LONG ISLAND LIGHTING COMPANY

Operating License NPF-36
Docket 50-322
License Change Application 12

This License Change Application requests modification to Operating License NPF-36 for the Shoreham Nuclear Power Station to change the method for determining the setpoint for the main control room vent radiation monitors.

The request and supporting documentation is contained in Attachments 1 to this License Change Application.

Long Island Lighting Company

By: John D. Leonard, Jr.
Vice President - Nuclear Operations

Subscribed and sworn to before me this 24th day of May 1988.

JAMES A. LITTLE
NOTARY PUBLIC, State of New York
No. 4886267, Suffolk County
Term Expires May 18, 1989

James A. Little
Notary Public of New York

My Commission Expires: May 18, 1989

Attachment 1
To License Change Application 12

1.0 DESCRIPTION OF CHANGE

Change the alarm/trip setpoint and measurement range of the main control room vent radiation monitors, item 1 of Technical Specification Table 3.3.7.1-1 as identified in Exhibit A.

2.0 REASON FOR CHANGE

2.1 The current method for determining the setpoint for these monitors is:

Setpoint $\leq$ 2 x Background

This current methodology has an inherent weakness. The lower the background the lower the setpoint and the higher the probability of false alarms. These false alarms can be attributed to electronic parameters of the instruments or a change of the background radiation level. This change in setpoint methodology is needed to reduce the number of spurious control room alarms and enable the affected instruments to perform their intended function effectively.

2.2 The change in the instrument range will correct an inconsistency between the Technical Specification and the design basis of the instrument as described in Updated Safety Analysis Report.

3.0 BASIS FOR NO SIGNIFICANT HAZARDS FINDING

The proposed license change does not involve a significant hazards consideration because operation of the Shoreham Nuclear Power Station - Unit 1, in accordance with this change, would not:

(1) involve a significant increase in the probability or consequences of an accident previously evaluated. These monitors only detect airborne radioactivity in the control room inlet ducts. The possibility of detecting radiation levels in these ducts will not be reduced by this change.

(2) create the possibility of an accident that is different than any already evaluated in the USAR. The setpoint of these monitors has no effect on plant equipment other than the alarm itself.

(3) involve a significant reduction in margin of safety. For the upper portions of the expected background range, the margin of safety will be increased, because the new methodology results in a lower setpoint for this portion of the expected range. There will be a slight reduction in the margin of safety for the lower portion of the expected background range (0-60 cpm). This reduction in the margin of safety has been determined to be insignificant, because the monitors will alarm at dose rates well below the 0.2 mr/hr control room design limit, resulting in a maximum dose rate increase to control room personnel of 1.4×10^{-3} mr/hr.

The Commission has provided guidance concerning the application of standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve significant hazards consideration. Example (vi) relates to changes which either may result in some increase in the probability or consequences of an accident or a reduction in a safety margin, but where the results of the change are within acceptance criteria: for example, a change due to a small refinement of a previously used calculational model or design method. In this case, the proposed change described above is similar to example (vi). The proposed change is a refinement of a calculational method, which may result in a reduction in the margin of safety, but the reduction is insignificant because the monitors will alarm at dose rates well below previously established design limits.

Therefore, based upon the above considerations and analyses, LILCO has determined that this proposed change does not involve a significant hazards consideration.

4.0 TIMING OF CHANGE

Since this proposed technical specification change will require a number of station procedure changes, LILCO requests that it become effective upon issuance of the update procedures.