 70160