

Duquesne Light Company

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GEORGE S. THOMAS
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August 17, 1995

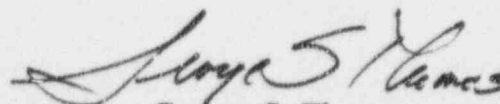
U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

**Subject: Beaver Valley Power Station, Unit No. 1 and No. 2
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
Generic Letter 92-01, Revision 1, Supplement 1
Reactor Vessel Structural Integrity**

The enclosed information is provided in response to Generic Letter 92-01, Revision 1, Supplement 1, "Reactor Vessel Structural Integrity." The generic letter requires a description of those actions taken or planned to locate all data relevant to the determination of reactor pressure vessel integrity, or an explanation of why the existing data base is considered complete as previously submitted.

If you have any questions regarding the attached information, please contact Mr. G. A. Kammerdeiner, Nuclear Engineering Department, at (412) 393-5677.

Sincerely,


George S. Thomas

Enclosure

c: Mr. L. W. Rossbach, Sr. Resident Inspector
Mr. T. T. Martin, NRC Region I Administrator
Mr. D. S. Brinkman, Sr. Project Manager

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Enclosure

Beaver Valley Power Station
Unit No. 1 and No. 2

Response to Generic Letter 92-01, Revision 1, Supplement 1 Reactor Vessel Structural Integrity

Supplement 1 to Generic Letter 92-01, Revision 1, was issued on May 19, 1995, to require all holders of operating licenses to identify, collect and report any new data pertinent to analysis of structural integrity of their reactor pressure vessel and to assess the impact of that data on the reactor pressure vessel (RPV) integrity analyses relative to the requirements of 10 CFR 50.60, 10 CFR 50.61, and Appendices G and H to 10 CFR 50.

Licensees are required to submit a written response, within 90 days from the date of the generic letter, providing a description of those actions taken or planned to locate all data relevant to the determination of RPV integrity, or providing an explanation of why the existing data is considered complete as previously submitted. Follow up actions to assess best estimate chemistry, the need for the RG 1.99 Rev 2, Position 2.1 ratio procedure, and the results of evaluations using the newly acquired data are required within 6 months from the date of the generic letter.

To ensure that Duquesne Light Co. possesses the relevant reactor vessel data for Beaver Valley Power Station Units 1 and 2, the below listed actions have been taken:

- The Beaver Valley Unit 1 and 2 reactor vessels were manufactured for Westinghouse Electric Corp. by Combustion Engineering at their Chattanooga, Tennessee facilities under contract numbers 5069 and 9071, respectively. As the OEM for approximately one-half of the operating RPV's in the United States and for 15 foreign vessels, ABB/CE maintained information in the form of materials data, fabrication process data, inspection and test results, and material samples. Duquesne Light Co., along with 14 other utilities, participated in the formation of the ABB/CE Reactor Vessel Group (RVG), chartered in September, 1991 for the purpose of funding common tasks associated with the CE manufactured reactor vessels. The RVG funded the development of a Records Evaluation Program for the assembly and evaluation of design and fabrication information. This program was completed in two phases and resulted in the development of a computerized Global Data Matrix of verified information on reactor vessels built by Combustion Engineering, the identification of sister vessel relations (common heats of weld wire or base metal used in more than one vessel), and vessel specific reports of the relevant data for each participating vessel owner. This program was completed in January, 1995.

Enclosure

Response to Generic Letter 92-01, Revision 1, Supplement 1

Reactor Vessel Structural Integrity

Page 2

- In 1992, the RVG also funded a review of the surplus material stored at the ABB/CE facilities in Chattanooga to identify those pieces related to reactor vessels which could be of future use in determining material properties. The appropriate materials were catalogued and then secured on-site in Chattanooga.
- An evaluation was done by Westinghouse Electric Corporation as required by the proposed rule on pressurized thermal shock published in February, 1984. As part of this work, the 1982 Westinghouse Owner's Group data base was used to determine the available information on the chemistry composition for each of the Unit 1 beltline welds. This information is being maintained and compared against the data received from sister vessel owners.

NOTE: The Unit 2 vessel beltline welds were produced as low copper and nickel submerged arc welds, and the docketed chemistry compositions are provided in WCAP 9615, "Duquesne Light Company, Beaver Valley Power Station Unit 2, Reactor Vessel Radiation Surveillance Program" in accordance with Appendix H of 10 CFR Part 50.

The Nuclear Management and Resources Council (now NEI) published recommendations in report NUMARC 93-04, dated November, 1993, to resolve RPV integrity issues. Following these recommendations, Duquesne Light has been supporting WOG programs, contacting sister vessel owners, and reviewing data bases to determine if other relevant information exists. In response to the generic letter supplement, the following additional actions will be taken:

- ABB/CE will be contacted to verify the list of sister vessels for the Beaver Valley reactor vessel beltline materials. This information is available from the RVG Records Evaluation Program and should confirm the known sister vessel relations.
- Each of the Beaver Valley sister vessel owners will be contacted with a request for data on common base metal and weld metal heats. The data requested will include chemical analyses, heat treatment, and unirradiated and irradiated mechanical properties, which may affect the vessel integrity evaluations. The sources of information may include fabrication data, surveillance tests, and supplementary tests.
- Westinghouse Electric Corporation, as the Beaver Valley NSSL, has been contacted regarding the availability of the source document data for the Unit 1 and 2 vessels. Duquesne Light Co. will be reviewing their records, which they have offered to make available, for any additional data.

Enclosure

Response to Generic Letter 92-01, Revision 1, Supplement 1

Reactor Vessel Structural Integrity

Page.3

- The latest versions of industry data bases will be reviewed for unirradiated and irradiated data relevant to the Beaver Valley units. EPRI maintains the PREP3 and RMATCH data bases which were distributed with the "Reactor Vessel Embrittlement Management Handbook", report TR-101975-12. PREP3 is comprised of vessel surveillance test data and RMATCH contains material and chemistry data for domestic vessels and surveillance programs. PREP3, which contains data for capsules tested through 1989, is scheduled to be updated to PREP4 by the end of 1995. Although this is beyond the generic letter report period, additional information identified in this update will be evaluated for the Duquesne Light vessels.
- Duquesne Light is currently funding an update of the ATI Consulting database, RPVDATA, through the Westinghouse Owner's Group. This data base will also be reviewed for material data and sister vessel relations to the Beaver Valley reactor vessels.

The information obtained from these sources will likely contain duplicate data and "evaluated" data. The source and validity of each data point will be reconciled with the source before being included in the data base for the Beaver Valley vessels. New data relevant to the RPV integrity evaluations of the Beaver Valley plant will be reported in response to the "Required Information" items (2), (3), and (4) of Generic Letter 92-01 Rev. 1, Supplement 1.