

December 1, 2003

Mr. David A. Christian
Sr. Vice President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 - PROPOSED
EMERGENCY PLAN CHANGES (TAC NOS. MB8096 AND MB8097)

Dear Mr. Christian:

By letter dated February 28, 2003, as supplemented by letter dated July 9, 2003, Dominion Nuclear Connecticut, Inc., submitted changes to the Millstone Power Station, Unit Nos. 2 and 3 (MP2 and MP3, respectively), Emergency Plan for review and approval by the U.S. Nuclear Regulatory Commission (NRC) prior to implementation in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(q). It should be noted that this application also proposed the same changes to the Millstone Power Station, Unit No. 1 (MP1). The MP1 change is addressed in a separate letter.

The proposed change would amend Table 5-1, "Station Emergency Response Organization" of the Millstone Power Station Emergency Plan by changing the requirement of one on-shift Health Physics Technician to a minimum staffing (30 to 60 minute) responder.

Based on its review, the NRC staff has concluded that the proposed MP2 and MP3 Emergency Plan changes do not decrease the effectiveness of the Emergency Plan and that the plan, as changed, continues to meet the planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50. The details of the NRC staff's review are contained in the enclosed Safety Evaluation. If you have any questions, please contact me at 301-415-1484.

Sincerely,

/RA/

Victor Nerses, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosure: As stated

cc w/encl: See next page

Millstone Power Station, Unit Nos. 2 and 3

cc:

Lillian M. Cuoco, Esquire
Senior Counsel
Dominion Resources Services, Inc.
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. W. R. Matthews
Senior Vice President - Nuclear Operations
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

Charles Brinkman, Director
Washington Operations Nuclear Services
Westinghouse Electric Company
12300 Twinbrook Pkwy, Suite 330
Rockville, MD 20852

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

Mr. P. J. Parulis
Manager - Nuclear Oversight
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

Mr. John Markowicz
Co-Chair
Nuclear Energy Advisory Council
9 Susan Terrace
Waterford, CT 06385

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

Mr. G. D. Hicks
Director - Nuclear Station Safety and
Licensing
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

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

Mr. William D. Meinert
Nuclear Engineer
Massachusetts Municipal Wholesale
Electric Company
P.O. Box 426
Ludlow, MA 01056

Mr. David W. Dodson
Licensing Supervisor
Dominion Nuclear Connecticut, Inc.
Roper Ferry Road
Waterford, CT 06385

Mr. S. E. Scace
Assistant to the Site Vice President
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

Millstone Power Station, Unit Nos. 2 and 3

cc:

Mr. M. J. Wilson
Manager - Nuclear Training
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

Mr. A. J. Jordan, Jr.
Director - Nuclear Engineering
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

Mr. S. P. Sarver
Director - Nuclear Station Operations and Maintenance
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road

Waterford, CT 06385
Mr. J. Alan Price
Site Vice President
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, CT 06385

Mr. Chris L. Funderburk
Director, Nuclear Licensing and
Operations Support
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

December 1, 2003

Mr. David A. Christian
Sr. Vice President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 - PROPOSED
EMERGENCY PLAN CHANGES (TAC NOS. MB8096 AND MB8097)

Dear Mr. Christian:

By letter dated February 28, 2003, as supplemented by letter dated July 9, 2003, Dominion Nuclear Connecticut, Inc., submitted changes to the Millstone Power Station, Unit Nos. 2 and 3 (MP2 and MP3, respectively), Emergency Plan for review and approval by the U.S. Nuclear Regulatory Commission (NRC) prior to implementation in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(q). It should be noted that this application also proposed the same changes to the Millstone Power Station, Unit No. 1 (MP1). The MP1 change is addressed in a separate letter.

The proposed change would amend Table 5-1, "Station Emergency Response Organization" of the Millstone Power Station Emergency Plan by changing the requirement of one on-shift Health Physics Technician to a minimum staffing (30 to 60 minute) responder.

Based on its review, the NRC staff has concluded that the proposed MP2 and MP3 Emergency Plan changes do not decrease the effectiveness of the Emergency Plan and that the plan, as changed, continues to meet the planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50. The details of the NRC staff's review are contained in the enclosed Safety Evaluation. If you have any questions, please contact me at 301-415-1484.

Sincerely,

/RA/

Victor Nerses, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosure: As stated

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	REnnis	BMcDermott, RGN-I	VNerses	GHill (2
PDI-2 Reading	CRaynor	KBrock	ACRS	JClifford
CHolden	OGC	EWeiss		

ADAMS Accession Number: ML032530013

* See previous concurrence

OFFICE	PDI-2/PM	PDI-2/LA	IEPB/SC*	OGC*	PDI-2/SC
NAME	REnnis for VNerses	CRaynor	SKlementowicz for EWeiss	AFernandez	JBoska for JClifford
DATE	11/25/03	11/25/03	11/7/03	11/19/03	11/25/03

OFFICIAL RECORD COPY

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO EMERGENCY PLAN CHANGES

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NOS. 2 AND 3

DOCKET NOS. 50-336 AND 50-423

1.0 INTRODUCTION

By letter dated February 28, 2003, as supplemented by letter dated July 9, 2003, Dominion Nuclear Connecticut, Inc. (the licensee) submitted a change to the Millstone Power Station, Unit Nos. 1, 2, and 3 (MP1, MP2, and MP3, respectively), Emergency Plan. The submittal was in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50.54(q). The proposed change would amend Table 5-1, "Station Emergency Response Organization" of the Millstone Power Station Emergency Plan by changing the requirement of one on-shift Health Physics (HP) Technician to a minimum staffing (30 to 60 minute) responder. It should be noted that the change to MP1 is addressed in a separate Safety Evaluation.

2.0 REGULATORY EVALUATION

The regulatory requirements and guidance on which the U.S. Nuclear Regulatory Commission (NRC or the Commission) staff based its acceptance are as follows:

2.1 Regulations

Section 50.47(b) of 10 CFR provides specific standards that the Emergency Plans of nuclear power reactors must meet. Those standards pertinent to this evaluation are listed below:

- Section 50.47(b)(2) of 10 CFR states, in part: "...adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available..."
- Section 50.47(b)(9) of 10 CFR states: "Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use."
- Section 50.47(b)(11) of 10 CFR states, in part: "Means for controlling radiological exposures, in an emergency, are established for emergency workers..."

The applicable regulation for making changes to a licensee's Emergency Plan is 10 CFR 50.54(q). This regulation states that licensees may change their radiological Emergency Plan without NRC approval only if the changes do not decrease the effectiveness of the plan, and the plan, as changed, continues to meet the planning standards of 10 CFR 50.47

and Appendix E to 10 CFR Part 50. The licensee states in their submittal dated February 28, 2003, that the change does not involve a decrease in effectiveness of the Emergency Plan. However, the change would involve a deviation from the guidance of Table B-1, "Minimum Staffing Requirements for NRC Licensees for Nuclear Power Plant Emergencies," of NUREG-0654, and from Table 2 of Supplement 1 to NUREG-0737, and requests the review and concurrence by the NRC of the proposed change.

2.2 Guidance

- Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," Revision 3, states, in part: "The criteria and recommendations contained in Revision 1 of NUREG-0654/FEMA-REP-1 are considered by the NRC staff to be acceptable methods for complying with the standards in 10 CFR 50.47 that must be met in onsite and offsite emergency response plans."
- NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," states, in part:
 - Section B, Onsite Emergency Organization, Item 5, "Each licensee shall specify... functional areas of emergency activity... These assignments shall cover the emergency functions in table B-1 entitled, "Minimum Staffing Requirements for Nuclear Power Plant Emergencies." The minimum on-shift staffing shall be as indicated in Table B-1. The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1..."
 - Section I, Accident Assessment, Item 8, "Each organization... shall provide methods, equipment and expertise to make rapid assessments of the actual or potential magnitude and locations of any radiological hazards... This shall include activation, notification means, field team composition, transportation, communication, monitoring equipment and estimates deployment times."

3.0 TECHNICAL EVALUATION

The licensee proposed to amend Table 5-1, "Station Emergency Response Organization" of the Millstone Power Station Emergency Plan by changing the requirement of one on-shift HP technician to a minimum staffing (30 to 60 minute) responder. The licensee has given the following justification in support of this change.

The justification for this change is based primarily upon technological advances made in the field of personnel and station monitoring, combined with the experience the industry has gained in the area of emergency response and planning since NUREG-0654 and NUREG-0737 were first issued. The licensee also states that there is a low probability that radiological concerns would be present at the onset of an emergency event.

The licensee outlined several advances in technology, including: electronic dosimetry; electronic access control stations with uninterruptible power supply (UPS); personal contamination monitors with UPSs; process and area radiation monitors (PRM and ARM,

respectively); the use of on-shift chemistry technicians; pre-approved Radiation Work Permits; and station emergency response personnel who have their own thermoluminescent dosimetry and are equipped with alpha-numeric pagers. Additionally, the licensee stated that these technological advances, including the use of a KAMAN system, which has ARM and PRM readouts in the control room and the HP control point, will relieve many of the administrative burdens of the on-shift HP technicians. The licensee further stated that, with the decommissioning of MP1, the MP1 control room is no longer manned, and the MP2 Shift Manager is responsible for monitoring and classifying MP1 events.

Table B-1 of NUREG-0654 (under the "in-plant protective actions" major functional area in NUREG-0654) specifies that there be two on-shift personnel that perform the functions of access control, HP coverage for repair, corrective actions, search and rescue first-aid and firefighting, personnel monitoring and dosimetry. These on-shift personnel are able to be augmented with two 30-minute responders and two 60-minute responders. In addition, under the "Radiological Accident Assessment and Support of Operational Accident Assessment" major functional area in NUREG-0654, Table B-1 also specifies one on-shift HP technician to perform in-plant surveys.

Currently, Millstone's Emergency Plan, Table 5-1, calls for three on-shift Radiological Monitoring Team #1 (RMT#1) responders. These responders are able to perform in-plant surveys, as listed under the "Radiological Accident Assessment and Support of Operational Accident Assessment" major functional area. The three on-shift RMT#1 responders correspond to one on-site responder per unit. The licensee has proposed to move one on-shift responder to a 30-60-minute responder. The total number of responders required to report in an emergency event will remain unchanged at 11. Because Unit No. 1 is decommissioned and Table B-1 only applies to licenced plants, the staff does not view this change as a deviation from Table B-1. The staff also finds that the abilities of on-site personnel, in performing in-plant surveys until the arrival of the 30-60-minute responder, will be augmented by the use of the aforementioned technology. Given this consideration, the staff finds that the licensee's Emergency Plan (as modified) will continue to meet the standards of 10 CFR 50.47(b)(2), (9), and (11) and is, therefore, acceptable.

4.0 CONCLUSION

The NRC staff has determined that the licensee's Emergency Plan, as modified by its application dated February 20, 2003, as supplemented by letter dated July 9, 2003, continues to meet the criteria specified in 10 CFR 50.47(b). Therefore, the Commission concludes, based on the above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the approval of the proposed Emergency Plan changes will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: K. Brock
Date: December 1, 2003