91-20-5 (5/95)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
NOTICE/RENEWAL APPLICATION/PERMIT

Please read **ALL** instructions on the back before completing this application form. Please **TYPE** or **PRINT** clearly in ink.

PART 1 - NOTICE 05/15/1997

Permittee Contact Name, Title, Address

1-4722-01075/00001

LONG ISLAND LIGHTING CO
-ROBERT D TEETZ
445 BROADHOLLOW RD
MELVILLE NY 11747

Facility and SPDES Permit Information

Name: SHOREHAM NUCLEAR POWER STATION
Ind. Code: 4939 County: SUFFOLK
DEC No.: 1-4722-01075/00001
SPDES No.: NY 022 5860
Expiration Date: 03/01/1998
Application Due By: 09/02/1997

Are these name(s) & address(es) correct? if not, please write corrections above.

The State Pollutant Discharge Elimination System Permit for the facility referenced above expires on the date indicated. You are required by law to file a complete renewal application **at least 180 days prior to expiration of your current permit. Note the "Application Due By" date above.**

CAUTION: This short application form and attached questionnaire are the only forms acceptable for permit renewal. Sign Part 2 below and mail only this form and the completed questionnaire using the enclosed envelope. *Effective April 1, 1994 the Department no longer assesses SPDES application fees.*

If there are changes to your discharge, or to operations affecting the discharge, then in addition to this renewal application, you must also submit a separate permit modification application to the Regional Permit Administrator for the DEC region in which the facility is located, as required by your current permit. See the reverse side of this page for instructions on filing a modification request.

PART 2 - RENEWAL APPLICATION

CERTIFICATION: I hereby affirm that under penalty of perjury that the information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

E.J. YOUNGLING — Sr. VICE PRESIDENT - ENGINEERING & CONSTR.
Name of person signing application (see instructions on back) — Title

Signature — 8/19/97 Date

97 SEP 23 PM

PART 3 - PERMIT (Below this line - Official Use Only)

Effective Date: 3/1/98 Expiration Date: 3/1/03

Debra Devine
Permit Administrator

Address: NYSDEC - Compliance Services
Permit and Registration Services
50 Wolf Road, Albany, NY 12233-1760

Debra Devine — 10/29/97
Signature — Date

This permit together with the previous valid permit for this facility issued 02/02/93 and subsequent modifications constitute authorization to discharge wastewater in accordance with all terms, conditions and limitations specified in the previously issued valid permit, modifications thereof or issued as part of this permit, including any special or general conditions attached hereto. Nothing in this permit shall be deemed to waive the Department's authority to initiate a modification of this permit on the grounds specified in 6NYCRR §621.14, 6NYCRR §754.4 or 6NYCRR §757.1 existing at the time this permit is issued or which arise thereafter.

Attachments: General Conditions dated 11/90

STATE OF NEW YORK
DEPT. OF PUBLIC SERVICE
DATE 8/19/98
CASE NO. 92-E-0260
EX 67

94-20-2 (1/89)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)

DISCHARGE PERMIT

Special Conditions (Part I)

Industrial Code: 4939
Discharge Class (CL): 04
Toxic Class (TX): N
Major Drainage Basin: 17
Sub Drainage Basin: 02
Water Index Number: LIS
Compact Area: ISC

SPDES Number: NY - 0225860
DEC Number: 1-4722-01075/00001-0
Effective Date (EDP): 03/01/93
Expiration Date (ExDP): 03/01/98
Modification Date(s): 6/7/95, 7/7/95, 11/25/97
Attachment(s): General Conditions (Part II) Date: 11/90

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.)(hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS Attention: Peter Picciano, Manager

Name: Long Island Power Authority
Street: 200 Garden City Plaza
City: Garden City State: NY Zip Code: 11530
is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: LIPA - Shoreham Nuclear Power Station
Location (C,T,V): Shoreham County: Suffolk
Facility Address: North County Road
City: Shoreham State: NY Zip Code: 11786
NYTM - E: . NYTM - N: 4 .
From Outfall No.: 001 at Latitude: 40° 58′ 28″ & Longitude: 72° 52′ 03″
into receiving waters known as: Long Island Sound Class: SA
and; (list other Outfalls, Receiving Waters & Water Classifications)

Outfalls 002 & 003:
L. I. Sound - Class SA
Outfalls 051 & 056:
Groundwater - Class GA

Suffolk County Tax Map #'s:
==========
District: 200 Section: 003
Block: 1 Lot: 1

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Shoreham Nuclear Power Station
Street: North County Road
City: Shoreham State: NY Zip Code: 11786
Responsible Official or Agent: Perter Picciano, Manager Phone: (516)929-8300

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: R. Hannaford
R. Schneck
J. Myslinski
J. Maloney

Permit Administrator:
Roger Evans - Deputy RPA
Address: Building 40, SUNY
Stony Brook, New York 11790-2356
Signature: Roger Evans Date: 11/28/97

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)** 11/25/97

and lasting until **March 1, 1998**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type

Outfall 001: Floor Drains from Building discharging to Long Island Sound - Class SA

NO MONITORING REQUIRED.

Outfall 002: Floor Drains & Fire Pump House Storm Drains discharging to Long Island Sound - Class SA

NO MONITORING REQUIRED.

Outfall 003: Oil Water Separator, Control Building Drains, Roof & Yard Drains[b] discharging to L. I. Sound - Class SA

NO MONITORING REQUIRED.

Outfalls 051 and 056: Sanitary Wastes Only discharging to Groundwater - Class GA
(these Outfalls replace former SPDES Permit Numbers NY-0132969 and NY-0055829)

NO MONITORING REQUIRED.

DEFINITIONS OF DAILY AVERAGE AND DAILY MAXIMUM

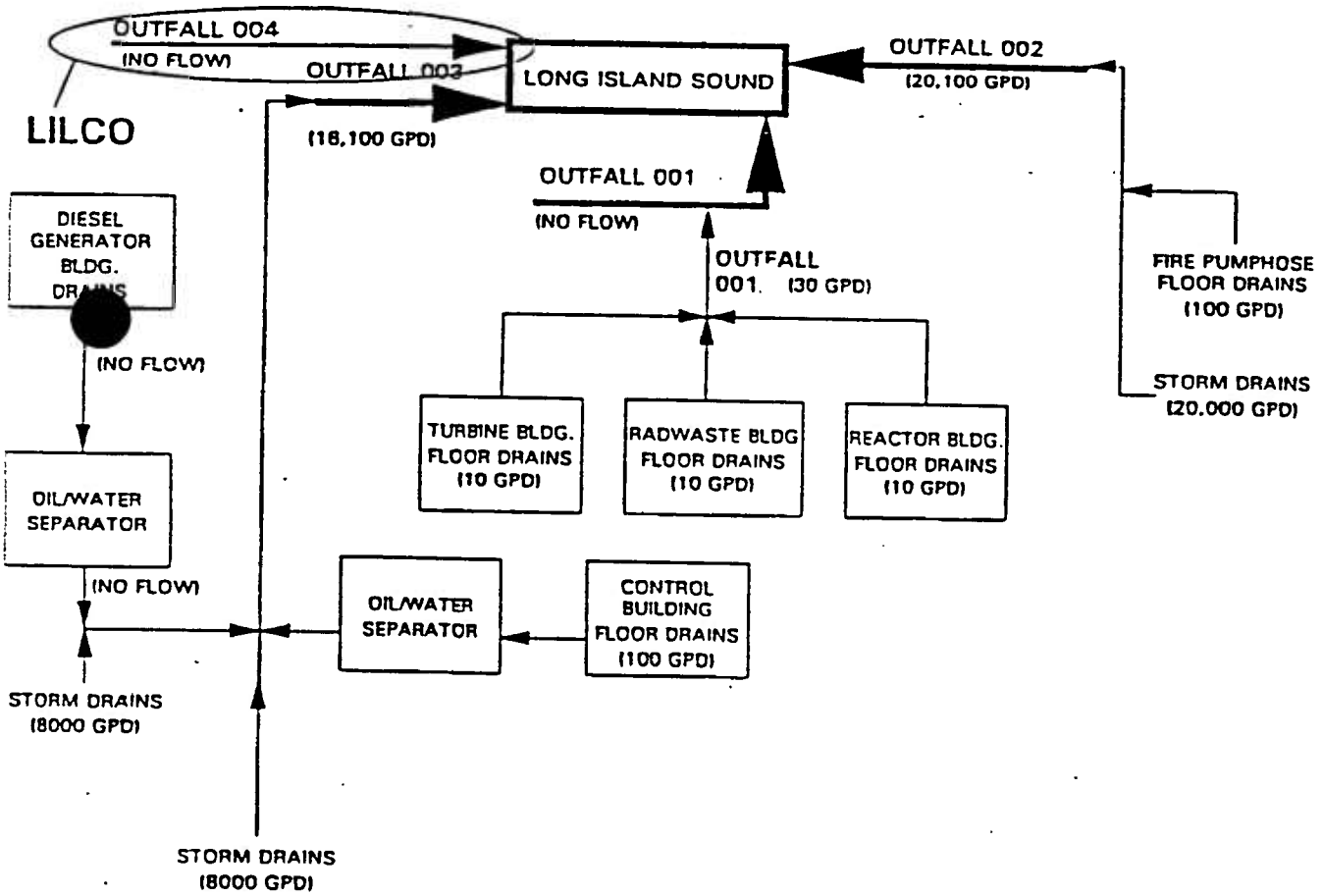
The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriated units as specified herein divided by the number of days during the calendar month when measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in t[redacted]ermit, at the location(s) indicated below: (Show sampling locations and outfalls with sketch or flow diagram as a[redacted]opriate)

LIPA SHOREHAM FACILITY: WATER BALANCE LINE DIAGRAM



ADDITIONAL REQUIREMENTS:

1. There shall be no discharge of PCB's from this facility.

2. There shall be no discharge of boiler cleaning wastewaters from this facility.

3. No biocides, corrosion control chemicals, or other water treatment chemicals are authorized for use by the permittee, except for those listed in the permit application. If other water treatment chemical additives are contemplated, application for their approval must be made to this Department prior to use.

4. This modified permit is for the specific purpose of the decommissioning of the Shoreham Nuclear Power Station. Any new activities not associated with the decommissioning of this facility, including the conversion to an alternate fuel or recommissioning this facility to use nuclear fuel will require a modification of this permit and/or reapplication to this Department.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**

[ ] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each ___ month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Send the **first copy** (second sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Regional Water Engineer - Region 1
Building 40 - SUNY @ Stony Brook
Stony Brook, New York 11790-2356

Include a copy of the laboratory analysis with the NYSDEC - Region 1 copy.

c) A monthly "Wastewater Facilities Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency listed above.

d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).

e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

~~1.20.5~~ (5/97)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
NOTICE / RENEWAL APPLICATION / PERMIT

Please read **ALL** instructions on the back before completing this application form. Please **TYPE** or **PRINT** clearly in ink.

PART 1 - NOTICE 06/15/1999

1-4726-00130/00031
Permittee Contact Name, Title, Address

KEYSPAN ENERGY
~~MARKETSPAN GENERATION LLC~~
ROBERT TEETZ
445 BROADHOLLOW RD
MELVILLE NY 11747

Facility and SPDES Permit Information

KEYSPAN ENERGY - NORTHPORT POWER STATION
Name: ~~MARKETSPAN NORTHPORT POWER STATIC~~
Ind. Code: 4911 County: SUFFOLK
DEC No.: 1-4726-00130/00031
SPDES No.: NY 000 5941
Expiration Date: 04/01/2000
Application Due By: 10/04/1999

Are these name(s) & address(es) correct? if not, please write corrections above.

The State Pollutant Discharge Elimination System Permit for the facility referenced above expires on the date indicated. You are required by law to file a complete renewal application **at least 180 days prior to expiration of your current permit.** [redacted] **the "Application Due By" date above.**

[redacted]TION: This short application form and attached questionnaire are the only forms acceptable for permit renewal. Sign Part 2 below and mail only this form and the completed questionnaire using the enclosed envelope. *Effective April 1, 1994 the Department no longer assesses SPDES application fees.*

If there are changes to your discharge, or to operations affecting the discharge, then in addition to this renewal application, you must also submit a separate permit modification application to the Regional Permit Administrator for the DEC region in which the facility is located, as required by your current permit. See the reverse side of this page for instructions on filing a modification request.

PART 2 - RENEWAL APPLICATION

CERTIFICATION: I hereby affirm that under penalty of perjury that the information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

BRIAN P. McCAFFREY — VICE PRES. - ENV. ENGINEERING AND SERVICES
Name of person signing application (see instructions on back) — Title

[redacted]re — 9/27/99
Signature — Date

RECEIVED 99 SEP 30 PM 1:30 NYSDEC

PART 3 - PERMIT (Below this line - Official Use Only)

Effective Date: 04/01/00 Expiration Date: 04/01/05

Barbara B. Rinaldi
Permit Administrator

Address: NYSDEC - Division of Environmental Permits
Bureau of Environmental Analysis
50 Wolf Road, Albany, NY 12233-1760

Barbara B Rinaldi 12/23/99
Signature Date

This permit together with the previous valid permit for this facility issued 10/14/94 and subsequent modifications constitute authorization to discharge wastewater in accordance with all terms, conditions and limitations specified in the previously issued valid permit, modifications thereof or issued as part of this permit, including any special or general conditions attached hereto. Nothing in this permit shall be deemed to waive the Department's authority to initiate a modification of this permit on the grounds specified in 6NYCRR §621.14, 6NYCRR §754.4 or 6NYCRR §757.1 existing at the time this permit is issued or which arise thereafter.

Attachments: General Conditions dated 11/90

ja (1/95)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Please enter the numbers from your current permit:

DEC Number: 1 - [illegible] - [illegible] / [illegible] - [illegible]

SPDES Number: NY [illegible]

SPDES RENEWAL APPLICATION
QUESTIONNAIRE

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR COMPLETED APPLICATION

Please **TYPE** or **PRINT** neatly using adaquate pressure to make ALL copies legible. Keep the GOLD copy for your records.

1. Has the SPDES permit for your facility been modified in the past 5 years ☒ YES ☐ NO

2. Dischargers who use, manufacture, store, handle or discharge toxic or hazardous pollutants are subject to Industrial Best Management Practices (BMP) plan requirements for toxic or hazardous substances. A BMP plan prevents or minimizes the potential for release of pollutants to receiving waters from such ancillary industrial activities, including material storage areas; plant site runoff; in-plant transfer; process and material storage areas; loading and unloading operations, and sludge and waste disposal areas.

Does your facility conduct ancillary activities as described above, which are not covered by BMP requirements in your current permit? ☒ YES ☐ NO

Please indicate which of the following best describes the situation at your facility:

☐ None of the concerns on the "Self Evaluation List" seem to apply to my facility at this time and I will not be applying for a modification of the SPDES permit in the foreseeable future.

☐ Yes, some of the items on the "Self Evaluation List" have led me to believe my permit needs to be modified. I already have a complete modification application pending with the Department.

☒ Yes, some of the items on the "Self Evaluation List" have led me to believe that the SPDES permit for this facility may need to be Modified. I have requested the appropriate forms by phone OR I have completed and attached the "Request For SPDES Application Forms" (included in this renewal package) to allow me to submit a permittee-initiated Modification application. See The "Request For SPDES Application Forms" page for a toll free 800 number.

☐ The items on the "Self Evaluation List" have left me unable to conclude whether my permit needs to be modified at this time. I am reporting the following general concerns about my permit:

DISTRIBUTION: Regional Water Engineer – WHITE
Central Office (BWFD) – YELLOW
Regional Permit Administrator – PINK
Applicant – GOLD

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)

DISCHARGE PERMIT

Special Conditions (Part 1)

First3 99

Industrial Code:	4911	SPDES Number:	NY- 0005932
Discharge Class (CL):	01	DEC Number:	1-4722-00107/00013-0
Toxic Class (TX):	T	Effective Date (ELP):	06/01/99
Major Drainage Basin:	17	Expiration Date (ExDP):	06/01/04
Sub Drainage Basin:	02	Modification Dates:	6/1/99, 01/11/02
Water Index Number:	68 LIS-PJH	Attachment(s):	General Conditions (Part II) Date: 11/90
Compact Area:	ISC		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: **KeySpan Energy** Attention: **Robert D. Teetz, Env. Manager**

Street: **445 Broadhollow Road**

City: **Melville** State: **NY** Zip Code: **11747**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **KeySpan Energy - Port Jefferson Power Station**

Location (C,T,V): **Brookhaven (T)** County: **Suffolk**

Facility Address: **Beech Street**

City: **Port Jefferson** State: **NY** Zip Code: **11777**

NYTM -E: NYTM - N: **4**

From Outfall No.: **001** at Latitude: **40 ° 57 ′ 02 ″** & Longitude: **73 ° 04 ′ 43 ″**

into receiving waters known as: **Port Jefferson Harbor** Class: **SA**

and; (list other Outfalls, Receiving Waters & Water Classifications)

Outfalls 002-018, 020-023, 025
007A, 007B & 007C (via 007)
025A & 025B (via 025)
Outfalls 026-031 Groundwater - Class GA

Suffolk County Tax Map #'s:
200 - 90 - 4 - 1
206 - 7 - 1 - 1
205 - 8 - 2 - 17

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **KeySpan Energy**

Street: **445 Broadhollow Road**

City: **Melville** State: **NY** Zip Code: **11747**

Responsible Official or Agent: **James K. Brennan** Phone: **(516) 545-5598**

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

R. Hannaford
R. Schneck/R. Sorrentino
[redacted]
EPA Chief - NYC
[redacted]

Permit Administrator: William R. Adriance	
Address: 625 Broadway Albany, NY 12233-1750	
Signature: William R. Adriance	Date: 01/11/02

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **June 01, 2004**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type

Outfall 001: Units 3 and 4 Screen Wash Return Water discharging to Port Jefferson Harbor - Class SA

NO MONITORING REQUIRED

Outfall 002: Units 3 and 4 Boiler Blowdown and Yard Drains* discharging to Port Jefferson Harbor - Class SA

Flow	NA	Monitor	GPD	Monthly	Recorded
pH (Range)	NA	6.0 - 9.0	SU	Each Batch[a]	Grab
Iron, Total	2.0	4.0	mg/l	Each Batch[a]	Grab
Vanadium, Total	15	20	mg/l	Each Batch[a]	Grab
Total Suspended Solids	30	50	mg/l	Annually	Grab
Oil & Grease	NA	15	mg/l	Each Batch[a]	Grab
Copper, Total	NA	1.0	mg/l	Each Batch[a]	Grab
Zinc, Total	NA	1.0	mg/l	Each Batch[a]	Grab

[a] Grab samples for these parameters shall be obtained immediately following a boiler wash operation.

* Under normal operating conditions, boiler blowdown and most stormwater covered by this outfall are directed to the wastewater treatment facility.

Outfall 003: Intake Tunnel Dewatering Drain discharging to Port Jefferson Harbor - Class SA

NO MONITORING REQUIRED

Outfall 004: Units 1 and 2 Screen Wash Return Water discharging to Port Jefferson Harbor - Class SA

NO MONITORING REQUIRED

Outfall 005: Yard Drains* discharging to Port Jefferson Harbor - Class SA

Flow	NA	Monitor	GPD	Monthly	Estimate
Oil & Grease	NA	15	mg/l	Monthly	Grab
Suspended Solids	NA	50	mg/l	Monthly	Grab

* Under normal operating conditions, all stormwater covered by this Outfall is directed to the wastewater treatment facility.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning Effective Date of Modification (EDM)

and lasting until June 01, 2004
the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfalls 006: Units 1 and 2 Boiler Blowdown Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Monthly	Recorded
Iron, Total	NA	4.0	mg/l	Monthly	Grab
Suspended Solids	NA	50	mg/l	Monthly	Grab
Oil & Grease	NA	15	mg/l	Monthly	Grab
[redacted]ll 007: Wastewater Holding Tank, Waste Oil/Sludge Tank Secondary Containment, Oil/Water Separator Containment & Storm Drains Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Monthly	Estimate
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Outfall 008: Storm Drains and Evaporator Blowdown Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Monthly	Estimate
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Outfall 009: Units 1, 2, 3 and 4 Circulating Cooling Water Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Monthly	Calculated
Discharge Temperature[b]	NA	110	°F	Continuous	Metered
Intake-Discharge Temperature Difference[b]	NA	30	°F	Continuous	Metered
Net Addition of Heat	NA	2.8×10^9	BTU/hr.	Hourly	Calculated
To[redacted]sidual Chlorine[c,d]	NA	0.2	mg/l	Continuous	Metered

[b] The permittee may exceed this limitation by not more than 10 °F for not more than 1% of the time in a year.

[c] If units are chlorinated simultaneously, neither free available chlorine nor total residual chlorine may be discharged for more than two hours in any one day. If units are chlorinated separately, chlorine may be discharged two hours/unit/day.

[d] Monitoring required only during periods of chlorination.

Outfalls 010 - 018 and 020 - 023: Condensed Steam Discharging to Port Jefferson Harbor - Class SA

NO MONITORING REQUIRED

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning Effective Date of Modification (EDM)

and lasting until June 01, 2004

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 025: Wastewater Treatment Plant Effluent Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Continuous	Recorded
pH (Range)[e]	NA	6.0 - 9.0	SU	Monthly	Grab
Iron, Total[a]	NA	1.0	mg/l	Weekly	Grab
Copper, Total[a,f]	NA	1.0	mg/l	Weekly	24 hr. Comp.
[redacted]dium, Total[f]	10	20	mg/l	Weekly	24 hr. Comp.
[redacted] Total[f]	0.5	1.0	mg/l	Monthly	24 hr. Comp.
[redacted]omium Total[f]	0.5	1.0	mg/l	Monthly	24 hr. Comp.
Nickel, Total[f]	1.0	2.0	mg/l	Monthly	24 hr. Comp.
Manganese, Total[f]	1.0	2.0	mg/l	Monthly	24 hr. Comp.
Benzene	NA	50	µg/l	Monthly	Grab
Toluene	NA	50	µg/l	Monthly	Grab
Xylenes, Total	NA	50	µg/l	Monthly	Grab
Ethylbenzene	NA	50	µg/l	Monthly	Grab
Oil & Grease	NA	15	mg/l	Weekly	Grab
Suspended Solids	30	50	mg/l	Weekly	Grab
Ammonia (as N)	NA	Monitor	mg/l	Monthly	Grab

[a] Grab samples for these parameters shall be obtained immediately following a boiler wash operation.

[e] The total time during which the pH values are outside the required range shall not exceed 7 hours and 26 minutes in any calendar month and no individual excursion from the range of pH values shall exceed 60 minutes.

[f] These parameters shall be monitored only when a discharge of metal cleaning wastewaters or ash sluicing waters occur. As a minimum, at least one composite sample of these parameters (excluding ammonia) shall be made for the duration of the discharge whether it is for 24 hours or less except if there is no discharge of these wastewaters during this period.

Outfall 07A: Wastewater Holding Tank Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Each Discharge	Estimate
Oil & Grease	NA	15	mg/l	Each Discharge	Grab
pH (range)	NA	6.0 - 9.0	SU	Each Discharge	Grab
Outfall 07B: Stormwater from Waste Oil/Sludge Tank Secondary Containment Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Grab
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Outfall 07C: Stormwater from Oil/Water Separation Containment Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Estimate
Oil & Grease	NA	15	mg/l	Quarterly	Grab

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **June 01, 2004**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 026: Stormwater from Secondary Containment of Fuel Oil Tanks at I.C. Site discharging to Groundwater - GA					
[redacted]	NA	Monitor	GPD	Monthly	Estimate
Oil & Grease	NA	15	mg/l	Monthly	Grab
Benzene	NA	0.7	µg/l	Quarterly	Grab
Toluene	NA	5	µg/l	Quarterly	Grab
Ortho-Xylene	NA	5	µg/l	Quarterly	Grab
Sum of Meta- and Para-Xylenes	NA	10	µg/l	Quarterly	Grab
Ethylbenzene	NA	5	µg/l	Quarterly	Grab
Outfall 027: Stormwater Runoff from Truck Unloading Pad at I.C. Site discharging to Groundwater - GA					
Flow	NA	Monitor	GPD	Monthly	Estimate
Oil & Grease	NA	15	mg/l	Monthly	Grab
Benzene	NA	0.7	µg/l	Quarterly	Grab
Toluene	NA	5	µg/l	Quarterly	Grab
Ortho-Xylene	NA	5	µg/l	Quarterly	Grab
Sum of Meta- and Para-Xylenes	NA	10	µg/l	Quarterly	Grab
Ethylbenzene	NA	5	µg/l	Quarterly	Grab

Outfall 028: Stormwater from Secondary Containment of LiquiMag Tanks directed to Wastewater Treatment

NO MONITORING REQUIRED.

Outfall 029: Stormwater Runoff from Truck Unloading Pad at LiquiMag Site directed to Wastewater Treatment

NO MONITORING REQUIRED.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **June 01, 2004**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 030: Stormwater from Secondary Containment of Demineralizer Acid and Caustic Tanks directed to Wastewater Treatment					
NO MONITORING REQUIRED.					
Outfall 031: Stormwater Runoff from Truck Unloading Pad at Demineralizer Acis and Caustic Tanks directed to Wastewater Treatment					
NO MONITORING REQUIRED.					

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning Effective Date of Modification (EDM)

and lasting until June 01, 2004

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 025A: Stormwater from Ammonia Tank Secondary Containment Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Estimate
Ammonia (as N)	NA	Monitor	mg/l	Quarterly	Grab
Outfall 025B: Stormwater from Ammonia Tank Truck Unloading Facility Discharging to Port Jefferson Harbor - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Estimate
Ammonia (as N)	NA	Monitor	mg/l	Quarterly	Grab
Tank Test Water**					
Flow	NA	Monitor	GPD	Each Discharge**	Instantaneous
Oil & Grease	NA	15	mg/l	Each Discharge**	Grab
Chlorine, Total Residual+	NA	0.5	mg/l	Each Discharge**	Grab
Benzene	NA	0.02	mg/l	Each Discharge**	Grab
Toluene	NA	0.02	mg/l	Each Discharge**	Grab
Xylenes	NA	0.02	mg/l	Each Discharge**	Grab
Ethylbenzene	NA	0.02	mg/l	Each Discharge**	Grab

+Required when a chlorinated supply such as that from a municipal system is used for tank testing purposes.

**Tank Test Water Discharges

1. Tanks being hydrostatically tested must be free of product and cleaned. The Regional Water Engineer must be informed at least two business days prior to the discharge of tank test water.

2. Any discharge of tank test water must be done under the direct supervision of plant personnel. Samples from the tank must be taken prior to discharge from various levels within the tank (top, middle, bottom). If sampling shows conformance with effluent limitations, discharge may be initiated. If effluent limitations are not attained, additional measures must be implemented to attain compliance prior to initiation of discharge.

   A visual check of the discharge must be made for the presence of oil and floating substances. Data associated with tank test water shall be kept, along with log of visual observations, for a period of three years and be made available to department personnel upon request.

   The discharge of tank test water must be done in a manner that minimizes erosion of soil or sediment and does not cause flooding in the area of discharge. It must be done in a manner that minimizes the impact on the fisheries.

ACTION LEVEL REQUIREMENTS (TYPE 1)

The parameters listed below have been reported present in the discharge but at levels that currently do not require water-quality or technology-based limits. Action levels have been established which, if exceeded, will result in reconsideration of Water Quality and Technology based limits.

Routine action level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sample was conducted. If submission of DMR's is not required by this permit, the results shall be maintained in accordance with instructions listed on the MONITORING, RECORDING AND REPORTING page of this permit.

If any of the action levels are exceeded, the permittee shall undertake a short-term, high-intensity monitoring program for this parameter. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three operating days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the action level was first exceeded. Results may be appended to the DMR or transmitted under separate cover to the addresses listed on the MONITORING, RECORDING AND REPORTING page of this permit. If levels higher than the action levels are confirmed, the result shall constitute a revised application and the permit shall be reopened for consideration of revised action levels or effluent limits.

The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

Outfall Number & Effluent Parameter	Action Level	Minimum Monitoring Requirements: Measurement Units	Frequency	Sample Type
Outfall 002: Units 3 and 4 Boiler Blowdown and Yard Drains discharging to Port Jefferson Harbor - Class SA				
Lead, Total	0.15	mg/l	Semi-Annually	Grab
Mercury, Total	0.015	mg/l	Semi-Annually	Grab
Outfall 008: Storm Drains and Evaporator Blowdown discharging to Port Jefferson Harbor - Class SA				
Chromium, Total	0.2	mg/l	Semi-Annually	Grab
Copper, Total	0.35	mg/l	Semi-Annually	Grab
Cyanide, Total	0.7	mg/l	Semi-Annually	Grab

DISCHARGE NOTIFICATION REQUIREMENTS

a) The permittee shall, except as set forth in (c) below, maintain identification signs at all outfalls to surface waters, which have not been waived by the Department in accordance with 17-0815-a. The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

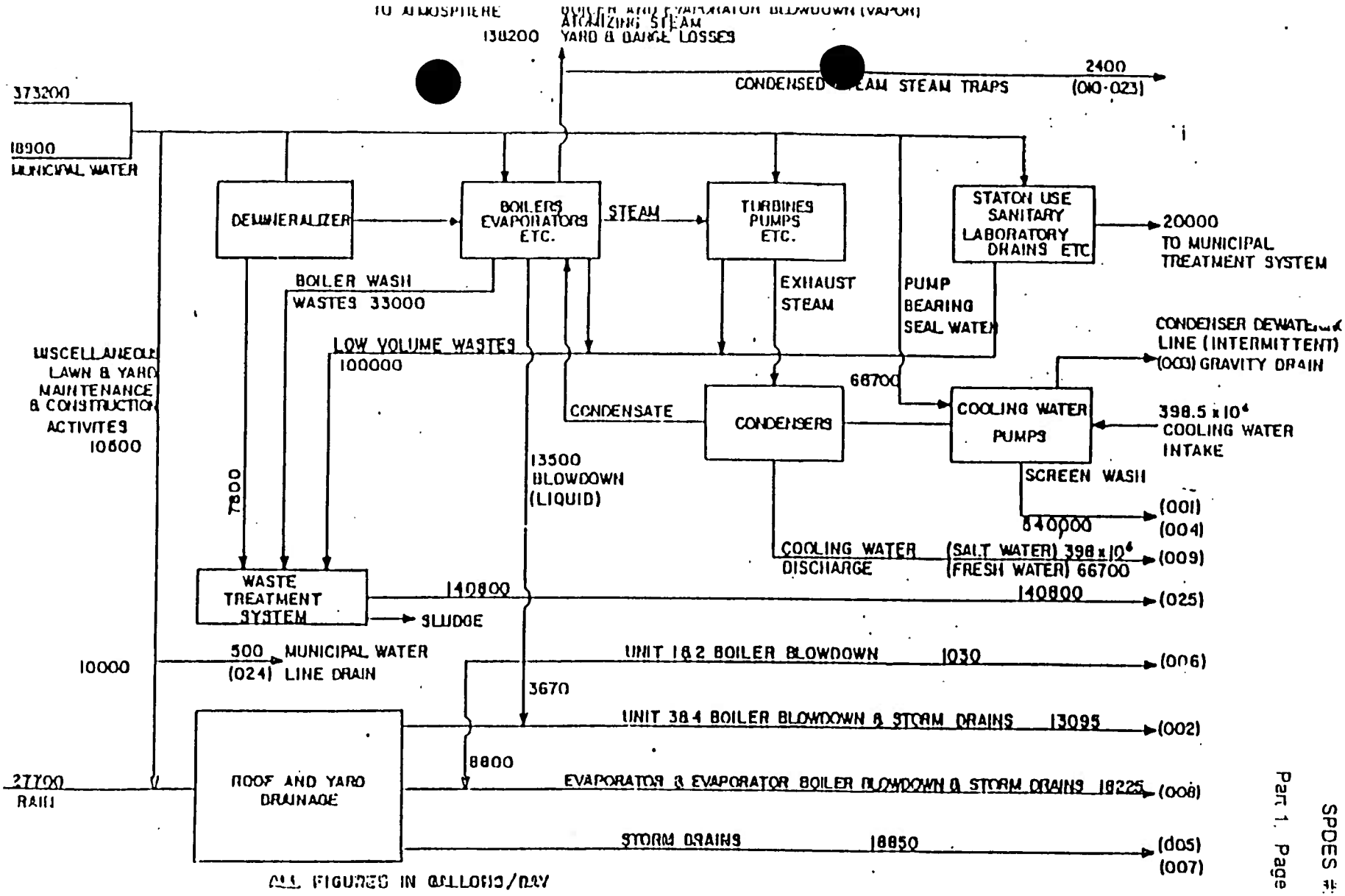
NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: ( ) - ### -####

b) For each discharge required to have a sign in accordance with a), the permittee shall provide for public review at a repository accessible to the public, copies of the Discharge Monitoring Reports (DMRs) as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public at a minimum of normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of three years.

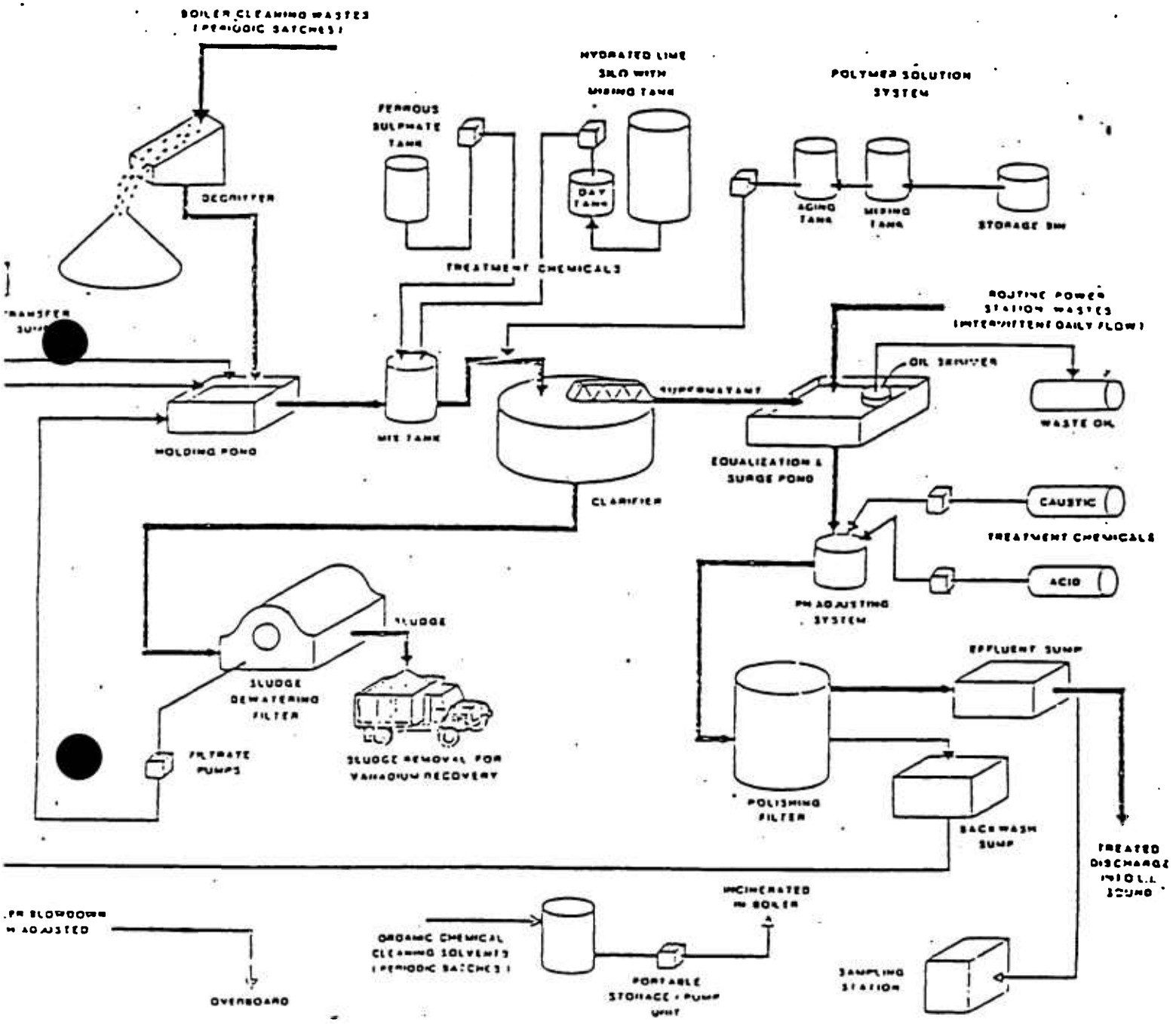
c) If, upon November 1, 1997, the permittee has installed signs that include the information required by 17-0815-a(2)(a) of the ECL, but do not meet the specifications listed above, the permittee may continue to use the existing signs for a period of up to five years, after which the signs shall comply with the specifications listed above.

d) The permittee shall periodically inspect the outfall identification signs in order to insure that they are maintained, are still visible and contain information that is current and factually correct.



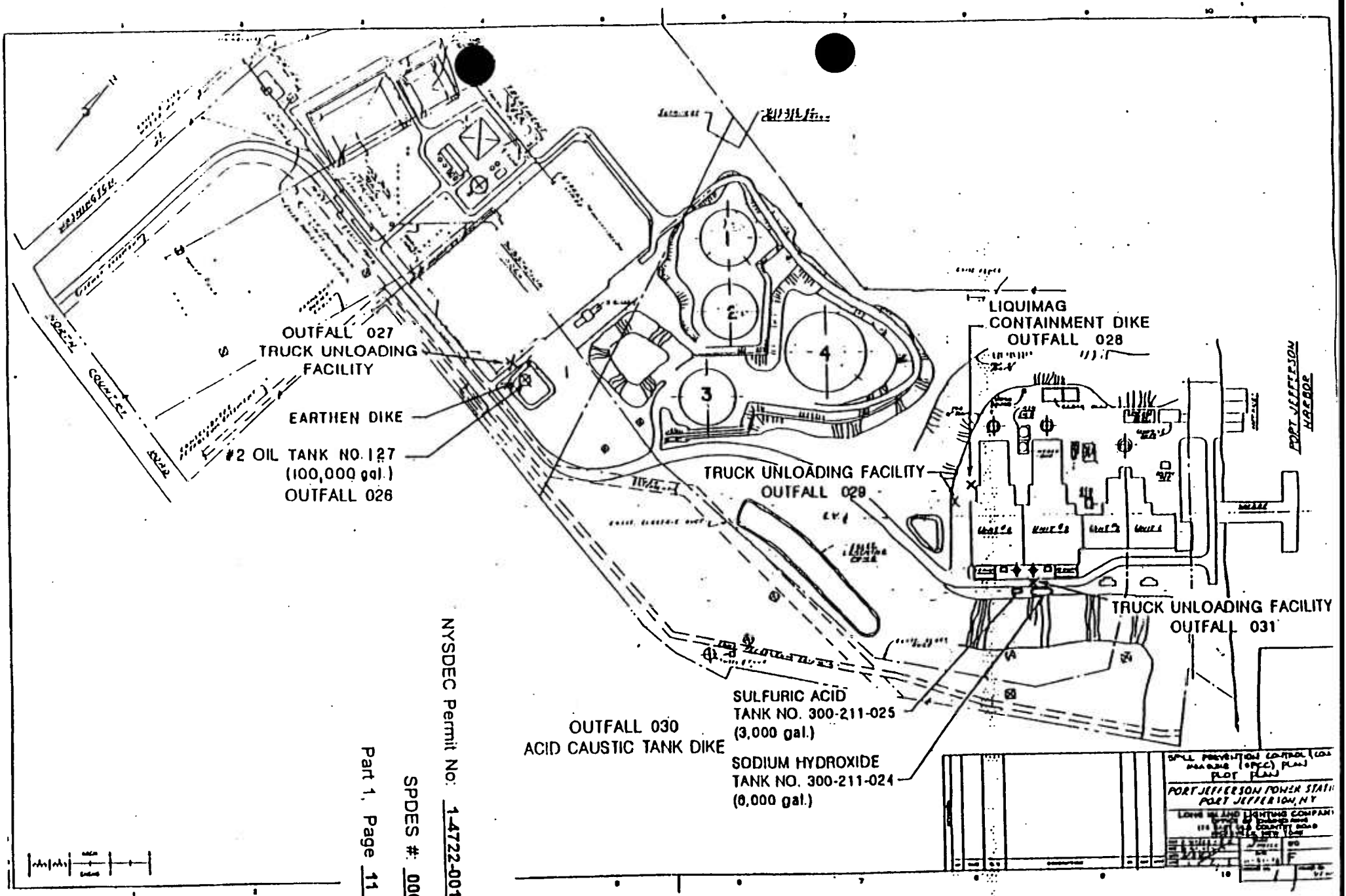
ALL FIGURES IN GALLONS/DAY

PORT JEFFERSON POWER STATION
N(S)PDES PERMIT APPLICATION
NY0005932 11/13/87
AVERAGE DAILY WATER BALANCE
LINE DIAGRAM



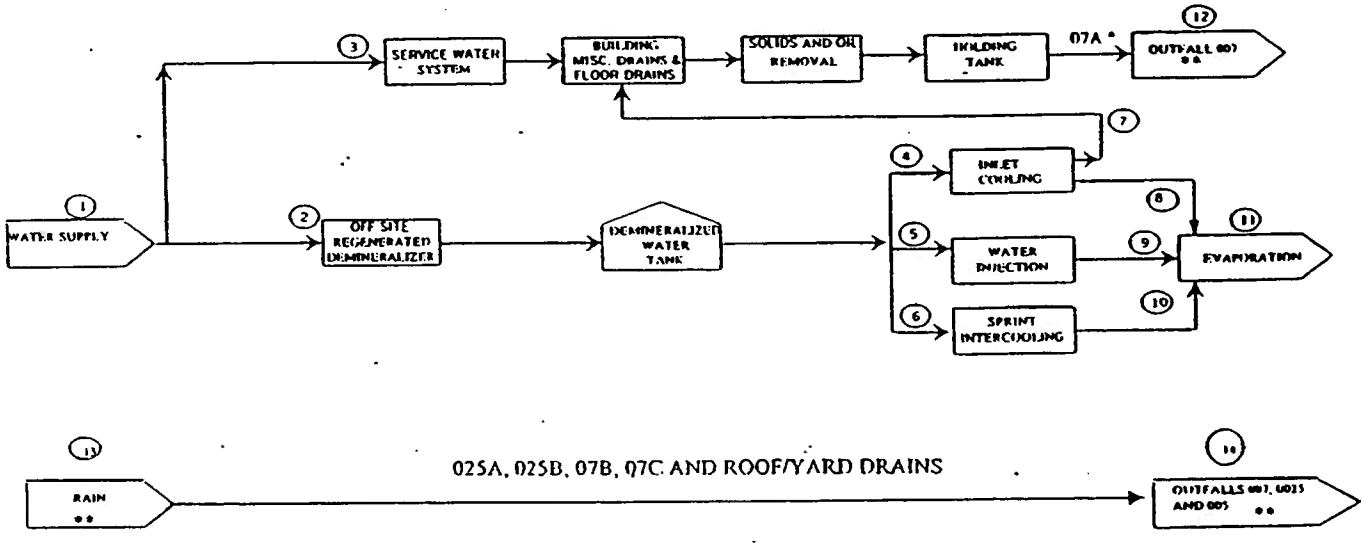
PORT JEFFERSON

WASTE TREATMENT SYSTEM PROCESS FLOW



NYSDEC Permit No: 1-4722-00107/00013-0

SPDES #: 0005932



* BATCH RELEASE OF 10,000 GALLONS ON AN AS-NEEDED BASIS
** COMBINED OUTFALLS - POWER STATION AND ENERGY CENTER

TRC

KeySpan Energy Development Corporation
Port Jefferson Energy Center
Village of Port Jefferson, Long Island, NY

ENERGY CENTER WATER BALANCE

Source: KeySpan Energy Development Corporation, October 2001

ADDITIONAL REQUIREMENTS

1. There shall be no discharge to groundwater of wastewaters resulting from station operation. These include, but are not limited to, the following: fireside wash, air preheater wash, ion exchange regenerative waste, boiler and evaporative blowdowns, ash sluicing waters and floor drainage. This prohibition does not apply to the discharge of excess steam and sanitary wastes from the waste treatment facility or uncontaminated stormwater runoff.

2. There shall be no discharge to groundwaters or surface waters of oil tank bottom water or PCB's from this facility. No biocides, slimicides or corrosion control chemicals are authorized for use except for those chemicals listed in LILCO's SPDES permit application. If use of new boiler/cooling water additives is intended, application must be made prior to use.

3. The permittee shall submit on an annual basis a report to the Department's offices in Albany and Stony Brook by the end of the month next following the end of the period containing:

   a. Daily minimum, average, and maximum station electrical output shall be determined and logged.

   b. Daily minimum, average, and maximum cooling water usage shall be directly or indirectly measured or calculated and logged.

   c. Daily minimum, average, and maximum intake and discharge temperatures shall be logged.

   d. Measurements in a, b, and c shall be taken on an hourly basis.

4. a. Notwithstanding any other requirement in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Sanitary Commission (ISC) on October 15, 1977, including Section 1.01 and 2.05(f) as they relate to Oil & Grease.

   b. All waters of the Interstate Sanitation District shall be of such quality and condition that they will be free from Oil & Grease, to the extent that Oil & Grease shall be noticeable on the water or deposited along the shore or on aquatic substrata, in quantities detrimental to the natural biota; nor shall Oil & Grease be present in quantities that would render the waters in question unsuitable for use in accordance with their respective classifications. All wastes shall be of a character that will not violate, or cause violation of, the requirements contained in this paragraph.

   c. In addition to the requirements for Total Suspended Solids (TSS) contained elsewhere in this permit, the requirements for TSS for the ISC shall be met. If at the conclusion of the prescribed operating test period for any new construction, the TSS requirements of the Commission are not being attained, the permittee shall have an additional period of three months within which to meet them.

5. The waste treatment facility sludge impoundment area shall be inspected and properly maintained following each cleaning to uphold the integrity of the concrete basin and waterstop lining.

6. In regard to General Condition #11.5, Items 3 and 4 shall be reported semi-annually to the NYSDEC offices in Albany and Stony Brook.

ADDITIONAL REQUIREMENTS (continued)

7. In all instances chlorine use shall be:

   a. kept to the minimum amount which will maintain plant efficiency,

   b. eliminated when intake water temperature is below 40°F unless failure to apply chlorine below 40°F is shown to adversely affect plant operating efficiency.

8. The Director of the Division of Marine Resources, NYSDEC at Stony Brook, shall be notified within 24 hours of any fish kill or impingement rates greater than 5000 fish per day.

9. The thermal discharge from the facility shall assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on Port Jefferson Harbor and Long Island Sound. In this regard, the permittee's 316(a) demonstration is hereby approved. This approval includes variance from Part 704.2(b)(4)(i) which limits the surface water temperature increase to 4°F from October to June and 1.5°F from July to September. The circulating cooling water system may be operated as designed for the 5-year duration of this permit so that the temperatures may be exceeded within a mixing zone having an area of 611 acres.

10. The permittee shall submit written notification, which shall include detailed descriptions and appropriate figures, to the Department of Environmental Conservation, the Chief of the Bureau of Environmental Protection, the Regional Supervisor for Natural Resources and the Regional Water Engineer at least 60 days in advance of any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structures. The permittee shall submit, with its written notifications, a demonstration that the change reflects the best technology currently available for minimizing adverse environmental impact. Prior DEC approval is required before initiating such change.

11. The bottom surface of the Holding Pond liner shall be inspected at least once every three years. Annual inspections shall be conducted of the following components of the Holding Pond and Surge Pond system: Earthen dikes, visible sections of the liners, outlet structure, degritter structure, sludge impoundment area, clarifier tank and other miscellaneous items that can be inspected. The results of this annual inspection must be included in an Engineering Report to be submitted to the NYSDEC Regional Water Engineer and the Suffolk County Department of Health Services for review. If at any time it is suspected that the liner system has been compromised, the NYSDEC Regional Water Engineer and the Suffolk County Department of Health Services must be notified and a complete inspection of the bottom surface of the Holding Pond liner must be conducted and repairs made as required.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also**;

[X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each **one** month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Send the **second copy** (third sheet) of each DMR page to:

Suffolk County Department of Health Services
15 Horseblock Place
Farmingville, New York 11738
Attn: Robert Seyfarth

Include a copy of the laboratory analysis with the NYSDEC - Region 1 and SCDHS copies.

Send the **first copy** (second sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Regional Water Engineer - Region 1
Building 40 - SUNY @ Stony Brook
Stony Brook, New York 11790-2356

c) A monthly "Wastewater Facilities Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency listed above.

d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).

e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

New York State Department of Environmental Conservation
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, New York 12233
Phone: (518) 457-7424 • **FAX:** (518) 457-7759
Website: www.dec.state.ny.us

Erin Crotty
Commissioner

January 11, 2002

Robert Teetz
Keyspan Energy Development Corp.
Environmental Engineering Department
445 Broadhollow Road
Melville, NewYork 11747

000 5932

RE: DEC # 1-4722-04141/00001 - Air State Facility Permit
1-4722-04141/00002 - Title IV Acid Rain Permit
1-4722-00107/00013 - SPDES (mod)
Port Jefferson Energy Center
Brookhaven (T), Suffolk County

Dear Mr Teetz:

Pursuant to your application and subsequent public notice, enclosed are your Air State Facility (ASF)and Phase II Acid Rain Permits for the Port Jefferson Energy Center. The ASF and Title IV permits are effective January 9, 2002.

Also enclosed are the modified SPDES permit pages (Pages 1, 3, 4, 6a, and 11a) for the existing Port Jefferson Power Station. The modified permits authorize the discharge to surface waters of any tank test water at the site. The SPDES permit is effective June 6, 1999, and a modification date of January 11, 2002 has also been added to the permit.

Please read all terms and conditions of the permit. Feel free to contact our office if you have any questions or concerns regarding the terms of the permit or your obligations under the permit.

Sincerely,

Christopher M. Hogan
Project Manager

Enclosure
CC: USEPA, Region 2 Air Compliance Branch (Air Permits only)
USEPA, Region 2 Water (SPDES only)
J. Pavacic, Region1 RPA (AIR and SPDES)
Region 1 Air Engineer (Air Permits only)
S. Rosen, AKRF (AIR and SPDES Permits)
C. DiBattista, CT DEP (Air Permits only)
Town of Brookhaven (Air and SPDES)
R. Hannaford, DOW (SPDES permit only)
R. Schneck/R. Sorrentino Region1 DOW (SPDES Only)
File

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)

DISCHARGE PERMIT

Special Conditions (Part 1)

Rev 6/99

Industrial Code:	4911	SPDES Number:	NY- 0005908
Discharge Class (CL):	03	DEC Number:	1-2820-00553/00043
Toxic Class (TX):	T	Effective Date (EDP):	12/01/99
Major Drainage Basin:	17	Expiration Date (ExPD):	12/01/04
Sub Drainage Basin:	01	Modification Dates:	02/01/01
Water Index Number:	MB-232A		
Compact Area:		Attachment(s):	General Conditions - Part II (11/90)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: KeySpan Energy Corp. Attention: Robert D. Teetz

Street: 445 Broadhollow Road

City: Melville State: NY Zip Code: 11747

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: KeySpan - E. F. Barrett Power Station

Location (C,T,V): Hempstead (T) County: Nassau

Facility Address: McCarthy Road

City: Island Park State: NY Zip Code: 11558

NYTM -E: 614.3 NYTM - N: 496.3

From Outfall No: 001 at Latitude: 40 ° 37 ' 01 " & Longitude: 73 ° 38 ' 55 "

into receiving waters known as: Barnum's Channel Class: I SC

and; (list other Outfalls, Receiving Waters & Water Classifications)

Outfalls 002 - 006: Barnum's Channel, Class I SC

055A, 055B & 056: Groundwater - Class GA

Nassau County Tax Map Numbers:
(See Page 1a of 10)

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: KeySpan System Laboratory

Street: Shore Road

City: Glenwood Landing State: NY Zip Code: 11547

Responsible Official or Agent: Michael P. Tucker Phone: (516) 545-5598

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

R. Schneck / W. Spitz
R. Hannaford
A. Santino, SCDHS
USEPA Region II

Permit Administrator:	John A. Wieland, Deputy RPA
Address:	Building 40 - SUNY Stony Brook, New York 11790-2356
Signature:	Date: 10-10-01

LILCO - E. F. BARRETT POWER STATION
TAX MAP NUMBERS

SECTION	BLOCK	LOT
43	E	2
43	E	4
43	E	12
43	52	33
43	52	6
43	167	14
43	168	15
43	169	15
43	170	15
43	171	1
43	176	12
43	399	283
43	399	287
43	399	204
43	404	11
43	404	12
43	404	13

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **December 01, 2004**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 001: Evaporator Boiler Surface Blowdown (Unit 1) discharging to Barnum's Channel - Class I					
NO MONITORING REQUIRED.					
Outfalls 002, 004, 05G, & 05H: Yard Drains, Storm Drains, Floor Drains, Storm Water Runoff and Condensate discharging to Barnum's Channel - Class I					
Flow	NA	Monitor	GPD	Quarterly	Calculated
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Suspended Solids, Total	NA	50	mg/l	Quarterly	Grab
Outfall 003: Evaporator Boiler Surface Blowdown (Unit 2) & Storm Water discharging to Barnum's Channel - Class I					
Flow	NA	Monitor	GPD	Quarterly	Calculated
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Suspended Solids, Total	NA	50	mg/l	Quarterly	Grab

Outfall 05I: Yard Drains, Storm Drains, Floor Drains, Storm Water Runoff and Condensate discharging to Barnum's Channel - Class I

NO MONITORING REQUIRED.

Due to the limited accessibility of the discharge point for this outfall, samples collected from outfall 05H will be sufficient to characterized the wastewater being discharged from this facility.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **December 01, 2004**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 005: Combined Outfall* discharging to Barnum's Channel - Class I					
Net Discharge of Heat	Monitor	Monitor	MGD	Continuous	Recorder
Discharge Temperature[2]	NA	2.44×10^9	Btu.Hr.	Monthly	Calculated
Intake Temperature Difference[2]	NA	110	°F	Continuous	Recorder
Total Chlorine Residual[3]	NA	30	°F	Daily	Calculated
pH (range)	NA	0.2	mg/l	Continuous[1]	Recorder
	NA	6.0 - 9.0	SU	Quarterly	Grab

Notes:

* Outfall 005 consists of Units 1 and 2 circulating cooling water, Units 1 and 2 screenwash, wastewater treatment plant, alternate boiler blowdown (Unit 2) and storm water.

1 - Continuous monitoring is required only during periods of chlorination.
2 - This limitation may be exceeded by not more than 10°F and for not more than 1% of the time in a year.
3 - Total Residual Chlorine may be discharged for no more than two hours per unit in any one day, and not more than one unit may discharge chlorine at a time.

Outfalls 05A and 05C: Units 1 & 2 Screenwash discharging to Barnum's Channel - Class I

NO MONITORING REQUIRED.

Outfall 05E: Wastewater Treatment Plant discharging to Barnum's Channel - Class I

Flow	Monitor	Monitor	GPD	Continuous	Recorder
Iron	NA	1.0	mg/l	Monthly	24-hr. Comp.
Nickel	NA	2.0	mg/l	Monthly	24-hr. Comp.
Copper	NA	1.0	mg/l	Monthly[4]	24-hr. Comp.
Chromium, Total	NA	1.0	mg/l	Monthly[4]	24-hr. Comp.
Zinc	NA	1.0	mg/l	Monthly[4]	24-hr. Comp.
Ammonia	NA	2	mg/l	Monthly	Grab
Total Suspended Solids	NA	50	mg/l	Monthly	Grab
Oil & Grease	NA	15	mg/l	Monthly	Grab
pH (Range)	NA	6.0 - 9.0	SU	Continuous	Recorder

Notes:

4 - These parameters are to be sampled for only when processing wastewater from the holding pond.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **December 01, 2004**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 05F: Boiler Blowdown (Units 1 & 2) & Storm Drainage from South Parking Lot discharging to Barnum's Channel - Class I					
Flow	NA	Monitor	GPD	Monthly[5]	Metered
Oil & Grease	NA	15	mg/l	Monthly[5]	Grab
Total Suspended Solids	30	50	mg/l	Monthly[5]	Grab
Outfall 006: Roof and Yard Drains discharging to Barnum's Channel - Class I					
Flow	NA	Monitor	GPD	Monthly	Calculated
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Total Suspended Solids	NA	50	mg/l	Monthly	Grab
pH (Range)	NA	6.0 - 9.0	SU	Monthly	Grab
Outfalls 55A and 55B: Tank 101 Oil Storage Diked Area Runoff at the Internal Combustion Site Truck Unloading Facility discharging to Groundwater - Class GA					
Flow	Monitor	Monitor	GPD	Monthly	Estimate
Oil & Grease	NA	15	mg/l	Monthly	Grab
Naphthalene	NA	10	ug/l	Monthly	Grab
Outfalls 056: Oil Storage Tank Unloading Facility discharging to Groundwater - Class GA					
Flow	Monitor	Monitor	GPD	Monthly	Estimate
Oil & Grease	NA	15	mg/l	Monthly	Grab
Benzene	NA	0.7	ug/l	Monthly	Grab
Toluene	NA	5	ug/l	Monthly	Grab
Ortho-Xylene	NA	5	ug/l	Monthly	Grab
Sum of Meta- and Para-Xylenes	NA	10	ug/l	Monthly	Grab
Ethylbenzene	NA	5	ug/l	Monthly	Grab

Notes:

5 - Sampling required only when Boiler Blowdown is being discharged to Barnum's Channel.

ADDITIONAL REQUIREMENTS

1. There shall be no discharge to groundwater of wastewaters resulting from station operation except for the wastewaters limited by Outfalls 55A and 55B and to the discharge of excess steam.

2. There shall be no discharge to groundwaters or surface waters of oil tank bottom water, sanitary wastes, or PCB's from this facility.

3. Wastewaters generated at LILCO's Far Rockaway and Glenwood Power Stations may be routed to the E.F. Barrett Wastewater Treatment Facility for treatment and discharge.

4. Metal cleaning wastes shall be monitored prior to combination with low volume wastes.

5. The permittee shall submit annually a report to the Department's offices in Albany and Stony Brook by the 18th of the month following the end of the period containing the following:

   a. A log of the daily minimum, average, and maximum station electrical output.

   b. A log of the daily minimum, average, and maximum water usage (either directly or indirectly measured or calculated).

   c. A log of the daily minimum, average, and maximum temperatures of the intake and discharge waters.

   d. Measurements in a, b, and c shall be taken on an hourly basis.

6. The permit application must list all the corrosion/scale inhibitors or biocidal-type compounds used by the permittee. If the use of new boiler/cooling water additives is intended, application to the Department must be made prior to use.

7. In all instances chlorine use shall be: (1) kept to the minimum amount which will maintain plant operating efficiency; (2) eliminated when intake water temperature is below 40° F unless failure to apply chlorine below 40° F is shown to adversely affect plant operating efficiency.

8. The waste treatment facility sludge impoundment area shall be inspected and properly maintained following each cleaning to uphold the integrity of the concrete basin and waterstop lining.

9. The Director of the Bureau of Marine Resources, at 205 Belle Meade Road, East Setauket, NY 11733 shall be notified within 24 hours of any fish kill or impingement rates greater than 5000 fish per day.

10. Proposed dredging operations shall be submitted for approval to the Director of Marine Resources at NYSDEC in East Setauket.

11. The location, design, construction, and capacity of this facility's cooling water intake structures shall reflect the best technology available for minimizing adverse environmental impact. In this regard, the applicant's request pursuant to Section 316(b) of the Clean Water Act is approved.

ADDITIONAL REQUIREMENTS

12. The thermal discharge from this facility shall assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on Barnum's Channel and Hempstead Bay. In this regard, the permittee's request for alternative thermal effluent limitations pursuant to Section 316(a) of the Clean Water Act is approved. The permittee's thermal discharge may exceed Part 704.2(b)(c) of the New York State Quality Criteria for enclosed bays within a mixing zone of 357 acres (15.6×10^8 sq. ft.). The size of the mixing zone is based on staff evaluation of the August 7, 1983 thermal survey submitted by the permittee.

13. Groundwater monitoring shall be conducted downgradient of the former leaching field annually during the month of February. Samples shall be analyzed for pH, iron, copper, nickel, vanadium, hexavalent chromium, lead, manganese, and zinc. Results shall be reported on the DMR.

14. The permittee shall submit written notification and appropriate figures to the Department of Environmental Conservation, Director of Marine Resources, Chief, Bureau of Environmental Protection, and to the Regional Water Engineer at least 60 days in advance of any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structures. The permittee shall submit, with its written notifications, a demonstration that the change reflects the best technology currently available for minimizing adverse environmental impacts. Prior DEC approval is required before initiating such change(s).

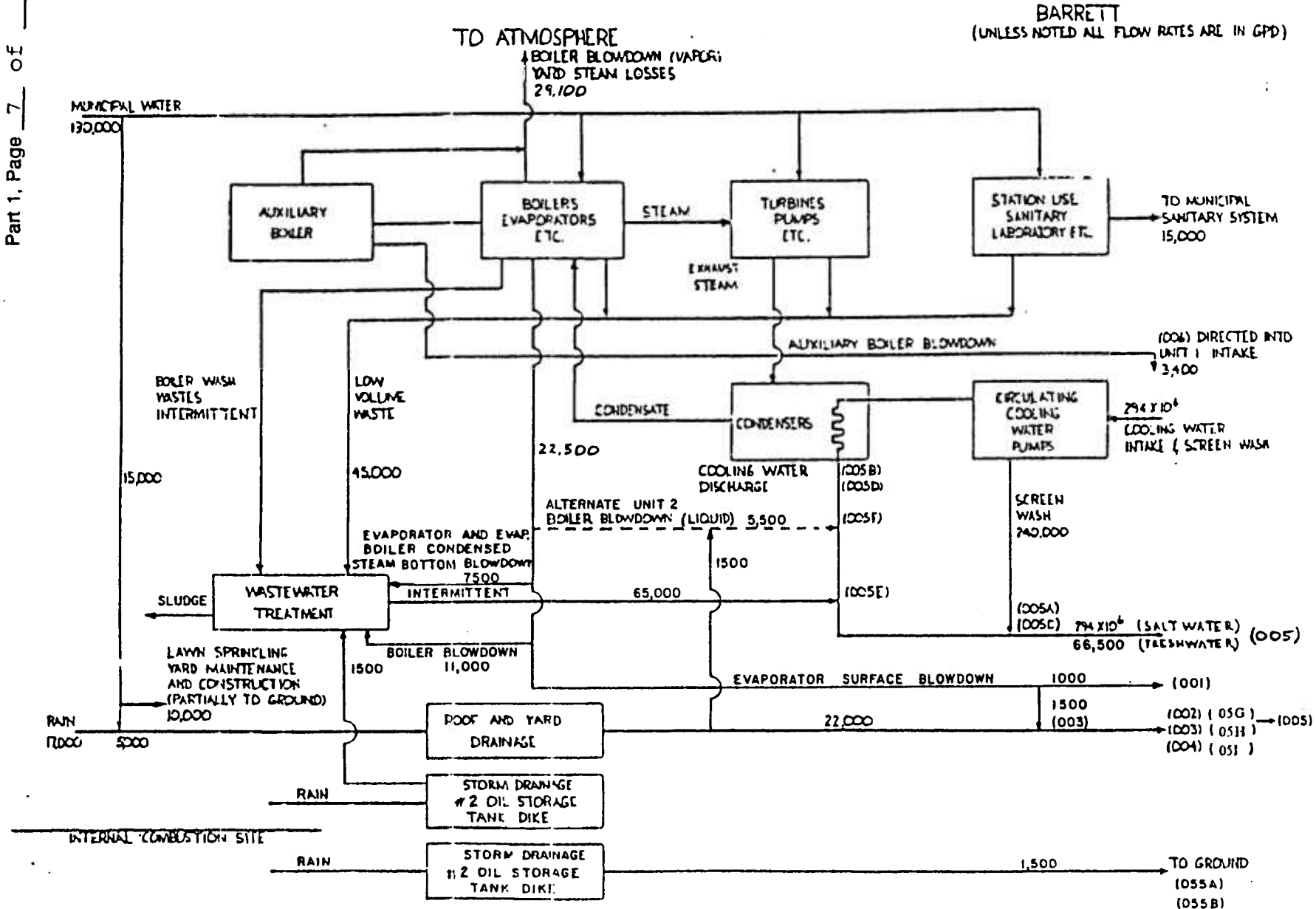
15. Traveling screen washings shall be returned directly to the receiving water without passage through a solid removal device. This condition supersedes any requirement outlined previously in this permit which may be interpreted to contradict it.

SPDES No.: NY 000 5908

Part 1, Page 7 of 10

BARRETT

(UNLESS NOTED ALL FLOW RATES ARE IN GPD)



E.F. Barrett Power Station
N(S)PDES Permit Application
NY0005908 9/06/96
Average Daily Water Balance

SPECIAL CONDITIONS - BEST MANAGEMENT PRACTICES

1. The permittee shall develop and implement a Best Management Practices (BMP) plan, within one year of EDP to prevent, or minimize the potential for, release of significant amounts of toxic or hazardous pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and storm water discharges including, but not limited to, drainage from raw material storage. Completed BMP plans shall be submitted to the Regional Water Engineer within one year of EDP.

2. The permittee shall review all facility components or systems (including material storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where toxic or hazardous pollutants are used, manufactured, stored or handled to evaluate the potential for the release of significant amounts of such pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. For hazardous pollutants, the list of reportable quantities as defined in 40 CFR, Part 117 may be used as a guide in determining significant amounts of releases. For toxic pollutants, the relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

   The review shall address all substances present at the facility that are listed as toxic pollutants under Section 307(a)(1) of the Clean Water Act or as hazardous pollutants under Section 311 of the Act or that are identified as Chemicals of Concern by the Industrial Chemical Survey.

3. Whenever the potential for a significant release of toxic or hazardous pollutants to State waters is determined to be present, the permittee shall identify Best Management Practices that have been established to minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider typical industry practices such as spill reporting procedures, risk identification and assessment, employee training, inspections and records, preventive maintenance, good housekeeping, materials compatibility and security. In addition, the permittee may consider structural measures (such as secondary containment and erosion/sediment control devices and practices) where appropriate.

4. Development of the BMP plan shall include sampling of waste stream segments for the purpose of toxic "hot spot"* identification. The economic achievability of technology-based end-of-pipe treatment will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology.

5. The BMP plan shall be documented in narrative form and shall include any necessary plot plans, drawings or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. USEPA guidance for development of stormwater elements of the BMP is available in the September 1992 manual "Storm Water Management for Industrial Activities," USEPA Office of Water Publication EPA 832-R-92-006 (available from NTIS, (703)487-4650, order number PB 92235969). A copy of the BMP plan shall be maintained at the facility and shall be available to authorized Department representatives upon request. As a minimum, the plan shall include the following BMP's:

   a. BMP Committee
   b. Reporting of BMP Incidents
   c. Risk Identification & Assessment
   d. Employee Training
   e. Inspections and Records
   f. Preventive Maintenance
   g. Good Housekeeping
   h. Materials Compatibility
   i. Security
   j. Spill prevention & response
   k. Erosion & sediment control
   l. Management of runoff

6. The BMP plan shall be modified whenever changes at the facility materially increase the potential for significant releases of toxic or hazardous pollutants or where actual releases indicate the plan is inadequate.

* A "hot spot" is a segment of an industrial facility; including but not limited to soil, equipment, material storage areas, sewer lines etc.; which contributes elevated levels of problem pollutants to the wastewater and/or storm water collection system of that facility. For the purposes of this definition, problem pollutants are substances for which end of pipe treatment to meet a water quality or technology requirement may, considering the results of wastestream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the end of pipe concentration of that same pollutant so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**

[X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each **one** month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Send the **first copy** (second sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Regional Water Engineer - Region 1
Building 40 - SUNY @ Stony Brook
Stony Brook, New York 11790-2356

Include a copy of the laboratory analysis with the NYSDEC - Region 1 copy.

c) A monthly "Wastewater Facilities Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency listed above.

d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).

e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

New York State Department of Environmental Conservation
Division of Environmental Permits, Room 538
50 Wolf Road, Albany, New York 12233-1750
Phone: (518) 457-2224 FAX: (518) 457-5965

John P. Cahill
Commissioner

September 26, 1997

Facility Information
LILCO-E F BARRETT POWER STATION
SPDES #: NY 0005908
DEC #: 1-2820-00553/00001
HEMPSTEAD (T), NASSAU CO.

MR R TEETZ
LONG ISLAND LIGHTING CO
445 BROAD HOLLOW RD
MELVILLE, NY 11747-

Dear Permittee:

This is to inform you that pursuant to Article 17, Title 8 (State Pollution Discharge Elimination System) and Article 70 (Uniform Procedures) of the Environmental Conservation Law (ECL), and 6NYCRR Parts 621 and 757, the Department has made a determination to modify the permit referenced above, in conformance with requirements of the "Discharge Notification Act" (§ 17-0815-a of the ECL). This new section of law, which became effective October 1, 1996, requires you to post a sign at each point of wastewater discharge to surface waters and to provide a public repository for Discharge Monitoring Reports(DMR's) required by the SPDES permit.

The enclosed permit modification page, which is to be appended to your existing permit, contains the specifics for: sign design, language, and posting; repository availability; and the compliance time frame.

The "Discharge Notification Act" also provides the Department with discretion to waive all or part of the requirements of the sign posting provisions if it is determined that a sign can not be located so as to satisfy the intent of the Act. Enclosed is a Waiver Request form that identifies the four circumstances in which the Department may determine that your discharge point is eligible for such a waiver. If you think you may qualify for a waiver, you must complete the Waiver Request form for each outfall by checking the appropriate box(es) and providing written justification to substantiate your waiver request.

The modification will become effective October 31, 1997 unless you either submit a completed Waiver Request form to the Department before the effective date, or should you object to this permit modification on other grounds, you submit a written statement giving supporting reasons why the permit should not be modified, or to request a hearing or both. Such a submission or request must be made within 15 calendar days of the date of this letter.

Completed Waiver Request forms, statements, and requests for hearing are to be addressed to New York State Department of Environmental Conservation, Bureau of Water Permits, 50 Wolf Road, Albany, New York 12233-3505.

If you require further information please contact Joseph DiMura at (518) 457-0657 or at the address in the preceding paragraph.

Sincerely,

William R. Adriance

William R. Adriance
Chief Permit Administrator

Enclosures
cc: RPA - Region 1
RWE - Region 1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)

DISCHARGE PERMIT

Special Conditions (Part 1)

Rev 6/99

Industrial Code:	4911	SPDES Number:	NY- 0005941
Discharge Class (CL):	03	DEC Number:	1-4726-00130/00031-0
Toxic Class (TX):	T	Effective Date (EDP):	04/01/95
Major Drainage Basin:	17	Expiration Date (ExPD):	04/01/00
Sub Drainage Basin:	02	Modification Dates:	10/14/98, 04/09/99, 06/11/99
Water Index Number:	LIS		
Compact Area:	ISC	Attachment(s):	General Conditions - Part II (11/90)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: MarketSpan Generation LLC Attention: Mr. Robert D. Teetz

Street: 445 Broadhollow Road

City: Melville State: NY Zip Code: 11747

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: MarketSpan - Northport Power Station

Location (C,T,V): Huntington (T) County: Suffolk

Facility Address: Waterside Avenue & Eaton's Neck Road

City: Northport State: NY Zip Code: 11768

NYTM -E: 640.3 NYTM - N: 4530.9

From Outfall No: 002 at Latitude: 40 ° 55 ' 23 " & Longitude: 73 ° 20 ' 30 "

into receiving waters known as: Groundwater Class: GA

and; (list other Outfalls, Receiving Waters & Water Classifications)

Outfalls 003 - 011: LIS - Class SA

Outfalls 040 - 043: Groundwater - Class GA

Suffolk County Tax Map Numbers:
District: 0400 Section: 010
Block: 01 Lot: 003

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: MarketSpan Generation LLC

Street: 445 Broadhollow Road

City: Melville State: NY Zip Code: 11747

Responsible Official or Agent: Mr. James K. Brennan Phone: (516) 545-5598

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

R. Schneck / W. Spitz
R. Hannaford
A. Santino, SCDHS

Permit Administrator:	Roger Evans, Deputy RPA
Address:	Building 40 - SUNY Stony Brook, New York 11790-2356
Signature: Roger Evans	Date: 6/11/99

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **April 01, 2000**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 002, 005, 08B and 013: Building and Yard Drains discharging to Long Island Sound - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Instantaneous
[redacted]ended Solids	NA	50	mg/l	Quarterly	Grab
[redacted]& Grease	NA	15	mg/l	Quarterly	Grab
Outfall 003: Unit 1 Intake Dewatering Line discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 004: Unit 2 Intake Dewatering Line discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 006: Circulating Cooling Water Units 1-4 and Dilution Pump Water discharging to Long Island Sound - Class SA					
Flow	Monitor	Monitor	MGD	Continuous	Recorder
Discharge Temperature*	NA	90 (32.2)	°F (°C)	Continuous	Recorder
Intake-Discharge Temperature Difference					
March - November	NA	30 (16.7)	°F (°C)	Continuous	Recorder
December - February	NA	35 (19.5)	°F (°C)	Continuous	Recorder
N[redacted]ddition of Heat	NA	9.1×10^9	BTU/hr.	Daily	Calculated
N[redacted]gen, Total	Monitor	Monitor	mg/l	Monthly	Grab
Outfall 06A: Yard Drainage discharging to Long Island Sound - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Instantaneous
Suspended Solids	NA	50	mg/l	Quarterly	Grab
Oil & Grease	NA	15	mg/l	Quarterly	Grab

* The discharge temperature of 90°F may be exceeded for no more than 96 hours per year however, the discharge temperature must not exceed 92°F unless there is a dilution pump or motor failure, repair, or replacement. During a period of dilution pump or motor failure, repair, and/or replacement, the maximum discharge temperature may exceed 90°F but shall not exceed 95°F for a period of 10 consecutive days, while the pump is repaired or replaced.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **April 01, 2000**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 06B: Unit 1 Cooling Water discharging to Long Island Sound - Class SA					
● NO MONITORING REQUIRED.					
Outfall 06C: Screen Wash Pumps discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 06D: Unit 2 Cooling Water discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 06E: Yard Drainage discharging to Long Island Sound - Class SA					
Flow	NA	Monitor	GPD	Quarterly	Instantaneous
Suspended Solids	NA	50	mg/l	Quarterly	Grab
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Outfall 06F: Cooling Dilution Water discharging to Long Island Sound - Class SA					
● NO MONITORING REQUIRED.					
Outfall 06G: Unit 3 Cooling Water discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 06H: Screen Wash Pumps discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfalls 06I, 06L, 06M, and 08A: Boiler Blowdown from Units 1, 2, 3 and 4 discharging to Long Island Sound - Class SA					
Flow	NA	Monitor	GPD	Semi-Annual	Instantaneous
Suspended Solids	NA	50	mg/l	Semi-Annual	Grab
Oil & Grease	NA	15	mg/l	Semi-Annual	Grab
Iron	2.0	4.0	mg/l	Semi-Annual	Grab

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **April 01, 2000**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 06J: Unit 4 Cooling Water discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 06K: Wastewater Treatment Facility discharging to Long Island Sound - Class SA					
Flow	Monitor	NA	GPD	Continuous	Recorded
pH (Range)	NA	6.0 - 9.0	SU	Continuous	Recorded
Oil & Grease	NA	15	mg/l	Monthly	Grab
Suspended Solids	NA	50	mg/l	Monthly	24 hr. Comp.
Iron, Total	NA	4.0	mg/l	Monthly	Grab
Iron, Total**	NA	2.0	mg/l	Monthly	24 hr. Comp.
Copper, Total**	NA	1.0	mg/l	Monthly	24 hr. Comp.
Zinc, Total**	NA	1.0	mg/l	Monthly	24 hr. Comp.
Chromium, Total**	NA	3.0	mg/l	Monthly	24 hr. Comp.
Nickel, Total**	NA	3.0	mg/l	Monthly	24 hr. Comp.
Manganese, Total**	NA	2.0	mg/l	Monthly	24 hr. Comp.
Vanadium, Total**	NA	20	mg/l	Monthly	24 hr. Comp.
Lead, Total**	NA	0.4	mg/l	Monthly	24 hr. Comp.
Arsenic, Total**	NA	0.1	mg/l	Monthly	24 hr. Comp.
[redacted]onia**	Monitor	Monitor	mg/l	Monthly	Grab
[redacted]gen, Total**	Monitor	Monitor	mg/l	Monthly	Grab

** These parameters shall be monitored only when there is a discharge of metal cleaning wastewaters or ash sluicing waters. At a minimum, all of these parameters shall be monitored for at least one 24 hour composite sample unless there is no discharge of these wastewaters during this period. A composite sample of less than 24 hours duration shall be taken if the discharge occurs for less than 24 hours.

Outfall 007: Dilution Pump Intake Structure Dewatering discharging to Long Island Sound - Class SA

NO MONITORING REQUIRED.

Outfall 010: Unit 3 Intake Dewatering Line discharging to Long Island Sound - Class SA

NO MONITORING REQUIRED.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning **Effective Date of Modification (EDM)**

and lasting until **April 01, 2000**

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 011: Unit 4 Intake Dewatering Line discharging to Long Island Sound - Class SA					
NO MONITORING REQUIRED.					
Outfall 040: Leaching Lagoons for Condensate Drains discharging to Groundwater - Class GA					
Flow	NA	Monitor	GPD	Monthly	Instantaneous
pH (Range)	NA	6.5 - 8.5	SU	Monthly	Grab
Oil & Grease	NA	15	mg/l	Monthly	Grab
Iron, Total	NA	0.6	mg/l	Monthly	Grab
Copper, Total	NA	1.0	mg/l	Monthly	Grab
Outfall 041, 042 and 043: Fuel Oil Tank Secondary Containment (041 and 042) and Unit 4 Day Tanks Secondary Containment (043) discharging to Groundwater - Class GA					
Flow	NA	Monitor	GPD	Monthly	Instantaneous
Oil & Grease	NA	15	mg/l	Monthly	Grab
Benzene	NA	0.7	µg/l	Monthly	Grab
Toluene	NA	5	µg/l	Monthly	Grab
Ortho-Xylene	NA	5	µg/l	Monthly	Grab
Sum of Meta- and Para-Xylene	NA	10	µg/l	Monthly	Grab
Ethylbenzene	NA	5	µg/l	Monthly	Grab
Outfall 051, 052, 053 and 055: Sanitary Wastewater Only discharging to Groundwater - Class GA					
NO INDUSTRIAL WASTE ALLOWED. NO MONITORING REQUIRED.					

DEFINITIONS OF DAILY AVERAGE AND DAILY MAXIMUM

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriated units as specified herein divided by the number of days during the calendar month when measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) indicated below: (Show sampling locations and outfalls with sketch or flow diagram as appropriate)

monitoring locations identified on the attached drawings.

Outfall 006 - Samples must be collected at the weir at the end of the discharge canal.
Outfall 06I, 06L, 06M and 08A - Samples must be collected at the blowdown tank for each unit.

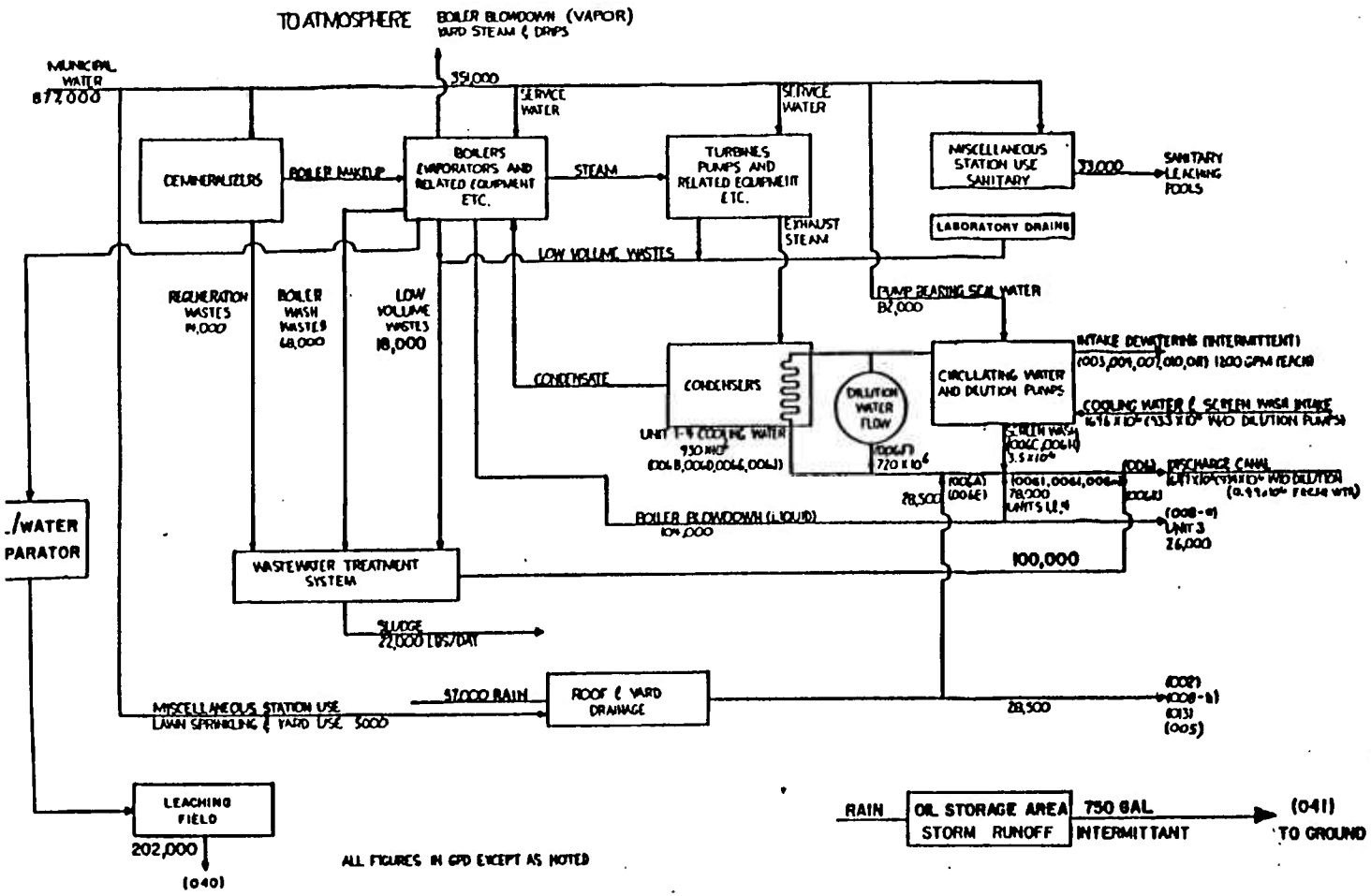
PROHIBITIONS

No industrial or manufacturing process wastewater effluents are permitted, including wastewaters resulting from vehicle maintenance or washing operations. Washing operations are those cleaning operations which involve the use of detergents or other emulsifying chemicals.

Waste or wastewater generated at locations other than at this facility are not permitted to be treated at or discharged from this facility except as noted otherwise in this permit.

NORTHPORT POWER STATION - NY0005941

AVERAGE DAILY WATER BALANCE LINE DIAGRAM



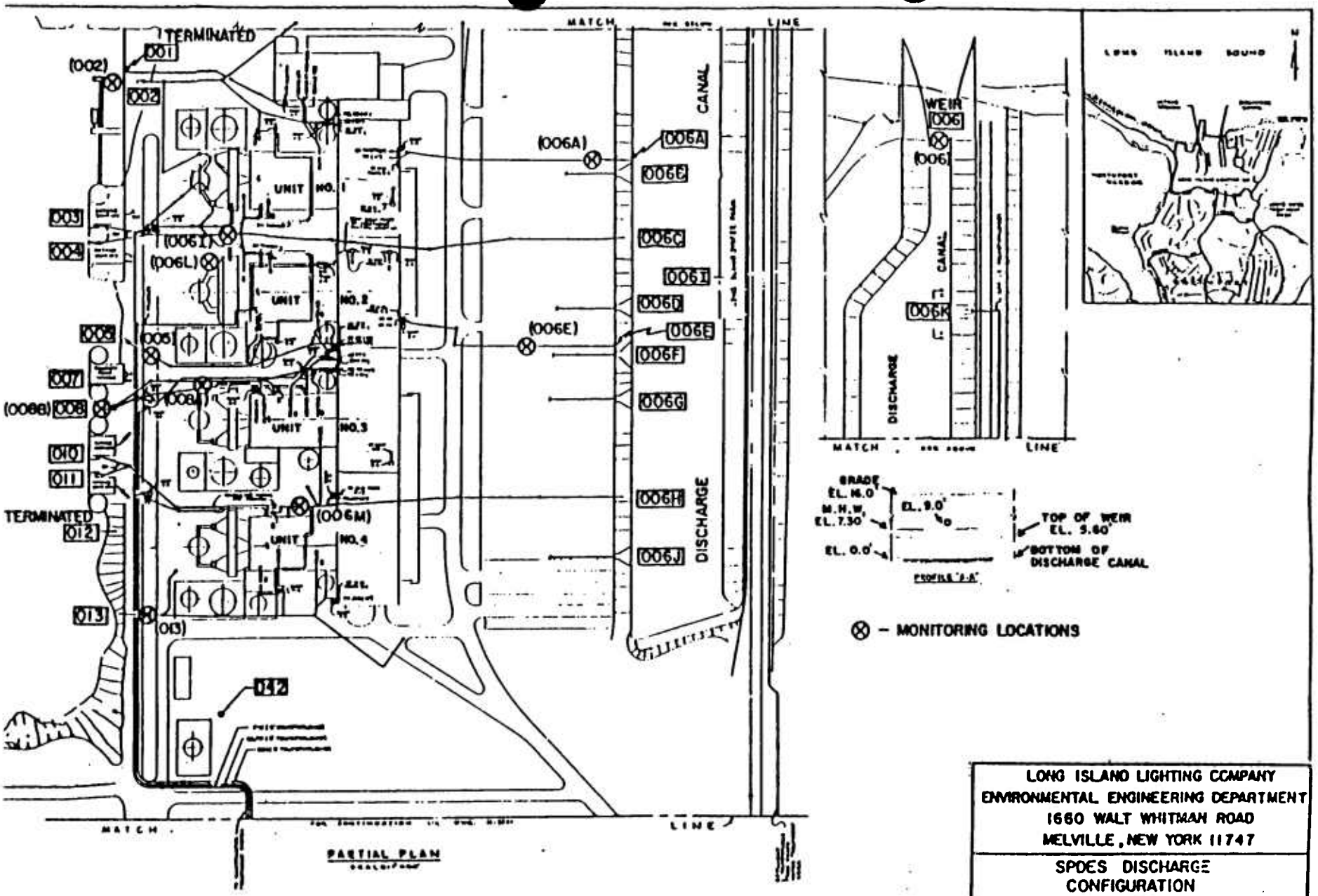
DATE DRAWN: 7-8-88
REVISED: 09-21-95
DRAWN BY: M.E.O.

91-20-2a (2/89)

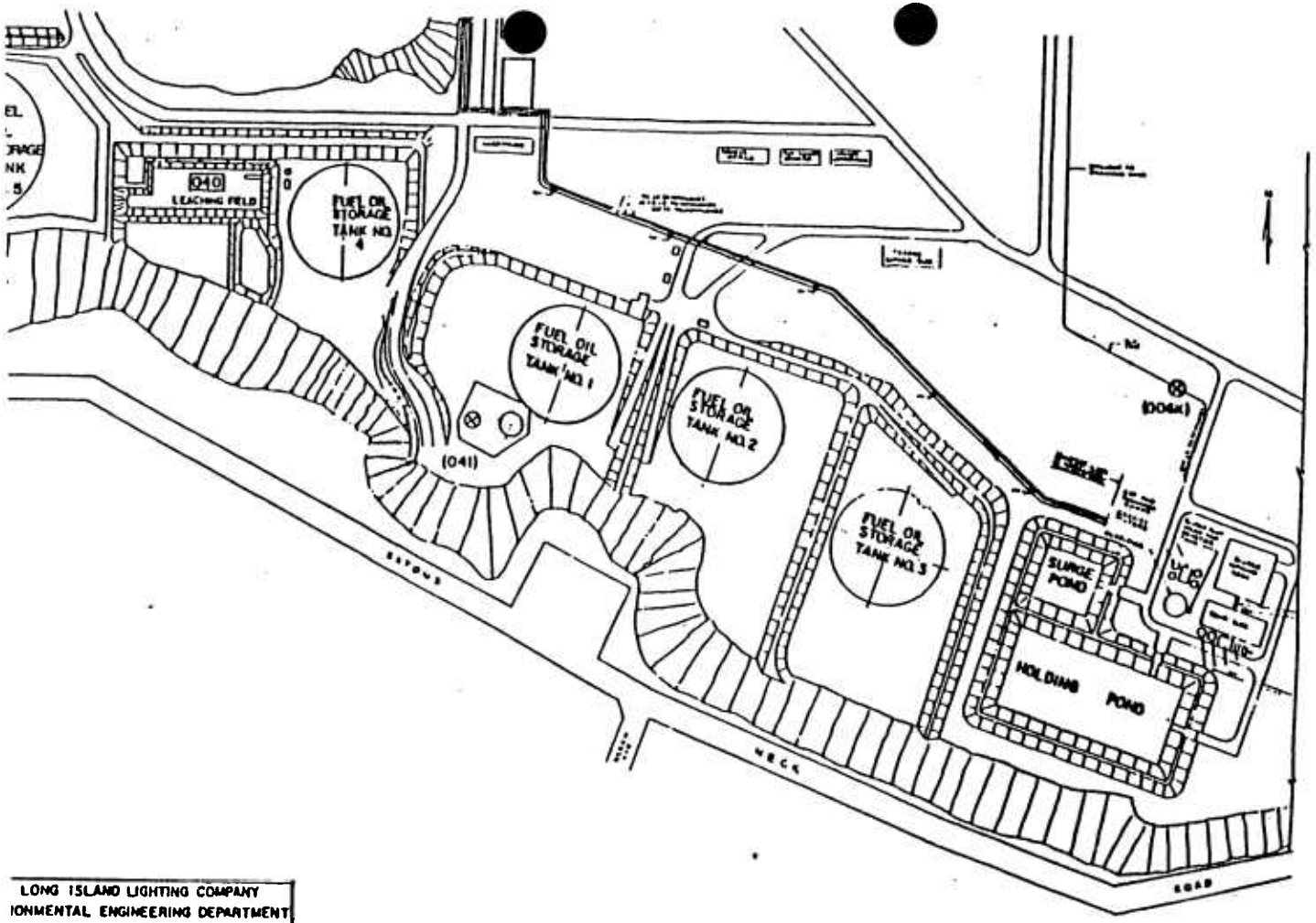
NYSDEC Permit No: 1-4726-00130/00031-0

SPDES #: 0005941

Part 1, Page 7 of 16



LONG ISLAND LIGHTING COMPANY ENVIRONMENTAL ENGINEERING DEPARTMENT 1660 WALT WHITMAN ROAD MELVILLE, NEW YORK 11747	
SPDES DISCHARGE CONFIGURATION PG. 1 of 2	
SPDES PERMIT	APPLICATION NO: NY0005941
DATE: 09-21-95	DWN: M.E.O.



⊗ - MONITORING LOCATIONS

LONG ISLAND LIGHTING COMPANY IONMENTAL ENGINEERING DEPARTMENT 1660 WALT WHITMAN ROAD MELVILLE, NEW YORK 11747	
SPDES DISCHARGE CONFIGURATION PG. 2 of 2	
PERMIT	APPLICATION NO: NY0005941
E: 6-15-88	DWN: M E O

ADDITIONAL REQUIREMENTS

1. There shall be no discharge to groundwater of wastewaters resulting from station operation except for the wastewaters limited by Outfalls 040 through 055 and the discharge of excess steam. These include, but are not limited to, the following: fireside wash, air preheater wash, ion exchange regenerative waste, boiler and evaporative blowdowns, ash sluicing waters and floor drainage.

2. There shall be no discharge to groundwaters or surface waters of oil tank bottom water, PCB's or free available or total residual chlorine from this facility.

3. All water treatment, corrosion inhibitor, antifouling, slimicide and biocides identified in the October 2, 1996 submittal are approved for use. Approval shall only be granted for uses which do not contravene New York State Water Quality Standards. Except for emergency measures to maintain equipment which shall be reported to the NYSDEC within twenty-four hours, no substitutions or new chemicals will be allowed without prior approval.

4. The permittee shall submit on an annual basis a report to the Department's offices in Albany and Stony Brook by the end of the month next following the end of the period containing:

   a. Daily minimum, average, and maximum station electrical output shall be determined and logged.

   b. Daily minimum, average, and maximum cooling water usage shall be directly or indirectly measured or calculated and logged.

   c. Daily minimum, average, and maximum intake and discharge temperatures shall be logged.

   d. Measurements in a, b, and c shall be taken on an hourly basis.

5. a. Notwithstanding any other requirement in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Sanitary Commission (ISC) on October 15, 1977, including Section 1.01 and 2.05(f) as they relate to Oil & Grease.

   b. All waters of the Interstate Sanitation District shall be of such quality and condition that they will be free from Oil & Grease, to the extent that Oil & Grease shall be noticeable on the water or deposited along the shore or on aquatic substrata, in quantities detrimental to the natural biota; nor shall Oil & Grease be present in quantities that would render the waters in question unsuitable for use in accordance with their respective classifications. All wastes shall be of a character that will not violate, or cause violation of, the requirements contained in this paragraph.

   c. In addition to the requirements for Total Suspended Solids (TSS) contained elsewhere in this permit, the requirements for TSS for the ISC shall be met.

6. The waste treatment facility sludge impoundment area shall be inspected and properly maintained following each cleaning to uphold the integrity of the concrete basin and waterstop lining.

7. In regard to General Condition #11.5, Items c. and d. shall be reported semi-annually to the NYSDEC offices in Albany and Stony Brook.

ADDITIONAL REQUIREMENTS (Continued)

8. In all instances, Sodium Hypochlorite use shall be:

   a. kept to the minimum amount which will maintain plant efficiency,

   b. eliminated when intake water temperature is below 40°F unless failure to apply chlorine below 40°F is shown to adversely affect plant operating efficiency.

9. The Director of the Division of Marine Resources, NYSDEC at Stony Brook, shall be notified within 24 hours of any fish kill or impingement rates greater than 5000 fish per day.

10. The thermal discharge from the facility shall assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on Long Island Sound. In this regard, the permittee's 316(a) demonstration is approved and this facility may be operated as designed for the 5 year period of this permit.

11. The thermal discharge from this facility shall not cause the surface water temperature of Long Island Sound to be raised more than 4°F from October through June nor more than 1.5°F from July through September over that which existed before the addition of heat of artificial origin except within a mixing zone of 90×10^6 sq. ft. (2066 acres).

12. The permittee shall submit, to the addresses listed below, written notification and appropriate figures to the Department of Environmental Conservation at least 60 days in advance of any proposed change which would result in the alteration of the permitted operation, location, design, construction, or capacity of the cooling water intake structures. The permittee shall submit, with its written notification, a demonstration that the change reflects the best technology currently available for minimizing environmental impact. Prior DEC approval is required before initiating such change.

Director of Marine Resources 205 Belle Meade Road East Setauket, NY 11733	Chief, Bureau of Environmental Protection 50 Wolf Road Albany, NY 12233	Regional Water Engineer Building 40 - SUNY Stony Brook, NY 11790-2356

13. The bottom surface of the Holding Pond liner shall be inspected at least once every three years. Annual inspections shall be conducted of the following components of the Holding Pond and Surge Pond system: Earthen dikes, visible sections of the liners, outlet structure, degritter structure, sludge impoundment area, clarifier tank and other miscellaneous items that can be inspected. The results of this annual inspection must be included in an Engineering Report to be submitted to the NYSDEC Regional Water Engineer and the Suffolk County Department of Health Services for review. If at any time it is suspected that the liner system has been compromised, the NYSDEC Regional Water Engineer and the Suffolk County Department of Health Services must be notified and a complete inspection of the bottom surface of the Holding Pond liner must be conducted and repairs made as required.

14. Wastewaters generated at KeySpan's other stations may be routed to the Northport Wastewater Treatment Facility (outfall 06K) for treatment and discharge.

15. Proposed dredging operations shall be submitted for approval to the Director of Marine Resources at Stony Brook. Dredging operations should meet Department requirements for effects on dissolved oxygen concentrations.

ADDITIONAL REQUIREMENTS (Continued)

16. The bathymetry survey(s) shall be performed as part of any individual dredging permit application to the DEC and/or USACE dredging permit and shall be submitted to the Region 1 Bureau of Marine Habitat Protection (BMHP). In addition, any bathymetry survey(s) done during the term of the permit to determine the scope of a dredging project will be forwarded to BMHP.

    Mailing Address: NYSDEC - Region 1
    Bureau of Marine Habitat Protection
    Building 40 - SUNY
    Stony Brook, New York 11790-2356

17. All dredging and beach replenishment operations must be performed in accordance with the terms and conditions of the Department of a Department of the Army permit issued by the New York District Corps of Engineers, and also in accordance with all tidal wetlands permits required for these activities that are, or will be, issued by NYSDEC.

18. Traveling screen washings shall be returned directly to the receiving water without passage through a solids removal device. This condition supersedes any requirement outlined previously in this permit which may be interpreted to contradict it.

19. **Biological Monitoring Requirements**

    A. Impingement Monitoring - An impingement monitoring study shall be conducted to estimate the number of fish and other aquatic organisms impinged on all intake traveling screens and washed into the screen washwater and debris discharge sluice. By EDM + 6 months the permittee shall submit for approval to the Director, Division of Marine Resources, East Setauket and to Chief, Bureau of Environmental Protection, Albany, a scope of work to conduct this impingement study. The study shall be generally consistent with the following guidelines:

        1. Duration - two years. The second year of the study will be conducted, if warranted by the results of the first year's study. The permittee may submit arguments in support of a single year of impingement monitoring as part of the annual report or in a separate report which must be received by the department no later than the due date for the annual impingement report. The department will make a determination on the need for the second year of studies and so notify the permittee.

        2. Intensity - During the first year, one continuous 24-hour collection will be made in every, seven-day calendar period from the beginning of the year. The collections will be scheduled to take place within the first two days of each period so that the remainder of the period is available for an alternate collection, should plant operation or equipment malfunction prevent impingement collections on the day initially scheduled. If for any reasons, a collection cannot be made within a given seven-day period, the subsequent collection shall proceed as scheduled. If more than 1,000 fish are collected in 24-hours of sampling, an additional 24-hour collection will be initiated within 72 hours. If the study is conducted for a second year. the sampling design may be modified based on the first years results to focus on species of interest.

ADDITIONAL REQUIREMENTS (Continued)

3. Traveling screens shall be washed until they are clean prior to the start of the 24-hour collection period.

4. Electrical output, average intake temperature before tempering, average discharge temperature and total station flows shall be recorded on a daily basis, tabulated and included as an appendix in the annual report.

5. Collection efficiency, that is, the ability of sampling to recover marked fish released in front of the traveling screens and downstream of the trash racks, shall be determined quarterly for each major species. Major species are defined as those occurring at greater than 10% abundance, and species with important recreational or commercial fishing interest such as striped bass, winter flounder and blue crab.

6. The report shall include a chapter on the station and site description. In the description of the facility's operation, there will be a completed description of the condenser cooling water system including the number of traveling screens, dimensions, type, mesh size, standard operating procedures, screen washwater sluice configuration and disposition of the screen washings, and the nature and estimated quantities of debris collected at this facility.

7. Water quality measurements will be taken in conjunction with the impingement sampling program. Measurements will include salinity, pH and dissolved oxygen.

B. Entrainment Monitoring - An entrainment monitoring program shall be conducted to determine the number and concentration, species composition and life stage of entrained organisms at the Northport Power Station. By EDM + 6 months the permittee shall submit for approval to the offices identified in I.A. above, a scope of work to conduct studies to estimate number of aquatic organisms entrained at the Northport Power Station. The study shall be generally consistent with the following guidelines.

1. Duration - one to two years. The second year of the study will be conducted, if warranted by the results of the first year's study. The permittee will prepare a report, for DEC approval, discussing whether or not the study should be extended for a second year.

2. Intensity - During the first year, collection will be made weekly from March through September, and twice per month from October through February. Each collection will be scheduled to take place within the first two days of each period so that the remainder of the period is available for an alternate collection, should plant operation or equipment malfunction prevent a collection on the day initially scheduled. If for any reasons, a collection cannot be made within a given seven-day period, the subsequent collection shall proceed as scheduled. If the study is continued for a second year, the sampling program may be modified based on the first year's results to focus on species of interest.

ADDITIONAL REQUIREMENTS (Continued)

3. All samples will be analyzed for ichthyoplankton and juvenile fish.

4. Proposed methods for sample processing, quality control, quality assurance, and splitting will be described in the scope of work submitted for DEC approval.

C. The DEC will review the results of the permittee's biological monitoring study, and other relevant information, to determine whether operation of the intake at the Northport Power Station results in excessive mortality to fish and other aquatic biota.

If DEC determines that the operation of the cooling water intake is causing an adverse environmental impact, then the permittee must, within 9 months of notification by DEC, submit an intake technology report to the offices listed in section D below. The purpose of the report will be to discuss the range of mitigative alternatives available for reducing mortality to aquatic life at the Northport Power Station. Alternatives should be discussed in terms of their engineering feasibility, reliability, cost and degree of ecological impact mitigation. DEC shall approve, from among the alternatives presented within the report and any other relevant information available, mitigation that shall minimize adverse environmental impact, consistent with the considerations listed above. Within 12 months of DEC approval, the permittee shall submit conceptual plans for the selected alternative(s), and a proposed schedule for the alternative(s) to be operational. Within 6 months of operation, the permittee shall submit for DEC approval, plan to evaluate the effectiveness of the alternative(s) to minimize adverse environmental impact.

DISCHARGE NOTIFICATION REQUIREMENTS

a) The permittee shall, except as set forth in (c) below, maintain identification signs at all outfalls to surface waters, which have not been waived by the Department in accordance with 17-0815-a. The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: ( ) - ### -####

b) For each discharge required to have a sign in accordance with a), the permittee shall provide for public review at a repository accessible to the public, copies of the Discharge Monitoring Reports (DMRs) as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public at a minimum of normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of three years.

c) If, upon November 1, 1997, the permittee has installed signs that include the information required by 17-0815-a(2)(a) of the ECL, but do not meet the specifications listed above, the permittee may continue to use the existing signs for a period of up to five years, after which the signs shall comply with the specifications listed above.

d) The permittee shall periodically inspect the outfall identification signs in order to insure that they are maintained, are still visible and contain information that is current and factually correct.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**

[X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each one month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Water Compliance Programs
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Send the **second copy** (third sheet) of each DMR page to:

Suffolk County Department of Health Services
15 Horseblock Place
Farmingville, New York 11738
Attn: Mr. Jim Maloney, P.E.

Include a copy of the laboratory analysis with the NYSDEC - Region 1 and SCDHS copies.

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer - Region 1
Building 40 - SUNY @ Stony Brook
Stony Brook, New York 11790-2356

c) A monthly "Wastewater Facilities Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency listed above.

d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).

e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

New York State Department of Environmental Conservation
Division of Environmental Permits, Room 538
50 Wolf Road, Albany, New York 12233-1750
Phone: (518) 457-2224 FAX: (518) 457-5965

John P. Cahill
Commissioner

September 26, 1997

M MILHOUS
LONG ISLAND LIGHTING CO
1660 WALT WHITMAN ROAD
MELVILLE, NY 11747-

Facility Information
LILCO-NORTHPORT POWER STATION
SPDES #: NY 0005941
DEC #: 1-4726-00130/00031
HUNTINGTON /T/, SUFFOLK CO.

Dear Permittee:

This is to inform you that pursuant to Article 17, Title 8 (State Pollution Discharge Elimination System) and Article 70 (Uniform Procedures) of the Environmental Conservation Law (ECL), and 6NYCRR Parts 621 and 757, the Department has made a determination to modify the permit referenced above, in conformance with requirements of the "Discharge Notification Act" (§ 17-0815-a of the ECL). This new section of law, which became effective October 1, 1996, requires you to post a sign at each point of wastewater discharge to surface waters and to provide a public repository for Discharge Monitoring Reports(DMR's) required by the SPDES permit.

The enclosed permit modification page, which is to be appended to your existing permit, contains the specifics for: sign design, language, and posting; repository availability; and the compliance time frame.

The "Discharge Notification Act" also provides the Department with discretion to waive all or part of the requirements of the sign posting provisions if it is determined that a sign can not be located so as to satisfy the intent of the Act. Enclosed is a Waiver Request form that identifies the four circumstances in which the Department may determine that your discharge point is eligible for such a waiver. If you think you may qualify for a waiver, you must complete the Waiver Request form for each outfall by checking the appropriate box(es) and providing written justification to substantiate your waiver request.

The modification will become effective October 31, 1997 unless you either submit a completed Waiver Request form to the Department before the effective date, or should you object to this permit modification on other grounds, you submit a written statement giving supporting reasons why the permit should not be modified, or to request a hearing or both. Such a submission or request must be made within 15 calendar days of the date of this letter.

Completed Waiver Request forms, statements, and requests for hearing are to be addressed to New York State Department of Environmental Conservation, Bureau of Water Permits, 50 Wolf Road, Albany, New York 12233-3505.

If you require further information please contact Joseph DiMura at (518) 457-0657 or at the address in the preceding paragraph.

Sincerely,

William R. Adriance

William R. Adriance
Chief Permit Administrator

Enclosures
cc: RPA - Region 1
RWE - Region 1

47-03F

47-0031

Application No.: NY0026344

Name of Permittee: Long Island Lighting Co

Shoreham Power Station, Unit 1

Effective Date: November 30, 1975

Expiration Date: November 30, 1980

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

DISCHARGE PERMIT

In reference to the above application for a permit authorizing the discharge of pollutants in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972 (33 U.S.C. §1251-1376) (hereinafter referred to as "the Act"), Long Island Lighting Co., 250 Old Country Road, Mineola, New York 11501

(hereinafter referred to as "the permittee")

is authorized by the Regional Administrator, Region II, U. S. Environmental Protection Agency
to discharge from the Shoreham Power Station, North Country Road

Wading River, Suffolk County, New York

to Long Island Sound

in accordance with the following conditions.

Reg. 1

1. All discharges authorized herein shall be consistent with the terms and conditions of this permit; facility expansions, production increases or process modifications which result in new or increased discharges of pollutants must be reported by submission of a new NPDES application, or if such new or increased discharge does not violate the effluent limitations specified in this permit, by submission to the Regional Administrator of notice of such new or increased discharges of pollutants; the discharge of any pollutant for which limitations have been established, more frequently than or at a level in excess of that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

2. After notice and opportunity for a public hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

3. Notwithstanding Condition 2 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, the Regional Administrator shall after opportunity for a hearing, revise or modify this permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.

4. The permittee shall allow the Regional Administrator or his authorized representative and/or the authorized representative of the State water pollution control agency, in the case of non-Federal facilities, upon the presentation of his credentials:

a. To enter upon the permittee's premises in which an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;

b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit;

c. To inspect at reasonable times any monitoring equipment or monitoring method required by this permit;

d. To sample at reasonable times any discharge of pollutants.

5. The permittee shall at all times maintain in good working order and operate as efficiently as possible any facilities or systems of treatment or control installed or utilized by the permittee to achieve compliance with the terms and conditions of this permit.

6. The issuance of this permit does not convey any property rights either in real estate or material, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of rights, nor any infringement of Federal, State or local laws or regulations; nor does it obviate the necessity of obtaining State or local assent required by law for the discharge authorized.

7. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

8. The specific effluent limitations and other pollution controls applicable to the discharge permitted herein are set forth in the following conditions. The following conditions also set forth self-monitoring and reporting requirements. Unless otherwise specified, the permittee shall submit duplicate original copies of all reports to the head of the State water pollution control agency and the Regional Administrator. Except for data determined to be confidential under Section 308 of the Act, all such reports shall be available for public inspection at the office of the Regional Administrator. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

9. General Limitations

a. Except as specifically authorized in this permit, the permittee shall not discharge floating solids.

b. Initial Limitations.

Unless specified otherwise in Conditions 10 and 11, the following conditions apply on the effective date of this permit and last for the duration of the permit.

(1) The permittee shall discharge condenser cooling water effluents such that the following conditions are satisfied:

Discharge No.	Effluent Limit
001	(a) The discharge temperature shall not exceed 40°C (104°F).
	(b) The discharge-intake temperature difference shall not exceed 13.9°C (25°F).
	(c) The net rate of addition of heat to the receiving water shall not exceed $1.49X10^9$ Kilocalories per hour ($5.9X10^9$ BTU/hr.).*
	(d) The pH shall not be less than 6.0 nor greater than 9.0 at any time.**

(2) The discharge from the Backwash of the Manganese Zeolite Filter (001 shall not exceed the following limitations for Total Iron:

Discharge Limitation in average kg/discharge (lbs/disch.)-gross
0.87(1.92)

* The net rate of addition of heat is determined by the product of the heat capacity, discharge flow and discharge-intake temperature difference.

** When the intake pH is less than 6.0, the discharge pH shall not be less than the intake pH; when the intake pH is greater than 9.0, the discharge pH shall not exceed the intake pH.

10. Required Effluent Discharge

a. Chemical Limitations. After the final date specified in Condition 11a and lasting until the date of expiration of this permit, discharges shall not exceed the values listed below for those parameters indicated:

(1) Effluent Limitations:

(a) The pH of all discharges except non-recirculating cooling waters shall not be less than 6.0 nor greater than 9.0 at any time.

(b) Concentrations of free available chlorine in waste water discharged from nonrecirculating and recirculating cooling water systems shall not exceed an average of 0.2 mg/l and an instantaneous maximum of 0.5 mg/l. Neither free available nor total residual chlorine may be discharged from any condenser for more than 2 hours in any one day and not more than one condenser may discharge free available or total residual chlorine at any time.

(c) Backwash from Manganese Zeolite Filter-

Parameter	Discharge Limitation in Maximum Kg/discharge (lbs/discharge)-gross
Total Iron	0.046 (0.10)

b. Thermal Limits

(1) Effluent Limitations - After the final date specified in Condition 11b and lasting until the date of expiration of this Permit, the permittee shall discharge effluent (s) such that the following thermal condition are satisfied:

(a) There shall be no discharge of heat from the main condensers of Shoreham except heat may be discharged in blowdown from recirculated cooling water systems provided the temperature at which the blowdown is discharged does not exceed at any time the lowest temperature of recirculated cooling water prior to the addition of make-up water.

(b) The permittee shall discharge effluent(s) such that the following conditions are satisfied:

Discharge Serial No.		Thermal Effluent Limits
001	i	Discharge temperature shall not exceed 37°C (98°F) at any time.
	ii	The net rate of addition of heat to the receiving water shall not exceed:*
		A 1.19×10^8 Kilocalories per hour (4.72×10^8 BTU/hr.), (October- May).
		B 7.42×10^7 Kilocalories per hour (2.95×10^8 BTU/hr.), (June- Septemb

* The net rate of addition of heat is determined by the product of the heat capacity, discharge flow and discharge-intake temperature difference.

11. SCHEDULE OF COMPLIANCE.

The permittee shall comply with the following schedule and shall report to both the Regional Administrator and the State Agency within 14 days following each date on the schedule detailing its compliance or noncompliance* with the schedule date and requirement.

a. Compliance Schedule to meet Chemical Limits (Condition 10a).

(1) The permittee shall complete an engineering report and submit it to the State Agency in accordance with State requirements* by March 1, 1976.

(2) The permittee shall complete final plans and specifications for the treatment facilities and submit it to the State Agency in accordance with State requirements* by July 1, 1976.

(3) The permittee shall submit a report detailing its progress toward completion of the facilities required to comply with Condition 10a by February 1, 1977.

(4) The permittee shall complete construction of the facilities by April 1, 1977 or upon commencement of operation of Shoreham, whichever is later.

(5) The permittee shall attain the operational levels required to achieve the limits specified in Condition 10a by July 1, 1977 or within 3 months from commencement of operation of Shoreham, whichever is later.

b. Compliance schedule to meet Thermal Effluent Limits (Condition 10b(1)).

(1) Unless Condition 10b(1) is deleted or modified as a result of the Regional Administrator's and State Certifying Agency's determination that the permittee's proposed alternative thermal effluent limitations will assure a balanced indigenous population of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made, the permittee shall attain the operational levels required to achieve the limits specified in Condition 10b(1) by July 1, 1981 and shall comply with the following schedule of compliance:

(a) The permittee shall complete an engineering report and submit it to the State Agency in accordance with State requirements* by January 1, 1977.

(b) The permittee shall complete final plans and specifications for the treatment facilities and submit it to the State Agency in accordance with State requirements* by June 1, 1977.

(c) The permittee shall submit reports detailing its progress toward completion of the facilities required to comply with Condition 10b(1) by March 1, 1978, December 1, 1978, September 1, 1979, and June 1, 1980.

(d) The permittee shall complete construction of the facilities by April 1, 1981 or upon commencement of operation of Shoreham, whichever is lat

(e) The permittee shall attain the operational levels required to achi

* Each notice of noncompliance shall include the following information:

(1) a short description of the noncompliance;

(2) a description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;

(3) a description of any factors which tend to explain or mitigate the noncompliance; and,

(4) an estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next schedule requirement on time.

All reports, plans and/or specifications that propose new or modified waste treatment and/or disposal facilities must be approvable and signed, and sealed, by a professional engineer, licensed to practice in the State in which the facilities are to be built.

12. MONITORING AND RECORDING

The permittee shall monitor and record the quantitative values of each discharge according to the following schedule and other provisions. For each discharge and for each Sampling Schedule listed below, the flow (in gallons per day) shall be measured.* Where net values are listed in Conditions 9b and/or 10 the surface water intake is to be sampled with the same frequency and type of sample as specified below for each required parameter.

a. Sampling Schedule for Discharge Serial No. 001.

The following sampling schedule shall commence upon operation of Shoreham, and for the duration of the permit:

Parameter	Minimum Freq. of Analysis	Sample Type
Discharge temperature	Continuous	
Intake temperature	Continuous	
pH	Twice weekly	Grab**
Free available chlorine	Continuous during chlorination periods	

* The flow of condenser cooling water discharges shall be monitored and recorded by continuous recording of the operating mode of the circulating water pumps; for all other discharges or internal waste streams (only those which are limited), the flow shall be measured and recorded at a frequency coinciding with the most frequently sampled parameter. Methods, equipment, installation and procedures shall conform to those prescribed in the Water Measurement Manual, U.S. Department of the Interior, Bureau of Reclamation, Washington, D.C., 1967.

** Grab samples only shall be taken for analysis of dissolved oxygen, oil and grease, pH and any bacteriological analysis. Care shall be exercised when collecting a composite sample such that the proper preservative is present in the sample container during sample collection. Depending on the analysis to be conducted, several different containers and preservation techniques may be required. Samples shall be analyzed as quickly as possible after collection and in no case shall the maximum holding time exceed that contained in the references cited in Condition 12(f).

b. Discharges other than Condenser Cooling Water

(1) Sampling Schedule I - The permittee shall submit a comprehensive monitoring report by February 1, 1976 months from commencement of operations, whichever is later. The permittee shall take daily 24-hour composite samples of discharges 001 a 003 over a typical production period of at least 7 consecutive operating days. One or two grab samples per day shall also be taken during maximum anticipated waste loadings (i.e. maximum production periods, batch dumping, washing operations). This sampling program shall be carried out to insure complete, reliable results which will typify the plant's daily discharge.

In lieu of this sampling program the permittee may submit documentation indicating the results of previous sampling programs for all or part of the required parameters. The data utilized in obtaining the average and maximum values which appear in the permit application can be substituted for this report if the reported values can be shown to be representative of the permittee's current discharge(s). The following parameters are to be reported on:

Discharge Serial No.	Parameter
003*	Total Suspended Solids
001**	Total Iron

(2) Sampling Schedule II - This schedule shall commence upon completion of Schedule I and continue until the expiration of this permit.

The permittee shall take 24-hour composite samples* on a monthly basis for the following parameters:

Discharge Serial No.	Parameter
003*	Total Suspended Solids
001**	Total Iron

* Boiler Blowdown shall be monitored prior to dilution with drain flows. Upon review of monitoring results for Total Suspended Solids, additional limits may be imposed.

** Manganese Zeolite Filter shall be monitored prior to dilution with Condenser Cooling Water.

c. Modifications to Sampling Schedules

The permittee may submit for approval an alternate schedule(s) to account for any realignment of discharges, for substitutions of parameters to be sampled, for analytical and sampling methods to be utilized, for realignment of sampling locations so that concentrations to be measured are within reliable sensitivity ranges of the analytical techniques, and for the compositing by volume of individual discharge samples to make a single plant sample. With regard to substituting parameters such as TOC or COD for BOD, the permittee shall provide test data to support the correlation between the parameters.

If the permittee monitors any pollutant more frequently than is required by this permit, he shall include the results of such monitoring in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA Form 3320-1 (10-72)) in Condition 12(g). Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

d. Quality Control

Adequate care shall be maintained in obtaining, recording, and reporting the required data on effluent quality and quantity, so that the precision and accuracy of the data will be equal to or better than that achieved by the prescribed standard analytical procedures.

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at sufficiently frequent intervals to ensure accuracy of measurements.

Sampling shall be representative of the volume and quality of effluent discharged over the sampling and reporting period.

The permittee is responsible for assuring that the methodology used is reliable for their specific wastes in their laboratory. The permittee must be able to demonstrate to the Regional Administrator that they have a viable quality control program.

e. Recording

The permittee shall maintain and record the results of all required analyses and measurements and shall record, for all samples, the date and time of sampling, the sample method used, the dates analyses were performed, who performed the sampling and analyses, and the results of such analyses.

All records shall be retained for a minimum of 3 years, such a period to be extended during the course of any unresolved litigation or when so requested by the Regional Administrator. The permittee also shall retain all original stripchart recordings from any continuous monitoring instrumentation and any calibration and maintenance records for a minimum of 3 years, such period to be extended during the course of any unresolved litigation or when so requested by the Regional Administrator.

The permittee shall provide the above records and shall demonstrate the adequacy of the flow measuring and sampling methods upon request of the Regional Administrator. The permittee shall identify the effluent sampling point used for each discharge pipe by providing a sketch or flow diagram, as appropriate, showing the locations.

f. Sampling and Analysis

All sampling and analytical methods used to meet the monitoring requirements specified above shall conform to guidelines establishing test procedures for the analysis of pollutants, published pursuant to Section 304(g) of the Federal Water Pollution Control Act, as amended. If the Section 304(g) guidelines do not specify test procedures for any pollutants required to be monitored by this permit and until such guidelines are promulgated, sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless otherwise specified by the Regional Administrator, conform to the latest edition of the following references:

Standard Methods for the Examination of Water and Wastewaters, 13th Edition, 1971 American Public Health Association, New York, New York 10019.

A.S.T.M. Standards, Part 23, Water; Atmospheric Analysis, 1972, American Society for Testing and Materials, Philadelphia, Pennsylvania 19103.

W.Q.O. Methods for Chemical Analysis of Water and Wastes, April 1971, Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, NERC, 1014 Broadway, Cincinnati, Ohio 45268.

g. Reporting

The results of the above monitoring requirements shall be reported by the permittee in the units specified in Conditions 9(b) and 10. A report or a written statement shall be submitted even if no discharge occurred during the reporting period. A report shall also be submitted if there have been any modifications in the waste collection, treatment, and disposal facilities, changes in operations procedures, or other significant activities which alter the quality and quantity of the discharges or otherwise concern these Conditions. Permanent elimination of a discharge shall be promptly reported by the permittee in writing to the Regional Administrator.

The permittee shall include in this report any previously approved non-standard analytical methods used. Copies of the report shall be sent to both the Regional Administrator and the State Agency on the 10th of each month reporting the monitoring data from the previous month. A Discharge Monitoring Report Form [EPA Form 3320-1 (10-72)] shall be used for reporting.

13. SLUDGE DISPOSAL.

Collected screenings, sludges, and other solids and precipitates separated from the permittee's discharges authorized by this permit and/or intake or supply water by the permittee shall be disposed of in such a manner as to prevent entry of such materials into navigable waters or their tributaries. Any live fish, shellfish, or other animals collected or trapped as a result of intake water screening or treatment may be returned to their water body habitat. The permittee shall report on all effluent screenings, sludges and other solids associated with the discharge herein described. The following data shall be reported quarterly together with the monitoring data required in Condition 12:

a. the method by which they were removed and transported;

b. their final disposal locations.

14. DISCHARGE CONTAINING PARAMETER NOT PREVIOUSLY REPORTED.

The permittee shall not discharge any wastewater containing a substance or characterized by a parameter which was indicated as absent in its NPDES Permit Application. In the event of such a discharge, the permittee shall notify the Regional Administrator and the State Agency prior to the discharge.

15. NON-COMPLIANCE WITH CONDITIONS.

a. In the event the permittee is unable to comply with any of these conditions, due, among other reasons, to:

(1) breakdown of waste treatment equipment, (biological and physical-chemical systems including, but not limted to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units);

(2) accidents caused by human error or negligence; or

(3) other causes, such as acts of nature,

the permittee shall notify the Regional Administrator and the State Agency immediately by telephone and in writing within five days.

b. The written notification shall include the following pertinent information:

(1) cause of noncompliance;

(2) a description of the noncomplying discharge including its impact upon the receiving waters;

(3) anticipated time the condition of noncompliance is expected to continue, or if such condition has been corrected, the duration of the period of noncompliance;

(4) steps taken by the permittee to reduce and eliminate the noncomplying discharge; and,

(5) steps to be taken by the permittee to prevent recurrence of the condition of noncompliance.

Permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitation specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

Nothing in this permit shall be construed to relieve the permittee from appropriate civil or criminal penalties for noncompliance.

16. BYPASS PROVISION.

There shall be no bypass of the waste treatment facilities which would allow the entry of untreated or partially treated wastes to the receiving waters.

17. AUTHORIZED SIGNATURE FOR REPORTING REQUIREMENTS.

All reports required to be submitted by a corporation must be signed by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application form originates. In the case of a partnership or a sole proprietorship, all reports must be signed by a general partner or the proprietor respectively. In the case of a municipal, State, Federal or other public facility, the application must be signed by either a principal executive officer, ranking elected official or other duly authorized employee.

18. RADIACTIVE SUBSTANCES. Limits and monitoring requirements for radioactive substances contained in wastewater discharges may be imposed in the future.

DEFINITIONS

Regional Administrator: Regional Administrator
Region II
Environmental Protection Agency
26 Federal Plaza
New York, New York 10007
ATTN: Status of Compliance Branch

State Certifying Agency: Mr. Russel Mt. Pleasant, P.E., Chief
Bureau of Monitoring and Surveillance,
Division of Pure Waters,
N.Y.S. Department of Environmental Conservation,
50 Wolf Rd.
Albany, N.Y. 12201

Daily - each operating day.

Weekly - every seventh day (the same day each week) and a normal operating day.

Monthly - one day each month (the same day each month) and a normal operating day. (i.e. the 2nd Tuesday of each month)

Daily Average - the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

Daily Maximum - the total discharge by weight during any calendar day.

Net - the poundage contained in the discharge, less the poundage contained in the surface water body intake source over the same period of time.

1. The intake source must be the same water body that is being discharged to.

2. In cases where the surface water body intake source is pretreated for the removal of pollutants, the intake poundage to be used in calculating the net, is that poundage contained after the pretreatment steps.

Composite - a combination of individual (or continuously taken) samples obtained at regular intervals over the entire discharge day. The volume of each sample shall be proportional to the discharge flow rate. For a continuous discharge, a minimum of 24 individual grab samples (at hourly intervals) shall be collected and combined to constitute a 24-hour composite sample. For intermittent discharges of 4 - 8 hours duration, grab samples shall be taken at a minimum of 30 minute intervals. For intermittent discharges of less than 4 hours duration grab samples shall be taken at a minimum of 15 minute intervals.

Gross - the poundage contained in the discharge. (Gross applies when the intake source is a municipal or private water supply, ground water, or a surface water body other than the one being discharged to.)

Grab - an individual sample collected in less than 15 minutes.

Instantaneous Maximum - The highest discharge valued at any time.

Average (Chlorine Limitations) - The mean value determined over the chlorination period(s) in any calendar day.

TSS - Total Suspended Solids.

Average Batch - The total discharge, by weight, of any two consecutive discharges.

Maximum Batch - The total discharge, by weight resulting from any single discharge of water.

This permit and the authorization to discharge shall be binding upon the permittee and any successors in interest of the permittee and shall expire on November 30, 1980. The permittee shall not discharge after the above date of expiration. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue NPDES permits no later than 180 days prior to the above date of expiration.

By authority of Gerald M. Hansler, P. E.
(Regional Administrator)

Meyer Scolnick

OCT 10 1975

Meyer Scolnick, Director
Enforcement and Regional
Counsel Division

Copies: A. Yerman
R. Hannaford
S. Costa
Dr. Baker
Dr. Spear

Facility ID No. : NY- 0026344

Effective Date (EDP) : December 1, 1981

Expiration Date (ExDP) : December 1, 1986

MODIFIED: 2/4/82, 7/29/82, 2/1/83

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
DISCHARGE PERMIT

Special Conditions
(Part I)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et. sec.) (hereinafter referred to as "the Act").

Permittee Name: Long Island Lighting Company,

Refer correspondence to:
Raymond Driscoll, P.E.
Manager, Environmental Engineering

Permittee Street: 175 E. Old Country Road

Permittee City: Hicksville, State: N.Y. Zip Code: 11801

is authorized to discharge from the facility described below:

Facility Name: Shoreham Nuclear Power Station

Facility Location (C,T,V): Brookhaven (T) County: Suffolk

Facility Mailing Address (Street): P. O. Box 628

Facility Mailing Address (City): Wading River State: N. Y. Zip Code: 11792

into receiving waters known as:

Long Island Sound (Class SA)

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal as prescribed by Sections 17-0903 and 17-0804 of the Environmental Conservation Law and Parts 621, 752, and 755 of the Departments' rules and regulations.

By Authority of Daniel J. Larkin, Regional Permit Administrator
Designated Representative of Commissioner of the
Department of Environmental Conservation

1/27/83
Date

Signature

1-20-2(6/81)Ep.1

Facility ID No.: NY 002 634

Final EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS MODIFIED: 7/29/82, 2/1/83

During the period beginning December 1, 1981
and lasting until the initiation of Reactor Low Power Testing
the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
001 - Temporary Cooling Water					
Flow*			GPD	Quarterly	Calculated
Temperature*			°F	Quarterly	Grab
Free Available Chlorine**		0.5	mg/l	Continuous	Recorded
001:027 Demineralizer Regeneration Wastes					
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil and Grease		15	mg/l	Quarterly	Grab
pH	(5.0 - 9.0) Range		SU	Continuous	Each Batch
Conductivity***		50	micromhos/cm^3	Continuous	Each Batch
002 Temporary Cooling Water					
Flow*			GPD	2/Month	Calcualted
Temperature*			°F	2/Month	Grab
002:027 - Demineralizer Regeneration Wastes & Flush Waters					
Iron*			mg/l	Monthly	Grab
Suspended Solids	30	50	mg/l	2/Month	Grab
Oil and Grease		15	mg/l	2/Month	Grab
pH	(6.0 - 9.0) Range		SU	Monthly	Grab
003 Auxiliary Boiler Blowdown & Flush Waters					
Flow*			GPD	Monthly	Calcualted
Iron*			mg/l	Monthly	Grab
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil and Grease		15	mg/l	Monthly	Grab
pH	(6.0 -9.0) Range		SU	2/Month	Grab
M[illegible]0 39-L		16,000	mg/l	Each Discharge	Grab
004 Emergency Generator Cooling Water					
Flow*			GPD	Monthly	Instantaneous
Discharge Temperature		110	°F	Monthly	Grab
Discharge Temperature Difference		30	°F	Monthly	Grab

*Monitoring Requirement Only

**Only required during chlorination system testing.

***Monitoring and limits effective only when demineralized water is discharged with a pH less than 6.

Final EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS
During the period beginning at the initiation of Reactor Low Power Testing
and lasting until December 1, 1986
the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Reqmts. Measurement Frequency	Sample Type
010 Circulating Cooling Water					
Flow	Monitor	Monitor	GPD	Continuous	Calculated
Discharge Temperature	Monitor	109	°F	Continuous[a]	Recorder
Intake-Discharge Temperature Difference[b]	Monitor	30	°F	Continuous	Calculated
Rate of Addition of Heat[e]		$5x9x10^9$	BTU/hr.		
Total Residual Chlorine	Monitor	0.2	mg/l	Continuous	Recorder
Boron		0.7	mg/l	Each Discharge	Grab
011 - Radwaste System Wastewater Effluent					
Suspended Solids	30	50	mg/l	Once Per Batch	Grab
Oil and Grease		15	mg/l	Once Per Batch	Grab
pH (6.0 - 9.0) Range			SU	Once Per Batch	Grab
012 - Demineralizer Regeneration Wastes					
Suspended Solids	30	50	mg/l	Once Per Batch	Grab
Oil and Grease		15	mg/l	Once Per Batch	Grab
pH (6.0 - 9.0)			SU	Once Per Batch	Grab
020[d] - Floor Drains & Storm Drains					
Flow	Monitor	Monitor	GPD	2/Month	Instantaneous
Oil and Grease		15	mg/l	2/Month	Grab
Suspended Solids	30	50	mg/l	2/Month	24-hr.Composi
pH (6.0 - 9.0) Range			SU	2/Month	Grab
030[d] - Floor Drains, Auxiliary Boiler Blowdown, Oil Separation Unit and Storm Drains					
Flow	Monitor	Monitor	GPD	2/Month	Instantaneous
Oil and Grease		15	mg/l	Weekly	Grab
Suspended Solids	30	50	mg/l	2/Month	24-hr.Composi
pH (6.0 -9.0) Range			SU	Weekly	Grab
NALCO 39-L		16,000	mg/l	Each Discharge	Grab
040 Screenwash Return Water and Fish Return System[e]					
041, 042, 043 - Screenwash Return Water[e]					
044 Emergency Generator Cooling Water[c]					
Flow		Monitor	GPD	Monthly	Instantaneous
Discharge Temperature	Monitor	110	°F	Weekly	Grab
Discharge Temperture Difference	Monitor	30	°F	Weekly	Grab

a - Monitored continuously and logged every ten minutes

b - This value may be exceeded by not more than 10°F for not more than 3% of the time per year.

c - Compliance Schedule and Effluent Limitations to be established for this parameter. See Additional Requirement #14.

d - This waste stream is to be sampled when there is no discharge from storm drains.

e - No monitoring required.

f - There shall be no discharge of emergency cooling water while impinged fish are being returned via outfall 040 unless these fish can be safely retained in the fish holdup pond.

ADDITIONAL REQUIREMENTS

1. There shall be no discharge of PCB's from this facility.

2. There shall be no discharge of boiler cleaning wastewaters from this facility.

3. No biocides, corrosion control chemicals, or other water treatment chemicals are authorized for use by the permittee, except for those listed in the permit application. If other water treatment chemical additives are contemplated, application for their approval must be made to the Department.

4. Within 180 days of the initiation of Reactor Low Power Testing the Company shall file for approval with the Department at its offices in Stony Brook and in Albany a report on all water treatment, corrosion inhibitor, anti-fouling, slimicide, biocide, and boiler cleaning chemicals or compounds. Such report shall identify each project by chemical formula and/or composition, annual consumption, frequency of use, maximum use per incident, effluent concentration, available bio-assay and toxicity limits and procedures for use.

5. By 180 days prior to circulating water system operation, the company shall file for approval with the Department at its offices in Stony Brook and in Albany a detailed biological monitoring program designed to determine the effects of the cooling water system on aquatic organisms. The plan of study shall address the scope and intensity of each survey, the technology of sampling and analysis, the arrangement and presentation of data in a standard and consistent format and units and the correlation and comparative presentation of results with other contemporary studies on Long Island Sound. The plan of study shall be coordinated with the requirements of NRC's Technical Specifications monitoring requirements. As a result of such monitoring program, as determined necessary by the Department, the company shall implement appropriate methods and procedures to reduce to the necessary extent the effects of facility operation on aquatic organisms. By 120 days following the collection of one year of monitoring data, an annual report summarizing this data shall be submitted to the Department offices. Additional reporting requirements may be imposed for certain segments of the program as necessary.

6. The location, design, construction and capacity of this facility's cooling water intake structure shall reflect the best technology available for minimizing adverse environmental impact. A determination of BAT in regards to the intake structure will be made following NYSDEC review of the post operational monitoring studies.

7. Starting 90 days after the initiation of Reactor Low Power Testing the Company shall submit to the Department at its offices in Stony Brook and in Albany a monthly report of daily operating data by the 28th of the month following:

   (a) Daily minimum, maximum, and average station electrical output shall be determined and logged.

(b) Daily minimum, maximum and average circulating water use shall be directly or indirectly measured or calculated and logged.

(c) Temperature of the intake and discharge shall be measured and recorded continuously. Daily minimum, maximum, and average intake and discharge temperatures shall be logged.

8. Within 180 days of the initiation of Reactor Low Power Testing the permittee shall file for approval with the Department at its offices in Stony Brook and in Albany, a report for a plan of study that will verify the location of the discharge plume. The plume verification program shall commence 60 days after commercial operation of this facility begins and shall include the following elements:

(a) surveys conducted in the spring, summer, and winter;

(b) triaxial temperature surveys made by actual temperature measurement of the mixing zone, and any additional area having a surface water temperature rise of $1^{o}F$ or more above ambient; with correlation, dye studies or infrared overflight data may be proposed as substitutes for certain surveys.

(c) studies shall be conducted only when plant load is significant and steady-state conditions have been attained;

(d) surveys shall be taken under four tidal stage conditions;

(e) a complete report of the year-long thermal survey program which shall be filed within 120 days of completion of the final survey and include results of all surveys, a discussion of the occurrences and results of each survey, and the correlation of field measurements with the predicted temperature distributions; and.

(f) based upon the results of the first year's studies, additional partial or complete thermal surveys in subsequent years as may be required to properly appraise the discharge plume.

9. The water temperature at the surface of Long Island Sound shall not be raised more than 4 Fahrenheit degrees from October through June nor more than 1.5 Fahrenheit degrees from July through September over that which existed before the addition of heat of artificial origin, except that within a radius of 300 feet or equivalent area from the point of discharge, this temperature may be exceeded.

10. The Department has approved a request pursuant to 316(a) of the Clean Water Act for alternative thermal effluent limitations at this facility. The thermal effluent limitations on page 3 of this permit reflect this approval. Following Department review of post operational monitoring reports, the Department may reaffirm this decision or establish a compliance schedule for retrofitting cooling towers, should they be so required.

11. Nothing in this permit abridges the permittee's standard rights of appeal should NYSDEC decide to impose the additional provisions of additional requirements #5, 6, and 10.

12. Section 704.2(a)(6) of the State Thermal Criteria which prohibits scheduled facility shutdown during the winter months is waived due to the operating characteristics of the facility's diffuser. Scheduled facility shutdown is permitted during the winter months, following prior notification of NYSDEC offices in Stony Brook. This waiver may be revoked based on NYSDEC review of post-operational monitoring results.

13. EPA has proposed BAT non-thermal effluent limits for this discharge category. This permit reflects these draft limitations. Should different non-thermal limitations be promulgated, this permit may be revised to impose these limitations.

14. Chlorination

(a) EPA draft regulation 423.13(b) requires that there be no discharge of total residual chlorine in the cooling water from this facility. However, the permittee may, upon showing NYSDEC that the facility must use chlorine for condenser biofouling control, discharge the minimum amount of chlorine necessary to operate the facility. As a minimum, the discharge of chlorine will be required to reflect applicable EPA BAT limits. Total residual chlorine may not be discharged for more than two hours per day unless it is required for mollusk and crustacean control or any other biota that EPA should permit.

(b) The permittee has elected to conduct a chlorine minimization study in accordance with Appendix A of the Steam Electric Effluent Guidelines.

Should the permittee change its mind, the limitations prohibiting the discharge of TRC will be imposed.

(c) Within 180 days of the initiation of Reactor Low Power Testing the permittee shall submit for NYSDEC approval, a plan of study for its chlorine minimization program.

15 Sanitary wastes from this facility are permitted by the following operational and three construction SPDES permits.

NY 013 2969 - permanent
NY 013 4376 - construction
NY 007 7739 - construction
NY 017 3509 - construction

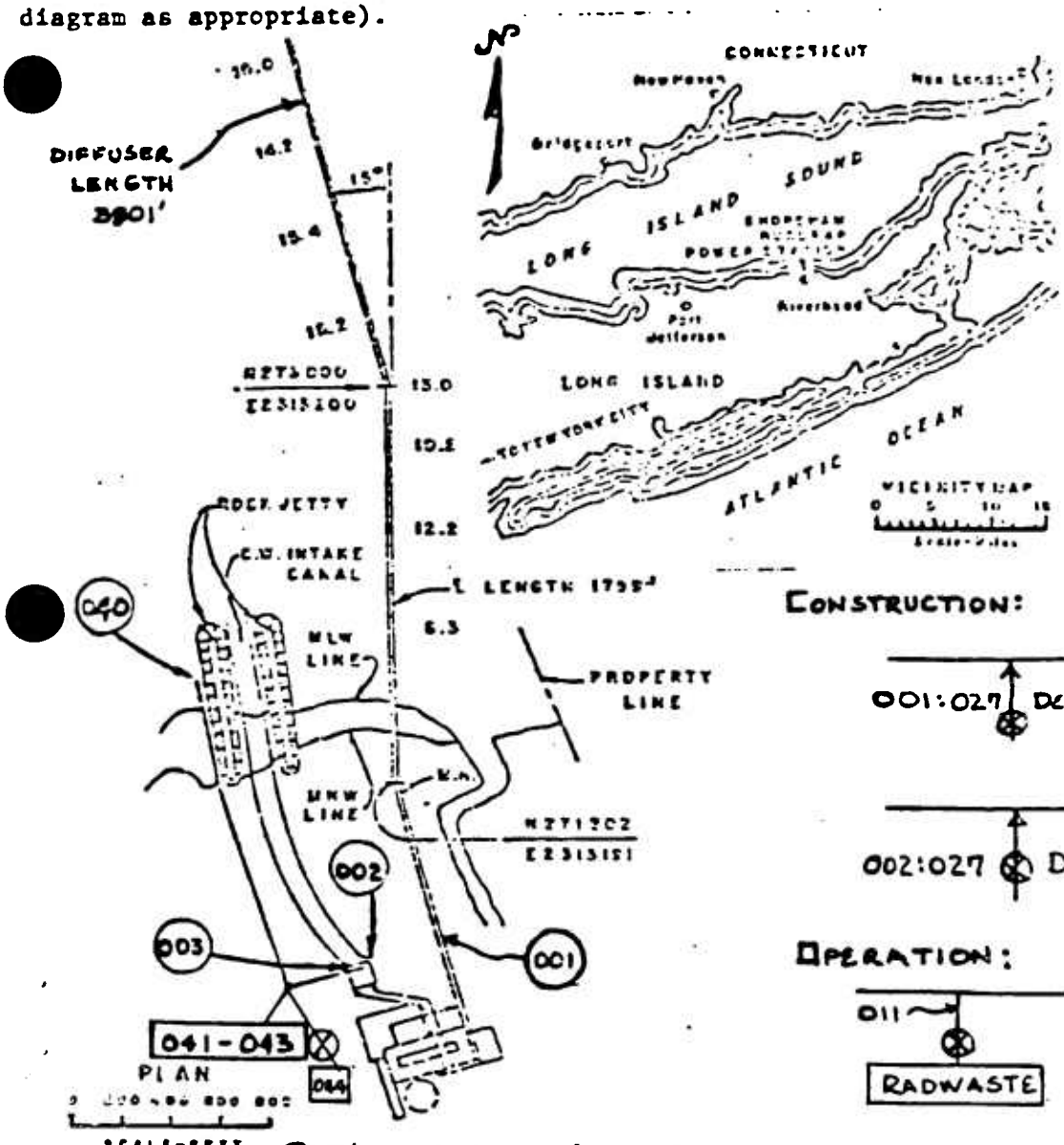
Definition of Daily Average and Daily Maximum

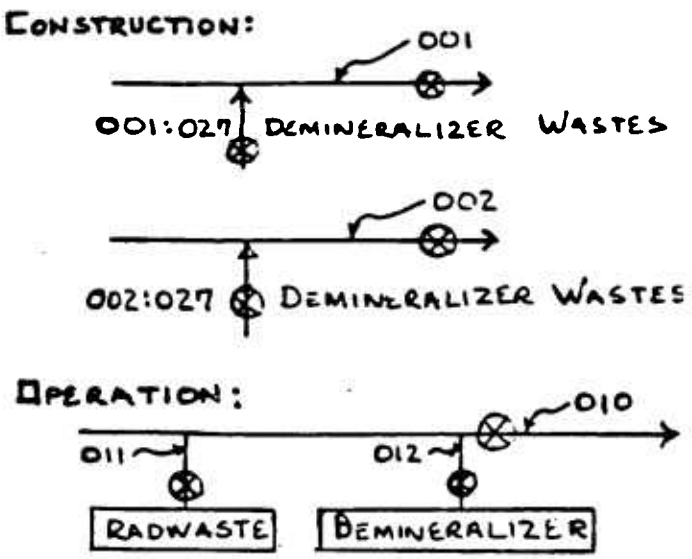
The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).





NOTE: 001 = 010
002 = 020
003 = 030
004 = 044

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
01	All	Engineering Report - Chemicals (Additional Requirement #4).	Initiation of Reactor Low Power Testing + 180 days
44	NA	Plan of Study - Effects of Circulating Water System Monitoring Study (Additional Requirement #5).	Circulating System Operation - 180 days
44	010	Plan of Study - Plume Verification Program (Additional Requirement #8).	Initiation of Reactor Low Power Testing + 180 days
28	010	Engineering Report - Plume Vertification Program (Additional Requirement #8).	Commercial Operation - 18 Months
26	010	Plan of Study - Chlorine Minimization Program (Additional Requirement #14).	Initiation of Reactor Low Power Testing + 180 days

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;

2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;

3. A description of any factors which tend to explain or mitigate the noncompliance; and

4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS
(Continued)

c) The permittee shall submit copies of the written notice of compliance or noncompliance required herein to the following offices:

Chief, Compliance Section
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Regional Engineer - Region #1
New York State Department of Environmental Conservation
Building 40 SUNY
Stony Brook, NY 11790

Suffolk County Department
of Health Services
65 Jetson Lane - Box G
Central Islip, New York 11722

Mr. Richard Baker
USEPA
Region II
26 Federal Plaza
New York, NY 10278

The permittee shall submit copies of any engineering reports, plans of study, final plans, as-built plans, infiltration-inflow studies, etc. required herein to the New York State Department of Environmental Conservation Regional Office specified above unless otherwise specified in this permit or in writing by the Department or its designated field office.

MODIFIED: 2/4/82

MONITORING, RECORDING AND REPORTING

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized and reported by submitting a completed and signed Discharge Monitoring Report form once every 3 months to the Department of Environmental Conservation and other appropriate regulatory agencies at the offices specified below. The first report will be due no later than March 28, 1982 . Thereafter, reports shall be submitted no later than the 28th of the following month(s): June, Sept. Dec., March

Water Division
New York State Department of Environmental Conservation
50 Wolf Road - Albany, New York 12233

New York State Department of Environmental Conservation
Regional Engineer - Region #1
Building 40 - SUNY
Stony Brook, New York 11794

Suffolk County Department of Health Services
15 Horseblock Place
Farmingville, NY 11738

[XX] (Applicable only if checked):

Dr. Richard Baker, Chief - Permits Administration Branch
Planning & Management Division
USEPA Region II
26 Federal Plaza
New York, New York 10278

c) If so directed by this permit or by previous request, Monthly Wastewater Treatment lant Operator's Reports shall be submitted to the DEC Regional Office and county health epart or county environmental control agency specified above.

d) Monitoring must be conducted according to test procedures approved under) CFR Part 136, unless other test procedures have been specified in this permit.

e) If the permittee monitors any pollutant more frequently than required by the ermit, using test procedures approved under 40 CFR 136 or as specified in the permit, ie results of this monitoring shall be included in the calculation and reporting of the ita submitted in the Discharge Monitoring Reports.

f) Calculations for all limitations which require averaging of measurements shall ilize an arithmetic mean unless otherwise specified in the permit.

g) Unless otherwise specified, all information submitted on the Discharge Monitoring rm shall be based upon measurements and sampling carried out during the most recently mpleted reporting period.

h) Blank Discharge Monitoring Report Forms are available at the above addresses.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT
Special Conditions (Part 1)

Industrial Code 4911
Discharge Class (CL) 03
Toxic Class (TX) 02
Major D.B. 17
Sub D.B. 02
Water Index Number

Facility ID Number: NY- 002 6344
UPA Tracking Number: 10-86-0879
Effective Date (EDP): August 1, 1987
Expiration Date (ExDP): August 1, 1992
Modification Date(s):
Attachment(s): General Conditions (Part II, 2/85)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et. seq.) (hereinafter referred to as "the Act").

Attn: Madison Milhous, P.E., Manager
Environmental Engineering

Permittee Name: Long Island Lighting Company

Street: 1660 Walt Whitman Rd.

City: Melville State: New York Zip Code: 11747

is authorized to discharge from the facility described below:

Facility Name: Shoreham Nuclear Power Station

Location (C,T,V): Brookhaven (T) County: Suffolk

Mailing Address (Street): 1660 Walt Whitman Rd.

Mailing Address (City) Melville State: New York Zip Code: 11747

from Outfall No. 001 at: Latitude 40°58'28" & Longitude 72°52'03"

into receiving waters known as: Long Island Sound Class SA

and: (list other Outfalls, Receiving Waters & Water Classification)

001A, 001B, 002, 003, 003A, 003B, 004 - Long Island Sound, Class SA
010, 011, 012, 020, 030, 040, 041, 042, 043, 044 - Long Island Sound, Class SA
051, 054, 055, 056 - groundwater, Class GA

County Tax Map Number:
District 200 Section 083
Block 1 Lot 1

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and th permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal as prescribed b Sections 17-0803 and 17-0804 of the Environmental Conservation Law and Parts 621, 752, and 755 of the Department rules and regulations.

PERMIT ADMINISTRATOR	DATE ISSUED	ADDRESS
~~Deputy Regional~~ David DeRidder	June 24, 1987	Bldg. 40, SUNY Stony Brook, N.Y. 11794

Distribution: P. Barbato J. Maloney
J. Ascher Dr. R. Baker
R. Hannaford Dr. Spear

David DeRidder
SIGNATURE

INITIAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the Period Beginning August 1, 1987

and lasting until the exceedance of 5% licensed power operation

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
001 - Temporary Cooling Water/Circulating Water and Service Water					
Flow	NA	Monitor	GPD	Quarterly	Calculated
[redacted]erature	NA	Monitor	°F	Quarterly	Grab
Total Residual Chlorine	Monitor	0.2	mg/l	Continuous[g]	Recorded[g]
Boron[f]	NA	0.7	mg/l	Ea. Discharge	Grab
001A - Demineralizer Regeneration Wastes					
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil and Grease	Monitor	15	mg/l	Quarterly	Grab
pH (Range)	NA	6.0-9.0	SU	Continuous	Ea. Batch
Conductivity*	NA	50	micromhoscm/3	Continuous	Ea. Batch
001B - Radwaste Facility (Demineralizer Regeneration Wastes & Flush Waters)					
Iron	NA	Monitor	mg/l	Weekly	Grab
Suspended Solids	30	50	mg/l	Weekly	Grab
Oil and Grease	NA	15	mg/l	Weekly	Grab
pH (Range)	NA	6.0-9.0	SU	Weekly	Grab
Radioactivity[e]	NA[e]	NA[e]	NA[e]	NA[e]	NA[e]
[redacted][d] - Floor Drains, Storm & Roof Drains					
[redacted] and Grease	NA	15	mg/l	Quarterly	Grab
003 - Auxiliary Boiler Blowdown, Flush Waters and Storm Drains[d]					
Flow	100	Monitor	GPD	Monthly	Estimated
Iron	NA	Monitor	mg/l	Monthly	Grab
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil and Grease	NA	15	mg/l	Monthly	Grab
pH (Range)	NA	6.0-9.0	SU	2/Month	Grab
003A - Oil Water Separator[h,i]					
Oil and Grease	Monitor	15	mg/l	2/Month	Grab
Suspended Solids	NA	50	mg/l	Monthly	Grab

INITIAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the Period Beginning August 1, 1987

and lasting until the exceedance of 5% licensed power operation

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
003B - Oil Water Separator (Colt Emergency Diesel Generator Building)[h,i]					
Flow	100	Monitor	GPD	2/month	Estimated
Oil and Grease	Monitor	15	mg/l	2/month	Grab
Suspended Solids	NA	50	mg/l	2/month	Grab
004 - Emergency Generator Cooling Water[c]					
Flow	NA	Monitor	GPD	Monthly	Instantane
Discharge Temperature	NA	110	°F	Monthly	Grab
Discharge Temperature Difference	NA	30	°F	Monthly	Grab
051, 054, 055, 056	Sanitary wastes only (to replace former SPDES permit numbers NY-0132969, NY-0173509, NY-0180700, NY-0055829)				

* Monitoring and limits effective only when demineralized water is discharged with a pH les than 6.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the Period Beginning at the exceedance of 5% licensed power operation

and lasting until August 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
010 Once Through Cooling Water/circulating water and service water					
Flow	Monitor	Monitor	MGD	Continuous	Calculated
Discharge Temperature	Monitor	109	°F	Continuous[a]	Recorder
Intake-Discharge Temperature Difference[b]	Monitor	30	°F	Continuous	Calculated
Net Rate of Addition of Heat	NA	5.9×10^9	BTU/hr	No monitoring	required
Total Residual Chlorine[g]	Monitor	0.2	mg/l	Continuous[g] during period of chlorination	Recorder[g]
Boron[f]	Monitor	0.7	mg/l	Ea Discharge	Grab
012 Radwaste System Wastewater Effluent					
Solids, Suspended	30	50	mg/l	Once Per Batch	Grab
Oil and Grease	Monitor	15	mg/l	Once Per Batch	Grab
pH (Range)[e]	NA[e]	6.0 - 9.0	SU	Once Per Batch	Grab
Radioactivity[e]	NA[e]	NA[e]	NA[e]	NA[e]	NA[e]
011 Demineralizer Regeneration Wastes					
Solids, Suspended	30	50	mg/l	Once Per Batch	Grab
Oil and Grease	Monitor	15	mg/l	Once Per Batch	Grab
pH (Range)	NA	6.0 - 9.0	SU	Continuous	Ea. Batch
Conductivity*	NA	50	Micromhos cm/^{3}	Continuous	Ea. Batch
020[d] Floor Drains & Storm Drains					
Flow	Monitor	Monitor	GPD	2/Month	Estimated
Oil and Grease	Monitor	15	mg/l	2/Month	Grab
Solids, Suspended	30	50	mg/l	2/Month	Grab
pH (Range)	NA	6.0 - 9.0	SU	2/Month	Grab
030[d] Floor Drains, Auxiliary Boiler Blowdown, Oil Separation Unit and Storm Drains					
Flow	Monitor	Monitor	GPD	2/Month	Estimated
Oil and Grease	Monitor	15	mg/l	2/Month	Grab
Solids, Suspended	30	50	mg/l	2/Month	Grab
pH (Range)	NA	6.0 - 9.0	SU	2/Month	Grab

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the Period Beginning at the exceedance of 5% licensed power operation

and lasting until August 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
040 Screenwash Return Water and Fish Return System (No Monitoring Required)					
●, 042, 043 Screenwash Return Water (No Monitoring Required)					
044 Emergency Generator Cooling Water[c]					
Flow	NA	Monitor	GPD	Monthly	Instantaneous
Discharge Temperature	Monitor	110	°F	Weekly	Grab
Discharge Temperature Difference	Monitor	30	°F	Weekly	Grab
051, 054, 055, 056	Sanitary wastes only (to replace former SPDES permit nos. NY-0132969, NY-0173509, NY-0180700, NY-0055829)				

FOOTNOTES

a. Monitored continuously and logged every fifteen minutes.

b. This value may be exceeded by not more than 10°F for not more than 3% of the time per year.

c. There shall be no discharge of emergency cooling water while impinged fish are being returned via outfall 040 unless these fish can be safely retained in the fish holdup pond.

d. This waste stream is to be sampled when there is no discharge from storm drains.

e. Permittee will submit radioactivity monitoring reports required by the Nuclear Regulatory Commission for this monitoring requirement.

f. The boron effluent limit is met by sampling the process stream and then calculating the required dilution to insure that discharges are within permit limits.

g. In the event of continuous monitor failure monitoring will be conducted by taking a grab "sample type" and "measurement frequency" will be once every eight hours for Outfall 001, 010 during periods of service water chlorination, or once every 30 minutes while chlorinating condenser water, EPA approved methods for testing as per 40 CFR 136 will be utilized.

h. Flow is limited to the design capacity for the oil/water separator.

i. Samples shall be taker at two week intervals.

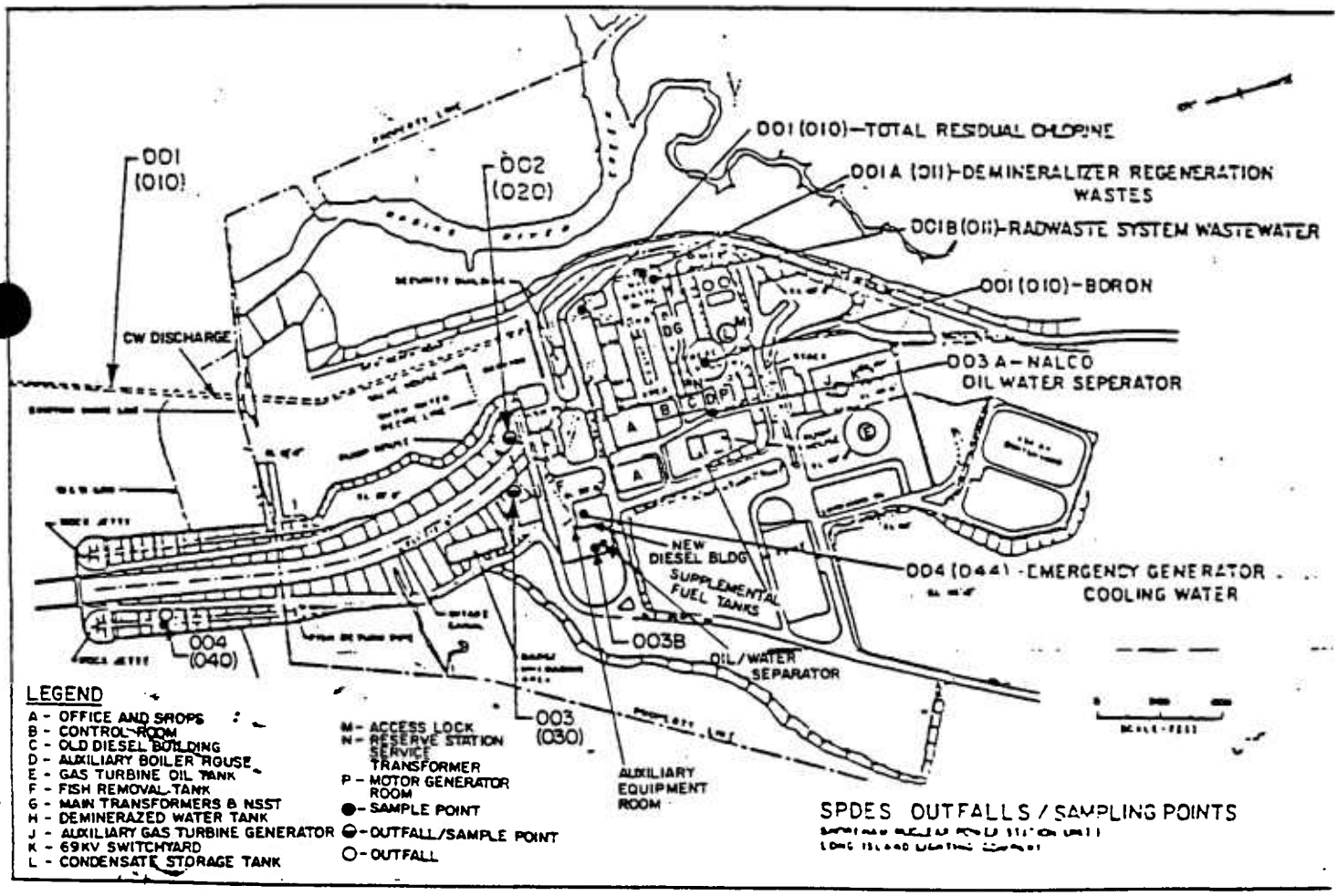
Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below. (Show locations of outfalls with sketch or flow diagram as appropriate). as shown on attached drawings and or identified in accompanying monitoring descriptions.



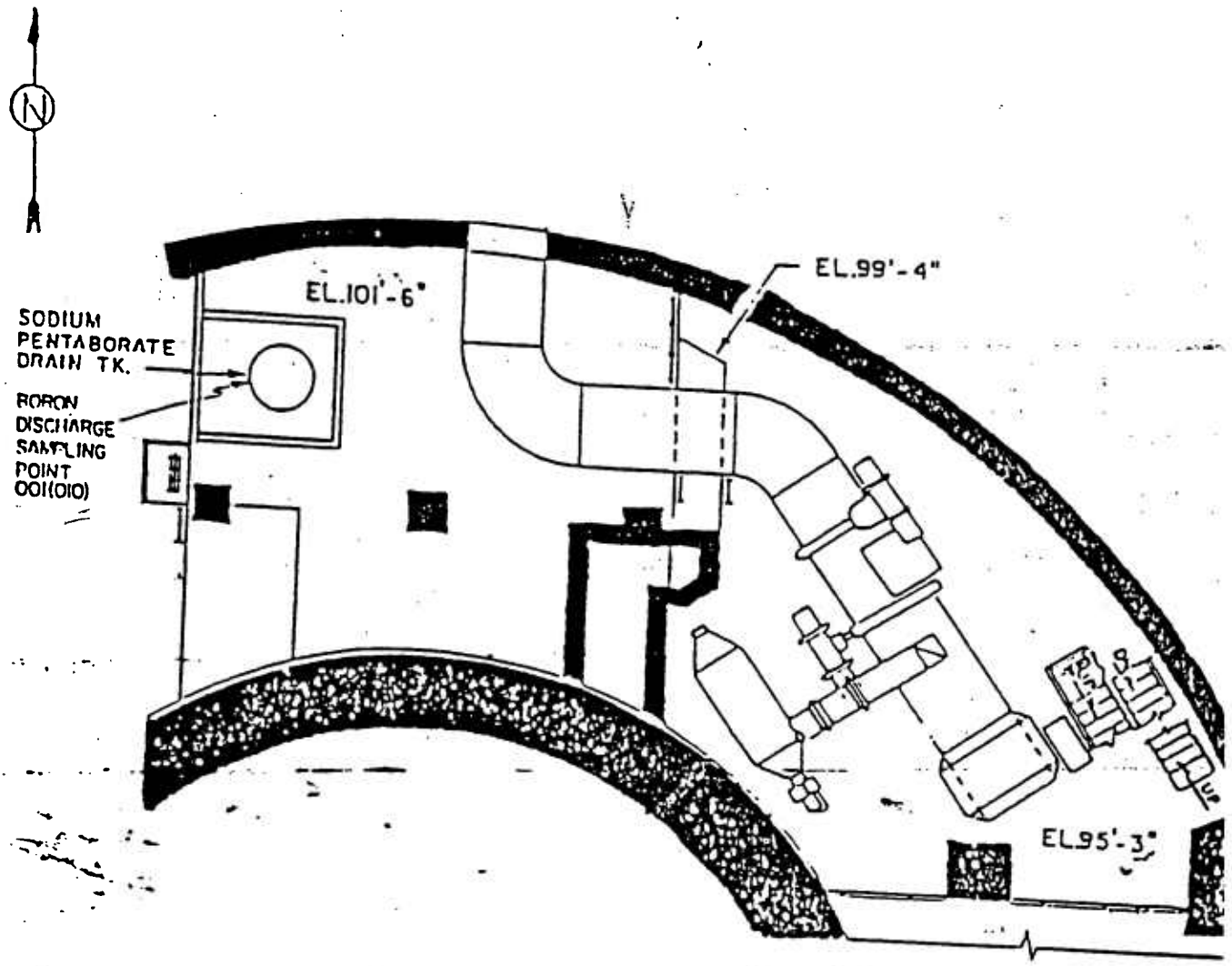
DISCHARGE MONITORING POINT DESCRIPTIONS

001(010); Total Residual Chlorine is continuously monitored by means of an Orion Chlorine Analyzer which is located in the Circulation Water Auxiliary Structure (approximately 100 feet north of the RAD Waste Building). (See Site Plan on page 6 of 14)

During the preoperational stage of the plant, Circulating Water Discharge Temperature is obtained by means of a grab sample taken from the Chlorine Monitor Sample pump which is located in the Circulation Water Auxiliary Structure (approximately 100 feet north of the RAD Waste Building). (See Site Plan on page 6 of 14)

During the operational stage of the plant, a computer monitors the circulating water discharge temperature every ten minutes at a point located downstream of the chlorine analyzer.

Boron is sampled from the Standby Liquid Control Drain Tank which is located in the Reactor Building. The grab sample is obtained from the hatchway in the tank. (See Sketch below:)

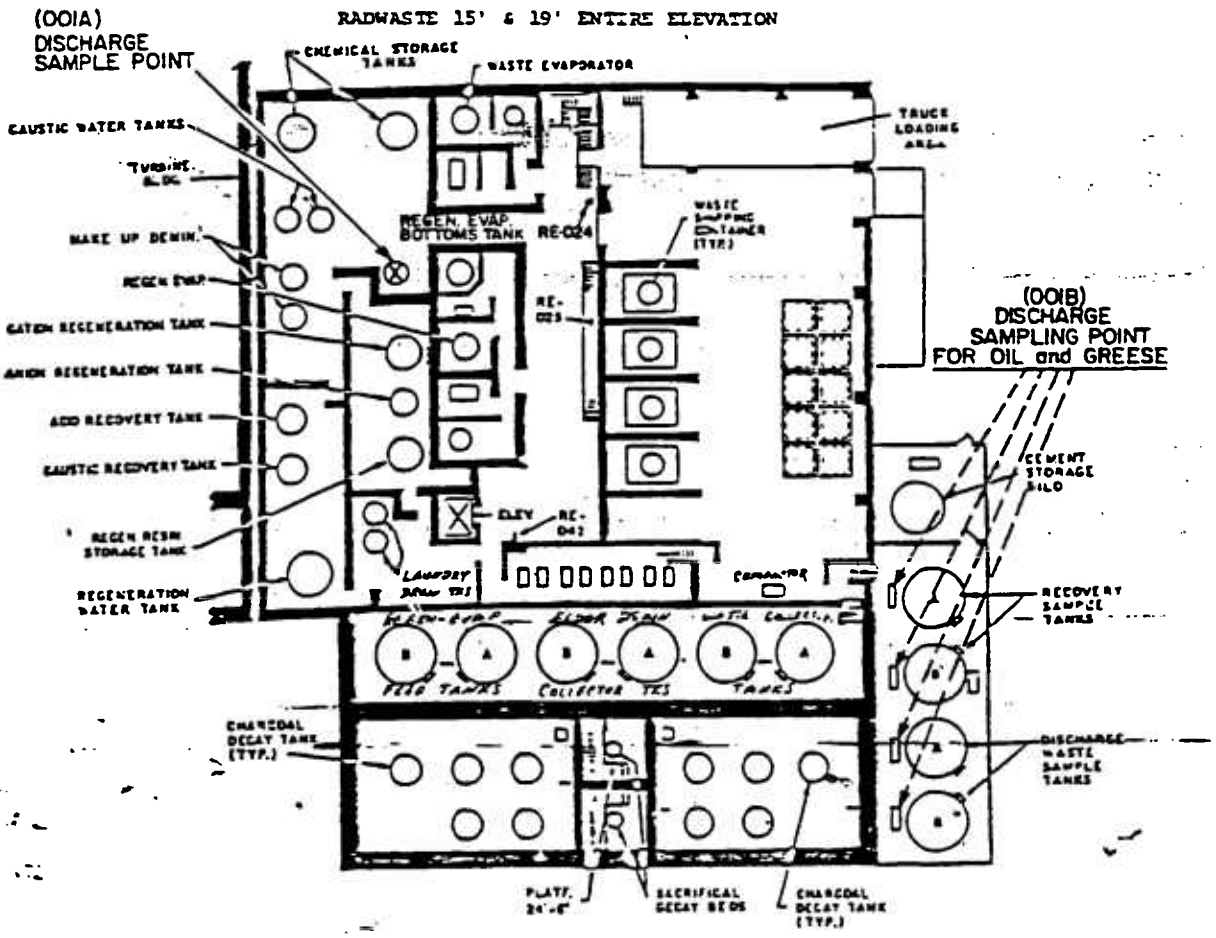


PX BLDG. VENT. EXH. FANS EL. 95' & 101'

Discharge Monitoring Point Descriptions-Continued

001A(011); Each parameter is sampled from a tap valve off of the recirculating line for the continuous pH monitor. The sample location is on the 15 foot elevation on the north side of the RAD Waste Building. (See Sketch Below :)

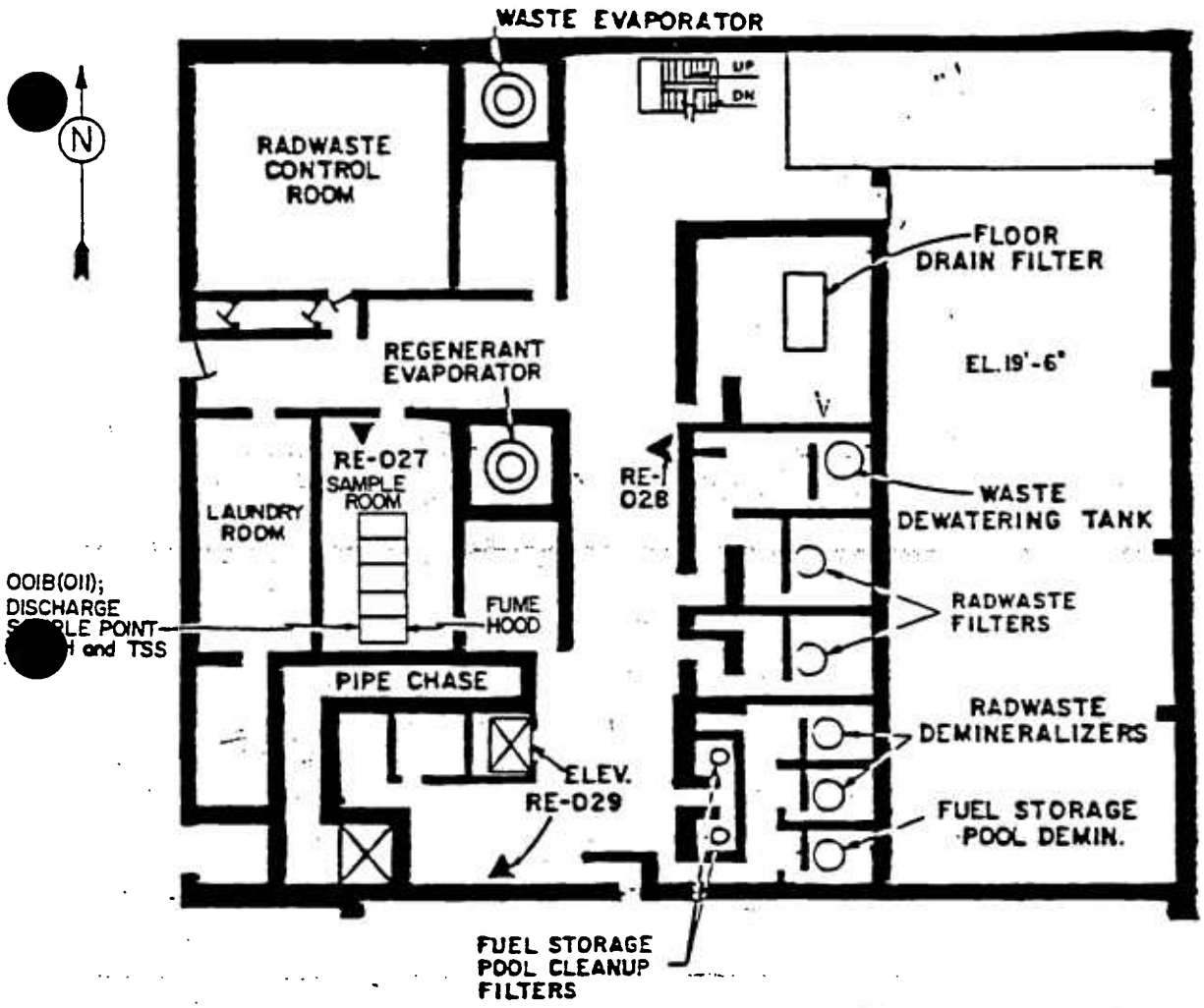
001B(011); Oil & Grease Samples are collected from the tank recirculating pump that is located on the South East side of the Rad-Waste Building, when radiological conditions permit. (See Sketch below:)



Discharge Monitoring Point Descriptions-Continued

001B(011); Each tank is sampled in a fume hood located in the Sample Room of the RAD Waste Building. The Sample Room is located on the 37 foot elevation at the north side of the RAD Waste Building. Each recovery sample tank and discharge waste sample tank has a dedicated sample line and valve. (See Sketch Below:)

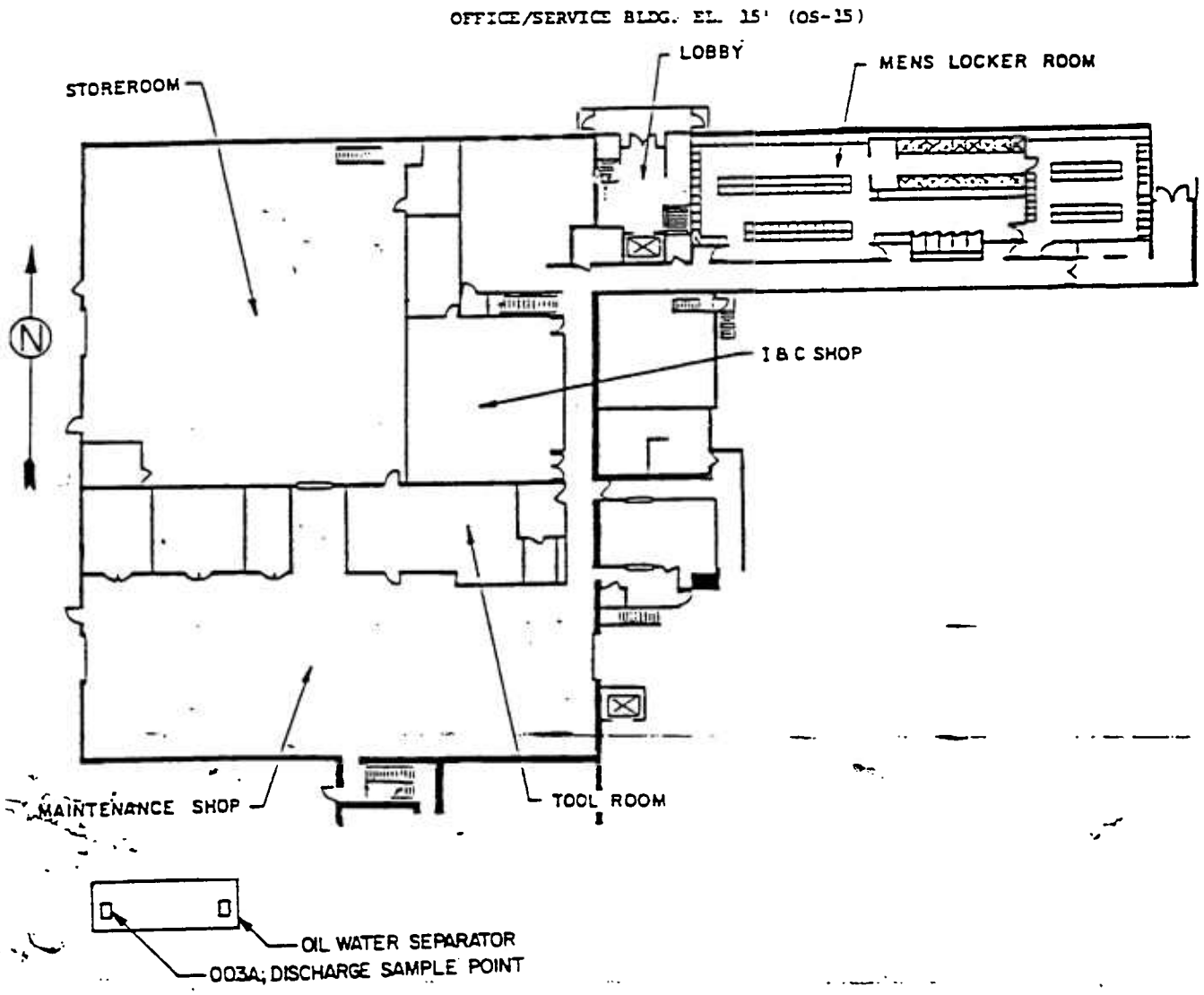
RADWASTE BLDG., EL., 37' NORTH



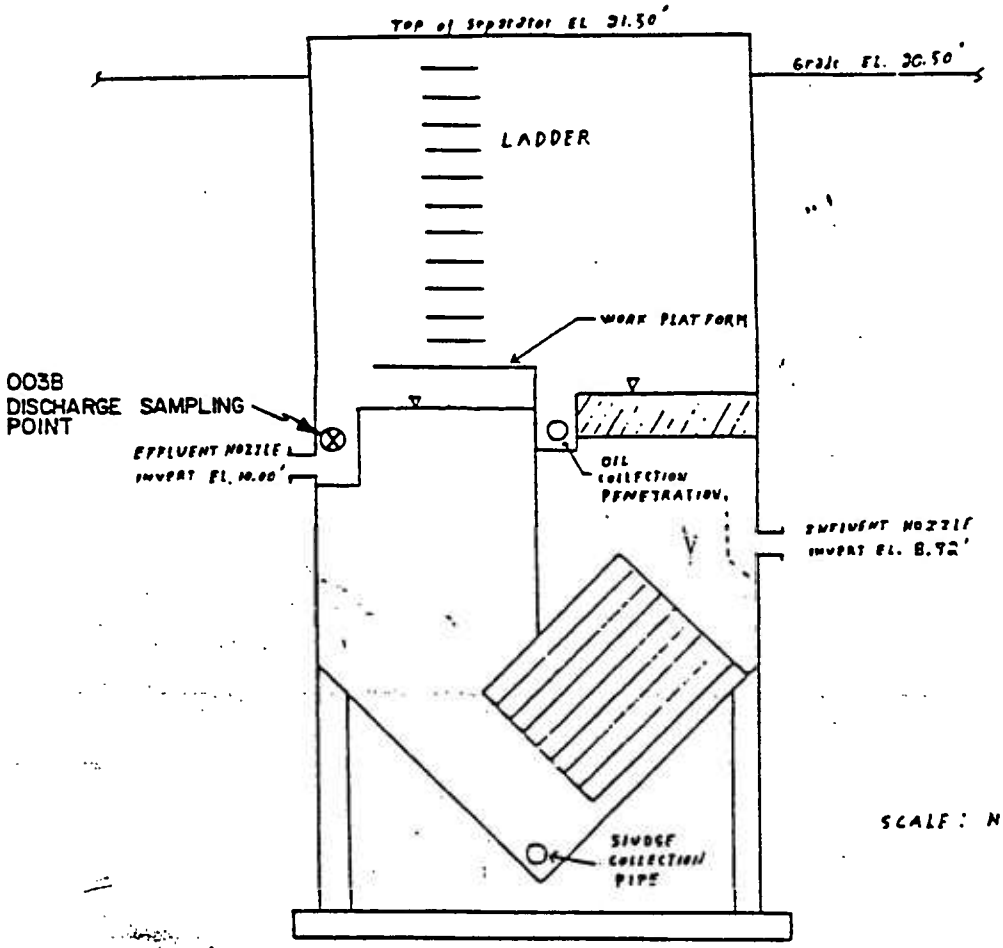
002(020): Sample point is located at the end of the discharge pipe which is located on the east side of the intake canal and adjacent to the intake structure. (See Site Plan on page 6 of 14).

003(030): Sample point for each parameter is located at the end of the discharge pipe which is located on the west side of the intake canal and adjacent to the intake structure. (See Site Plan on page 6 of 14

003A; Sample point is located at the oil-water separator located adjacent to, and Southwest, of the Office and Service Building. The sample is collected at the outlet of the discharge weir on the west-side of the oil-water separator. Sampling access is gained through a two-foot square steel manway. (See Sketch below:)

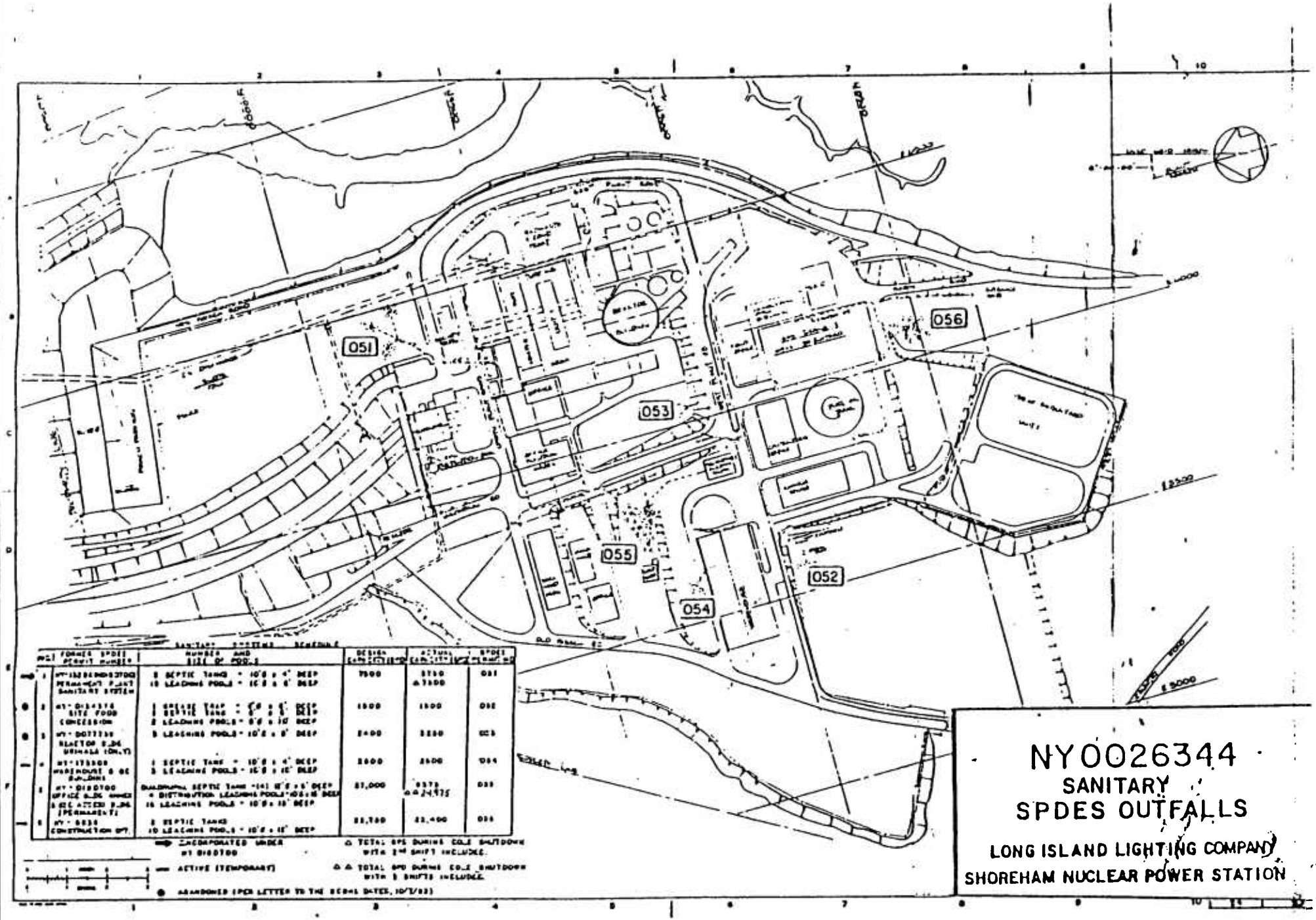


003B The sampling point is at the oil-water separator located on the west-side of the Colt Emergency Diesel Building. (See Site Plan) Sampling access to the oil-water separator is gained through a manway and ladder. The sample is collected from the effluent water basin which is located directly beneath the access ladder. (See Sketch Below:)



004(044); Inlet temperature is recorded from the dial temperature device which is located at the service water ~~inlet~~ line to the Colt Emergency Diesel Engine.

Outlet temperature is recorded from the dial temperature device which is located on the discharge line of the heat exchanger of the Colt Emergency Diesel Engine.



NY0026344

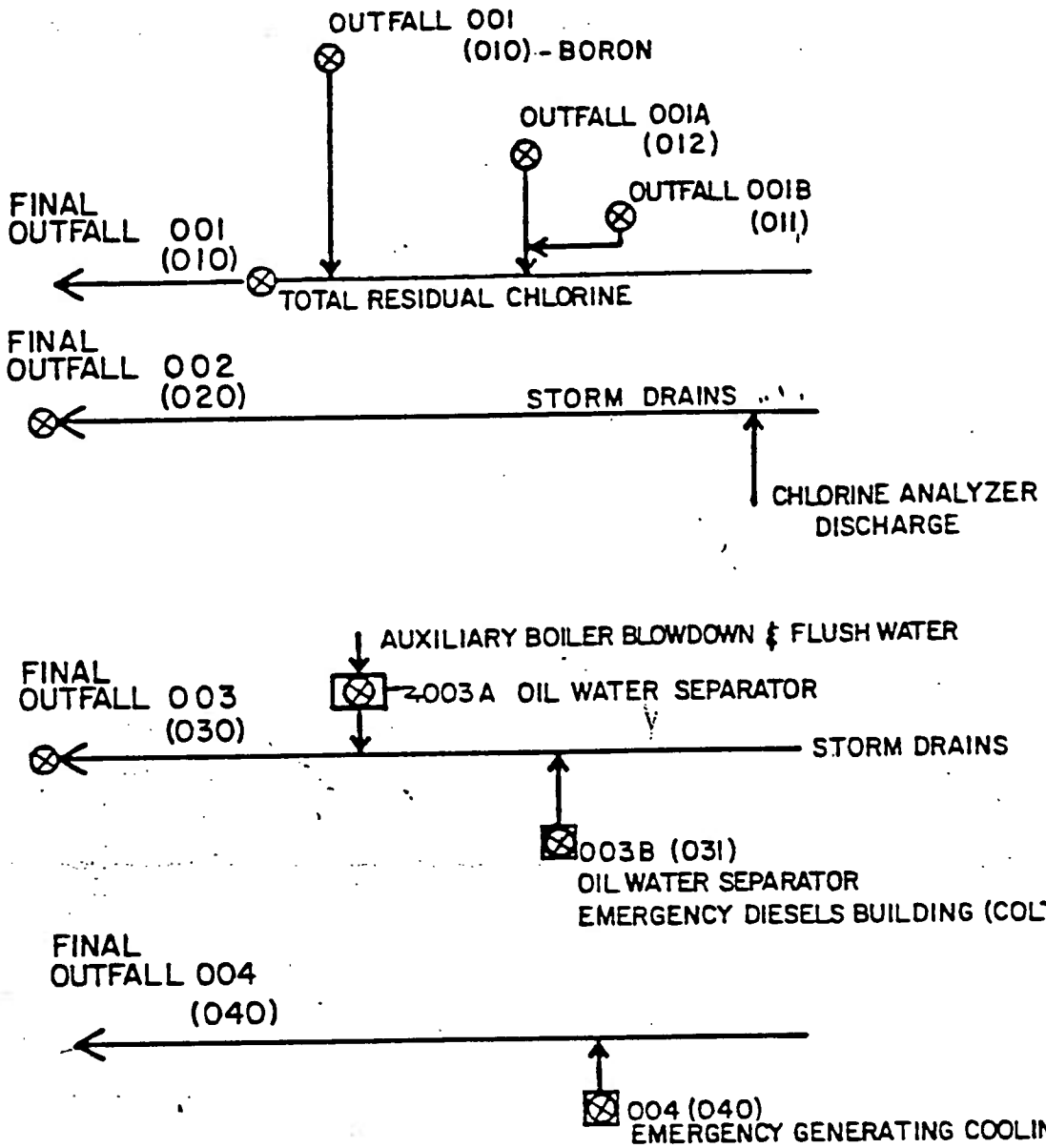
SANITARY

SPDES OUTFALLS

LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

FLOW DIAGRAM



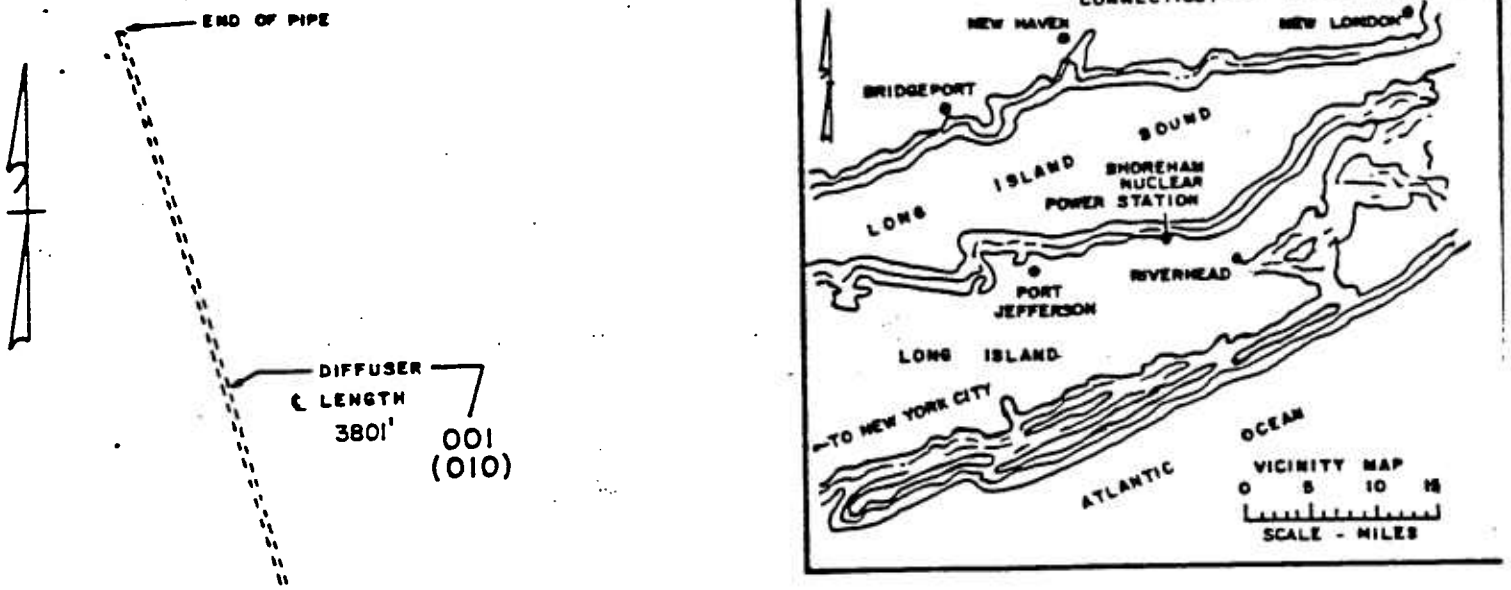
NOTE: "( )" - INDICATES FINAL PHASE

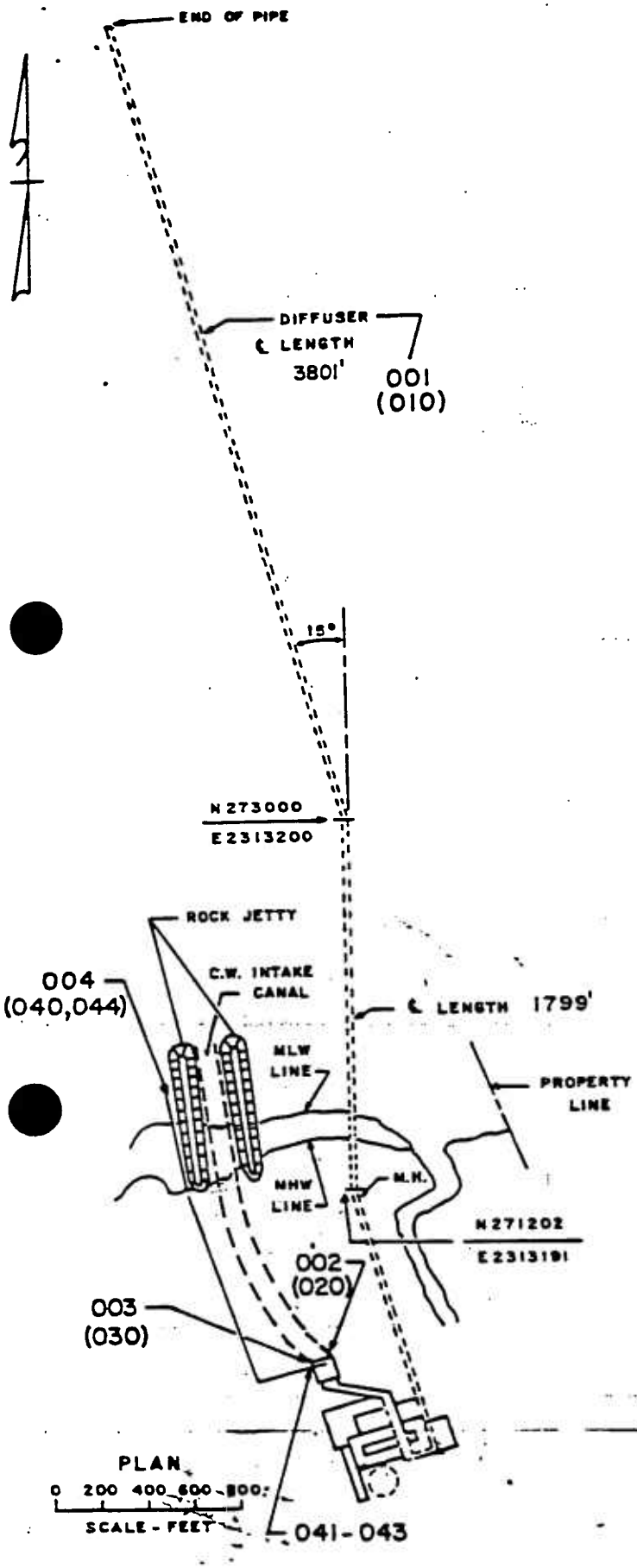
⊗ - INDICATES SAMPLING LOCATIONS

NY 0026344

SPDES MONITORING LOCATION

LONG ISLAND LIGHTING COMPANY
SHOREHAM NUCLEAR POWER STATION





NY0026344

SPDES OUTFALLS

LONG ISLAND LIGHTING COMPANY
SHOREHAM NUCLEAR POWER STATION

FACILITY I.D. # NY0026344

ADDITIONAL REQUIREMENTS

1. There shall be no discharge of PCB's from this facility.

2. There shall be no discharge of boiler cleaning wastewaters from this facility.

3. No biocides, corrosion control chemicals, or other water treatment chemicals are authorized for use by the permittee, except for those listed in the permit application. If other water treatment chemical additives are contemplated, application for their approval must be made to the Department.

4. Within 180 days after the exceedance of 5% licensed power operation the Company shall file for approval with the Department at its offices in Stony Brook and in Albany a report on all water treatment, corrosion inhibitor, anti-fouling, slimicide, biocide, and boiler cleaning chemicals or compounds. Such report shall identify each project by chemical formula and/or composition, annual consumption, frequency of use, maximum use per incident, effluent concentration, available bio-assay and toxicity limits and procedures for use.

5. The Company shall initiate its aquatic monitoring program at commercial licensed power operation. By 180 days following the collection of one year of monitoring data, an annual report summarizing this data shall be submitted to the Department Office in Stony Brook. A copy of this report shall be sent to the NRC in compliance with the plant's Environmental Protection Plan, which is in Appendix B of the "Operating License".

6. The location, design, construction and capacity of this facility's cooling water intake structure shall reflect the best technology available for minimizing adverse environmental impact. A determination of BAT in regards to the intake structure will be made following NYSDEC review of the post operational monitoring studies.

7. Starting 90 days after the exceedance of 5% licensed power operation the Company shall submit to the Department at its offices in Stony Brook and in Albany a monthly report of daily operating data by the 28th of the month following:

   (a) Daily minimum, maximum, and average station electrical output shall be determined and logged.

(b) Daily minimum, maximum and average circulating water use shall be directly or indirectly measured or calculated and logged.

(c) Temperature of the intake and discharge shall be measured and recorded continuously. Daily minimum, maximum, and average intake and discharge temperatures shall be logged.

8. Within 180 days after the exceedance of 5% licensed power operation the permittee shall file for approval with the Department at its offices in Stony Brook and in Albany, a report for a plan of study that will verify the location of the discharge plume. The plume verification program shall commence 60 days after commercial operation of this facility begins and shall include the following elements:

(a) surveys conducted in the spring, summer, and winter;

(b) triaxial temperature surveys made by actual temperature measurement of the mixing zone, and any additional area having a surface water temperature rise of 1°F or more above ambient; with correlation, dye studies or infrared overflight data may be proposed as substitutes for certain surveys.

(c) studies shall be conducted only when plant load is significant and steady-state conditions have been attained;

(d) surveys shall be taken under four tidal stage conditions;

(e) a complete report of the year-long thermal survey program which shall be filed within 120 days of completion of the final survey and include results of all surveys, a discussion of the occurrences and results of each survey, and the correlation of field measurements with the predicted temperature distributions; and

(f) based upon the results of the first year's studies, additional partial or complete thermal surveys in subsequent years as may be required to properly appraise the discharge plume.

9. The water temperature at the surface of Long Island Sound shall not be raised more than 4 Fahrenheit degrees from October through June nor more than 1.5 Fahrenheit degrees from July through September over that which existed before the addition of heat of artificial origin, except that within a radius of 300 feet or equivalent area from the point of discharge, this temperature may be exceeded.

10. The Department has approved a request pursuant to 316(a) of the Clean Water Act for alternative thermal effluent limitations at this facility. The thermal effluent limitations on page 3 of this permit reflect this approval. Following Department review of post operational monitoring reports, the Department may reaffirm this decision or establish a compliance schedule for retrofitting cooling towers, should they be so required.

11. Nothing in this permit abridges the permittee's standard rights of appeal should NYSDEC decide to impose additional provisions pursuant to requirements #5, 6, and 10.

12. Section 704.2(a)(6) of the State Thermal Criteria, which prohibits scheduled facility shutdown during the winter months, is waived due to the operating characteristics of the facility's diffuser. Scheduled facility shutdown is permitted during the winter months, following prior notification of NYSDEC offices in Stony Brook (Division of Marine Resources). This waiver may be revoked based on NYSDEC review of post-operational monitoring results.

13. Chlorination

(a) Condenser cooling water may not be chlorinated for more than two hours per day.

(b) Within 180 days after the exceedance of 5% licensed power operation the permittee shall submit for NYSDEC approval, a plan of study for a chlorine minimization program for condenser cooling water. This program shall be conducted in accordance with Appendix B of the Steam Electric Effluent Guidelines.

(c) By two months after the exceedance of 5% licensed power operation of service cooling water, the permittee shall submit a plan of study for chlorine minimization of the service water cooling system. The plan of study shall include the items outlined in the permittee's 5/24/83 request letter. The Department will review the results of this study to determine whether the variance approval described in (a) above should be continued.

14. The corrosion inhibitor, "NALCO Sure-Cool 1355, is the only chemical additive authorized for use. Use of any other chemical additives requires prior written approval from NYSDEC.

15. LILCO must submit completed form 2C for this facility within 60 days from the date that the plant exceeds 5% power. At that time ~~the~~ data will be reviewed by this Department and a new permit may be issued or the existing one modified to reflect the data submitted on 2C application.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
01	All	Engineering Report - Chemicals (Additional Requirement #4)	Exceedance of 5% Licensed Power Operation+180days
44	NA	Aquatic Monitoring Report - Effects of Circulating Water System Monitoring Study (Additional Requirement #5)	6 Mths After the Completion of 1 Year Sampling
44	010	Plan of Study - Plume Verification Program (Additional Requirement #8)	Exceedance of 5% Licensed Power Operation+180days
[illegible]	010	Engineering Report - Plume Verification Program (Additional Requirement #8)	120 Days After Completion of Study
26	010	Plan of Study - Chlorine Minimization Program (Additional Requirement #13b)	Exceedance of 5% Licensed Power Operation+180days
	010	Plan of Study - Chlorine Minimization Program (Additional Requirement #13c)	Exceedance of 5% Licensed Power Operation+60days
	003A & 003B		Date of Issuance + 6 months

A short-term, high-intensity monitoring program will be conducted to measure the concentrations of lead, cadmium and BTX in the effluent of the oil water separator (Outfall 003A and 003B). Sampling shall be conducted every 2 weeks usin grab method, to continue for 12 months. Submit sample results monthly to Regiona Water Engineer, Stony Brook; Chief, Compliance Section, Albany, ATTN: Walter Loveridge; and Gordon Watt, Pollution Control, Suffolk County Department of Health Services, 15 Horseblock Place, Farmingville, N.Y. 11738.

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS (continued)

(c) The permittee shall submit copies of the written notice of compliance or noncompliance required herein to the following offices:

Chief, Compliance Section
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Regional Water Engineer, Region 1
New York State Department of Environmental Conservation
Building 40 - SUNY
Stony Brook, New York 11794

Suffolk County Department of Health Services
15 Horseblock Place
Farmingville, N.Y. 11738

Att: James Maloney

Dr. Richard Baker
USEPA, Region II
26 Federal Plaza
New York, New York 10278

The permittee shall submit copies of any engineering reports, plans of study, final plans, as-built plans, infiltration-inflow studies, etc. required herein to the New York State Department of Environmental Conservation Regional Office specified above unless otherwise specified in this permit or in writing by the Department or its designated field office.

MONITORING, RECORDING AND REPORTING

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be:

☐ Summarized, signed and retained for a period of three years from the date of sampling for subsequent inspection by the Department or its designated agent.

☒ Summarized and reported by submitting completed and signed Discharge Monitoring Report forms once every _____ month to the locations specified below. Blank forms available at department offices listed below.

The first report will be due no later than September 28, 1987.

Thereafter, reports shall be submitted no later than the 28th of each following month(s):

Department of Environmental Conservation
Regional Water Engineer, Region 1
Building 40 - SUNY
Stony Brook, New York 11794

Suffolk County Department
of Health Services
15 Horseblock Place
Farmingville, New York 11738

ATTN: J. Maloney, P.E.

Department of Environmental Conservation
Water Division
50 Wolf Road,
Albany, New York 12233

☒ (applicable only if checked)
Dr. Richard Baker, Chief
Permit Administration Branch
Planning & Management Division
USEPA Region II, 26 Federal Plaza
New York, New York 10278

c) If so directed, Monthly Wastewater Treatment Plant Operator's Reports should be submitted to the Regional Engineer and County Health Department or County Environmental Control Agency specified above.

d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

f) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

g) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

h) On or after April 1, 1984, any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquires regarding laboratory certification should be sent to the Laboratory Certification/Quality Assurance Group, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences. The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

91-20-2 (1/89)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)

DISCHARGE PERMIT

Special Conditions (Part I)

Industrial Code: 4911
Discharge Class (CL): 03
Toxic Class (TX): N
Major Drainage Basin: 17
Sub Drainage Basin: 02
Water Index Number: LIS
Compact Area:

SPDES Number: NY-0026344
DEC Number: 1-4722-00108/00001-0
Effective Date (EDP): 08/01/87
Expiration Date (ExDP): 08/01/92
Modification Date(s): 11/4/91
Attachment(s): General Conditions (Part II) Date: 11/90

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.)(hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS Attention: Madison Milhous, P.E. Manager

Name: Long Island Lighting Company
Street: 445 Broadhallow Road
City: Melville State: NY Zip Code: 11747
is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

NOV 06 1991 RECEIVED DEC REGION 1

Name: Shoreham Nuclear Power Station
Location (C,T,V): Brookhaven (T) County: Suffolk
Facility Address: North Country Road
City: Shoreham State: NY Zip Code: 11786
NYTM - E: . NYTM - N: 4 .
From Outfall No.: 001 at Latitude: 40° 58′ 28" & Longitude: 72° 52′ 03"
into receiving waters known as: Long Island Sound Class: SA
and; (list other Outfalls, Receiving Waters & Water Classifications)
001A, 001B, 002, 003, 004, 040 Long Island Sound Class SA
051, 054, 055, 056 Groundwater - Class GA
County Tax Map Number: District 200 Section 083
Block 1 Lot 1

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Long Island Lighting Company
Street: 445 Broadhollow Road
City: Melville State: NY Zip Code: 11747
Responsible Official or Agent: Madison Milhous Phone: (516)391-6341

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

R. Hannaford
R. Schneck
J. Maloney
USEPA
M. Papcun
K. Chytalo
A. Yerman

Deputy Regional
Permit Administrator: David DeRidder
Address: NYSDEC-DRA
Bldg40 SUNY rm219 Stony Brook NY 11790-2356
Signature: David DeRidder Date: 11 / 4 /91

91-20-2a (1/89)

SPDES No.: NY 0026344

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning November 4, 1991

and lasting until August 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
001 - Temporary Cooling Water/Circulating Water Service Water					
Fl[redacted]	NA	Monitor	GPD	Quarterly	Calculated
Te[redacted]erature	NA	Monitor	°F	Quarterly	Grab
Total Residual Chlorine	Monitor	0.2	mg/l	Continuous[d]	Recorded[d]
001A - Demineralizer Regeneration Wastes - Make-up Demineralizer System (Non-Radioactive)					
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil & Grease	Monitor	15	mg/l	Quarterly	Grab
pH (Range)	NA	6.0 - 9.0	SU	Continuous	Ea. Batch
Conductivity*	NA	50 micromhos/cm/		Continuous	Ea. Batch
001B - Radwaste Facility -(Demineralizer Regeneration Wastes)					
Iron	NA	Monitor	mg/l	Monthly	Grab
Suspended Solids	30	50	mg/l	Monthly	Grab
Oil & Grease	NA	15	mg/l	Monthly	Grab
pH (Range)	NA	6.0 - 9.0	SU	Monthly	Grab
Radioactivity[c]	NA[c]	NA[c]	NA[c]	NA[c]	NA[c]
002 Floor Drains: Chlorine Monitor & Fire Pump House Storm Drains					
O[redacted]ease	NA	15	mg/l	Quarterly	Grab
Flow	NA	Monitor	GPD	Quarterly	Estimate
003 - Oil Water Separator (Auxiliary Boiler Blowdown, EDG Floor Drains, Control Building Drains); Oil Water Separator (Colt Emergency Diesel Generator Building); Roof and Yard Drains [b,f]					
Flow	NA	Monitor[e]	GPD	2/Month	Estimated
Iron	NA	Monitor	mg/l	2/Month	Grab
Suspended Solids	30	50	mg/l	2/Month	Grab
Oil & Grease	NA	15	mg/l	2/Month	Grab
pH (Range)	NA	6.0-9.0	SU	2/Month	Grab

91-20-2a (1/89)

SPDES No.: NY 0026344

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning November 4, 1991

and lasting until August 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
004 [redacted]ergency Generator Cooling Water[a]					
Flow	NA	Monitor	GPD	Monthly	Instantaneous
Discharge Temperature	NA	110	°F	Monthly	Grab
Discharge Temperature Difference	NA	30	°F	Monthly	Grab
040 Screenwash Return Water and Fish Return System (No Monitoring Required)					
051, 054, 055 and 056	Sanitary wastes only (to replace former SPDES permit numbers NY-0132969, NY-0173509, NY-0180700, NY-0055829). No Monitoring Required.				

*Monitoring and limits effective only when demineralized water is discharged with a pH less than 6.

FOOTNOTES:

A. There shall be no discharge of emergency cooling water while impinged fish are being returned via outfall 040 unless these fish can be safely retained in the fish holdup pond.

B. [redacted]waste stream is to be sampled when there is no discharge from storm drains.

C. Permittee will submit radioactivity monitoring reports required by the Nuclear Regulatory Commission for this monitoring requirement.

D. In the event of continuous monitoring failure monitoring will be conducted by taking a grab "sample type" and "measurement frequency" will be one every eight hours for Outfall 001, during periods of service water chlorination, EPA approved methods for testing as per 40 CFR 136 will be utilized.

E. Flow is limited to the design capacity for the oil/water separator(100 GPM).

F. Samples shall be taken at two week intervals.

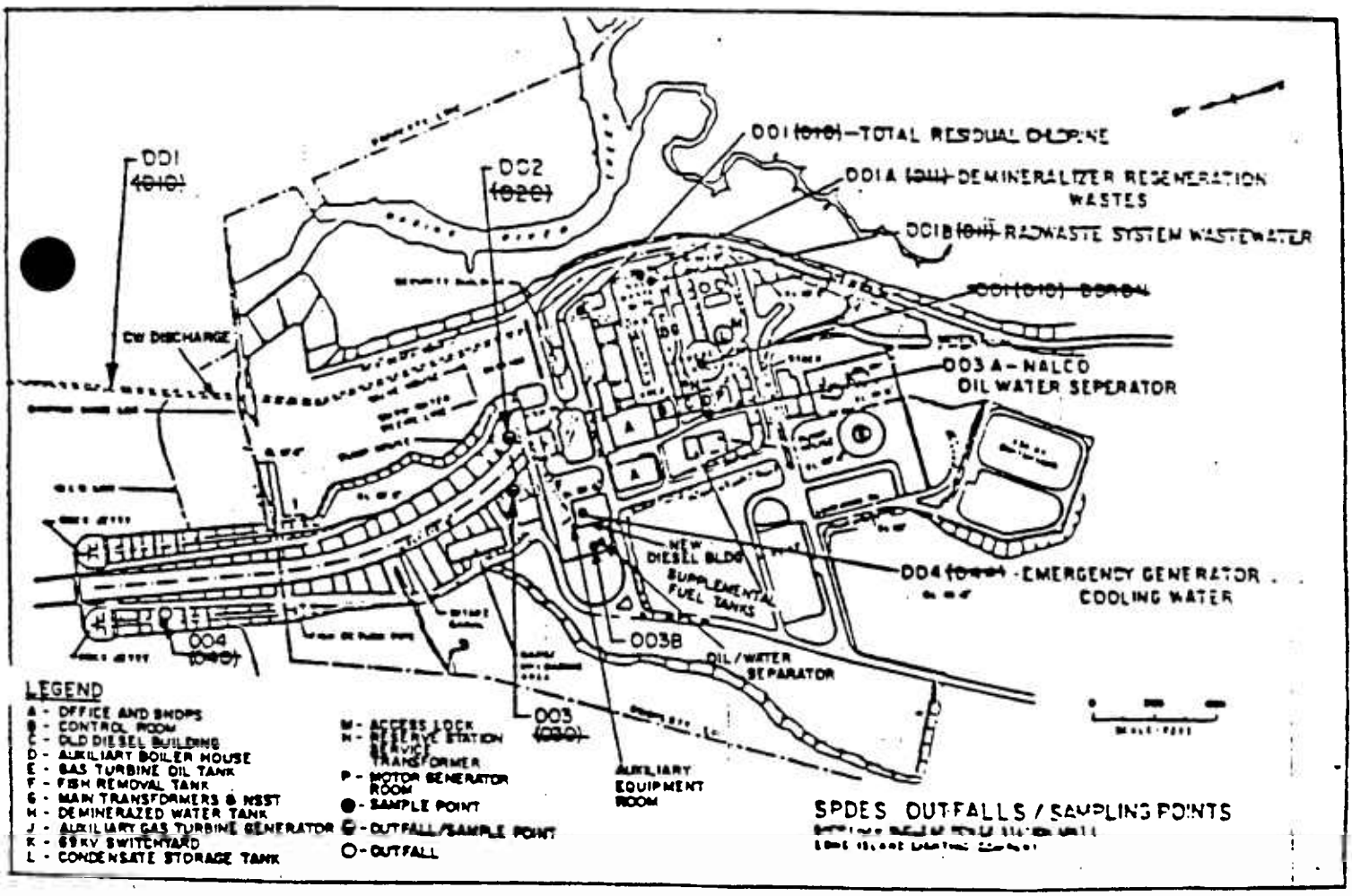
DEFINITIONS OF DAILY AVERAGE AND DAILY MAXIMUM

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when measurements were made.

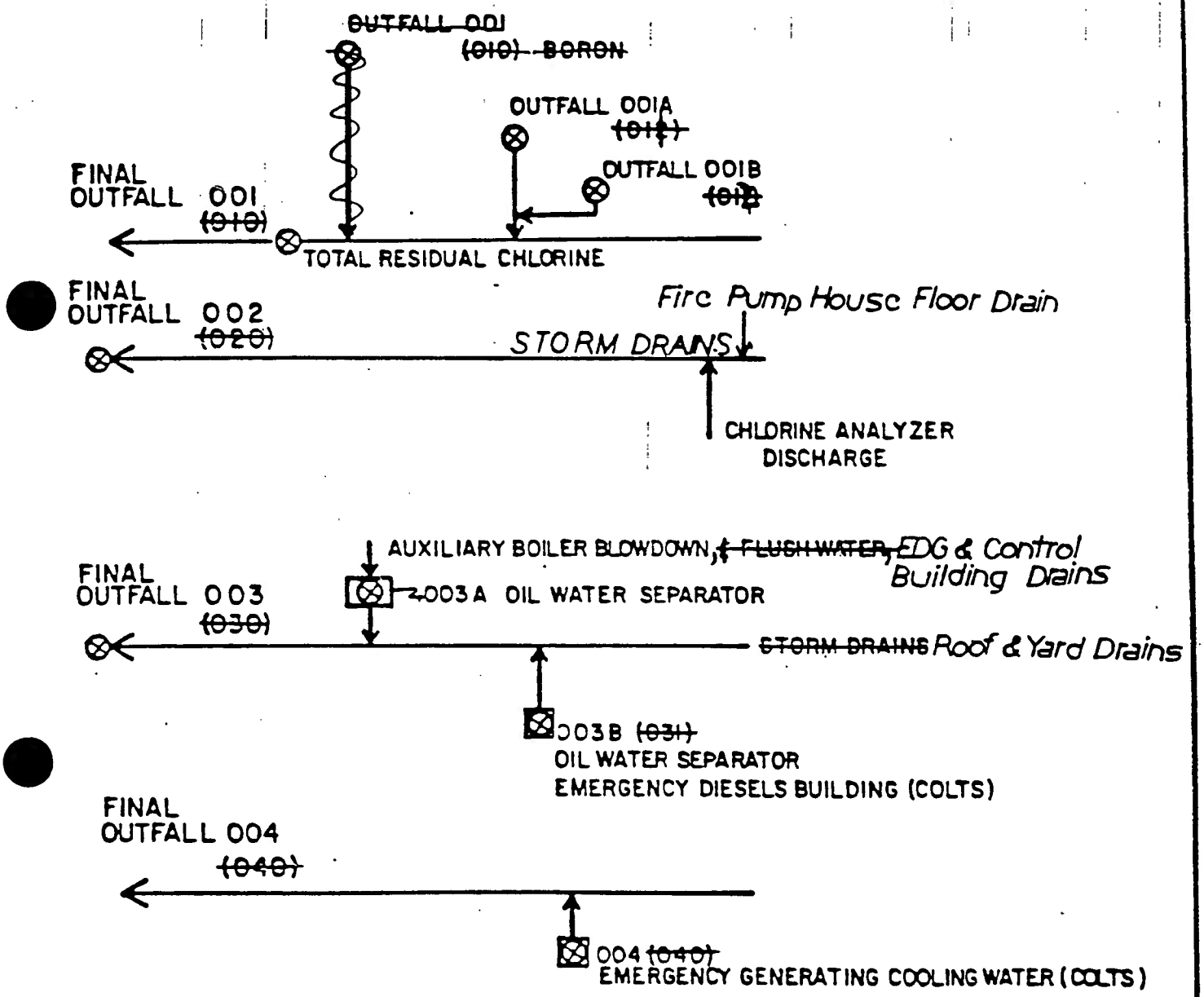
The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) indicated below: (Show sampling locations and outfalls with sketch or flow diagram as appropriate) as shown on attached drawings and or identified in accompanying monitoring descriptions.



FLOW DIAGRAM



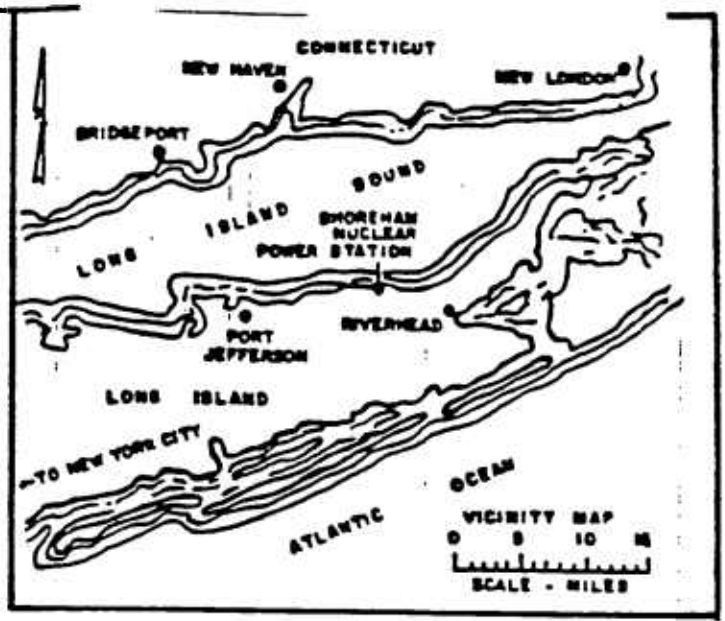
~~NOTE: "( )" INDICATES FINAL PHASE~~

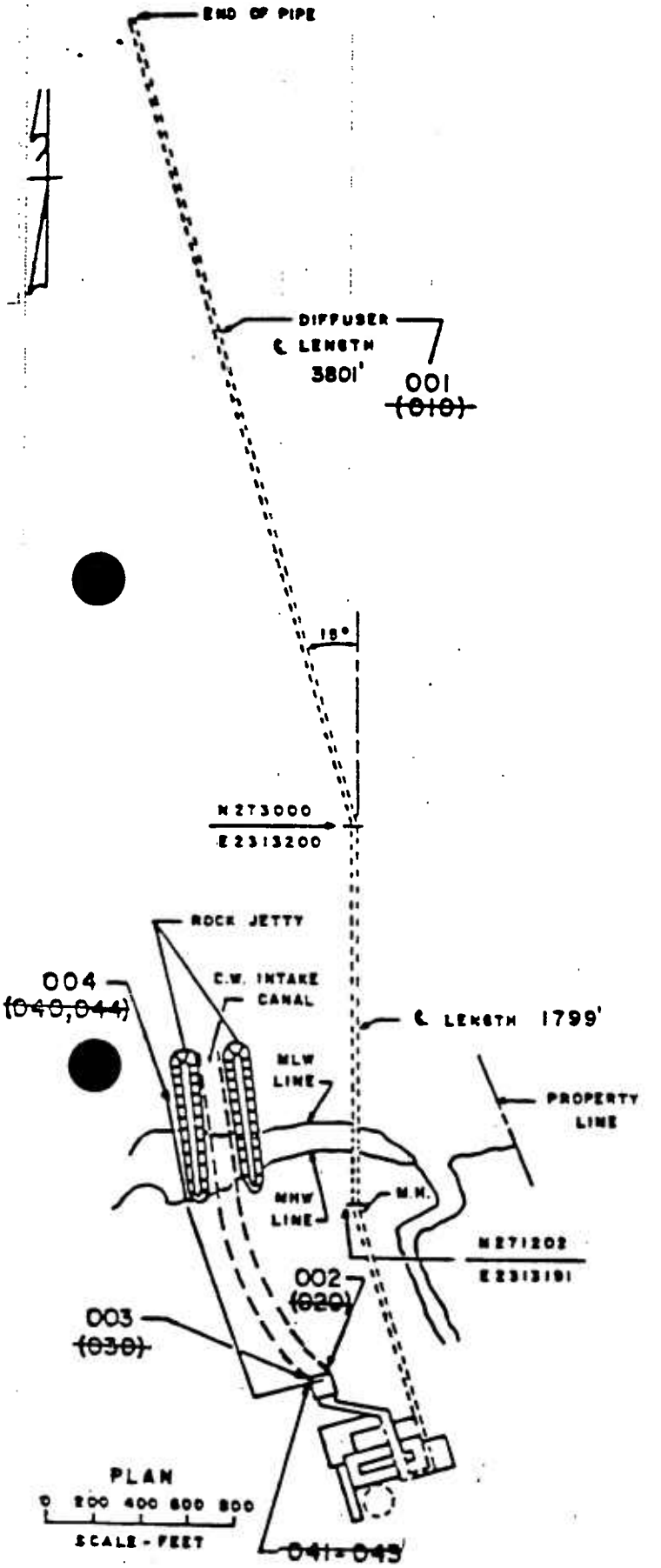
⊗ - INDICATES SAMPLING LOCATIONS

NY0026344

SPDES MONITORING LOCATIONS

LONG ISLAND LIGHTING COMPANY
SHOREHAM NUCLEAR POWER STATION





NY0026344

SPDES OUTFALLS

LONG ISLAND LIGHTING COMPANY
SHOREHAM NUCLEAR POWER STATION

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**

[X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506

Phone: (518) 457-3790

Suffolk County Dept. of Health Svcs.
15 Horseblock Place
Farmingville, NY 11738
Att: J. Maloney, P.E.

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer
Region 1
Building 40 - SUNY
Stony Brook, New York 11790-2356

NYSDEC
Bureau of Marine Habitat Protection
Bldg 40 SUNY Campus rm223
Stony Brook, NY 11790-2356
Attn: Karen Chytalo

c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency listed above.

d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).

e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording on the Discharge Monitoring Reports.

g) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit

h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approvalpursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockerfeller State Plaza, Albany, New York 12201

ADDITIONAL REQUIREMENTS

1. There shall be no discharge of PCB's from this facility.

2. There shall be no discharge of boiler cleaning wastewaters from this facility.

3. No biocides, corrosion control chemicals, or other water treatment chemicals are authorized for use by the permittee, except for those listed in the permit application. If other water treatment chemical additives are contemplated, application for their approval must be made to the Department.

4. Company shall file for approval with the Department at its offices in Stony Brook and in Albany a report on all water treatment, corrosion inhibitor, anti-fouling, slimicide, biocide, and boiler cleaning chemicals or compounds. Such report shall identify each product by chemical formula and/or composition, annual consumption, frequency of use, maximum use part incident, effluent concentration, available bio-assay and toxicity limits and procedures for use.

5. The location, design, construction and capacity of this facility's cooling water intake structure shall reflect the best technology available for minimizing adverse environmental impact. A determination of BAT in regards to the intake structure will be made following NYSDEC review of the post operational monitoring studies.

6. The water temperature at the surface of Long Island Sound shall not be raised more than 4 Fahrenheit degrees from October through June not more than 1.5 Fahrenheit degrees from July through September over that which existed before the addition of heat of artificial origin, except that within a radius of 300 feet or equivalent area from the point of discharge, this temperature may be exceeded.

7. Chlorination of service water is allowed for 24 hours per day.

8. Corrosion inhibitor, NALCO Sure-Cool 1355, is the only chemical additive authorized for use. Use of any other chemical additives requires prior written approval from NYSDEC.

9. The modified permit is for the specific purpose of the decommissioning of the Shoreham Nuclear Power Station. Any new activities not associated with the decommissioning of this facility, including the conversion to an alternate fuel or recommissioning this facility to use nuclear fuel will require a modification of this permit and/or reapplication to this Department.

91-2(-2 (1/89)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)

DISCHARGE PERMIT

Special Conditions (Part I)

R5
Ay
JN
P.G

Industrial Code: 4939
Discharge Class (CL): 03
Toxic Class (TX): N
Major Drainage Basin: 17
Sub Drainage Basin: 02
Water Index Number: LIS
Compact Area:

SPDES Number: NY-0026344
DEC Number: 1-4722-00108/00001-0
Effective Date (EDP): 03 /01 /93
Expiration Date (ExDP): 03 /01 /98
Modification Date(s):
Attachment(s): General Conditions (Part II) Date: 11/90

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.)(hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Attention: Madison Milhous, P.E. Manager

Name: Long Island Lighting Company
Street: 445 Broad Hollow Road
City: Melville State: NY Zip Code: 11747

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Shoreham Emergency Diesel/Electric Generator Facility
Location (C,T,V): Brookhaven (T) County: Suffolk
Facility Address: North Country Road
City: Shoreham State: NY Zip Code: 11786
NYTM - E: . NYTM - N: 44 .
From Outfall No.: 004 at Latitude: 40° 57′ 57″ & Longitude: 72° 52′ 08″
into receiving waters known as: Long Island Sound Class: SA
and; (list other Outfalls, Receiving Waters & Water Classifications)

Outfall 040: Long Island Sound - Class SA
Outfalls 054 & 055: Groundwater - Class GA
Suffolk County Tax Map Number: District: 200 Section: 083
Block: 1 Lot: 1

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Long Island Lighting Company
Street: 445 Broad Hollow Road
City: Melville State: NY Zip Code: 11747
Responsible Official or Agent: Madison Milhous Phone: (516)391-6341

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: R. Hannaford
R. Schneck
A. Yerman / J. Myslinski
J. Maloney
USEPA Chief Reg II

Deputy Regional

Permit Administrator: David DeRidder
Address: Building 40, SUNY
Stony Brook, New York 11790-2356
Signature: David DeRidder Date: 02/02/93

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 1, 1993

and lasting until March 1, 1998

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 004: Emergency Generator Cooling Water[1]					
Flow	NA	Monitor	GPD	Monthly	Instantaneous
Discharge Temperature	NA	110	°F	Monthly	Grab
Discharge Temperature Difference	NA	30	°F	Monthly	Grab

Outfall 040: Screenwash Return Water and Fish Return System

NO MONITORING REQUIRED

Outfall 054 & 055: Sanitary Wastes Only (to replace former SPDES permits 0132969, 0173509, 0180700 & 0055829)

NO MONITORING REQUIRED

FOOTNOTE:

1 There shall be no discharge of emergency cooling water while impinged fish are being returned via outfall 040 unless these fish can be safely retained in the fish holdup pond.

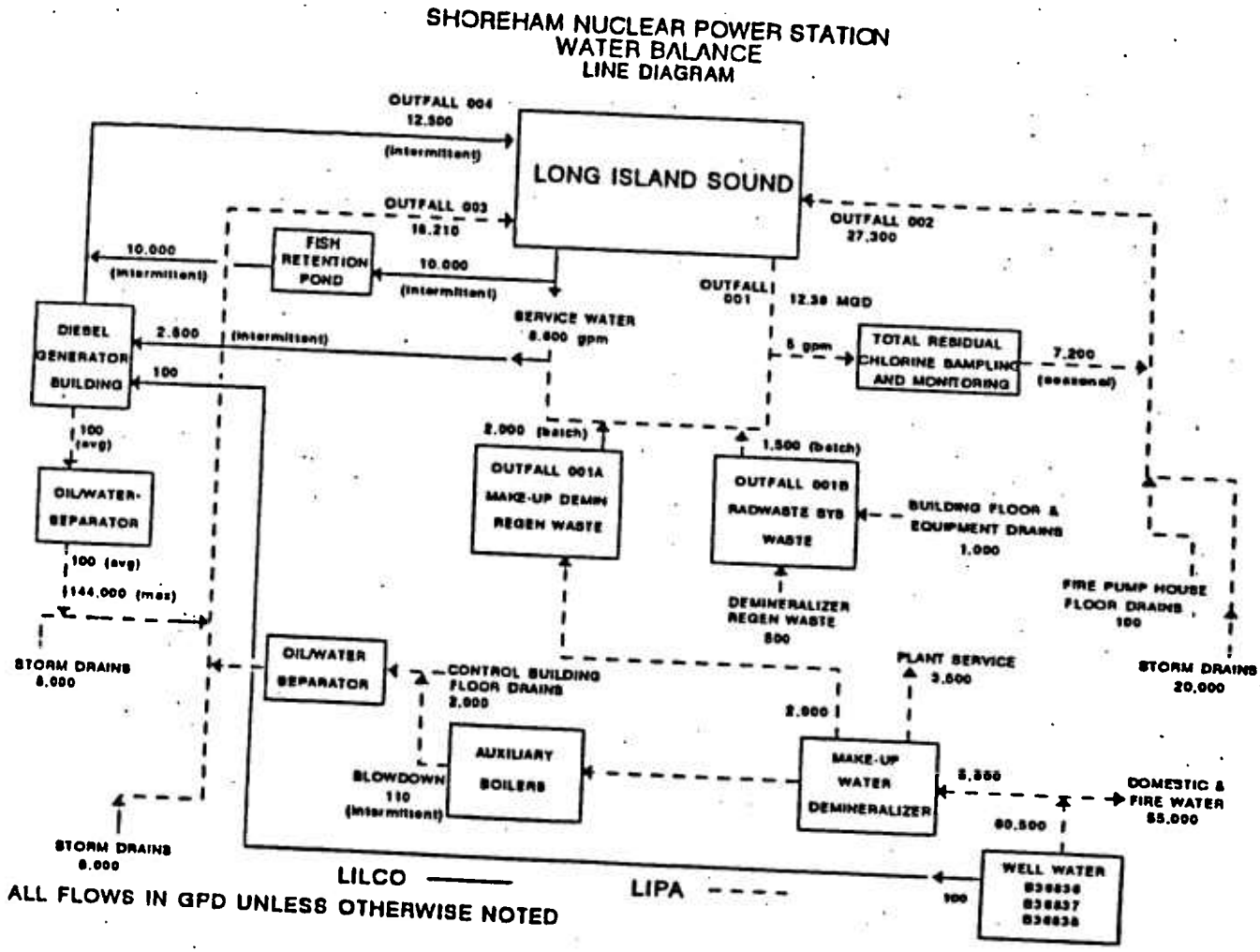
DEFINITIONS OF DAILY AVERAGE AND DAILY MAXIMUM

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) indicated below: (Show sampling locations and outfalls with sketch or flow diagram as appropriate).



ADDITIONAL REQUIREMENTS:

1. There shall be no discharge of PCB's from this facility.

2. There shall be no discharge of boiler cleaning wastewaters from this facility.

3. No biocides, corrosion control chemicals, or other water treatment chemicals are authorized for use by the permittee, except for those listed in the permit application. If other water treatment chemical additives are contemplated, application for their approval must be made to the Department.

4. Company shall file for approval with the Department at its offices in Stony Brook and in Albany a report on all water treatment, corrosion inhibitor, anti-fouling, slimicide, biocide, and boiler cleaning chemicals or compounds. Such report shall identify each product by chemical formula and/or composition, annual consumption, frequency of use, maximum use part incident, effluent concentration, available bioassay and toxicity limits and procedures for use.

5. The water temperature at the surface of Long Island Sound shall not be raised more than 4 Fahrenheit degrees from October through June not more than 1.5 Fahrenheit degrees from July through September over that which existed before the addition of heat of artificial origin, except that within a radius of 300 feet or equivalent area from the point of discharge, this temperature may be exceeded.

6. Corrosion inhibitor, NALCO Sure-Cool 1355, is the only chemical additive authorized for use. Use of any other chemical additives requires prior written approval from NYSDEC.

7. The modified permit is for the specific purpose of the decommissioning of the Shoreham Nuclear Power Station. Any new activities not associated with the decommissioning of this facility, including the conversion to an alternate fuel or recommissioning this facility to use nuclear fuel will require a modification of this permit and/or reapplication to this Department.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. Also;

[X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each one month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the original (top sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Send the second copy (third sheet) of each DMR page to:

Suffolk County Department of Health Services
15 Horseblock Place
Farmingville, New York 11738
Attn: Jim Maloney, P.E.

Include a copy of the laboratory analysis with the SCDHS and DEC Region 1 copies.

Send the first copy (second sheet) of each DMR page to:

N.Y.S. Department of Environmental Conservation
Regional Water Engineer - Region 1
Building 40 - SUNY @ Stony Brook
Stony Brook, New York 11790-2356

c) A monthly "Wastewater Facilities Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency listed above.

d) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).

e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

CASE 01-F-0761

KeySpan Energy Development Corporation Article X Application
Spagnoli Road Energy Center

KEYSPAN ENERGY DEVELOPMENT CORPORATION
INTERROGATORY/DOCUMENT REQUESTS TO SHARED

Request No.: KEDC-SHARED-55
Date of Request: July 5, 2002
Reply Date: July 15, 2002
Subject: Gas Transmission and Alternatives (Testimony of Peter M. Mueller)

General Objections:

S.H.A.R.E.D. objects to these requests on the grounds that they are unduly burdensome, harassing, an abuse of the discovery process, and constitute an illicit attempt to obtain pre-filed written cross-examination. S.H.A.R.E.D. further objects on the ground that many of these requests seek information that is adequately presented in the pre-filed testimony. Subject to, and without waiver of, these objections, S.H.A.R.E.D. responds as follows:

(a) Please provide the "estimate[] of natural gas transmission and associated metering/regulation costs from the Application" referred to in South Huntington Alliance for Responsible Energy Development, Arrow Electronics, Inc., Gilbert Displays, Inc. and Marchon Eyewear, Inc.'s Pre-Filed Direct Testimony of Peter M. Mueller ("Mueller Testimony") on page 3. Provide all documents that relate to or were relied on in forming that estimate, including, but not limited to, any worksheets, data, calculations, reports, charts, and formulas.

Response:

In evaluating the natural gas transmission and associated metering/regulation costs from the Application in my pre-filed direct testimony, I evaluated Keyspan's estimated costs from the Spagnoli Road gas pipeline installation. I converted Keyspan's total cost to an "inch-mile" basis. I then contacted pipeline contractors in the New York area to confirm Keyspan's costs, and confirmed that the combination of unionized construction labor and construction through congested urban areas account for the increases over lower costs in the western U.S. I evaluated those costs on a per mile basis and, based on this information, determined that Keyspan's projected costs for constructing a gas pipeline to the Spagnoli Road site were deemed to be within a range of reasonableness. I then utilized that same estimated per mile cost for land-based pipeline construction in my estimates. My estimates for underwater pipeline construction costs were determined based on the projected costs for the Eastchester expansion project. The specific cost data from the Application is confidential information and is not produced herewith.

- Interconnects with Tennessee Pipeline's 200 and 300 lines, and Algonquin - as well as LDCs in Connecticut and New York

Key Features:

- Targeted in-service date of Spring 2003
- 230,000 Dth/d, 33-mile extension (24", 1440 psig pipe) through Long Island Sound
- 100% load-factor-rate of approximately $0.42/Dth; approximately 2.5% compression fuel
- Mainline expansion achieved via compression rather than new-pipe construction
- FERC Certificate received December 2001
- Hourly swings of 120%
- Direct access to merchant electric plants along the Iroquois mainline, including the Bridgeport, Milford, Devon, Northport, and Athens power stations (a combined demand of 540,000 Dth/d)
- Access to the Mid-Atlantic marketplace via swapping arrangements with Con Ed
- Commitments from Con Ed, KeySpan Ravenswood, Orion/Reliant, Virginia Power and Mirant

(c) State how the Eastchester Expansion Pipeline will increase the supply of gas to Northport.

Response:

Part of the Eastchester Expansion Pipeline project includes enhancements to the existing Iroquois Pipeline upstream (north) of the Northport alternative site. Those enhancements include two new compressor stations and additional pipeline. The combined effect of these enhancements will increase Iroquois' capacity at the Northport alternative site by 230,000 Dekatherms per day. See press release reproduced below from the Iroquois website: http://www.iroquois.com/igts/info/section-frame.html.

IROQUOIS' EASTCHESTER EXTENSION FULLY SUBSCRIBED.

Shelton, Ct. — Iroquois Gas Transmission System today announced that its Eastchester Extension Project has been fully subscribed. Eastchester will bring 230 thousand dekatherms per day of natural gas to power electric generation and to serve residential, other industrial and commercial customers in New York City.

Craig Frew, President of the Iroquois Pipeline Operating Company, said, "Of all projects now proposed to serve New York City, Iroquois' Eastchester Extension brings the greatest benefit to the energy infrastructure with the least impact to the area. This new link will provide price competition for gas coming from the Gulf of Mexico, and, use of natural gas to produce electricity will assist in Clean Air Act attainments."

"The market has spoken. We are 100% subscribed," said Herb

Rakebrand, Vice President of Marketing and Transportation. "New York City needs incremental pipeline capacity and the Eastchester Project is the best means to meet that need."

(d) State the basis for the statement on page 6 of the Mueller Testimony that the "sites at Northport, Shoreham, and Port Jefferson will all have optional gas supply from the[] new pipelines" referred to in the last sentence on page 5 of Mueller's Testimony.

Response:

The Northport alternative site will enjoy additional volumes via the Iroquois line, and new access to gas transmission via the Eastchester Expansion Pipeline. The Shoreham alternative site would have both new supplies and access primarily via the Islander East Pipeline or potentially the Long Island Expansion.

(e) Describe how Northport will have "optional gas supply" as a result of the Eastchester Expansion Pipeline referred to in the Mueller Testimony at pages 4 and 6.

Response:

See responses to Request Nos. KEDC-S.H.A.R.E.D.-55(c) and (d).

(f) State whether the Eastchester Expansion Pipeline requires any approval(s), certificate(s), license(s), or variance(s) of any kind that it does not currently have from any governmental authority before construction of the pipeline or related structures may commence. Describe the nature of any such approval(s), certificate(s), license(s), or variance(s) and indicate which governmental entity or entities have jurisdiction over the grant or denial of each such approval(s), certificate(s), license(s), or variance(s). Provide all documents that relate to any such approval(s), certificate(s), license(s), or variance(s).

Response:

See Table 55-1, below, for the permits required for the Eastchester Expansion and their current status.

(g) State the basis for the statement on page 6 of Mueller's Testimony that "interior sites [other than the sites at Northport, Shoreham, and Port Jefferson] will also benefit [from the proposed pipelines discussed in Mueller's Testimony at pages 4-5] as the pipelines progress south and east over land to their terminus."

Response:

Eastern Long Island's gas consumers will benefit directly or indirectly from the additional supplies brought to the Island via these proposed pipelines. More directly, the

DSSKT-7

CASE 01-F-0761

KeySpan Energy Development Corporation Article X Application
Spagnoli Road Energy Center

KEYSPAN ENERGY DEVELOPMENT CORPORATION
INTERROGATORY/DOCUMENT REQUESTS TO SHARED

Request No.: KEDC-SHARED-56
Date of Request: July 5, 2002
Reply Date: July 15, 2002
Subject: Gas Transmission and Alternatives (Testimony of Peter M. Mueller)

General Objections:

S.H.A.R.E.D. objects to these requests on the grounds that they are unduly burdensome, harassing, an abuse of the discovery process, and constitute an illicit attempt to obtain pre-filed written cross-examination. S.H.A.R.E.D. further objects on the ground that many of these requests seek information that is adequately presented in the pre-filed testimony. Subject to, and without waiver of, these objections, S.H.A.R.E.D. responds as follows:

(a) Please state the basis for the estimate (on page 9 of Mueller's Testimony) of $3 million to $7 million for metering and regulation costs for a pipeline project. Provide the names of the "other pipeline projects" Mueller claims to have considered in forming this estimate of costs. (*See* Mueller Testimony at 9.) State how Mueller prepared the estimate of $3 million to $7 million. State the cost of metering and regulation for each of the other pipeline projects to which Mueller is referring on page 9. Provide all calculations, worksheets, data, spreadsheets, reports, estimates, formulas, and other records concerning the estimate of metering and regulation costs referred to at the top of page 9 of Mueller's Testimony.

Response:

I have revised my cost estimates for metering and regulation to $1 million because metering and regulation costs would not include labor cost factors as originally applied. The $1 million estimate for metering and regulation is based on documents attached hereto as Exhibit 56-1. In addition, please see Exhibit 55-1, which shows the total estimated cost of providing gas transmission facilities as the Spagnoli Road site as well as the E.F. Barrett, Northport, Shoreham and Port Jefferson alternative sites.

(b) Provide the metering and regulation costs for all gas pipeline projects with which R.W. Beck, Inc. ("Beck") or Peter Mueller has been involved during the past 10 years in the United States. Provide all documents that set forth such metering and regulation costs. Provide Beck's estimate(s) of metering and regulation costs for each

(e) (1) State whether the estimate on page 10 of Mueller's Testimony of the cost of a gas transmission extension to the Shoreham site is based on an extension to the Islander East Pipeline or the Eastern Long Island Expansion Pipeline. (2) State whether the estimate of the cost of a gas transmission extension to the Shoreham site would change depending on which proposed pipeline the extension were connected to. (3) If it would, provide a separate estimate of the cost of a gas transmission extension to the Shoreham site from the Islander East Pipeline and the Eastern Long Island Expansion Pipeline.

Responses:

1) The cost estimate to the Shoreham alternative site is based on an extension to the Islander East Pipeline.
2) The cost estimate could change, depending on the landing point of the Eastern Long Island Expansion Pipeline.
3) S.H.A.R.E.D. objects to this request insofar as it purports to require the development of information or the preparation of a study or estimate. Subject to and without waiver of its objections, S.H.A.RE.D. states that no attempt was made to make such an estimate.

(f) State the basis for the statement on page 10 of Mueller's Testimony that a "very significant portion of the expense (roughly $8 million) of constructing underwater pipelines is the mobilization charges for the pipeline barge and associated equipment." State the basis for the figure of roughly $8 million.

Response:

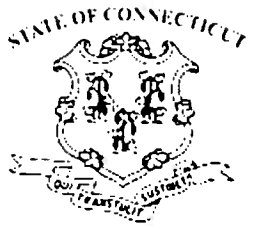
As part of my work as the Independent Engineer for the Eastchester Expansion Project, and in determining the estimated costs to connect to and bring gas from the Eastchester Expansion Pipeline on shore, we contacted pipeline constructors to explain and confirm the various types of costs associated with this type of project. The estimated cost of mobilization is the result of those inquiries. Market demand for such equipment changes, and a contractor's cost would vary based on the then current utilization.

(g) State the basis for the statement on page 10 of Mueller's Testimony that the "mobilization charges for the pipeline barge and associated equipment" for a gas transmission extension to the Shoreham site "could be avoided if Keyspan coordinated the construction of a lateral to the site with the pipeline [presumably meaning the Islander East Pipeline or Eastern Long Island Expansion Pipeline]."

Response:

If the construction of a lateral to an onshore site is coordinated with and performed during the construction of a new pipeline crossing Long Island Sound, the pipeline barge

DSSKT-8



Substitute House Bill No. 5609

Public Act No. 02-95

AN ACT CONCERNING THE PROTECTION OF LONG ISLAND SOUND.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) *(Effective from passage)* Notwithstanding any other provision of the general statutes, no state agency, including, but not limited to, the Department of Environmental Protection and the Connecticut Siting Council, shall consider or render a final decision for any applications relating to electric power line crossings, gas pipeline crossings or telecommunications crossings of Long Island Sound including, but not limited to, electrical power line, gas pipeline or telecommunications applications that are pending or received after the effective date of this section for a period of one year after the effective date of this section. Such moratorium shall not apply to applications relating solely to the maintenance, repair or replacement necessary for repair of electrical power lines, gas pipelines or telecommunications facilities currently used to provide service to customers located on islands or peninsulas off the Connecticut coast or harbors, embayments, tidal rivers, streams or creeks. Nothing in this act shall be construed to affect the project in the corridor across Long Island Sound, from Norwalk to Northport, New York, to replace the existing electric cables that cross the sound. During such twelve-month moratorium on applications relating to crossings of Long Island Sound, the Institute of Sustainable Energy at the Eastern Connecticut State University shall chair and convene a task force of the parties described in section 3 of this act in order to undertake the tasks described in section 3 of this act.

Sec. 2. (NEW) (*Effective from passage*) (a) Notwithstanding any other provision of the general statutes, no state agency, including, but not limited to, the Department of Environmental Protection and the Connecticut Siting Council, shall render a final decision for any relating to electric transmission lines from Bethel to Norwalk including, but not limited to, applications that are pending or received on and after the effective date of this section until February 1, 2003. During such interim period, the Institute for Sustainable Energy shall chair and convene a working group comprised of: (1) Two representatives chosen by the chief elected officials of Bethel, Redding, Weston, Wilton and Norwalk, one of whom shall have environmental expertise and one of whom shall have energy expertise; (2) one representative of the Connecticut Fund for the Environment; (3) two representatives of the applicant company; and (4) one representative of the New England Independent System Operator, Inc. and develop a comprehensive assessment and report on: (A) The economic considerations and

environmental preferences and appropriateness of installing such transmission lines underground or overhead; (B) the feasibility of meeting all or part of the electric power needs of the region through distributive generation; and (C) the electric reliability, operational and safety concerns of the region's transmission system and the technical and economic feasibility of addressing those concerns with currently available electric transmission system equipment. The Institute for Sustainable Energy shall publish its report on or before January 1, 2003, and shall also include recommendations for any legislative changes deemed necessary as a result of such assessment. Any decision or opinion rendered on any application for an electric transmission line from Bethel to Norwalk by either the Department of Environmental Protection or the Connecticut Siting Council after the publication of such comprehensive assessment and report, shall be evaluated to determine such application's consistency with such assessment. Nothing in this section shall be construed to prevent routine maintenance and repair of such electric transmission lines.

(b) Any applicant that elects to proceed with its application for an electric transmission line from Bethel to Norwalk before any state agency, including, but not limited to, the Department of Environmental Protection and the Connecticut Siting Council, during the interim period described in subsection (a) of this section, shall accrue no legal rights or financial entitlements by proceeding with its application.

Sec. 3. (NEW) (*Effective from passage*) Not later than one year from the effective date of this section, a comprehensive environmental assessment and plan shall be completed under the direction of the Institute for Sustainable Energy. In conducting the comprehensive environmental assessment and plan, a task force shall work with the Institute of Sustainable Energy that consists of the task force members contained in Executive Order Number 26 of Governor John G. Rowland and a representative of: (1) The Bureau of Fisheries of the Department of Environmental Protection; (2) the Director of the Bureau of Aquaculture of the Department of Agriculture; (3) the Bureau of Aviation and Ports, Connecticut Coastline Port Authority of the Department of Transportation; (4) the Connecticut Seafood Council; (5) the Atlantic States Marine Fisheries; (6) Save the Sound, Inc. ; (7) the Connecticut Fund for the Environment, Inc. ; (8) the Long Island Soundkeeper; (9) the State Geologist; and (10) no more than one representative each from the holder of a permit for a merchant cable, one representative from an applicant for a gas pipeline, one representative from each local gas and electric distribution company and one representative from the telecommunications industry. Nothing in this section shall prohibit the task force from soliciting the participation of other persons in the development of the comprehensive environmental assessment and plan including, but not limited to, federal agencies regarding matters within such agency's jurisdiction. Such assessment and plan shall include, but not be limited to, a review and analysis of those criteria set forth in Executive Order Number 26 of Governor John G. Rowland in addition to the following: (A) In consultation with the Institute of Water Resources at The University of Connecticut and The University of Connecticut Cooperative Extension Service, a comprehensive inventory and mapping of all existing environmental data on the natural resources of Long Island Sound, including, but not limited to: All coastal resources, as defined in section 22a-93 of the general statutes, all points of public access and public use, locations of rare and endangered species including the breeding and nesting areas for such rare and

endangered species, locations of historically productive fishing grounds and locations of unusual and important submerged vegetation; (B) an evaluation of the relative importance and uniqueness of the natural resources and an identification of the most ecologically sensitive natural resources of Long Island Sound; (C) an assessment of the present status, future potential and environmental impacts on Long Island Sound of meeting the region's energy needs that do not require the laying of a power line or cable within Long Island Sound; (D) an evaluation of methods to minimize the numbers and impacts of electric power line crossings, gas pipeline crossings and telecommunications crossings within Long Island Sound, including an evaluation of the individual and cumulative environmental impacts of any such proposed crossings; (E) an inventory of current crossings of Long Island Sound and an evaluation of the current environmental status of those areas that have crossings; (F) an evaluation of the reliability and operational impacts to the state and region of proposed crossings of Long Island Sound and an evaluation of the impact on reliability by recommended limitations on such crossings; (G) recommendations for providing for regional energy needs while protecting Long Island Sound to the maximum extent possible; and (H) recommendations on natural resource performance bond levels to insure and reimburse the state in the event that future electric power line crossings, gas pipeline crossings or telecommunications crossings substantially damage the public trust in the natural resources of Long Island Sound. For the purposes of sections 1, 3, 4 and 5 of this act, "Long Island Sound" shall include its harbors, embayments, tidal rivers, streams and creeks to the extent that any such projects would impact such harbors, embayments, tidal rivers, streams and creeks.

Sec. 4. (NEW) (*Effective from passage*) Any application for an electric power line, gas pipeline or telecommunications crossing of Long Island Sound that is considered by any state agency, including, but not limited to, the Department of Environmental Protection or the Connecticut Siting Council, after the creation of the comprehensive environmental assessment and plan, described in section 3 of this act, shall additionally be evaluated for such application's: (1) Likelihood to impair the public trust in Long Island Sound based on, but not limited to, the information contained in the comprehensive environmental assessment and plan; (2) consistency with the recommendations of the comprehensive environmental assessment; and (3) environmental impact, both individual and cumulative, including but not limited to those impacts anticipated by the comprehensive environmental assessment and plan described in section 3 of this act.

Sec. 5. (NEW) (*Effective from passage*) Notwithstanding any provision of the general statutes, the Connecticut Siting Council, within fifteen days of the effective date of this section shall submit the state's advisory opinion to the Federal Energy Regulatory Commission requesting that, on behalf of the state, the Federal Energy Regulatory Commission not approve any new individual electric power line crossing, gas pipeline crossing or telecommunications crossing until the comprehensive environmental assessment and plan described in section 3 of this act is completed and that the Federal Energy Regulatory Commission avoid environmental damage to Long Island Sound to the greatest extent possible when licensing any future project by considering the recommendations contained in the comprehensive environmental assessment and plan described in section 3 of this act. Notwithstanding the provisions of this act, if the Federal Energy Regulatory Commission proceeds with consideration of any such

project, regardless of the Siting Council's request, the Connecticut Siting Council and any other state agency with jurisdiction over such project shall review such proposed project and recommend siting, construction procedures and environmental mitigation measures to the Federal Energy Regulatory Commission for such project that conform with the comprehensive environmental assessment and plan described in section 3 of this act, to the degree such assessment and plan information is available.

Approved June 3, 2002

DSSKT-9

DSSKT-10

[redacted]

Zoning

"Generating Station District - Initial Enactment"

Duplicate & miscellaneous file

NOTICE OF ENACTMENT

NOTICE IS HEREBY GIVEN That at a meeting of the Town Board of the Town of Huntington, held at the Town Hall, Huntington, March 20, 1956, the Building Zone Ordinance of the Town of Huntington was amended as follows:

By adding the following new section to follow Section 3, Article VII as follows:

Section 4. Generating Station District. In a Generating Station District, no building shall be erected except those used in connection with the generation, transmission and distribution of electric energy in, among other places, the Town of Huntington by a corporation subject to the jurisdiction of the Public Service Commission of the State of New York.

(A) Area. The minimum area shall be 50 acres and no more than 50% of the entire area so zoned shall be used for buildings or the storage of fuel, except during construction periods.

(B) Setbacks. No buildings shall be erected in said district within 200 feet of the exterior lines thereof, except

(1) Where such exterior line borders on the Long Island Sound or harbor, bay, or inlet thereof, and

(2) Where a buffer strip zoned for residential purposes is owned by such corporation described aforesaid, the width of such buffer strip shall be included in computing the aforesaid 200 foot setback requirement.

(C) Height Limitation. No building shall be erected in excess of a height of 250 feet except that a chimney stack may be erected in excess of such height.

(D) On-site parking. Provision must be made for all deliveries and employee parking within the premises and such parking area shall be paved and maintained at all times.

(E) Landscaping. Prior to the issuance of a Building Permit for any building in a Generating Station District, plans must be submitted to the Planning Board showing the manner in which the property will be landscaped upon the completion of construction. The Planning Board may make such reasonable modifications to such proposed plans prior to approval, which modifications may include the designation of planting strips or fences to be installed within the boundaries of the premises.

By order of the Town Board of the Town of Huntington.

ROBERT J. McNULTY,
Town Clerk.

Dated, March 20, 1956.

4A

TBM
3/20/56

Book II
#127

NOTICE OF ENACTMENT

NOTICE IS HEREBY GIVEN That at a meeting of the Town Board of the Town of Huntington, held at the Town Hall, Huntington, March 20, 1956, the Building Zone Ordinance and Building Zone Map of the Town of Huntington were amended as follows:

By changing from Residence "B" to "Generating Station District" all those certain pieces or parcels of land lying near Northport (unincorporated area), Town of Huntington, County of Suffolk, State of New York, except as stated hereinafter, bounded and described as follows:

Beginning at the intersection of the westerly side of Waterside Road and the northerly side of Eatons Neck Road (Dugway), and thence proceeding northerly along the westerly side of Waterside Road North 44° 44' 00" East 168.84 feet; thence North 53° 38' 40" East 165.91 feet; thence North 43° 20' 10" East 282.18 feet; thence North 41° 00' 20" East 204.69 feet to the intersection of the westerly side of Waterside Avenue with the southerly line of the property now or formerly of Arabo; thence westerly along the southerly line of the said property now or formerly of Arabo, North 87° 45' 20" West 179.10 feet; thence North 63° 14' 50" West 262.73 feet; thence North 67° 11' 00" West 205.15 feet; thence North 65° 23' 20" West 226.51 feet; thence North 64° 31' 00" West 202.20 feet; thence North 65° 08' 20" West 120.68 feet; thence North 64° 41' 40" West 399.93 feet to the shore of the lake; thence westerly along the shore of the lake as it winds and turns, North 84° 03' 30" West 87.73 feet; thence North 62° 14' 20" West 61.30 feet to the intersection of the shore of the lake with the dividing line between property now or formerly of Northrop Realty Corporation and William N. Beach and property now or formerly of Bayhurt Realty Corporation and William N. Beach; thence northerly across the lake on a straight line to a point in the lake (which point can be located by proceeding from said point of intersection of the lake shore with the last aforementioned dividing line easterly and then northerly along the shore of the lake South 62° 14' 00" East 61.30 feet; thence South 81° 03' 30" East 87.73 feet; thence North 72° 61' 00" East 45.11 feet; thence North 51° 23' 10" East 102.73 feet; thence North 26° 50' 00" East 164.17 feet; thence North 18° 17' 00" West 27.79 feet; thence North 13° 01' 00" East 70.74 feet; thence North 28° 06' 40" East 107.54 feet to a point; thence westerly across said lake North 65° 52' 30" West 340.10 feet;) thence northerly from said point in the lake North 00° 00' 10" West 1580.39 feet more or less to the highwater line of Long Island Sound; thence westerly and southwesterly along the highwater line of Long Island Sound as it winds and turns, across the head of the inlet or lagoon, and still along the highwater line of Long Island Sound as it winds and turns to the point of intersection of said highwater line with the eastern boundary line of the Village of Asharoken, and thence southerly from said point of intersection along said easterly boundary of the Village of Asharoken and a southerly prolongation thereof to the northerly side of Eatons Neck Road (Dugway); thence easterly along the northerly side of Eatons Neck Road (Dugway) to the point or place of beginning.

Excepting therefrom, however, the cemetery located on the northerly side of Eatons Neck Road (Dugway) described as follows:

Beginning at the intersection of the westerly side of Waterside Road and the northerly side of Eatons Neck Road (Dugway) and thence proceeding westerly along the northerly boundary of said Eatons Neck Road (Dugway) the following twelve courses and distances:

North 32° 44' 00" West 74.09 feet;
North 14° 01' 50" West 138.63 feet;
North 32° 23' 30" West 161.97 feet;
North 58° 59' 40" West 93.74 feet;
South 77° 20' 00" West 76.60 feet;
South 39° 49' 00" West 106.87 feet;
South 56° 21' 10" West 240.34 feet;
South 78° 17' 20" West 455.99 feet;
North 71° 26' 20" West 358.57 feet;
North 68° 14' 00" West 8.08 feet;
North 64° 09' 20" West 613.16 feet;
North 64° 09' 20" West 119.31 feet;

to a point in the northerly boundary of the said Eatons Neck Road (Dugway), which point is the point or place of beginning; running thence North 25° 34' 10" East 147.68 feet; thence North 64° 25' 50" West 194.55 feet; thence South 25° 36' 40" West 144.75 feet, to a point in the northerly boundary of the said Eatons Neck Road (Dugway), thence easterly along said northerly boundary to the point or place of beginning.

Also excepting therefrom a strip of land to remain as presently zoned 200 feet in width at all points contiguous and parallel to the afore-described boundary, on the interior thereof, except where said boundary runs along the mean high water line of Long Island Sound and except where said northerly side of Eatons Neck Road (Dugway) is interrupted by the Cemetery.

By order of the Town Board of the Town of Huntington
ROBERT J. McNULTY
Town Clerk

Dated: March 20, 1956.

6A

Generating Plant
LILCO + BM
3/20/56

DSSKT-11

EXHIBIT DSSKT-11

Comparison of Generating Station Efficiency (sf/MW)

Facility	Footprint Area (sf) (approx.)	Capacity (MW)	Square feet/MW
Spagnoli Road	92,500	250	370
E. F. Barrett	242,000	360	672
Port Jefferson	345,000	440	784
Northport	726,000	1564	464
Coventa Energy (garbage-to-energy)	139,530	25	5581

DSSKT-12

Long Island Power Authority and Subsidiaries

Consolidated Financial Statements
December 31, 2001 and 2000

Long Island Power Authority and Subsidiaries

Consolidated Statements of Revenues, Expenses and Changes in Retained Earnings/(Accumulated Deficit) (Thousands of Dollars)

	Twelve Months Ended December 31, 2001	2000
Electric Revenue	$2,367,900	$2,199,741
Expenses		
Operations - fuel and purchased power	880,665	885,732
Operations and maintenance	719,853	636,568
General and administrative	36,746	33,162
Depreciation and amortization	212,283	208,295
Capital recovery amortization	-	34,209
Payments in lieu of taxes	219,955	230,319
Total Operating Expenses	2,069,502	2,028,285
Excess of operating revenues over expenses	298,398	171,456
Other income, net		
Investment income	23,638	31,713
Carrying charges on regulatory asset	36,192	16,068
Other	12,219	2,355
Total other income, net	72,049	50,136
Excess of revenues over expenses before interest charges and (credits) and extraordinary gain	370,447	221,592
Interest charges and (credits)		
Interest on long-term debt, net	316,592	322,095
Other interest	25,914	27,371
Allowance for borrowed funds used during construction	(4,450)	(5,646)
Total interest charges	338,056	343,820
Excess of revenues over expenses (expenses over revenues) before extraordinary gain	32,391	(122,228)
Extraordinary gain on early extinguishment of debt	-	1,688
Excess of revenues over expenses (expenses over revenues)	32,391	(120,540)
(Accumulated deficit) / Retained earnings		
Beginning	(61,670)	58,870
Ending	$ (29,279)	$ (61,670)

The accompanying notes are an integral part of these financial statements.

DSSKT-13

The Markets

Installed Capacity (ICAP) Market

Installed Capacity Auctions and Related Information

Related Links

Download

Announcements:

- Locational Installed Capacity Requirements Study - covering the New York Control Area for the 2002 - 2003 Capability Year (revised 3/14/2002)
- Winter 2001 /2002 Monthly ICAP Auction Delayed
- Special Case Resource Event Reporting
- ICAP Deficiency Auction (4/26/01) Charges
- Summer 2001 ICAP Certification Deadlines Revised
- GADS Data Mailbox
- Winter 2000-2001 ICAP Auction Purchase and Sale Agreements
- Announcement - September 26, 2000
- ICAP Deficiency Auctions For the Summer 2000 Obligation Procurement Period - 4/20/2000
- Summer DMNC Instructions

TOP

Installed Capacity Manual:

Stage 2 ICAP Manual (posted 02/28/02) (818k)

TOP

General Information:

- Special Case Resource Event Reporting
- Date and Time of Transmission District Capability Period Peak Loads (Revised 04/26/02)

Shortening the NYISO's Installed Capacity Procurement Period: Assessment of Reliability Impacts

One-Month vs. Six-Month Obligation Procurement Period Study Survey
(Note: Surveys must be returned by April 5, 2000)

Survey Cover Letter
Survey Cover Letter
Survey Cover Letter
ICAP Procurer Survey Response Form
ICAP Procurer Survey Response Form
ICAP Procurer Survey Response Form
ICAP Seller/Marketer Survey Response Form
ICAP Seller/Marketer Survey Response Form
ICAP Seller/Marketer Survey Response Form

TOP

Revised Sanctions Proposal

Submitted to the Management Committee and amended during discussion at the March 9th meeting. The ICAP sanctions must be filed with FERC, an action that requires joint MC and Board approval. The MC elected to review the amended proposal in FERC filing
form.

Six-Month vs. One-Month Obligation Procurement Study Scope
(2/9/2000)

NYISO Filing of Transitional Installed Capacity Market Design - Filed February 1, 2000

Transmittal Letter and Services Tariff Provisions
Installed Capacity Auction Description
Installed Capacity Auction Description (Redlined)

TOP

NERC-GADS Data

NERC-GADS Data (File Formats for NYISO Data Submission) (2/22/2000)

External ICAP Supplier Requirements (9/14/99)

Modified LSE Data Request

Modified LSE Data Request (revised 9/14/99)
Modified LSE Data Request (revised 9/14/99)

ICAP Auction "Rules, Procedures & Guidelines"

ICAP Auction "Rules, Procedures & Guidelines" (revised 9/10/99)

ICAP Auction "Rules, Procedures & Guidelines" (revised 9/10/99)

Transmission District Installed Capacity Requirements (revised 9/10/99)

TOP

Summer 2002

ICAP Manual Attachment A Summer 2002 Capability Period (posted 04/25/02) (90k)

ICAP Load Forecast for Summer 2002 (posted 01/31/02)

ICAP Requirements for Capability Year beginning May 1, 2002, with deficiency prices - revised

Forms:

Attachment D: Dependable Maximum Net Capability Audit Forms (171k)

New Bid Form (07-10-02) in Microsoft Excel Format (414k)

New Certification Form (07-10-02) in Microsoft Excel Format (233k)

New Offer Form (07-10-02) in Microsoft Excel Format (719k)

SCR Commitment Workbook with electronic forms - 7/11/2002 (164k)

Summer 2002 Auction Results

UCAP Deficiency Auction Results (06/26/02) (47k)

UCAP Monthly Auction Results (6/13/2002) (49k)

UCAP Deficiency Auction Results (05/28/02) (4k)

UCAP Monthly Auction Results (5/14/2002) (49k)

UCAP Deficiency Auction Results (4/25/2002-Revised)

UCAP Monthly Auction Results (4/12/2002) (49k)

UCAP Strip Auction Results (3/28/2002) (48k)

Winter 2001/2002 Auction

NYISO Installed Capacity Manual reflecting FERC approved Stage 2 Tariff changes

Attachment A - Installed Capacity Reporting and Auction Timeline Winter 2001-2002 Only (Revised 3/18/2002)

Attachment F - Agreement to Purchase Unforced Capacity in NYISO Installed Capacity Auctions

Attachment G - Agreement to Sell Unforced Capacity in NYISO Installed Capacity Auctions

Winter 2001/2002 Auction Results

UCAP Deficiency Auction Results (03/25/02) (48k)

UCAP Monthly Auction Results (03/15/02)

UCAP Deficiency Auction Results (02/22/02) (47k)

UCAP Monthly Auction Results (02/04/02) (47k)

UCAP Deficiency Auction Results (01/24/02)

UCAP Monthly Auction Results (1/15/02)

UCAP Deficiency Auction Results (12/26/01)

UCAP Monthly Auction Results (12/14/01)

UCAP Deficiency Auction Results (11/28/01)

UCAP Monthly Auction Results (11/15/01)

UCAP Deficiency Auction Results (Revised 11/05/01)

Summer 2002 Capability Period
Monthly Auction Results for UCAP
(July 2002 through October 2002)

	July	August	September	October
NYC				
Awarded (MW)	313.3	98.4	99.4	96.4
Price ($/kW-M)	$ 4.46	$ 4.85	$ 4.85	$ 4.85
LI*				
Awarded (MW)	*	*	*	*
Price ($/kW-M)				
ROS				
Awarded (MW)	294.2	162.0	64.2	60.0
Price ($/kW-M)	$ 0.43	$ 0.50	$ 0.25	$ 0.12
PJM				
Awarded (MW)				
Price ($/kW-M)				
HQ				
Awarded (MW)				
Price ($/kW-M)				
Total Awarded (MW)	607.5	260.4	163.6	156.4

*Market did not clear

DSSKT-14

FOR IMMEDIATE RELEASE
March 12, 2002

Contact:
Media Relations: (516) 719-9892
Media Pager: (516) 657-2993

LIPA: Energy Crisis Far From Over

More Resources to be Added for Summer, But Supply Could be Tight

Kessel Details State of Long Island's Electric Supply in Speech before Hauppauge Industrial Association

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Smithtown, NY – March 12, 2002 – Long Island's electric supply will remain tight this summer, according to Long Island Power Authority (LIPA) Chairman Richard M. Kessel. He also warned that several major power producers who are currently planning to build new power plants on Long Island are canceling other projects around the country raising concern about the long-term commitment to complete plants on Long Island.

Long Island's electric demand is still growing at an annual rate of about 100 megawatts (MW) per year, despite a recent economic downturn, Kessel said in a far-ranging speech today before a luncheon of the Hauppauge Industrial Association. Despite recent statements that energy demand growth would taper off this year, Kessel said that LIPA is already seeing growth numbers that could mean another record electricity use this summer. According to Kessel, LIPA already has 21.4 MW of additional commercial growth (out of a projection of 24 MW for the entire year) and its only mid-March.

"We're not out of the woods yet," said Kessel. Even though LIPA is pressing forward with projects to add about 400 MW of new electricity to be produced by ten new turbine generators being placed around Long Island, and the possibility of a new cross-Sound cable being completed in time for summer that could carry an additional 330 megawatts of power, Kessel emphasized that electricity consumers will "need to conserve as much as possible to get Long Island through extreme heat waves."

Since all of the new electric resources may not be available in time for the entire summer, Kessel said that LIPA will "continue to stress energy conservation and efficient energy use as part of our Clean Energy Initiative, but we can't ignore the fact that we also need new generation resources on Long Island.

"Long Island's demand will continue to grow at a rate that is outpacing the state," said Kessel. "As a result, we need to evaluate the electric resources that will be required if we want an adequate supply to meet demand and to have a truly competitive retail market for electricity on Long Island."

Kessel also indicated that he was concerned about the power producers around the country who are pulling back from commitments to build plants in a number of states.

"We will seek to encourage producers to build plants for the out years of 2005 and 2006," said Kessel. "We need new generation resources or we'll go dark."

Last year, LIPA's Clean Energy Initiative lowered electric use on the Island by about 115MW, said Kessel. But increased demand offset the savings, which is another reason why more on-island generation is needed.

In many ways, Kessel said that Long Island is in much better shape than it was last summer, but "we must continue to conserve as much as possible while we seek to add new generation resources, which would include alternative generation technologies."

In addition to reducing electric rates by an average of 20%, and saving electric customers approximately $2 billion over the last four years, LIPA has fully opened the Long Island market to retail competition through its Long Island Choice program.

The full text of Mr. Kessel's presentation before the HIA can be obtained through LIPA's Web site at

www.lipower.org.

The Long Island Power Authority owns the electric retail system on Long Island, and provides electric service to nearly 1.1 million customers in Nassau and Suffolk counties, and the Rockaway Peninsula in Queens. LIPA is the second largest municipal, not-for-profit electric utility in the nation in term of sales, and the third largest in terms of customers served. LIPA does not provide natural gas service.

Information about LIPA's wide range of energy saving, money saving programs can be obtained by visiting LIPA's Web site, or by calling the EnergyWise Infoline at 1-800-692-2626.

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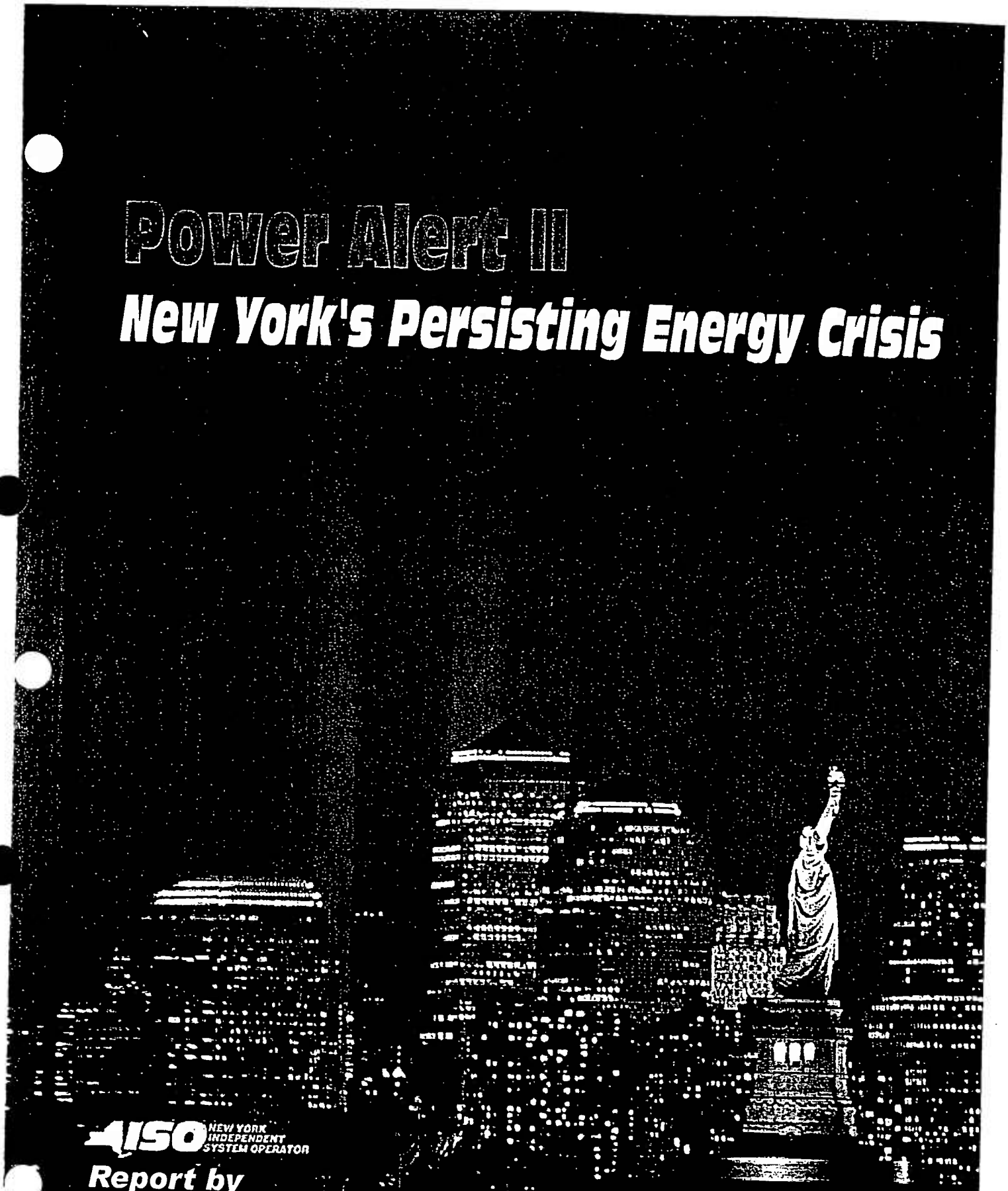
Power Alert II

New York's Persisting Energy Crisis



NYISO NEW YORK INDEPENDENT SYSTEM OPERATOR

Report by
The New York Independent System Operator
March 27, 2002

EXECUTIVE SUMMARY

Despite the economic downturn and ill-advised suggestions that the need for more power has subsided, the New York Independent System Operator stands by its strong recommendation that the state must add significant amounts of new electric generating capacity by 2005 to ensure a reliable, competitive and efficient energy market, and improved air quality for New York's residents.

When the NYISO released its first *Power Alert* on March 15, 2001, it concluded New York State should approve and build 8,600 megawatts of new electric generating supply by 2005 to avoid impending shortages, improve competition, lower prices, and improve the environment. Since then, the NYISO has reexamined its findings and developed new forecasts regarding New York State's electric power supply, taking into account the developments of the past year. *Power Alert II* confirms last year's overall findings and outlines appropriate changes to recommended actions.

In preparing this report, the NYISO also examined operation of New York's electric system during the week of August 6-10, when a major summer heat wave struck the Northeast, causing record-setting demand for electrical power in New York and neighboring systems. The events of that week, detailed in an appendix to this report, tested the power system's and the market's ability to maintain a reliable supply of energy - especially while power reserves remain dangerously close to minimum levels - and highlighted the critical role that can be played by an effective demand response program.

The NYISO's reexamination of the State's power needs yields the following conclusions and recommendations:

- The loss of the World Trade Center and adjacent buildings on September 11 resulted in an immediate gross reduction of about 140 MW of summer peak load, but a permanent loss of only 90 MW in New York City. Some early reports had estimated that the gross loss could be five times greater;

- Even with the downturn in the economy and the effects of September 11, New York State still needs an additional capacity of 7,100 MW by 2005 - of which 2,000 to 3,000 MW must be located in New York City;

- Recent progress by the New York State Board on Electric Generation Siting (the Siting Board) in approving 4,427 MW of new capacity is encouraging. To meet New York State's electric supply needs and prepare for a rebounding economy, approvals for an additional 3,000 MW of new capacity are needed by spring 2002. Long Island alone requires 750-1,000 MW approved as soon as possible to alleviate severe reliability risks and high prices;

- For summer 2002, statewide electricity supplies are expected to be adequate under normal weather conditions, but Long Island will be at risk because of a tight supply situation and limited transmission capacity. New York City should have adequate supply, but a repeat of last year's heat wave could place the city at risk, as well;

- More power plants would improve air quality, lower prices, and ensure adequate generation in the event of attacks on generators, or severe droughts;

- The Legislature should renew the Article X electric power plant siting law - scheduled to expire December 31, 2002 - to maintain the Siting Board's momentum. If any changes are made to Article X in the renewal process, the changes should be focused on shortening the approval time frame;

- While this report emphasizes the importance of certifying new plants through the Article X process, such approvals do not necessarily mean that these plants will be financed and built. As they develop energy policy, legislators

OVERVIEW

A. *Power Alert II* Background

The NYISO is a not-for-profit corporation established in 1999 to facilitate the restructuring of New York State's electricity industry. In addition to administering the State's wholesale energy markets, the NYISO operates the State's high-voltage electric transmission system. One of the NYISO's highest priorities is ensuring an adequate level of electric capacity to meet the demands of the State's economy and consumers.

. . . to the products we manufacture and the communications connecting our modern economy.

Last year, the NYISO conducted a study of the State's electric supply needs. The study examined options for meeting these needs by accelerating the pace of building power generators and developing and promoting enhanced consumer energy conservation measures. The NYISO released the results of this study in a report entitled *"Power Alert: New York's Energy Crossroads."* The NYISO concluded that New York State faced a growing and troubling disparity between electric demand and in-State supply.

In preparing *Power Alert*, the NYISO reviewed two scenarios: one in which generating capacity was added, one in which it was not. The comparison demonstrated that to avoid a replication of California's "market meltdown," with its attendant price increases and rolling blackouts, New York must address its growing supply and demand imbalance.

Among the specific conclusions presented in *Power Alert* were:

- New York State needed to approve a substantial amount of new generation in the range of 4,000-5,000 MW during 2001;
- New York State should approve approximately 1,000 MW of generating capacity each year for the next three to four years, with more than 50 percent of it located in New York City and on Long Island;
- New York City, because it is both a major consumer of electrical power and also a "load pocket" (with limited ability to import power from outside the city over existing transmission lines), must have 2,000-3,000 MW of this additional capacity approved within its own borders;
- To further enhance a competitive wholesale electricity market in New York, demand response and price-sensitive load initiatives should be developed on an expedited basis; and
- Significant economic and environmental benefits would be gained by the addition of 8,600 MW of new generation by 2005.

Other recommendations presented in *Power Alert* included:

- Transmission upgrades and expansions and distributed generation should be encouraged through market design improvements;
- As part of its energy policy, the State must consider matters of fuel diversity in addition to the issues of economics and adequacy of energy supply; and
- To facilitate the development of additional, modern gas-fired combined cycle plants, the State must expand its natural gas transmission infrastructure.

If an additional 8,600 MW of supply were added to the system by 2005 as

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NEWS RELEASE

NEW YORK INDEPENDENT SYSTEM OPERATOR

Building The Energy Markets of Tomorrow . . . Today

For Immediate Release:
Wednesday, March 27, 2002

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New Electricity Demand Forecast Warns of Continued Risk of Energy Crisis if Power Plant Development Lags

Despite Loss of World Trade Center and Recession, New York Still Needs Significantly Expanded Power Supply by 2005

(New York, New York – March 27, 2002)--In an update of its *Power Alert* report issued a year ago on New York State's electric capacity needs, the New York Independent System Operator (NYISO) today called for the immediate approval of 3,000 megawatts (MW) of new generating capacity to avoid serious electricity shortages, improve air quality, facilitate New York's economic growth, and avert strong upward pressure on prices. The report says that Long Island alone needs between 750 and 1,000 MWs approved as soon as possible to reduce severe reliability risks and high prices.

The NYISO is a not-for-profit corporation established in 1999 to facilitate the restructuring of New York State's electric industry. In addition to administering the state's wholesale energy markets, the NYISO operates the state's high-voltage electric transmission system.

The updated report, *Power Alert II: New York's Persisting Energy Crisis*, calls for the addition of a total of 7,100 MW of capacity by 2005. The original version of the report, issued in March 2001, called for the addition of 8,600 MW by 2005. The 17 percent reduction in NYISO's call for new capacity reflects the impact of reduced electricity usage due to slowed economic growth over the past year. The loss of the World Trade Center had a more marginal impact on reducing overall power demand than is widely perceived, causing an immediate gross reduction of only 140 MW and a total net reduction of 90 MW, one-fifth the amount estimated in some early published reports.

"The bottom line is that New York continues to need significant additions of new generating capacity despite the temporary dampening of demand growth caused by the terrorist attack and the recessionary conditions of last year," said William J. Museler, President and CEO of the NYISO. "To ensure that New Yorkers have reliable, affordable, environmentally responsible sources of power to fuel the growth of the information age, we have to move fast in adding new capacity to the state's power grid."

Of the 7,100 MW of new capacity that New York State needs by 2005, the NYISO says that 2,000-3,000 MW must be located in New York City, which, like Long Island, is a "load pocket" – a region whose energy needs cannot be satisfied by imported electricity due to limited transmission capabilities.

"A year after our release of the original *Power Alert* report, New York remains headed toward a very serious power shortage unless it acts immediately to get new supply sited and actually built within its borders," said Mr. Museler. "This updated report is a warning call that we are far from out of the woods with respect to our electric supply situation."

In addition, the NYISO report also recommends the renewal of the State's Article X electric power plant siting law that expires on December 31, 2002 in order to maintain the growing momentum in approving new power plants.

"The State Siting Board—led by the PSC--has done an excellent job of streamlining the process under Article X to efficiently review and make determinations on applications for siting new electric power plants and as a result 3,680 MW of additional capacity were approved during the past year," said Museler. "Given our continued need for additional power, combined with the changing development climate brought about by the recession and the Enron collapse, we cannot afford to have the siting process lose momentum by letting the Article X legislation lapse."

Even though six major electric power plant projects have been approved, only one is actually under construction.

In an unexpected twist since last year's report, statewide power supplies could also be adversely affected by one of the Northeast's worst droughts in decades. The current dry spell could potentially reduce the water available for hydroelectric generators, as well as for the cooling and pollution-control needs of fossil-fuel generators.

"The drought is simply another factor that highlights how urgently we need additional generating capacity, not only for growth in demand, but for unforeseen events and losses of capacity as well," said Museler.

The current situation results from a growing disparity between electricity demand and supply. Between 1995 and 2001 in New York, statewide demand for electricity rose by 3,280 MW, while generating capacity increased by only 1,720 MW. In fact, since 1999, the growing disparity between supply and demand has meant that the state has been unable to cover its 18 percent reserve requirement from in-state generating sources. If this trend continues New York can expect to see increased prices, decreasing reliability and a negative impact on the environment.

"What people often forget is that by adding this new supply largely in the form of technologically-advanced combined-cycle baseload units, we will reduce the adverse environmental impact of the electric system as well," said Museler. "The new units are so efficient that their output will begin to displace that from the older, dirtier units as soon as we have enough capacity to meet our reliability needs."

The NYISO also has confirmed that the long-range recommendations it made in *Power Alert* remain valid. These include:

- Transmission infrastructure upgrades and expansions, and distributed generation, should be encouraged through market design enhancements. At the request of New York State, the NYISO is preparing an assessment of the State's transmission system, which will identify potential high-value transmission infrastructure projects that could increase reliability and market efficiency. This assessment will be completed by the end of 2002;

- The State must consider fuel diversity and the economics and adequacy of energy supply as part of its energy policy; and

- The State must examine the expansion of its natural gas transmission infrastructure to facilitate the development of additional natural gas-fired combined cycle plants. The NYISO has taken steps to implement this recommendation by jointly undertaking a study with NYSERDA to examine the impact of increased demand for natural gas on the state's electric system and natural gas infrastructure.

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The New York Independent System Operator (" NYISO")—www.nyiso.com-- is a not-for-profit corporation established in 1999 to facilitate the restructuring of New York State's electric industry. Based in New York's Capital Region, in addition to administering the State's wholesale energy markets, the NYISO operates the State's high voltage electric transmission system. Last year, the NYISO's market volume exceeded $5.6 billion, more than all of the other Northeast markets combined.