



**North
Atlantic**

North Atlantic Energy Service Corporation
P.O. Box 300
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(603) 474-9521

The Northeast Utilities System

September 25, 2000

Docket No. 50-443

NYN-00083

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Seabrook Station
Supplement to License Amendment Request 00-04,
"Reactor Coolant System Flow Measurement"

North Atlantic Energy Service Corporation (North Atlantic) has enclosed herein a supplement (Enclosure 1) to License Amendment Request (LAR) 00-04. Enclosure 1 provides the revised Technical Specification (TS) and associated TS Bases changes. Submittal of this supplement was previously committed in North Atlantic's response letter¹ to the NRC Staff's request for additional information,² and subsequently discussed by teleconference.

LAR 00-04 was submitted on June 20, 2000, pursuant to the requirements of 10CFR50.90 and 10CFR50.4. LAR 00-04 proposed changes to the Seabrook Station Technical Specifications (TS) related to Reactor Coolant System (RCS) flow measurement surveillance requirement (SR) 4.2.5.3 contained in TS 3/4.2.5, "DNB Parameters, and the associated reactor trip function for Reactor Coolant Flow - Low, contained in TS Table 2.2-1, "Reactor Trip System Instrumentation Trip Setpoints."

The changes to the Technical Specifications proposed by LAR 00-04 have been reviewed by the Station Operation Review Committee and the Nuclear Safety Audit Review Committee.

North Atlantic has determined that the revision to the proposed change to SR 4.2.5.3 and its associated Bases are inconsequential with regard to the original proposal. Therefore, the revision does not invalidate North Atlantic's original determination that the proposed TS change does not involve a significant hazard consideration pursuant to 10 CFR 50.92, as stated in LAR 00-04. In addition, the proposed TS change continues to meet the criteria of 10 CFR 51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.

¹ NYN-00082, "Response to NRC Request For Additional Information (RAI) Regarding Proposed Technical Specification Change To Surveillance Requirement 4.2.5.3," dated September 11, 2000.

² Seabrook Station, Unit No. 1 - Request For Additional Information (RAI) Regarding Proposed Technical Specification Change To Surveillance Requirement 4.2.5.3," dated August 11, 2000.

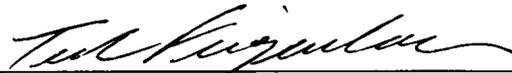
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A copy of this letter and the enclosed LAR has been forwarded to the New Hampshire State Liaison Officer pursuant to 10 CFR 50.91(b). North Atlantic requests NRC Staff review of LAR 00-04, and issuance of a license amendment by October 15, 2000.

Should you have any questions regarding this letter, please contact Mr. James M. Peschel, Manager - Regulatory Programs, at (603) 773-7194.

Very truly yours,

NORTH ATLANTIC ENERGY SERVICE CORP.



Ted C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

w/o Enclosure

cc: H. J. Miller, NRC Regional Administrator
R. M. Pulsifer, NRC Project Manager, Project Directorate 1-2
R. K. Lorson, NRC Senior Resident Inspector

Mr. Woodbury P. Fogg, P.E., Director
New Hampshire Office of Emergency Management
State Office Park South
107 Pleasant Street
Concord, NH 03301

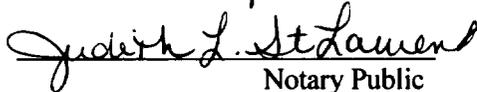
Oath and Affirmation

I, Ted C. Feigenbaum, Executive Vice President and Chief Nuclear Officer of North Atlantic Energy Service Corporation hereby affirm that the information and statements contained within this supplement to LAR 00-04 are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed

before me this

25th day of September, 2000


Notary Public



Ted C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

Enclosure 1

POWER DISTRIBUTION LIMITS

LAR 00-04 SUPPLEMENT
MARK UP
AS OF 9/24/00

3/4.2.5 DNB PARAMETERS

LIMITING CONDITION FOR OPERATION

3.2.5 The following DNB-related parameters shall be maintained within the following limits:

- a. Reactor Coolant System T_{avg} , $\leq 594.3^{\circ}F$
- b. Pressurizer Pressure, ≥ 2185 psig*
- c. Reactor Coolant System Flow shall be:
 1. $\geq 382,800$ gpm**; and,
 2. $\geq 392,800$ gpm***

APPLICABILITY: MODE 1.

ACTION:

With any of the above parameters exceeding its limit, restore the parameter to within its limit within 2 hours or reduce THERMAL POWER to less than 5% of RATED THERMAL POWER within the next 4 hours.

SURVEILLANCE REQUIREMENTS

4.2.5.1 Each of the parameters shown above shall be verified to be within its limits at least once per 12 hours.

4.2.5.2 The RCS flow rate indicators shall be subjected to CHANNEL CALIBRATION at least once per 18 months.

4.2.5.3 The RCS total flow rate shall be determined by an approved method ~~a precision heat balance measurement~~ to be within its limit prior to operation above 95% of RATED THERMAL POWER after each fuel loading. The provisions of Specification 4.0.4 are not applicable for entry into MODE 1.

*Limit not applicable during either a THERMAL POWER ramp in excess of 5% of RATED THERMAL POWER per minute or a THERMAL POWER step in excess of 10% of RATED THERMAL POWER.

**Thermal Design Flow. An allowance for measurement uncertainty shall be made when comparing measured flow to Thermal Design Flow.

***Minimum measured flow used in the Revised Thermal Design Procedure.

BASES

3/4.2.5 DNB PARAMETERS

The limits on the DNB-related parameters assure that each of the parameters is maintained within the normal steady-state envelope of operation assumed in the transient and accident analyses. The limits are consistent with the updated FSAR assumptions and have been analytically demonstrated adequate to assure compliance with acceptance criteria for each analyzed transient. Operating procedures include allowances for measurement and indication uncertainty so that the limits of 594.3 °F for T_{avg} and 2185 psig for pressurizer pressure are not exceeded.

RCS flow must be greater than or equal to, 1) the Thermal Design Flow (TDF) with an allowance for measurement uncertainty and, 2) the minimum measured flow used in place of the TDF in the analysis of the DNB related events when the Revised Thermal Design Procedure (RTDP) methodology is utilized.

The 12-hour periodic surveillance of these parameters through instrument readout is sufficient to ensure that the parameters are restored within their limits following load changes and other expected transient operation.

The periodic surveillance of indicated RCS flow is sufficient to detect only flow degradation which could lead to operation outside the specified limit.

MOVE

Measurement of RCS total flow rate is performed by performance of either a precision calorimetric heat balance or normalized cold leg elbow tap ΔP measurements. RCS flow measurements using either the precision heat balance or the elbow tap ΔP measurement methods are to be performed at steady state conditions prior to operation above 95% rated thermal power (RTP) at the beginning of a new fuel cycle. The elbow tap RCS flow measurement methodology is described in WCAP-15404, "Justification of Elbow Taps for RCS Flow Verification at Seabrook Station", dated April 2000.

INSERT

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