ABB
ASEA BROWN BOVERI

July 29, 1994
ML-94-037

Docket No. 70-1100
License No. SNM-1067

Mr. Robert Pierson, Chief
Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Materials Safety and Safeguards
U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: **Dilution Tank Level Instrumentation Operational Checks**

Reference: (A) Letter, M. A. Michelsen (CE) to NRC, dated July 15, 1994

Dear Mr. Pierson:

Reference (A) provided our reply to the Notice of Violation (Inspection Report No. 70-1100/94-01) concerning annual calibration of the dilution tank level instrumentation in Building 6. As indicated therein, a license amendment request would be submitted to change the annual calibration to a monthly operational check. This letter provides that request. It is also requested that Condition No. S-6 of the materials license certificate be similarly changed, or deleted by reference to this application.

Enclosure I provides an explanation of the request. Enclosure II lists the page affected in the application for License No. SNM-1067. Enclosure III provides the affected page; changes are indicated by a bar in the right-hand margin. Six (6) copies of this document are enclosed for your use.

If there are questions or comments regarding this matter, please feel free to contact me at (203) 285-5261.

Very truly yours,

COMBUSTION ENGINEERING, INC.

Mark A. Michelsen
Licensing Engineer

xc: S. Soong (NRC)
J. Noggle (NRC - Region I)

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Enclosure I to
ML-94-037

COMBUSTION ENGINEERING, INC.

WINDSOR NUCLEAR FUEL MANUFACTURING FACILITY

EXPLANATION OF CHANGES

July 1994

COMBUSTION ENGINEERING, INC.
WINDSOR NUCLEAR FUEL MANUFACTURING FACILITY
EXPLANATION OF CHANGES

The Notice of Violation of NRC Inspection Report No. 70-1100/94-01 concerns the lack of calibration of the dilution tank level instrumentation in Building 6. As explained in CE's letter replying to the Notice of Violation, dated July 15, 1994, the level indication system and level sensors were modified circa 1985. The license condition (circa 1982) which invoked the calibration requirement was based upon the previous level indication system.

The method of performing dilution prior to discharge has also been revised since the license condition S-6 was invoked. The dilution tanks are filled completely prior to discharge; therefore the concentration of the diluted discharged water is well known and well controlled without reliance upon the level instruments.

The level sensors are discrete indicators at several tank levels, consisting of conductivity activated on-off, go-nogo probes. Calibration of such indicators is not meaningful; also, if such were feasible, it would require removing the level probes and creating a fixture to simulate water level variations. The sensors are discrete and their position on the level probes will not change. It is not important that they measure a particular value or engineering parameter, but merely that they are maintained operational. Therefore, the enclosed license amendment request would change the requirement for annual calibration of these instruments to a monthly operational check when in use.

It is also requested that Condition No. S-6 of the materials license certificate be similarly changed, or deleted by reference to this application.

Enclosure II to
ML-94-037

COMBUSTION ENGINEERING, INC.

WINDSOR NUCLEAR FUEL MANUFACTURING FACILITY

LIST OF AFFECTED PAGES

July 1994

COMBUSTION ENGINEERING, INC.
WINDSOR NUCLEAR FUEL MANUFACTURING FACILITY
LIST OF AFFECTED PAGES

Combustion Engineering, Inc. is updating Part I of its license application for the Windsor Nuclear Fuel Manufacturing Facility (License No. SNM-1067) to modify the requirement for an annual calibration of the Building 6 dilution tank level instruments to a requirement for a monthly operational check. The affected page of the application is provided in Enclosure III.

The license application page affected is as follows:

List of Affected Pages

Delete Page			Add Page		
Page No.	Rev.	Date	Page No.	Rev.	Date
I.5-3	5	6/3/93	I.5-3	6	7/29/94

Enclosure III to
ML-94-037

COMBUSTION ENGINEERING, INC.

WINDSOR NUCLEAR FUEL MANUFACTURING FACILITY

APPLICATION CHANGE PAGE

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packages shall be sealed in a manner which precludes casual entry (e.g., by the use of steel clips or strapping) until final sealing is accomplished prior to shipment to the processor or disposal facility. Packages containing liquid wastes shall not be stored outside, shall be segregated from solid waste packages (e.g., stacked separately) and shall be appropriately labelled.

5.1.4 Potentially Contaminated Waste Water

In-process and clean-up rinse water solutions are sampled to verify that MPC is not exceeded, and are then introduced to the waste water system as described below. Release of waste water will be authorized by a member of the Radiological Protection and Industrial Safety staff.

Sinks and showers in the laboratories and the manufacturing facility are drained to any one of ten (10) 2000-gallon retention tanks (located in Building 6). The tanks fill automatically in sequence. When eight tanks become filled to capacity, a blinking warning light located in the outside wall of the building is activated to warn that two retention tanks remain in reserve to receive radioactive waste water. A sampling station is provided at the base of each retention tank, from which a 500-ml sample is withdrawn and forwarded to the Radiochemistry Laboratory for gross alpha and beta analyses. Water is discharged at or below 0.000003 μCi/ml (this is ten percent of MPC for insoluble natural uranium). The discharge level for unidentified mixtures of radionuclides is 0.000000003 μCi/ml. (This is ten percent of MPC for unidentified mixed radionuclides). Where levels of activity exceed these limits the water is diluted before being discharged. An operational check of the instruments measuring the water level in the dilution tank(s) shall be performed on a monthly basis when the tank(s) are used during the month.