

April 23, 2008

Mr. David A. Christian
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NO. 3 - REQUEST FOR ADDITIONAL
INFORMATION REGARDING STRETCH POWER UPRATE AMENDMENT
REQUEST (TAC NO. MD6070)

Dear Mr. Christian:

By letter dated July 13, 2007,¹ as supplemented by additional letters,² Dominion Nuclear Connecticut, Inc. (DNC), licensee of Millstone Power Station, Unit No 3 (MPS3), submitted the application, "Dominion Nuclear Connecticut, Inc., Millstone Power Station Unit 3, License Amendment Request, Stretch Power Uprate," to the U.S. Nuclear Regulatory Commission (NRC). The proposed license amendment would allow an increase in the maximum authorized power level from 3,411 megawatts thermal (MWt) to 3,650 MWt and make changes to the technical specifications, as necessary, to support operation at the stretch power level.

In order to complete its review, the NRC staff has determined that additional information is needed, and requires a response to each of the enclosed questions.

The license amendment request (LAR), dated July 13, 2007, stated that the environmental qualification (EQ) evaluations for the Main Steam Valve Building (MSVB), Engineered Safety Features (ESF) Building and Auxiliary Building were not completed. The NRC staff informed DNC staff in November 2007 via telephone that the NRC staff would not be able to complete the Electrical Engineering evaluation of the stretch power uprate (SPU) until the EQ evaluations were completed. Additionally, the NRC had several questions and issued a request for additional information (RAI) on December 14, 2007.³ Nine questions were issued with seven relating to EQ.

By letter dated January 10, 2008, DNC provided RAI responses to the 8 of 9 Electrical Engineering questions. DNC stated that it would provide the results of RAI EEEB-07-0052 by March 31, 2008. On February 14, 2008, a teleconference was held discussing the LAR schedule. Once again, the NRC staff informed DNC that the NRC staff needed the EQ evaluations to proceed with the Electrical Engineering review.

¹ DNC Letter (07-450) to the NRC, "Dominion Nuclear Connecticut, Inc., Millstone Power Station Unit 3 License Amendment Request, Stretch Power Uprate," dated July 13, 2007 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML072000386).

² Supplemental Letters dated: July 13, 2007 (ML072000281); September 12, 2007 (ML072570061); November 19, 2007 (ML073230976); December 13, 2007 (ML073480240); December 17, 2007 (ML073520051); January 10, 2008 (ML080100600, ML080100604, ML080100606, ML080100611); January 11, 2008 (ML080110695, ML080140077, ML080170495, ML080580476); January 14, 2008 (ML080140570); January 18, 2008 (ML080220506, ML080220527, ML080220530, ML080220541, ML080280375); January 31, 2008 (ML080320308); February 25, 2008 (ML0805 60392, ML080560615); March 5, 2008 (ML080660108); March 10, 2008 (ML080710377, ML080710391); March 25, 2008 (ML080850894); March 27, 2008 (ML080880268); and April 4, 2008 (ML08xxxxxx).

³ ADAMS Accession No. ML073370384

DNC notified the NRC staff that DNC would provide the response to RAI EEEB-07-0052 by March 31, 2008.

By letter dated March 25, 2008, DNC provided supplemental information regarding the EQ evaluations in MSVB, ESF and Auxiliary Buildings. The response did not provide the necessary information or sufficient detail. DNC failed to provide in-depth assumptions and methodology for the EQ evaluations in its responses. On March 31, 2008, a teleconference was held to discuss the lack of information in DNC's responses. The NRC staff informed the DNC staff that the details in its responses were lacking, and further information was needed to complete the safety evaluation.

The resultant NRC staff follow-up questions were discussed via teleconference on April 15, 2008, with the DNC staff to ensure that the questions were understandable, the regulatory basis was clear and to determine if the information was previously docketed. During a teleconference on April 18, 2008, with Mr. Bill Bartron of the DNC staff, the NRC staff informed Mr. Bartron that the EQ responses, as well as the reactor systems supplement, are needed by April 30, 2008; otherwise, the current schedule for the completion of the proposed stretch power uprate amendment will be adversely effected. The possibility of schedule slippage has been previously stated in a letter to you, dated March 28, 2008.⁴

Please note that if you do not respond to this letter within the prescribed response times or provide an acceptable alternate date in writing, we may reject your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108. If you have any questions, I can be reached at (301) 415-3100.

Sincerely,

/RA/

John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosure: As stated

cc w/encl: See next page

⁴ ADAMS Accession No. ML080460620

DNC notified the NRC staff that DNC would provide the response to RAI EEEB-07-0052 by March 31, 2008.

By letter dated March 25, 2008, DNC provided supplemental information regarding the EQ evaluations in MSVB, ESF and Auxiliary Buildings. The response did not provide the necessary information or sufficient detail. DNC failed to provide in-depth assumptions and methodology for the EQ evaluations in its responses. On March 31, 2008, a teleconference was held to discuss the lack of information in DNC's responses. The NRC staff informed the DNC staff that the details in its responses were lacking, and further information was needed to complete the safety evaluation.

The resultant NRC staff follow-up questions were discussed via teleconference on April 15, 2008, with the DNC staff to ensure that the questions were understandable, the regulatory basis was clear and to determine if the information was previously docketed. During a teleconference on April 18, 2008, with Mr. Bill Bartron of the DNC staff, the NRC staff informed Mr. Bartron that the EQ responses, as well as the reactor systems supplement, are needed by April 30, 2008; otherwise, the current schedule for the completion of the proposed stretch power uprate amendment will be adversely effected. The possibility of schedule slippage has been previously stated in a letter to you, dated March 28, 2008.⁵

Please note that if you do not respond to this letter within the prescribed response times or provide an acceptable alternate date in writing, we may reject your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108. If you have any questions, I can be reached at (301) 415-3100.

Sincerely,

/RA/
John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosure: As stated

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	RidsNrrLAABaxter	RPowell, RGN-I	RidsNrrDorlDpr
LPLI-2 Reading	RidsNrrDciCvib	RidsOgcRp	
RidsNrrDorlLp11-2	RidsNrrPMJLamb	RidsAcrsAcn&mMailCenter	RidsRgn1MailCenter

ACCESSION NUMBER: ML081080024

OFFICE	LPL1-2/PM	LPL1-2/LA	EEEB/BC	LPL1-2/BC
NAME	JLamb	ABaxter	VJGoel for GWilson	HChernoff
DATE	04/ 22 /08	04/ 22 /08	04/ 22 /08	04/ 23 /08

OFFICIAL RECORD COPY

⁵ ADAMS Accession No. ML080460620

REQUEST FOR ADDITIONAL INFORMATION
MILLSTONE POWER STATION, UNIT NO. 3
STRETCH POWER UPRATE LICENSE AMENDMENT REQUEST
TAC NO. MD6070
DOCKET NO. 50-423

By letter dated July 13, 2007,¹ as supplemented by additional letters,² Dominion Nuclear Connecticut, Inc. (DNC), licensee of Millstone Power Station, Unit No. 3 (MPS3), submitted the application, "Dominion Nuclear Connecticut, Inc., Millstone Power Station Unit 3, License Amendment Request, Stretch Power Uprate," to the U.S. Nuclear Regulatory Commission (NRC). The proposed license amendment would allow an increase in the maximum authorized power level from 3,411 megawatts thermal (MWt) to 3,650 MWt, and make changes to the technical specifications, as necessary, to support operation at the stretch power level.

The U.S. Nuclear Regulatory Commission (NRC) staff has been reviewing the submittal and has determined that additional information is needed to complete its review.

ELECTRICAL ENGINEERING BRANCH

EEEB-07-0052 Follow-Up (EEEB-08-0108)

In the March 25, 2008, letter, the licensee states that the analysis for the Main Steam Valve Building (MSVB) following a main steam line break (MSLB) is performed for the duration of the component's mission time. Specify the mission time and function for each of the affected components in the MSVB. Describe the effects of the increased temperature and pressure on the affected components. In addition, explain, in detail, the assumptions and methodology used to evaluate the components. Provide a comparison of the pre-stretch power uprate (SPU) and SPU environmental temperature and pressure profile. Also, provide the detailed environmental qualification (EQ) evaluations and calculations for the ASCO solenoid valves, NAMCo limit switches, Rosemount pressure transmitters, Limitorque motor-operated valves and solenoids associated with Sulzer main steam isolation valves (MSIVs) and ITT actuators.

¹ DNC Letter (07-450) to the NRC, "Dominion Nuclear Connecticut, Inc., Millstone Power Station Unit 3 License Amendment Request, Stretch Power Uprate," dated July 13, 2007 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML072000386

² Supplemental Letters dated: July 13, 2007 (ML072000281); September 12, 2007 (ML072570061); November 19, 2007 (ML073230976); December 13, 2007 (ML073480240); December 17, 2007 (ML073520051); January 10, 2008 (ML080100600, ML080100604, ML080100606, ML080100611); January 11, 2008 (ML080110695, ML080140077, ML080170495, ML080580476); January 14, 2008 (ML080140570); January 18, 2008 (ML080220506, ML080220527, ML080220530, ML080220541, ML080280375); January 31, 2008 (ML080320308); February 25, 2008 (ML0805 60392, ML080560615); March 5, 2008 (ML080660108); March 10, 2008 (ML080710377, ML080710391); March 25, 2008 (ML080850894); March 27, 2008 (ML080880268); and April 4, 2008 (ML08xxxxxxx)

Enclosure

EEEB-07-0052 Follow-Up (EEEB-08-0109)

Provide the worst-case breaks and their impact on the EQ components for the MSVB EQ analysis.

EEEB-07-0052 Follow-Up (EEEB-08-0110)

In the March 25, 2008, letter, the licensee states that the outside temperature (i.e. component casing temperature) of the equipment, instead of the internal temperature of the equipment, was conservatively compared with the component qualification temperature. Provide a basis for why the outside temperature is conservative for the affected EQ components.

EEEB-07-0052 Follow-Up (EEEB-08-0111)

During the March 31, 2008, teleconference, the licensee stated that due to the temperature increase in the MSVB, a design change (enclosing the Limitorque motors with insulation) will be required to maintain the qualification of the motors. Describe the design change in detail and provide a detailed evaluation justifying how this new design, (enclosing the motors with insulation), does not impact the original qualification configuration of the Limitorque motors. In addition, provide a schedule for implementing the aforementioned design change.

EEEB-07-0052 Follow-Up (EEEB-08-0112)

Do the motor-operated valves installed in the MSVB use magnesium rotors? If yes, then evaluate the impact of high temperatures on the motors due to the SPU to ensure that these motors do not experience the failure mechanism identified in Information Notice 2006-26 and industry operating experience.

EEEB-07-0052 Follow-Up (EEEB-08-0113)

In the March 25, 2008, letter, the licensee stated that the ITT actuators are not required to mitigate the consequences of an MSLB in the MSVB. Provide the function of the ITT actuators and the impact on other components or systems if the ITT actuators fail due to MSLB in the MSVB under SPU conditions.

EEEB-07-0054 and EEB-07-0055 Follow-Up (EEEB-08-0114)

In the January 10, 2008, letter, the licensee stated, in regards to license renewal, that the EQ program will re-evaluate EQ components to ensure that the current qualification remains valid for the period of extended operation. The licensee also states that the SPU will not have any impact on the EQ program's ability to adequately manage the effects of aging on the intended functions of EQ components. Describe why the SPU has no impact on the EQ program in regards to license renewal, as stated in the July 13, 2007, submittal. Please clarify whether EQ evaluations have been completed regarding the qualification of equipment for the period of extended operation.

Millstone Power Station, Unit No. 3

cc:

Lillilan M. Cuoco, Esquire
Senior Counsel
Dominion Resources Services, Inc.
Building 475, 5th Floor
Rope Ferry Road
Waterford, CT 06385

Edward L. Wilds, Jr., Ph.D.
Director, Division of Radiation
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

First Selectmen
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385

Mr. J. W. "Bill" Sheehan
Co-Chair NEAC
19 Laurel Crest Drive
Waterford, CT 06385

Mr. Evan W. Woollacott
Co-Chair
Nuclear Energy Advisory Council
128 Terry's Plain Road
Simsbury, CT 06070

Senior Resident Inspector
Millstone Power Station
c/o U.S. Nuclear Regulatory Commission
P. O. Box 513
Niantic, CT 06357

Ms. Nancy Burton
147 Cross Highway
Redding Ridge, CT 00870

Mr. Joseph Roy,
Director of Operations
Massachusetts Municipal Wholesale
Electric Company
Moody Street
P.O. Box 426
Ludlow, MA 01056

Mr. J. Alan Price
Site Vice President
Dominion Nuclear Connecticut, Inc.
Building 475, 5th Floor
Rope Ferry Road
Waterford, CT 06385

Mr. Chris Funderburk
Director, Nuclear Licensing and
Operations Support
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

Mr. William D. Bartron
Licensing Supervisor
Dominion Nuclear Connecticut, Inc.
Building 475, 5th Floor
Rope Ferry Road
Waterford, CT 06385

Mr. David A. Sommers
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

Mr. David A. Christian
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711