



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION
AMENDMENT NO. 2 TO LICENSE NO. NPF-36
SHOREHAM NUCLEAR POWER STATION
DOCKET NO. 322

Introduction

By letter dated October 21, 1985 (SNRC-1206), the Long Island Lighting Company (LILCo, the licensee) requested that Tables 3.3.7.5-1 and 4.3.7.5-1 of the Technical Specifications attached to License No. NPF-36 for the Shoreham Nuclear Power Station be revised to reflect the conversion of one of the two Reactor Building Standby Ventilation Systems (RBSVS) low range noble gas radiation monitors into a Low Range Plant Vent Stack noble gas radiation monitor.

Discussion and Evaluation

Regulatory Guide 1.97 (R.G. 1.97), Revision 2, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident" describes a method acceptable to the NRC staff for complying with the Commission's regulations (specifically General Design Criteria 13, 19, and 64 of Appendix A to 10 CFR Part 50) to provide instrumentation to monitor plant variables and systems during and following an accident in a light-water-cooled nuclear power plant.

Table 1 of R.G. 1.97 contains a list of "Type E" variables which are to be monitored as required to determine the magnitude of a release of radioactive materials and to continually assess such releases. In order to monitor the release of airborne radioactive materials, boiling water reactors should have, among others, instruments to measure the noble gas activities and vent flow rates of (1) the drywell purge and standby gas treatment system purge systems, and (2) the common plant vent stack. R.G. 1.97 requires one instrument to monitor each function and does not require that redundant instruments be provided.

As originally licensed, the Shoreham plant was equipped with one low range and one high range noble gas activity and vent flow monitor for the station ventilation stack, and two low range and one high range monitors for the RBSVS. The configuration was reflected in Table 3.3.7.5-1 of the Technical Specifications, except that the low range plant vent stack monitor was not listed.

However, the original low range vent stack monitor could not be environmentally qualified in accordance with the provisions of 10 CFR 50.49. The RBSVS monitors and the high range vent stack monitor were successfully qualified. The licensee has therefore proposed to re-route the sample inlet line for one of the low range RBSVS instruments (1D11*PNL-021) so that it would serve as the low range vent stack monitor. The sample discharge line for this instrument would also be re-routed from the Control Building roof to the station vent.

8603130211 860304
PDR ADOCK 05000322
P PDR

The low range monitor itself will not be relocated. It will remain in the Control Building chiller room, which is a non-harsh environment under all postulated accident conditions; it will retain its seismic, Category I qualification; and it will continue to be supplied with power from an emergency diesel generator so that it will be available throughout the course of the accident. The new sample tubing has been designed with seismic Category I supports, so that it will not collapse or become a missile during a seismic event and will not thereby endanger other safety related equipment.

The proposed Technical Specification change would not reduce a margin of safety because the original technical specifications required only one RBSVS instrument to be operable at one time. With that channel inoperable for more than 72 hours, Action Statement 81 requires monitoring by an alternative method. Therefore, having only one instead of two RBSVS low range monitors available provides reduced flexibility for plant operation, but does not impact the ability to satisfy this specification. The change would also add the new low range vent stack instrument to Tables 3.3.7.5-1 and 4.3.7.5-1. We therefore find these changes to be acceptable.

3.0 Environmental Consideration

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and/or changes to the surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement nor environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 Conclusion

The Commission made a proposed determination that this amendment involves no significant hazards consideration which was published in the Federal Register on November 6, 1985 (50 F.R. 46214), and consulted with the State of New York. No public comments were received, and the State of New York did not have any comments.

The staff has concluded, based on the considerations discussed 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributors: R. Caruso, H. Li

Dated: MAR 04 1985

Docket No. 50-322

MAR 04 1986

Mr. John D. Leonard, Jr.
Vice President - Nuclear Operations
Long Island Lighting Co.
Shoreham Nuclear Power Station
P.O. Box 618, North Country Road
Wading River, NY 11792

Dear Mr. Leonard:

SUBJECT: AMENDMENT NO. 2 TO FACILITY OPERATING LICENSE NO. NPF-36: SHOREHAM
NUCLEAR POWER STATION

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 2 to Facility Operating License No. NPF-36 for the Shoreham Nuclear Power Station. This amendment is in response to your letter dated October 21, 1985 (SNRC-1206). The amendment revises the Technical Specifications to reflect the conversion of one of the two low range Reactor Building Standby Ventilation System noble gas radiation monitors to a low range plant vent stack noble gas radiation monitor.

A copy of the related safety evaluation supporting Amendment No. 2 to Facility Operating License No. NPF-36 is enclosed.

Sincerely,

Original signed by

Walter R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing

Enclosures:

1. Amendment No. 2
to NPF-36
2. Safety Evaluation

cc w/enclosures:
See next page

DISTRIBUTION

See next page

PD#4/PM
RChyuso:lb
02/20/86

PD#4/LA
EHylton
03/4/86

PD#4/D
WButler
03/4/86

WB

3. This amendment is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Walter R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing

Enclosure:
Changes to the Technical Specifications

Date of Issuance: MAR 04 1986

*See Previous Concurrence

PD#4/PM

*RCaruso:lb

02/19/86

PD#4/LA

*EHylton

02/19/86

OELD

*Bordenick

02/21/86

PD#4/D

WButler

03/4/86

WB