



LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

P.O. BOX 618, NORTH COUNTRY ROAD • WADING RIVER, N.Y. 11792

Direct Dial Number

February 14, 1983

SNRC-839

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Loose Parts Monitoring System
Safety Evaluation Report Item #64

Reference: (1) Letter SNRC-769 dated September 14, 1982
(2) Region I Insepction Report 50-322/82-02

Dear Mr. Denton:

In the reference 1 letter, LILCO forwarded additional information on Shoreham's Loose Parts Monitoring System (LPMS) consisting of the following:

- (1) LPMS Description and cost/benefit analysis for separation.
- (2) Proposed test program to determine the utilization of the Deliberate Plant Maneuver Detector.
- (3) Various plant procedures including a draft of STP 814, Startup Test Procedure.

This information has been received by the staff and, based on recent discussions, it has been determined that one additional commitment must be formally made by LILCO prior to resolution of this item with NRR. To this end, and in response to the Ref. 2 inspection item, when calibration (system sensitivity adjustment and alarm logic adjustment) of the feedwater LPMS sensors is done, feedwater flow will be at least 50% rated flow.

Copies of the pertinent pages of the revised draft startup test procedure (STP 814, refer to sections 8.4.2 and 8.5.2) are enclosed denoting this commitment.

Boo1

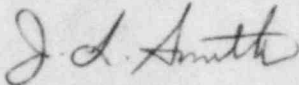
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Based on the above noted discussions, it is LILCO's understanding that this commitment is sufficient to close this issue with NRR (SER item number 64). LILCO will continue to work with Region I and NRR regarding utilization of the deliberate plant maneuver inhibit feature of the LPMS (Inspection Item No. 322/82-02-05).

Should you have any question, please contact this office.

Very truly yours,



J. L. Smith
Manager, Special Projects
Shoreham Nuclear Power Station

JLS:bc

cc: J. Higgins
Parties Listed in Attachment 1

ATTACHMENT 1

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Submitted: _____

Approved: _____
(Plant Manager)

STP Number	814
Revision	_____
Date Eff.	_____
TRN	_____
TRN	_____
TRN	_____

Loose Parts Monitoring

1.0 PURPOSE

- 1.1 Establish base line data for later reference in the detection of loose parts.
- 1.2 Establish Loose Parts Monitoring System alert adjustments for normal plant operating conditions and verify simulated impacts are detected.
- 1.3 Demonstrate that the Loose Parts Monitoring System sensitivity meets the RG 1.133 requirements of detecting 0.5 ft-lb impacts 3 feet from the sensor.
- 1.4 Determine the plant maneuvers that generate spurious loose parts monitoring system alarms.

2.0 DESCRIPTION

- 2.1 The Loose Parts Monitoring System response will be monitored and recorded.
- 2.2 The information collected will be evaluated to determine LPM alert settings and to ensure adequate instrument sensitivity and response.
- 2.3 Monitor LPMS response during deliberate plant maneuvers and establish which plant maneuvers should disable the LPMS so spurious alarms will not be generated during deliberate plant maneuvers.

8.4 System Sensitivity Adjustment

This test measures the background noise levels under normal plant conditions and calculates the required alert threshold setting to meet the Regulatory Guide 1.133 sensitivity requirements.

- 8.4.1 Verify that procedure steps 8.1 and 8.2 have been completed.

Verified Date

- 8.4.2 Verify that the plant conditions are within the range of conditions listed below. Record the actual plant conditions in Table 3.

Power : 50 - 100%
Feedwater Flow: 50 - 100%
Recirc. Flow : 50 - 100%

Verified Date

- 8.4.3 Contact control room personnel and verify that the plant should remain stable for the remainder of Section 8.4 of the procedure.

Verified Date

- 8.4.4 Set all switches and controls in accordance with Attachment 4.

Verified Date

- 8.4.5 Depress the system reset switch and verify that all TEC-1432 status LEDs are green.

Verified Date

- 8.4.6 Record the gain and filter settings of the TEC-932 amplifiers in Table 3.

8.5 System Alarm Logic Adjustment

This test adjusts the alarm logic of the TEC model 1433C control module to prevent false alarms while maintaining the sensitivities required by RG 1.133. This adjustment is performed by monitoring the rate at which the TEC model 1432 impact detectors generate spurious alert signals and determining the appropriate alert rate setting for preventing false alarms.

- 8.5.1 Verify that procedure steps 8.1, 8.2 and 8.4 have been performed.

Verified	Date
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- 8.5.2 Verify that plant conditions are within the range of conditions listed below and will remain so for the duration of procedure Section 8.5. Record the actual reactor conditions in Table 4.

Power	:	50 - 100%
Feedwater Flow:		50 - 100%
Recirc. Flow	:	50 - 100%

Verified	Date
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- 8.5.3 Power down the LPMS and connect the 6 channel strip chart recorder to the LPM system in order to monitor the (later) alert signals of all of the TEC 1432 impact detectors. When completed, power the LPM system back up.

Verified	Date
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- 8.5.4 Set all switches and controls in accordance with Attachment 4.

Verified	Date
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- 8.5.5 Power up the strip chart recorder and set the paper speed so that an hours worth of data collection will not produce an unwieldy amount of paper.

Verified	Date
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