NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Shoreham Nuclear Power Station Unit #1	0 5 0 0 0 3 2 2	1 OF 0 3

TITLE (4)
Ultimate Heat Sink, Accumulation of Sediment

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
0 3	1 8	8 6	8 6	0 1 1	0 2	1 2	0 5	8 6		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
4	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 0 0	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	X OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	Special Report
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Robert W. Grunseich, Operational Compliance Engineer	5 1 6 9 2 9 - 1 8 3 0 0

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

This Special Report is submitted pursuant to Technical Specification 6.9.2 to comply with Technical Specification 3.7.1.4. This revision is being submitted as a supplement to LER's submitted 3/18/86 and 7/25/86 to incorporate updated status of work to be performed on the Shoreham Intake Canal.

On March 13, 1986 annual soundings of the intake canal were taken in accordance with Long Island Lighting Company (LILCO) Station Procedure 84.122.01 "Intake Canal - Sediment Deposition Monitoring" for compliance with Technical Specification 4.7.1.4.a.1. The results of the soundings were finalized and reported to the watch engineer on March 18, 1986 and showed that of 24 transects measured, two were found to have readings of -10.3 and -10.7 feet MLW. The plant was in Operational Condition 4 (Cold Shutdown) at the time. The decrease in depth at the two transects is due to normal deposition. One major storm (Hurricane Gloria) was experienced at the site since the last dredging. 2

To bring the intake canal back into compliance with LILCO's procedure, a contractor was obtained to dredge the canal. Dredging was expected to be completed by July 30, 1986. The Army Corps of Engineers was ready to issue the necessary permit renewal on 6/23/86. However, since this LER was last revised, the State of New York, Department of State, has advised the Army Corps of Engineers and LILCO that the state objected to a consistency certification for the project. Without such a consistency certification, the Corps of Engineers is prohibited from issuing the dredging permit for the project. Therefore, the expected date for dredging has been made indeterminate.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

This Special Report is submitted pursuant to Technical Specification 6.9.2 to comply with Technical Specification 3.7.1.4.

This revision is being submitted as a supplement to LER's submitted 3/18/86 and 7/25/86 to incorporate updated status of work to be performed on the intake canal.

On March 13, 1986 the annual sounding of the intake canal was performed in accordance with Station Procedure 84.122.01 "Intake Canal - Sediment Deposition Monitoring" for compliance with Technical Specification 4.7.1.4.a.1. This procedure requires that each transect measure at least -11.0 feet MLW. The Technical Specifications require that the average depth of the intake canal measure -11.0 feet MLW. The plant was in Operational Condition 4 (Cold Shutdown) at the time. The results of the sounding were finalized and reported to the watch engineer on March 18, 1986. It showed the bottom depth at two of 24 transects to be slightly above the -11.0 feet MLW depth with measured depths of -10.3 and -10.7 feet MLW, the average depth of the intake canal measured -11.9 feet MLW. A Limiting Condition of Operation report was initiated on March 18, 1986.

The intake canal is 1500 feet long, 600 feet of which extends into the Long Island Sound from the shore line. The ultimate heat sink for the plant consists of the Long Island Sound connected to the intake structure by the dredged intake canal. The canal is dredged to a depth of -12 feet below mean low water (MLW) with a bottom width of 78 feet. The portion of the canal protruding into the sound is protected on each side by a rock jetty. The jetties are constructed of core stone and covered on the crest and slope with a single course of armor stone. The canal side slopes are covered with stone from the jetties to the screenwell structure to protect the canal from wave action. The bottom of the canal is not covered with stone to facilitate periodic dredging to remove accumulations of silt.

Only two of the 24 transects sounded were out of the Technical Specification limit with depths of -10.3 and -10.7 feet MLW. The average depth of the canal based on the soundings is -11.9 feet MLW which is well within the Technical Specification limit. The decrease in flow area because of the deposition at the two transects is minimal and would not affect coolant supply to the service water system. Station Procedure 84.122.01, (copy enclosed), provides a conservative means of assuring compliance with Technical Specification 3.7.1.4. The procedure requires a survey of East - West transects at fifty foot intervals. If any single transect has an average depth less than -11 feet MLW, the acceptance criteria has not been met and maintenance dredging is required. The procedure is meant to preclude the effects of "damming" in the canal and does not allow consideration of adjacent transects.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

A revision of LILCO's procedure is now being considered to allow consideration of the adjacent transects without disregarding the effects of dams. The minor accumulations of silt on the north end of the intake canal at transects 3+50 and 6+50 are shown on the enclosed drawing. Technical Specifications state that an average canal depth of -11 feet MLW must be maintained.

Since the last dredging was performed on June 23, 1985, one major storm has been experienced at the site (Hurricane Gloria, 9/27/85). Visual inspection of the canal banks show no defects. The cause of the small amount of deposition is believed to have been caused by normal annual sediment deposition. The intake canal has been designed to provide 590,000 GPM of cooling water to the intake structure to supply the full power operating requirements of both the circulating water and service water systems. Only about 17,000 GPM or 4 percent of the total is required for the service water system to assure reactor shutdown, cooldown and maintenance of cooldown. An average water depth of 1.4 feet across the canal will provide about two times the minimum required service water flow during full power operation. During conditions of shutdown and low power operation the service water requirements are less.

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To bring the intake canal back into compliance with LILCO's procedures, a contractor was obtained to dredge the canal. Dredging was expected to be completed by July 30, 1986. The Army Corps of Engineers was willing and ready to issue the permit renewal on 6/23/86. However, the State of New York, Department of State, advised the Army Corps of Engineers and Long Island Lighting that they objected to a consistency determination for the project. The Department of State contends that LILCO did not supply all of the information necessary to review the dredging application. They claimed to have the authority to review the coastal zone effects of SNPS based on their assumption that SNPS is an "associated facility" (See 15CFR930). They therefore requested information from LILCO including, but not limited to; plant safety, need for power, and emergency planning. LILCO believes that the dredging project is consistent with the Coastal Zone Management Act and that the New York State Department of State is incorrect in its categorization of SNPS as an "associated facility". Accordingly, LILCO is considering an appeal of the New York State decision to the United States Department of Commerce. Until the dredging permit situation is resolved, LILCO will increase the frequency of monitoring the deposition of silt in the intake canal so as to insure that startup or operation will not commence if abnormal degradation occurs.

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