El Segundo Power, LLC
301 Vista Del Mar
El Segundo, CA 90245
Direct: (310) 615-6043
Fax: (310) 615-6030

NRG

May 31, 2011

Mr. Philip Isorena
Chief
State Water Resource Board
Division of Water Quality, 15th Floor
1001 I Street
Sacramento, CA 95814

Subject: Report of Waste Discharge (Resubmittal)
El Segundo Generating Station
El Segundo Power, LLC
NPDES Permit No. CA0001147

Dear Mr. Isorena:

El Segundo Power, LLC ("ESP") submits this Report of Waste Discharge (RWD) application for the renewal for the El Segundo Generating Station in compliance with your November 30, 2010 request and per the requirements of 40 CFR Section 122.21(d)(2), Duty to Reapply. ESP submitted the Implementation Plan on March 30, 2011 and a status of Implementation Plan and Report of Waste Discharge in a separate letter on March 30, 2011. In the status letter ESP requested an extension for submittal of the RWD to June 1, 2011. This RWD is submitted for NPDES Permit No. CA0001147, File No. CI 4667.

Analyses were conducted at a laboratory certified for such analyses by the State Department of Health Service or approved by the Executive Officer and in accordance with current EPA guideline procedures or as specified in the Monitoring Program. Analytical results for radiological and dioxin constituents are pending due to the long turn-around time for those analyses. Data will be supplied in a supplemental data package as soon as results are available.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person and persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. "I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations."

If you should have any questions concerning the report please contact George Piantka at (760) 710-2156.

Sincerely,

El Segundo Power, LLC
By: NRG El Segundo Operations Inc.,
It's Authorized Agent

By: _____
Ken H. Riesz, Sr.
Plant Manager

Enclosures: Report of Waste Discharge

Cc: Mr. Jonathan Bishop
State Water Resource Board
Division of Water Quality, 24th Floor
1001 I Street
Sacramento, CA 95814

File

TABLE OF CONTENTS

Los Angeles Regional Water Quality Control Board NPDES Permit No.CA0001147 CI 4667 (Waste Discharge Requirements for El Segundo Power, LLC, El Segundo, California) expired on May 10, 2005. This application is being submitted per the request of the State Water Resources Board in the letter dated November 30, 2010.

The following California and Federal application forms are enclosed:

- Signatory and Certification Statement to NPDES Permit Applications
- SWRCB Contributions Disclosure Statement
- SWRCB Form 200
- USEPA Form 1
- USEPA Form 2C

In order to provide information specified in each of these applications, the following attachments were required:

Section 1 - SWRCB Form 200:

Form 200, Section VI. - Characterization Information and Site Map

To address information requested in Section VI for SWRCB Form 200, attached to this application are the following USEPA applications:

- Form 1 (Section 2)
- Form 2C (Section 3)

These forms and their respective attachments provide a complete characterization of this facility's NPDES discharge, and include:

- Site Map
- Schematic of Water Flow
- Analytical laboratory chemical analyses
- Best Management Practices (Storm Water Pollution Prevention Plan)
- Description of the disposal methods

Section 2 - USEPA Form 1:

Supplemental attachments included with USEPA Form 1 include:

- Attachment 2.1 - Existing Environmental Permits
- Attachment 2.2 - Site Location Map

- Attachment 2.3 - El Segundo Generating Station Map Showing Location of Cooling Water Intake and Discharge Point

Section 3 - USEPA Form 2C and Attachments:

Supplemental attachments included with the USEPA Form 2C include:

- Attachment 3.1 – Section II.A and II.B - Flows, Sources of Pollution, and Treatment Technologies
    - Figure 3.1 – Schematic of Water Flow
- Attachment 3.2 – Requested Changes
- Attachment 3.3 – Application Sampling and Analysis Laboratory Reports (CD Only)
- Attachment 3.4 – Best Management Practices (Storm Water Pollution Prevention Plan) (CD Only)

Section 4 – Supplemental Data

Supplemental data attachments include:

- Attachment 4.1 – Correspondence and Implementation Plan for Clean Water Act Section 316(b) Policy
- Attachment 4.2 – NPDES Monitoring Data for the Previous 5 Year Period (CD Only)

SECTION 1
State of California Form 200 and Contributions Disclosure Statement

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

State of California
Regional Water Quality Control Board

APPLICATION/REPORT OF WASTE DISCHARGE
GENERAL INFORMATION FORM FOR
WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT

I. FACILITY INFORMATION

A. Facility:

Name: El Segundo Power, LLC			
Address: 301 Vista Del Mar			
City: El Segundo	County: Los Angeles	State: CA	Zip Code: 90245
Contact Person: Ken H. Riesz, Sr.		Telephone Number: 310-615-6030	

B. Facility Owner:

Name: El Segundo Power, LLC			Owner Type (Check One) 1. ☐ Individual 2. ☑ Corporation	
Address: 301 Vista Del Mar			3. ☐ Governmental Agency 4. ☐ Partnership	
City: El Segundo	State: CA	Zip Code: 90245	5. ☐ Other:	
Contact Person: Ken H. Riesz, Sr.		Telephone Number: 310-615-6030		Federal Tax ID: 41-197-9997

C. Facility Operator (The agency or business, not the person):

Name: NRG El Segundo Operations Inc.			Operator Type (Check One) 1. ☐ Individual 2. ☑ Corporation
Address: 301 Vista Del Mar			3. ☐ Governmental Agency 4. ☐ Partnership
City: El Segundo	State: CA	Zip Code: 90245	5. ☐ Other:
Contact Person: Ken H. Riesz, Sr.		Telephone Number: (310) 615-6030	

D. Owner of the Land:

Name: Same as Facility			Owner Type (Check One) 1. ☐ Individual 2. ☑ Corporation
Address:			3. ☐ Governmental Agency 4. ☐ Partnership
City:	State:	Zip Code:	5. ☐ Other:
Contact Person:		Telephone Number:	

E. Address Where Legal Notice May Be Served:

Address: 301 Vista Del Mar		
City: El Segundo	State: CA	Zip Code: 90245
Contact Person: Ken H. Riesz, Sr.		Telephone Number: (310) 615-6030

F. Billing Address:

Address: Same as Facility		
City:	State:	Zip Code:
Contact Person:		Telephone Number:

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

State of California
Regional Water Quality Control Board

APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT

II. TYPE OF DISCHARGE

Check Type of Discharge(s) Described in this Application (A or B):

☐ **A. WASTE DISCHARGE TO LAND** ☑ **B. WASTE DISCHARGE TO SURFACE WATER**

Check all that apply:

- ☐ Domestic/Municipal Wastewater Treatment and Disposal
- ☑ Cooling Water
- ☐ Mining
- ☐ Waste Pile
- ☐ Wastewater Reclamation
- ☐ Other, please describe: _____
- ☐ Animal Waste Solids
- ☐ Land Treatment Unit
- ☐ Dredge Material Disposal
- ☐ Surface Impoundment
- ☑ Industrial Process Wastewater
- ☐ Animal or Aquacultural Wastewater
- ☐ Biosolids/Residual
- ☐ Hazardous Waste (see instructions)
- ☐ Landfill (see instructions)
- ☑ Storm Water

III. LOCATION OF THE FACILITY

Describe the physical location of the facility.

1. Assessor's Parcel Number(s)	2. Latitude	3. Longitude
Facility: 19-013-300011	**Facility:** 33 Deg 54' 30" N	**Facility:** 118 Deg 25' 25" W
Discharge Point: 002	**Discharge Point:** 33Deg54'27"N	**Discharge Point:** 118Deg25'50"W

IV. REASON FOR FILING

- ☐ New Discharge or Facility
- ☐ Changes in Ownership/Operator (see instructions)
- ☐ Change in Design or Operation
- ☑ Waste Discharge Requirements Update or NPDES Permit Reissuance
- ☐ Change in Quantity/Type of Discharge
- ☐ Other: _____

V. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Name of Lead Agency: Los Angeles Regional Water Quality Control Board

Has a public agency determined that the proposed project is exempt from CEQA? ☑ Yes ☐ No

If Yes, state the basis for the exemption and the name of the agency supplying the exemption on the line below.

Basis for Exemption/Agency: California Water Code Section 13389/Los Angeles RWQCB

Has a "Notice of Determination" been filed under CEQA? ☐ Yes ☑ No

If Yes, enclose a copy of the CEQA document, Environmental Impact Report, or Negative Declaration. If no, identify the expected type of CEQA document and expected date of completion.

Expected CEQA Documents:

☐ **EIR** ☐ **Negative Declaration** **Expected CEQA Completion Date:** N.A.

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

State of California
Regional Water Quality Control Board

APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT

VI. OTHER REQUIRED INFORMATION

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to, design and actual flows, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any Best Management Practices (BMPs) used, and a description of disposal methods.

Also include a site map showing the location of the facility and, if you are submitting this application for an NPDES permit, identify the surface water to which you propose to discharge. Please try to limit your maps to a scale of 1:24,000 (7.5' USGS Quadrangle) or a street map, if more appropriate.

VII. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:

EPA Form 1, EPA Form 2C, Schematic of Water Flow, Operations Description, Site Location Map, Best Management Practices (Storm Water Pollution Prevention Plan), and Characterization Analytical Data

You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your Application/Report of Waste Discharge, pursuant to Division 7, Section 13260 of the California Water Code.

VIII. CERTIFICATION

"I certify under penalty of law that this document, including all attachments and supplemental information, were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Print Name: Ken H. Riesz, Sr.

Title: Plant Manager, El Segundo Power, LLC

Signature:

Date: 5/31/11

By: NRG El Segundo Operations Inc.,
It's Authorized Agent

FOR OFFICE USE ONLY

Date Form 200 Received:	Letter to Discharger:	Fee Amount Received:	Check #:

CONTRIBUTIONS DISCLOSURE STATEMENT

Check the appropriate response:

✓ I certify that El Segundo Power, LLC
(name of applicant)
has not made contributions amounting to $250 or more to any of the current Regional Board members within twelve (12) months of the date of this application for use in a federal, state, or local election.

_____ I certify that _____
(name of applicant)
has made contributions amounting to $250 or more to the following current Regional Board members with in twelve (12) months of the date of this application for use in a federal, state, or local election.

Regional Board Member	Amount of Contribution

Signature Ken Riesz Sr.

Name Ken H. Riesz, Sr.

Title Plant Manager

Date 5/31/11

Organization El Segundo Power, LLC
By: NRG El Segundo Operations Inc.,
It's Authorized Agent

Address 301 Vista del Mar
El Segundo, CA 90245

Phone Number (310) 615-6030

SECTION 2

United States Environmental Protection Agency (USEPA)
Form 1 and Attachments

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		T/A	C
F	CAR000036848		D
1	2 — 13	14	15

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
	16	17	18		19	20	21
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
	22	23	24		25	26	27
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)	X			F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
	28	29	30		31	32	33
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
	34	35	36		37	38	39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	
	40	41	42		43	44	45

III. NAME OF FACILITY

1 | SKIP | EL SEGUNDO Power, LLC

15 | 16 – 29 | 30 — 69

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 Ken H. Riesz, Sr.	(310) 615-6030
15 — 16 — 45	46 — 48 — 49 — 51 — 52 — 55

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX

3 301 Vista Del Mar

15 — 16 — 45

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 El Segundo	CA	90245
15 — 16 — 40	41 — 42	47 — 51

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 301 Vista Del Mar

15 — 16 — 45

B. COUNTY NAME

Los Angeles

46 — 70

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 El Segundo	CA	90245	
15 — 16 — 40	41 — 42	47 — 51	52 — 54

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
4911 (specify) Electric Power Generation	(specify)

C. THIRD	D. FOURTH
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME: NRG El Segundo Operations Inc.

B. Is the name listed in Item VIII-A also the owner? ☐ YES ☑ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

P (specify)

D. PHONE *(area code & no.)*: A (310) 615-6030

E. STREET OR P.O. BOX: 301 Vista Del Mar

F. CITY OR TOWN	G. STATE	H. ZIP CODE	IX. INDIAN LAND
El Segundo	CA	90245	Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*
9 N CA0001147	9 P

B. UIC *(Underground Injection of Fluids)*	E. OTHER *(specify)*
9 U	9 List Attached (specify)

C. RCRA *(Hazardous Wastes)*	E. OTHER *(specify)*
9 R CAR00003648	9 (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

Electric generation.

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Ken H. Riesz, Sr., Plant Manager	[signature]	5/31/11

COMMENTS FOR OFFICIAL USE ONLY

C

EPA Form 3510-1 (8-90)

By: NRG El Segundo Operations Inc.,
It's Authorized Agent

SECTION 2

Attachment 2.1 - Existing Environmental Permits

SECTION 2
ATTACHMENT 2.1

EPA Form 1
SECTION X. Existing Environmental Permits

Other: South Coast Air Quality Management District - Permits to Operate

Description	Permit No.
Boiler (>50 MW) Nat Gas/Resid Oil	115663
Boiler (>50 MW) Nat Gas/Resid Oil	115663
Selective Catalytic Reduction	115663
Selective Catalytic Reduction	115663
Storage Tank (Ammonia)	115663
Title V Permit to Construct and Temporary Permit to Operate	115663

E. **Other: South Coast Air Quality Management District - Other Permits**

Description	Permit No.
Title IV Acid Rain Permit	115663
California and Federal Greenhouse Gas Reporting	115663

E. **Other: CA State Water Resources Control Board / Los Angeles Regional Water Quality Control Board**

Description	Permit No.
Clean Water Act Certificate Section 401	
Industrial Activities Stormwater Site-Specific Permit	CA0001147
Dewatering Activities Stormwater General Permit	CAG994004
Construction Activities Stormwater General Permit	CAS000002

E. **Other: City of El Segundo Fire Department/Environmental Department (CUPA)**

Description	Permit No.
Underground Storage Tank Operating Permit - Aqueous Ammonia Storage Tank	30-0011
Hazardous Waste / Hazardous Materials Management Program	30-0011

E. **Other: City of El Segundo Fire Department**

Description	Permit No.
Fire Prevention Permit	02552-6

E. **Other: United States Army Corps of Engineers**

SECTION 2
ATTACHMENT 2.1

EPA Form 1
SECTION X. Existing Environmental Permits

Description	Permit No.
Nationwide Permit No. 3	SPL-2010-01051-CO

E. **Other: National Marine Fisheries Services**

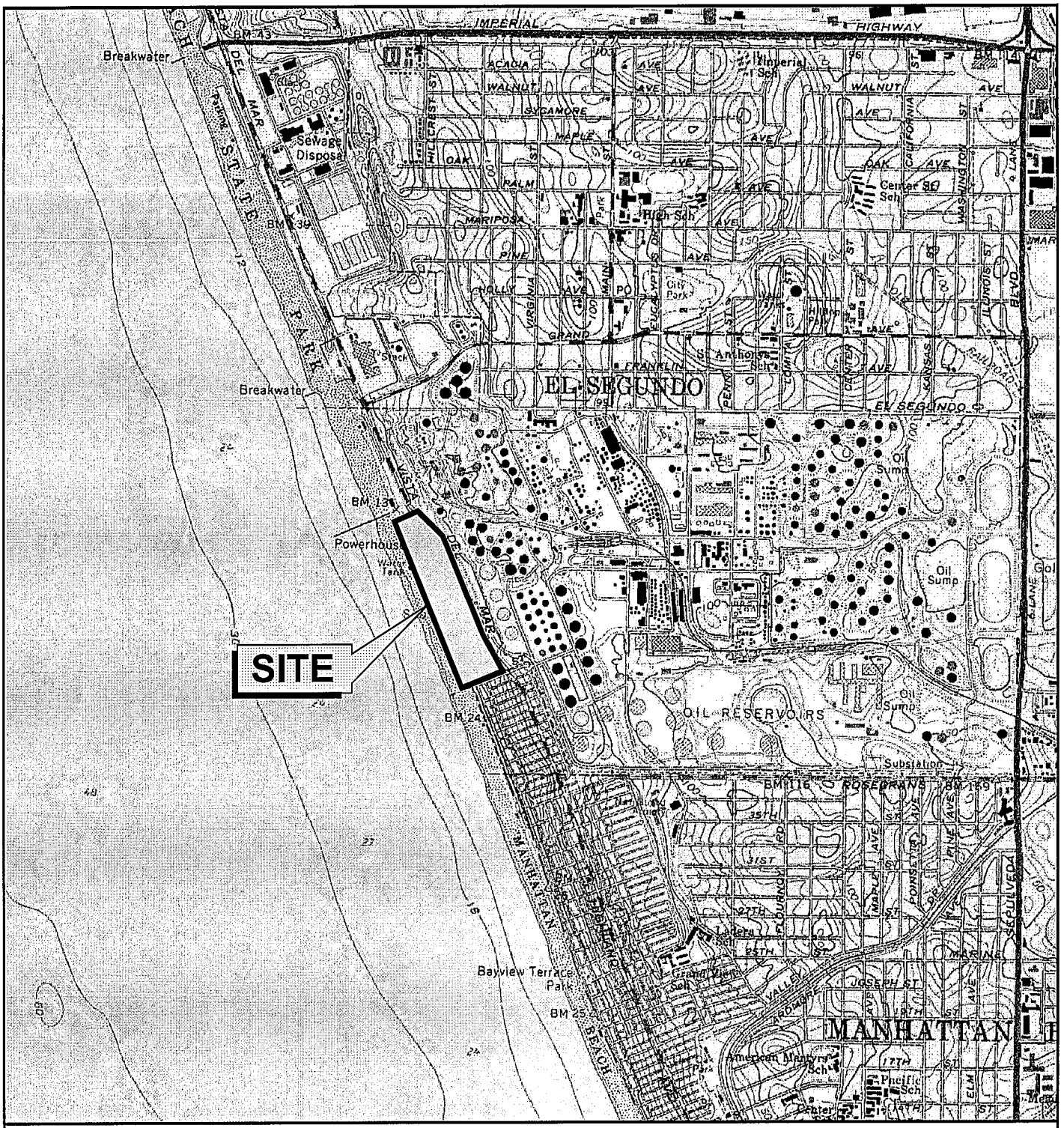
Description	Permit No.
Letter of Authorization to Participate in Marine Mammal Stranding Network	N/A

E. Other: State Lands

Description	Permit No.
State Lands - Lease (Rock Revetment)	PRC 5628.9
State Lands - Lease (Cooling Tunnels)	PRC 858.1

SECTION 2

Attachment 2.2 – Site Location Map



SCALE 1:24000

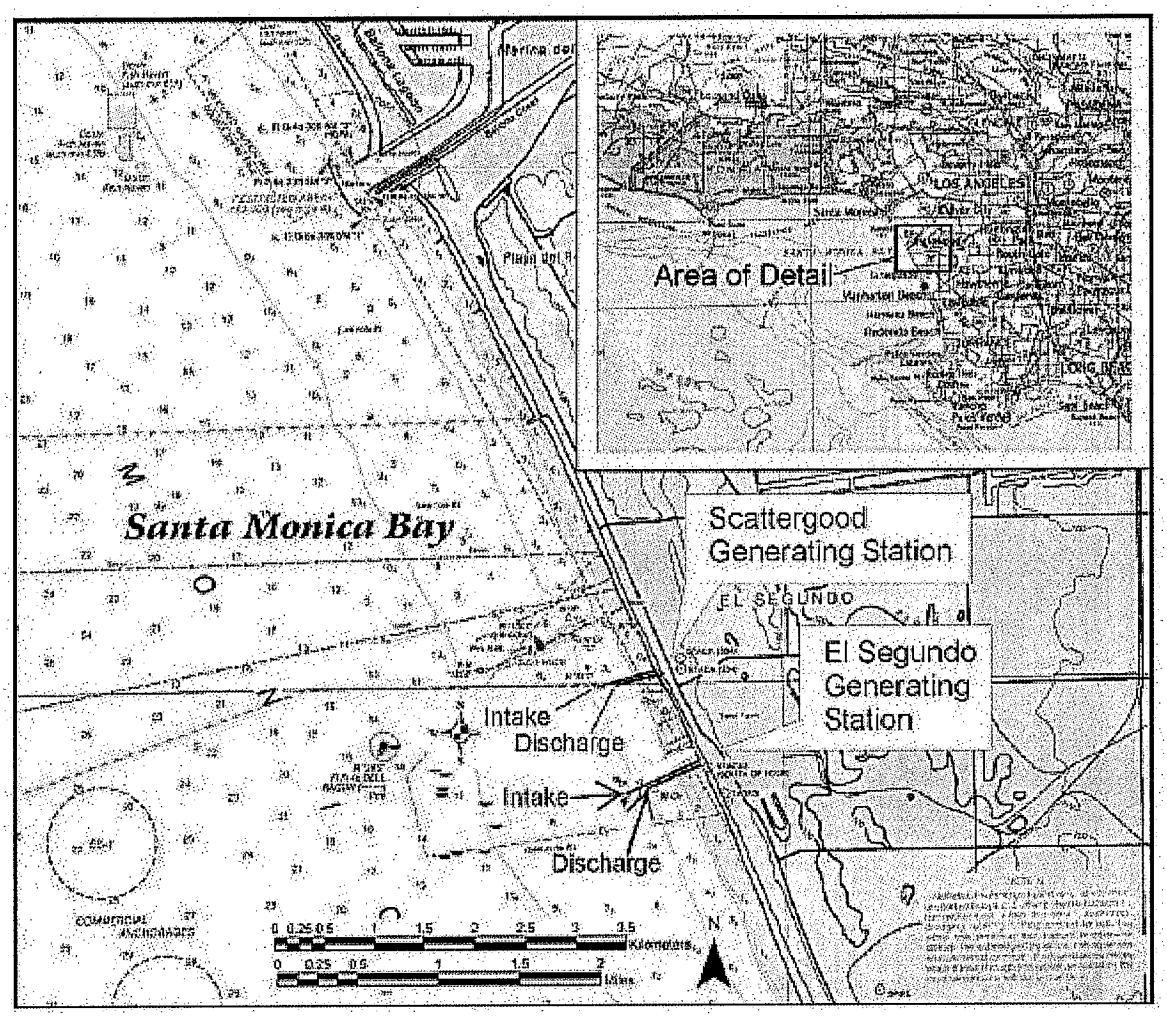
1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

SGI environmental THE SOURCE GROUP, INC.	FILE NAME: NRG–ELS–SL DATE: 08/09 SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE MAP VENICE, CA	**SITE LOCATION MAP** 301 VISTA DEL MAR BOULEVARD EL SEGUNDO, CALIFORNIA	**FIGURE** 1

SECTION 2

Attachment 2.3 – El Segundo Generating Station Map Showing Location of Cooling Water Intake and Discharge Point



Reference: NOAA Chart #18744 "Santa Monica Bay".

Figure 2: Location of Cooling Water Intake and Discharge Points

SECTION 3

USEPA Form 2C and Attachments

Please print or type in the unshaded areas only.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)
CAR000036848

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

FORM 2C NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
002	33.00	54.00	27.00	118.00	25.00	50.00	Pacific Ocean

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
002	Condenser Cooling	398.6 MGD	Ocean Discharge	4-B	
	*Water Tank Hydro-static Test Water	0.45 MGD	Retention & Ocean Discharge	4-B	
	Storm Drains	Negilgible	Oil Removal & Ocean Discharge	1-H	
	Unit 3 & 4 Oil Waste Sump (Floor Drains)	0.10 MGD	Oil Removal, Retention & Ocean Discharge	1-H	
	Chemical Laboratory Drains	Negilgible	Retention & Ocean Discharge	4-B	
	Fire Hydrant Test Water	Negilgible	Oil Removal & Ocean Discharge	1-H	
	Unit 3 & 4 Boiler Blowndown	0.013 MGD	Retention & Ocean Discharge	4-B	
	Unit 3 & 4 Demineralizer	0.045 MGD	Reverse Osmosis	1-S	
	Unit 3 & 4 Condenser Sump	0.015 MGD	Oil Removal, Retention & Ocean Discharge	1-H	

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

* - Estimated Maximum Daily Flows

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☑ YES (*complete the following table*) ☐ NO (*go to Section III*)

1. OUTFALL NUMBER (*list*)	2. OPERATION(s) CONTRIBUTING FLOW (*list*)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (*specify average*)	b. MONTHS PER YEAR (*specify average*)	a. FLOW RATE (*in mgd*)		B. TOTAL VOLUME (*specify with units*)		C. DURATION (*in days*)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
002	* Water tank hydrotest is based on largest tank volume.							

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☑ YES (*complete Item III-B*) ☐ NO (*go to Section IV*)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (*or other measure of operation*)?

☐ YES (*complete Item III-C*) ☑ NO (*go to Section IV*)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (*list outfall numbers*)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (*specify*)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (*complete the following table*) ☑ NO (*go to Item IV-B*)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (*or other environmental projects which may affect your discharges*) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)
CAR000036848

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (*list all such pollutants below*) ☑ NO (*go to Item VI-B*)

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☑ YES (*identify the test(s) and describe their purposes below*) ☐ NO (*go to Section VIII*)

Quarterly Chronic Toxicity Tests (EPA-600/R-95/136) Methods. Test were conducted in years 2008 through 2011 on recieving and effluent discharge waters using abalone, sliversides, top smelt, sea urchin, and kelp species. Toxicity Units Chronic (TUCs) values are typically 1.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☑ YES (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ NO (*go to Section IX*)

A. NAME	B. ADDRESS	C. TELEPHONE (*area code & no.*)	D. POLLUTANTS ANALYZED (*list*)
CalScience Environmental Laboratories, Inc.	7440 Lincoln Way, Garden Grove, CA 92...	(714)695-5494	BOD, TSS, Cyanide, , and Ammonium Nitrate,Residual Chlorine, Settelable, Solids, and Oil and Grease,
Applied Laboratories	1538 West Gaylord Street, Long Beach, CA 90813	(562) 496-9500	Fecal and Total Coliform, Enterococcus
SCE Power Prodcution Chemical Laboratory	7301 Fenwick lane, 2nd Floor, Westminster, CA 92683	(714)895-0525	Nitrate, pH, and TSS
Pace Analytical Services, Inc.	PO Box 158, Madison, PA 15663	(724)722-5407	Dioxins
Weck Laboratories	14859 East Clark Avenue, City of Industry, CA 91745	(626) 336-5354	Organics, VOCs

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (*type or print*)	B. PHONE NO. (*area code & no.*)
Ken H. Riesz, Sr., Plant Manager	(310) 615-6030
C. SIGNATURE	D. DATE SIGNED
[signature] Sr.	5/31/11

By: NRG El Segundo Operations, Inc.,
It's Authorized Agent

EL SEGUNDO GENERATING STATION
NPDES PERMIT (CA0001350) RENEWAL APPLICATION (6/1/2011)
EPA NPDES Application Form 2C - Section V, Part A

EPA ID No. CAT 000 618 900												
V. Intake and Effluent Characteristics											**Outfall No. 002**	
Part A.												
Pollutant	**Effluent**							**Units**		**Intake**		
	Maximum Daily Value		**Maximum 30 Day Value**		**Long Term Avrg Value**		**No. of**			**Long Term Avrg Value**		**No. of**
	Conc	**Mass**	**Conc**	**Mass**	**Conc**	**Mass**	**Analyses**	**Conc**	**Mass**	**Conc**	**Mass**	**Analyses**
a. Biochemical Oxygen Demand	<0.58	<0.73					1	mg/L	tons			
b. Chemical Oxygen Demand	220	275.04					1	mg/L	tons			
c. Total Organic Carbon	0.13	0.16					1	mg/L	tons			
d. Total Suspended Solids	18.8	23.50					1	mg/L	tons			
e. Ammonia (as N)	<0.094	<0.2350					1	ug/l	lbs			
f. Flow	Value=299.8						9	MGD				
g. Temperature (winter)	Discharge Value = 76.9						1	Deg - F				
h. Temperature (summer)	Discharge Value = 79.6						1	Deg - F				
i. pH	Min=8.02	Max=8.17					9	Standard Units				

Note:
1) "<" indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2). Temperature (winter) value is maximum temperature reading from December 2010. Temperature (summer) value is maximum temperature reading from June 2010.

EL SEGUNDO GENERATING STATION
NPDES PERMIT (CA0001350) RENEWAL APPLICATION (6/1/2011)
EPA NPDES Application Form 2C - Section V, Part B

EPA ID No. CAT 000 618 900																
V. Intake and Effluent Characteristics																Outfall No. 002
Part B.																
Pollutant	CAS No.	Mark X		Effluent							Units		Intake			
		Believed Present	Believed Absent	Maximum Daily Value		Maximum 30 Day Value		Long Term Avrg Value		No. of Analyses			Long Term Avrg Value		No. of Analyses
				Conc	Mass	Conc	Mass	Conc	Mass		Conc	Mass	Conc	Mass	
a. Bromide	24959-67-9	X		68	85					1	mg/L	tons			
b. Chlorine, Total Residual		X		<0.03	<75.01					1	mg/L	lbs			
c. Color		X		5						1	color units	N/A			
d. Fecal Coliform		X		20						1	MPN/100ml	N/A			
e. Fluoride	16984-48-8	X		0.92	2300					1	mg/L	lbs			
f. Nitrate-Nitrite (as N)		X		<0.1	<250.03					1	mg/L	lbs			
g. Nitrogen, Total Organic (as N)		X		1.4	3500					1	mg/L	lbs			
h. Oil and Grease		X		1	2500					1	mg/L	lbs			
i. Phosphorus, (as P) Total	7723-14-0	X		0.28	700					1	mg/L	lbs			
j(1). Radioactivity: Alpha, Total			X												
j(2). Radioactivity: Beta, Total			X												
j(3). Radioactivity: Radium, Total			X												
j(4). Radioactivity: Radium 226, Total			X												
k. Sulfate (SO4)	14808-79-8	X		2330	2913					1	mg/L	tons			
l. Sulfide (as S)		X		<0.042	<0.05					1	mg/L	tons			
m. Sulfite (as SO3)	14265-45-3	X		<1	<2500.33					1	mg/L	lbs			
n. Surfactants		X		<0.089	<0.11					1	mg/L	tons			
o. Aluminum, Total	7429-90-5	X		91.4	229					1	ug/L	lbs			
p. Barium, Total	7440-39-3	X		1.77	4					1	ug/L	lbs			
q. Boron, Total	7440-42-8	X		1660	4151					1	ug/L	lbs			
r. Cobalt, Total	7440-48-4	X		<0.07	<0.18					1	ug/L	lbs			
s. Iron, Total	7439-89-6	X		177	443					1	ug/L	lbs			
t. Magnesium, Total	7439-95-4	X		1210	3025					1	ug/L	lbs			
u. Molybdenum, Total	7439-98-7	X		14.4	36					1	ug/L	lbs			
v. Manganese, Total	7439-96-5	X		<3.10	<7.75					1	ug/L	lbs			
w. Tin, Total	7440-31-5	X		<1.83	<4.58					1	ug/L	lbs			
x. Titanium, Total	7440-32-6	X		7.23	18					1	ug/L	lbs			

Note:

1) "<" indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2) Mass emissions were calculated using the flow measured during the sampling period: 299.8 MGD (effluent)

EL SEGUNDO GENERATING STATION
NPDES PERMIT (CA0001350) RENEWAL APPLICATION (6/1/2011)
EPA NPDES Application Form 2C - Section V, Part C

EPA ID No. CAT 000 618 900																	
V. Intake and Effluent Characteristics																	**Outfall No. 002**
Part C.																	
Pollutant	**CAS No.**	**Mark X**			**Effluent**							**Units**		**Intake**			
		Testing Required	**Believed Present**	**Believed Absent**	**Maximum Daily Value**		**Maximum 30 Day Value**		**Long Term Avrg Value**		**No. of Analyses**			**Long Term Avrg Value**		**No. of Analyses**
					Conc	**Mass**	**Conc**	**Mass**	**Conc**	**Mass**		**Conc**	**Mass**	**Conc**	**Mass**	
Metals, Cyanide, and Total Phenols																
Total Antimony	7440-36-0	X			<1.90	<4.75					1	ug/l	lbs			
Total Arsenic	7440-38-2	X			<2.94	<7.35					1	ug/l	lbs			
Total Beryllium	7440-41-7	X			1.81	4.53					1	ug/l	lbs			
Total Cadmium	7440-43-9	X			<1.33	<3.33					1	ug/l	lbs			
Total Chromium	7440-47-3	X			<3.09	<7.73					1	ug/l	lbs			
Hexavalent Chromium		X				0.00					1	ug/l				
Total Copper	7440-50-8	X			5.4	13.50					1	ug/l	lbs			
Total Lead	7439-92-1	X			0.95	2.38					1	ug/l	lbs			
Total Mercury	7439-97-6	X			<0.0348	<0.09					1	ug/l	lbs			
Total Nickel	7440-02-0	X			1.45	3.63					1	ug/l	lbs			
Total Selenium	7782-49-2	X			5.78	14.45					1	ug/l	lbs			
Total Silver	7440-22-4	X			<0.60	<1.50					1	ug/l	lbs			
Total Thallium	7440-28-0	X			<2.49	<6.23					1	ug/l	lbs			
Total Zinc	7440-66-6	X			36.5	91.26					1	ug/l	lbs			
Total Cyanide	57-12-5	X			<0.007	<17.50					1	mg/L	lbs			
Total Phenols		X			1.3	3250.43					1	mg/L	lbs			
Dioxin																
2,3,7,8-Tetrachlorodibenso-P-Dioxin	1746-01-6			X												
GS/MS Fraction - Volatile Compounds																
1V acrolein	107-02-8	X			<2.2	<6					1	ug/l	lbs			
2V acrylonitrile	107-13-1	X			<1.8	<5					1	ug/l	lbs			
3V benzene	71-43-2	X			<0.23	<.6					1	ug/l	lbs			
4V bis (Chloromethyl) Ether	542-88-1	N/A*			<1.0	<2.5					1	ug/l	lbs			
5V bromoform	75-25-2	X			<0.32	<.8					1	ug/l	lbs			
6V carbon tetrachloride	56-23-5	X			<0.33	<.8					1	ug/l	lbs			
7V chlorobenzene	108-90-7	X			<0.21	<.5					1	ug/l	lbs			
8V chlorodibromomethane	124-48-1	X			<0.38	<1.					1	ug/l	lbs			
9V chloroethane	75-00-3	X			<0.23	<.6					1	ug/l	lbs			
10V 2-chloroethylvinyl ether	110-75-8	X			<0.28	<.7					1	ug/l	lbs			
11V chloroform	67-66-3	X			<0.25	<.6					1	ug/l	lbs			
12V dichlorobromomethane	75-27-4	X			<0.28	<.7					1	ug/l	lbs			
13V dichlorodifluoromethane	75-71-8	N/A*			<0.44	<1.1					1	ug/l	lbs			
14V 1,1-dichloroethane	75-34-3	X			<0.21	<.5					1	ug/l	lbs			
15V 1,2-dichloroethane	107-06-2	X			<0.24	<.6					1	ug/l	lbs			
16V 1,1-dichloroethylene	75-35-4	X			<0.18	<.5					1	ug/l	lbs			
17V 1,2-dichloropropane	78-87-5	X			<0.18	<.5					1	ug/l	lbs			
18V 1,3-dichloropropylene	542-75-6	X			<0.22	<.6					1	ug/l	lbs			
cis-1,3-dichloropropene	10061-01-5															
19V ethylbenzene	100-41-4	X			<0.17	<.4					1	ug/l	lbs			
20V methyl bromide	74-83-9	X			<0.47	<1.2					1	ug/l	lbs			
21V methyl chloride	74-87-3	X			<0.26	<.7					1	ug/l	lbs			
22V methylene chloride	75-09-2	X			<0.25	<.6					1	ug/l	lbs			
23V 1,1,2,2-tetrachloroethane	79-34-5	X			<0.18	<.5					1	ug/l	lbs			
24V tetrachloroethylene	127-18-4	X			<0.27	<.7					1	ug/l	lbs			
25V toluene	108-88-3	X			<0.22	<.6					1	ug/l	lbs			
26V 1,2-trans-dichloroethylene	156-60-5	X			<0.23	<.6					1	ug/l	lbs			
27V 1,1,1-trichloroethane	71-55-6	X			<0.38	<1.					1	ug/l	lbs			
28V 1,1,2-trichloroethane	79-00-5	X			<0.25	<.6					1	ug/l	lbs			
29V trichloroethylene	79-01-6	X			<0.37	<.9					1	ug/l	lbs			
30V trichlorofluoromethane	75-69-4	N/A*			<0.43	<1.1					1	ug/l	lbs			
31V vinyl chloride	75-01-4	X			<0.33	<.8					1	ug/l	lbs			
32V tributyltin (Note 3)		X									1	ug/l	lbs			
GS/MS Fraction - Acid Compounds																
1A 2-chlorophenol	95-57-8	X			<0.71	<1.8					1	ug/l	lbs			

EL SEGUNDO GENERATING STATION
NPDES PERMIT (CA0001350) RENEWAL APPLICATION (6/1/2011)
EPA NPDES Application Form 2C - Section V, Part C

EPA ID No. CAT 000 618 900

V. Intake and Effluent Characteristics — Outfall No. 002

Part C.

Pollutant	CAS No.	Mark X: Testing Required	Mark X: Believed Present	Mark X: Believed Absent	Effluent: Maximum Daily Value Conc	Effluent: Maximum Daily Value Mass	Effluent: Maximum 30 Day Value Conc	Effluent: Maximum 30 Day Value Mass	Effluent: Long Term Avrg Value Conc	Effluent: Long Term Avrg Value Mass	Effluent: No. of Analyses	Units: Conc	Units: Mass	Intake: Long Term Avrg Value Conc	Intake: Long Term Avrg Value Mass	Intake: No. of Analyses
2A 2,4-dichlorophenol	120-83-2	X			<0.77	<1.9					1	ug/l	lbs			
3A 2,4-dimethylphenol	105-67-9	X			<0.80	<2.					1	ug/l	lbs			
4A 4,6-dinitro-o-cresol	534-52-1	X			<0.33	<.8					1	ug/l	lbs			
5A 2,4-dinitrophenol	51-28-5	X			<5.0	<12.5					1	ug/l	lbs			
6A 2-nitrophenol	88-75-5	X			<0.84	<2.1					1	ug/l	lbs			
7A 4-nitrophenol	100-02-7	X			<6.7	<16.8					1	ug/l	lbs			
8A p-chloro-m-cresol	59-50-7	X			<0.40	<1.					1	ug/l	lbs			
9A pentachlorophenol	87-86-5	X			<0.56	<1.4					1	ug/l	lbs			
10A phenol	108-95-2	X			<0.30	<.8					1	ug/l	lbs			
11A 2,4,6-trichlorophenol	88-06-2	X			<0.88	<2.2					1	ug/l	lbs			
GS/MS Fraction - Base/Neutral Compounds																
1B acenaphthene	83-32-9	X			<0.31	<.8					1	ug/l	lbs			
2B acenaphthylene	208-96-8	X			<0.26	<.7					1	ug/l	lbs			
3B anthracene	120-12-7	X			<0.28	<.7					1	ug/l	lbs			
azobenzene	103-33-3															
4B benzidine	92-87-5	X			<0.70	<1.8					1	ug/l	lbs			
5B benzo(a)anthracene	56-55-3	X			<0.19	<.5					1	ug/l	lbs			
6B benzo(a)pyrene	50-32-8	X			<0.20	<.5					1	ug/l	lbs			
7B 3,4-benzofluoranthene	205-99-2	X			<0.16	<.4					1	ug/l	lbs			
8B benzo(ghi)perylene	191-24-2	X			<0.31	<.8					1	ug/l	lbs			
9B benzo(k)fluoranthene	207-08-9	X			<0.23	<.6					1	ug/l	lbs			
10B bis(2-chloroethoxy)methane	111-91-1	X			<0.40	<1.					1	ug/l	lbs			
11B bis(2-chloroethyl)ether	111-44-4	X			<0.46	<1.2					1	ug/l	lbs			
12B bis(2-chloroisopropyl)ether	102-60-1	X			<0.48	<1.2					1	ug/l	lbs			
13B bis(2-ethylhexyl)phthalate	117-81-7	X			<2.6	<6.5					1	ug/l	lbs			
14B 4-bromophenyl phenyl ether	101-55-3	X			<0.23	<.6					1	ug/l	lbs			
15B butylbenzyl phthalate	85-68-7	X			<1.0	<2.5					1	ug/l	lbs			
16B 2-chloronaphthalene	91-58-7	X			<0.26	<.7					1	ug/l	lbs			
17B 4-chlorophenyl phenyl ether	7005-72-3	X			<0.24	<.6					1	ug/l	lbs			
18B chrysene	218-01-9	X			<0.25	<.6					1	ug/l	lbs			
19B dibenzo(a,h)anthracene	53-70-3	X			<0.32	<.8					1	ug/l	lbs			
20B 1,2-dichlorobenzene	95-50-1	X			<0.30	<.8					1	ug/l	lbs			
21B 1,3-dichlorobenzene	541-73-1	X			<0.36	<.9					1	ug/l	lbs			
22B 1,4-dichlorobenzene	106-46-7	X			<0.32	<.8					1	ug/l	lbs			
23B 3,3-dichlorobenzidine	91-94-1	X			<0.30	<.8					1	ug/l	lbs			
24B diethyl phthalate	84-66-2	X			<0.23	<.6					1	ug/l	lbs			
25B dimethyl phthalate	131-11-3	X			<0.26	<.7					1	ug/l	lbs			
26B di-n-butyl phthalate	84-74-2	X			0.91	<2.3					1	ug/l	lbs			
27B 2,4-dinitrotoluene	121-14-2	X			<0.40	<1.					1	ug/l	lbs			
28B 2,6-dinitrotoluene	606-20-2	X			<0.24	<.6					1	ug/l	lbs			
29B di-n-octyl phthalate	117-84-0	X			<0.28	<.7					1	ug/l	lbs			
30B 1,2-diphenylhydrazine (as azobenzene)	122-66-7	X			<0.35	<.9					1	ug/l	lbs			
31B fluoranthene	206-44-0	X			<0.16	<.4					1	ug/l	lbs			
32B fluorene	86-73-7	X			<0.28	<.7					1	ug/l	lbs			
33B hexachlorobenzene	118-74-1	X			<0.15	<.4					1	ug/l	lbs			
34B hexachlorobutadiene	87-68-3	X			<0.41	<1.					1	ug/l	lbs			
35B hexachlorocyclopentadiene	77-47-4	X			<5.0	<12.5					1	ug/l	lbs			
36B hexachloroethane	67-72-1	X			<0.36	<.9					1	ug/l	lbs			
37B indeno(1,2,3-cd)pyrene	193-39-5	X			<0.32	<.8					1	ug/l	lbs			
38B isophorone	78-59-1	X			<0.33	<.8					1	ug/l	lbs			
39B naphthalene	91-20-3	X			<0.35	<.9					1	ug/l	lbs			
40B nitrobenzene	98-95-3	X			<0.37	<.9					1	ug/l	lbs			
41B N-nitrosodimethylamine	62-75-9	X			<0.36	<.9					1	ug/l	lbs			
42B N-nitrosodi-n-propylamine	621-64-7	X			<0.36	<.9					1	ug/l	lbs			
43B N-nitrosodiphenylamine	86-30-6	X			<0.23	<.6					1	ug/l	lbs			
44B phenanthrene	85-01-8	X			<0.25	<.6					1	ug/l	lbs			

EL SEGUNDO GENERATING STATION
NPDES PERMIT (CA0001350) RENEWAL APPLICATION (6/1/2011)
EPA NPDES Application Form 2C - Section V, Part C

EPA ID No. CAT 000 618 900																	
V. Intake and Effluent Characteristics																	**Outfall No. 002**
Part C.																	
Pollutant	**CAS No.**	**Mark X**			**Effluent**							**Units**		**Intake**			
		Testing Required	**Believed Present**	**Believed Absent**	**Maximum Daily Value**		**Maximum 30 Day Value**		**Long Term Avrg Value**		**No. of Analyses**			**Long Term Avrg Value**		**No. of Analyses**
					Conc	**Mass**	**Conc**	**Mass**	**Conc**	**Mass**		**Conc**	**Mass**	**Conc**	**Mass**	
45B pyrene	129-00-0	X			<0.16	<.4					1	ug/l	lbs			
46B 1,2,4-trichlorobenzene	120-82-1	X			<0.26	<.7					1	ug/l	lbs			
GS/MS Fraction - Pesticide Compounds																
1P aldrin	309-00-2	X			<0.0015	<0.004					1	ug/l	lbs			
2P alpha-BHC	319-84-6	X			<0.0018	<0.005					1	ug/l	lbs			
3P beta-BHC	319-85-7	X			<0.0031	<0.008					1	ug/l	lbs			
4P gamma-BHC	58-89-9	X			<0.0021	<0.005					1	ug/l	lbs			
5P delta-BHC	319-86-8	X			<0.0025	<0.006					1	ug/l	lbs			
6P chlordane	57-74-9	X			<0.080	<0.200					1	ug/l	lbs			
7P 4,4-DDT	50-29-3	X			<0.0031	<0.008					1	ug/l	lbs			
8P 4,4-DDE	72-55-9	X			<0.0025	<0.006					1	ug/l	lbs			
9P 4,4-DDD	72-54-8	X			<0.0030	<0.008					1	ug/l	lbs			
10P dieldrin	60-57-1	X			<0.0021	<0.005					1	ug/l	lbs			
11P alpha-endosulfan	115-29-7	X			<0.0017	<0.004					1	ug/l	lbs			
12P beta-endosulfan	115-29-7	X			<0.0019	<0.005					1	ug/l	lbs			
13P endosulfan sulfate	1031-07-8	X			<0.0080	<0.020					1	ug/l	lbs			
14P endrin	72-20-8	X			<0.0028	<0.007					1	ug/l	lbs			
15P endrin aldehyde	7421-93-4	X			<0.0030	<0.008					1	ug/l	lbs			
16P heptachlor	76-44-8	X			<0.0017	<0.004					1	ug/l	lbs			
17P heptachlor epoxide	1024-57-3	X			<0.0019	<0.005					1	ug/l	lbs			
18P PCB-1242	53469-21-9	X			<0.070	<0.175					1	ug/l	lbs			
19P PCB-1254	11097-69-1	X			<0.040	<0.100					1	ug/l	lbs			
20P PCB-1221	11104-28-2	X			<0.060	<0.150					1	ug/l	lbs			
21P PCB-1232	11141-16-5	X			<0.15	<0.375					1	ug/l	lbs			
22P PCB-1248	12672-29-6	X			<0.060	<0.150					1	ug/l	lbs			
23P PCB-1260	11096-82-5	X			<0.040	<0.100					1	ug/l	lbs			
24P PCB-1016	12674-11-2	X			<0.050	<0.125					1	ug/l	lbs			
25P toxaphene	8001-35-2	X			<0.12	<0.300					1	ug/l	lbs			

N/A* - This pollutant has been deleted from Table II in 40 CFR 122.21, therefore testing is not required.

1) "<" indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2) Mass emissions were calculated using the flow measured during the sampling period: 299.8 MGD (effluent)

3) This chemical is being tested for per Table B of the 2001 California Ocean Plan.

SECTION 3

Attachment 3.1 – Section II.A and II.B – Flows, Sources of Pollution, and Treatment Technologies

Attachment 3.1
Flows, Sources of Pollution, Treatment Technologies

EPA FORM 2C
ATTACHMENT 3.1

SECTION II.A AND II.B – FLOWS, SOURCES OF POLLUTION AND TREATMENT TECHNOLOGIES

Introduction

This attachment addresses sections II.A and II.B, Flows, Sources of Pollution, and Treatment Technologies in EPA Form 2C. As required in section II.A, Figure 3.1 is a water flow schematic and depicts the plant's discharge sources with their associated estimated maximum daily discharge flows.

Once Through Cooling Water (Figure 3.1)

Cooling Water –Cooling water is withdrawn from the Santa Monica Bay through a submerged offshore intake system equipped with a velocity cap. The cooling water intake system (CWIS) includes onshore pump and screen structures. Cooling water is withdrawn through a velocity cap inlet located approximately 2,600 ft from the onshore seawall. The bottom of the cooling water inlet is located at a depth of approximately 10 ft above the bottom of the Santa Monica Bay. The top of the velocity cap is located at a depth of approximately 16 ft below MLLW. Water is drawn through an approximately 3 foot deep opening. The circulating water flow is conveyed to the onshore screen well structure via a concrete pipe with an internal diameter of 12 ft. Water entering the screen well structure passes through a trash rack that removes larger debris from the cooling water before it enters the traveling screens. There are four conventional traveling screens (two per unit) with 3/8 inch mesh. There is one circulating water pump for each screen. Each pump is rated at 69,200 gallons per minute ("gpm"), for a total design offshore cooling water flow of 276,800 gpm, or 398.6 mgd total capacity. The circulating water pumps have bronze bearings that are sealed and lubricated with fresh water. There are no fish handling or return systems. Cooling water is discharged approximately 2,100 ft offshore via a 12 ft diameter discharge pipe.

When both units are operated at full loads, both circulating water pumps are operated for each unit. Traveling screens are rotated at least twice per day to remove impinged debris, which may include aquatic organisms. A screen-wash is initiated by operations personnel once per 12-hour shift. Screens are rotated for 8 minutes, and are washed with water at a pressure of 70 psig. Screens are also rotated automatically if there is a substantial increase in the differential pressure across the screens. Fish and debris removed from the screens are washed into a collection basket which is emptied into the trash by plant staff. The intakes that service the two units conduct heat treatments of the cooling water systems several times per year to remove mussels, barnacles, and other organisms which foul the cooling water intake conduit. The intake and discharge flow are reversed to discharge the warmer condenser effluent through the cooling water intake conduit to thermally shock, kill; and dislodge any fouling organisms.

During normal operation non-contact cooling water passes through the condensers and heat exchangers and then returns to the Pacific Ocean via a discharge channel.

Sodium Hypochlorite Injection – To control biological growths (defouling), the condenser tubes (arranged in two banks per generating unit, each bank is called condenser half) are treated by intermittently and mechanically injecting chlorine (in the form of sodium hypochlorite), for a maximum of two (2) hours per generating unit per day, into the cooling water stream.

Heat Treatment – Marine fouling of the cooling water conduits (intake and discharge) is controlled by temporarily recirculating (thus increasing the temperature) and reversing the flow of the once-through cooling water alternately in each offshore conduit (i.e., the discharge point becomes the intake point, and the intake point becomes the discharge point). This procedure (referred to as "heat treatment") is typically conducted every six (6) weeks and lasts for about six hours per conduit with the highest temperature lasting for one hour during gate adjustment. During the heat treatment, the temperature of the water discharged through the intake conduit must be raised to 105°F for one hour to remove the fouling organisms. The discharge limit of the effluent is 125°F. During gate adjustments, the discharge temperature is allowed limited to reach 135°F for no more than 30 minutes. Gate adjustments control the temperature of the water recirculated in the intake and discharge points during heat treatment. As a result of heat treatments, calcareous shell debris accumulates in the intake structure. This shell debris is physically removed and disposed in the Ocean as required.

Cooling Water Forebay & Traveling Screens – Cleaning of the cooling water forebay is conducted periodically to remove accumulated shells and sediment. Water from the forebay cleaning is pumped to a decanting waste bin, filtered and returned to the forebay. Materials cleaned from the pumps and forebay are collect in bins and disposed of as waste. Waste that accumulates on the traveling screens are removed as needed and disposed of at an off-site disposal facility.

Low Volume Wastewater

Multiple sources of wastewater contribute to the plant's combined low volume wastewater (LVW) discharge to the cooling water system. Waste streams including floor drains, boiler blowdown, reverse osmosis reject water, condenser sump and chemical laboratory drains are routed to an oil water separator and then to the retention basin for treatment prior to discharge to the cooling water system. The LVW treatment system was designed to remove total suspended solids, and oil and grease, in order to ensure the plant's compliance with the Stream Electric Guidelines' effluent limits for LVW.

As a result of the plant's housekeeping practices, the amount of solids and oil that reach the treatment facility is greatly minimized. Consequently, very little oil or solids accumulate at the LVW treatment system. Residues in the basins, pretreatment wastes, and oil sludge from oil/water separators are periodically hauled away to legal disposal sites.

Reverse Osmosis System

Units 3 and 4 require boiler makeup during operation. The makeup water must be ultra pure water to prevent scaling and wear on equipment. The makeup feed water is from a municipal water source from the city of El Segundo. The feed water is sent through a reverse osmosis (RO) system on site. The RO system consists of carbon vessels, various pH adjusting and antiscalant injection systems, RO membranes, and mixed bed demineralizer resins. The RO system can be operated in single pass or two pass mode. The RO system can generate up to 72,000 gallons per day of reject water which is directed to the oil water separator and then to the retention basin for treatment prior to discharge to the Pacific Ocean through Discharge Serial No. 002.

Storm Water - Storm water runoff collected in drop inlets throughout the site and passed through oil/water separators before combining with the cooling water prior to discharge to the Pacific Ocean through Discharge Serial No. 002. However, storm water run-on from upslope of the facility flows into an easement conveyance and pipe and then to the beach without commingling with the industrial activity associated with the site.

Fire Hydrant Testing – Fire hydrants are tested (monthly, quarterly) as a preventative maintenance. Different hydrants are opened for approximately 5 minutes. Runoff is directed to the nearest storm drain. This run off is considered negligible.

New Units 5, 6, 7 & 8

The new Units 5, 6, 7, and 8, currently under construction, are Rapid Response Combined Cycle (R2C2) design and will consist of two gas turbine generators, two heat recovery steam generators, and two steam turbine generators utilizing air cooled heat exchangers for cycle heat rejection. The R2C2 air cooled design does not utilize once-through cooling technology. The new units design also will employ recycling technology for all process wastewater flows and flows from process areas (floor drains, etc.). The wastewater flows will all be captured and fed back to the raw water tank where they will be treated by the plant demineralizer system for use as boiler makeup water or evaporative cooler makeup water. Solid waste from the demineralizer system will be shipped offsite for disposal at an appropriate facility.

SECTION 3

Figure 3.1 – Water Mass Balance Schematic

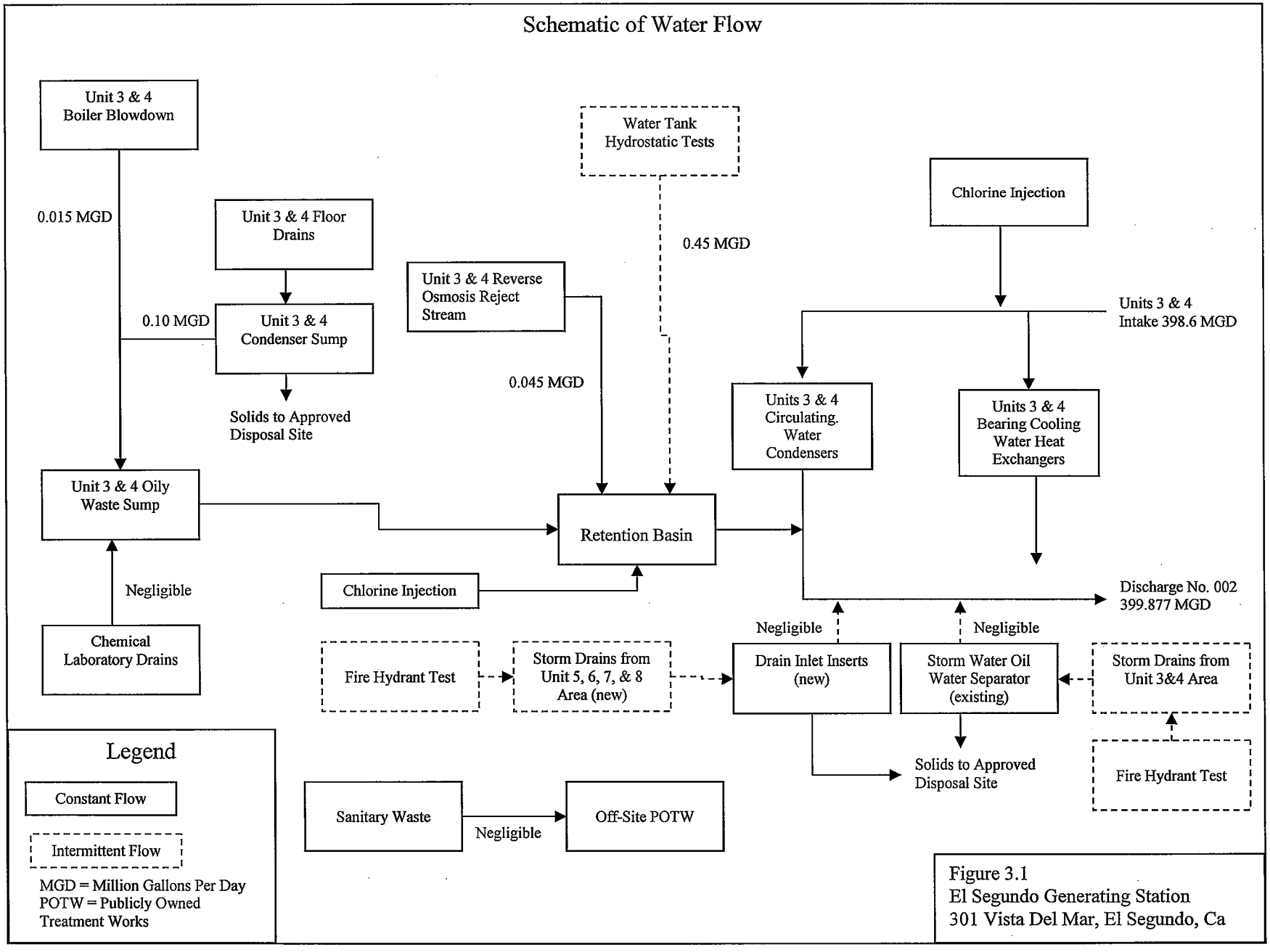


Figure 3.1
El Segundo Generating Station
301 Vista Del Mar, El Segundo, Ca

SECTION 3

Attachment 3.2 – Requested Permit Changes

EPA FORM 2C
ATTACHMENT 3.2

REQUESTED CHANGES

ESP suspended discharge through Outfall No. 001 in May 2010. Suspension of flow from outfall 001 was made in preparation for demolition of Unit 1 & 2, and site preparation activities related to the construction of new power generating equipment. The demolition and new construction is licensed under the California Energy Commission (CEC). The CEC in February 2005 issued a Final Decision (i.e., license) approving the repowering project with conditions. On June 18, 2007, ESP filed a petition to amend ("PTA") the license with the CEC. ESP subsequently filed an amendment with the CEC to change the owner and name of the "R2C2" project to El Segundo Energy Center LLC and El Segundo Energy Center ("ESEC"), respectively. The PTA proposed the replacement of Units 1 and 2 with two trains of fast start, highly efficient combined cycle generation, referred to as rapid response combined cycle, or "R2C2" (Units 5, 6, 7 and 8). Each train, when constructed will consist of one gas turbine generator, one heat recovery steam generator, and one steam turbine generator. The combustion turbines are referred to as Units 5 and 7, while the steam turbines are referred to as Units 6 and 8. The repowered units are expected to have a capacity of 560 MW. ESEC will utilize air cooled condensers which do not use cooling water from the ocean, equivalent to that of dry cooling towers. CEC approved the ESEC on June 30, 2010 and subsequently published the written decision on July 13, 2010. Demolition of Units 1 and 2 was completed January 2011 and construction is scheduled to commence June 1, 2011. Construction is scheduled to be completed by March 2013 and the new generation will subsequently be commissioned to be online by the summer of 2013.

ESP initiated plugging the intake and outfall tunnels under permit by the Army Corps of Engineers and under 401 Certification from the Los Angeles Regional Water Quality Control Board in April 2011. This change will eliminate several different effluent streams from the site and will require minor modifications to the Outfall No. 002 contribution streams. This proposed new waste discharge design will eliminate 207 million gallons per day of discharge from the site.

The ESGS requests the following changes to the Individual Industrial NPDES permit when it is reissued:

- Eliminate condenser cooling water from Units 1 & 2;
- Eliminate boiler blowdown from Units 1 & 2;
- Eliminate treated chemical metal cleaning wastes from Units 1, 2, 3, and 4;
- Eliminate treated sanitary wastes from wastewater treatment plants 1 and 2;
- Eliminate floor drains from the generating Units 1 & 2;
- Eliminate condenser sump wastes from generating units 1 and 2;
- Eliminate treated non metal cleaning wastes from Units 1 through 4;
- Updated flow condenser sump discharge for Unit 3&4;

- New additional flow to Low Volume Waste Stream from Demineralization System for Units 3 & 4 (only),
- Storm water run-off from new Units 5, 6, 7, and 8 power block area (formerly Units 1 & 2 area) to a new drain inlets and insert filter cartridges to Outfall No. 002;
- Divert storm water runoff from new parking lot through bio-swale to existing southwest corner discharge point;
- Reroute run-on storm water from Vista Del Mar Avenue through an enclosed pipe to the existing southwest corner discharge point; and
- Injection of hypochlorite into Retention Basin.

Sanitary waste treatment plants 1 and 2 have ceased discharge and plant 1 has been decommissioned. Plant 2 has been shut down and all sanitary waste are temporarily removed from the site by and disposed of at a regional sewage treatment facility. Sanitary waste streams will be diverted the sanitary sewer system through a connection to the City of Manhattan Beach, to the Hyperion Waste Treatment Plant. The requested changes are reflected in the EPA Form 2C, Section II.B. included in this update. Analytical data associated with intake and outfall 002 is provided in Attachment 3.4 of this transmittal. Results of radiological and dioxin characterization analysis will be provided once they become available. It should be noted that ESP anticipated that the proposed changes will improve water quality due to the reduction in chemical use, removal of sanitary wastes, and reduction in overall flow to the receiving water body.

PREVIOUSLY REQUESTED CHANGES

The 2004 NPDES renewal application ROWD requested several changes to the new permit to describe minor changes that had occurred at the site and had been approved by the Regional Board but not officially recognized in the NPDES permit diagram or description. The following is a summary of the changes that ESP still wished to recognize in the renewed NPDES permit.

Incidental Runoff:

El Segundo Power, LLC uses recycled water that has received tertiary filtration for pathogen removal for irrigation purposes as specified under Title 22 guidelines. This recycled water applied for irrigation is intended to remain on the irrigated areas. Even though incidental runoff of minor amounts of recycled water can be minimized, it cannot be fully prevented. Similarly, it is not possible to completely prevent the runoff of rainwater from areas irrigated with recycled water. El Segundo Generating Station is designed and operated to avoid runoff to waters of the State (Pacific Ocean - Santa Monica Bay). Occasional incidental discharge does not unreasonably affect the beneficial uses of the water and does not result in exceeding applicable water quality objectives in the receiving waters as indicated in Regional Board's "Incidental Runoff of Recycled Water" dated February 24, 2004. The ESGS facility will continue to use recycled water for irrigation after the proposed new plant modification are completed. The incidental run off has little to no impact on the character of the discharge and does not constitute a material change to the power plant's outfall.

Foam Generation:

Intake No. 2 is currently operating at relatively lower flow levels, contributing to the naturally occurring generation of foam at Discharge Serial Number 002. Rather than mechanically removing the foam, ESP proposes to spray seawater over open areas of the discharge to prevent the foam from being formed in the first place. By this permit renewal application, ESP requests the Regional Board's approval in using seawater to prevent foam generation.

Retention Basin Biological Growth Control:

As discussed in the 2004 NPDES renewal application ROWD (Section 1.0 of the Facility Operation Description), in order to control biological growths (algae), the retention basin is intermittently treated by addition sodium hypochlorite. In addition to this, an algae eating product containing diatomaceous earth is also added to the retention basin. Other techniques such as mechanical treatment using vacuum trucks, oil skimmers, and spraying water are also applied at the Retention Basin. The biological growth control has little impact on the character of the discharge and does not constitute a material change to the power plant's outfall.

PREVIOUSLY REQUESTED CHANGES TO RESCIND

ESP had requested the following changes to the permit renewal, however, through the abandonment of Unit 1 & 2 and the elimination on the sanitary treatment system the following changes should be withheld from the new permit. Although these requested changes are currently in effect they will not be required for continued operation once the plant modifications have been completed. These changes have beneficial to no impact on the character of the discharge and does not constitute a material change to the power plant's outfall.

The following items are rescinded.

Sanitary Waste Treatment Plants:

The Sanitary Waste Treatment Plants employs biological nitrification process in order to effectively remove Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) from the incoming sewage. Key factors which affect the nitrification process are nitrogen concentration, BOD concentration, alkalinity, temperature, and potential toxic compounds. Since the natural alkalinity of the incoming sewage is insufficient for acid production during the energy yielding oxidation process of biological nitrification at the Waste Treatment Plants 1 and 2, low pH levels and a detrimental effect on BOD and TSS removal is resulted. El Segundo Power, LLC is requesting the Regional Board's permission to increase the alkalinity of the incoming sewage by installing a sodium bicarbonate (baking soda) feed system. Based on historical observations, a sodium bicarbonate demand of approximately 1 to 5 pounds per day is adequate for the sodium bicarbonate feed system.

Water saturated with sodium bicarbonate will be fed into the activated sludge process on a timed basis to maintain the alkalinity above 100 mg/l. using a "saturator". The saturator will be a 55 gallon drum outfitted with an automatic water valve controlled by a programmable logic controller (PLC), and a water diffuser that disperses supply water at the bottom of the drum. The drum will be kept full of water to the overflow point and have about 24 inches of reserve powdered sodium bicarbonate sitting at the bottom. Automatically opening the automatic fill valve on a timed basis such as 15 seconds every hour will introduce small amount of fresh water that will become saturated with sodium bicarbonate at the bottom of the drum, while simultaneously pushing an equal quantity of already saturated water out the overflow and into the activated sludge process. Powdered sodium bicarbonate will be manually replenished as needed based on the level in the bottom of the saturator. The corresponding sodium bicarbonate MSDS sheets are included in this attachment.

Desalination Pilot Plant:

As discussed previously discussed, in May of 2002, the California Regional Water Quality Control Board, Los Angeles Region, approved the installation and operation of the seawater desalination pilot plant as proposed by West Basin Municipal Water District (West Basin). In May 2002, West Basin initiated seawater desalination operations and testing in accordance with the conditions set forth by the Regional Board in a letter dated May 16, 2002.

The Regional Board approved the use of 30 gallons per minute (gpm) (.043 MGD) of seawater from the cooling water intake to microfiltration and reverse osmosis units. The seawater is separated into two components; pure water and waste brine. Each of the separated streams constitutes 50% of the intake flow (15 gpm of pure water and 15 gpm of brine). The brine and reverse osmosis permeate is returned into the power plant's cooling water intake. Chemicals such as sodium hypochlorite, ammonium hypochlorite, and antiscalant are added to the influent water to enhance the removal efficiency of dissolved solids during desalination. The total amount of chemicals added have very little impact to the cooling water flow and the Desalination Pilot Plant operation does not constitute a material change to the power plant's outfall.

SECTION 3

Attachment 3.3 – Application Sampling and Analysis Reports (CD Only)

SECTION 3

Attachment 3.4 – Best Management Practices (Storm Water Pollution Prevention Plan) (CD Only)

SECTION 4

Attachment 4.1

Letter Dated March 30, 2011, Subject: Status of Implementation Plan and Report of Waste Discharge (Resubmittal), El Segundo Generating Station, El Segundo Power, LLC, NPDES Permit No. CA0001147

And

Letter Dated March 30, 2011, Subject: California 316(b) Policy – Implementation Plan, El Segundo Generating Station, El Segundo Power, LLC NPDES Permit No. CA0001147

El Segundo Power, LLC
301 Vista Del Mar Blvd
El Segundo, CA 90245
Phone: 310.615.6030
Fax: 310.615.6028

Mr. Philip Isorena
Chief
NPDES Unit
State Water Resources Board
Division of Water Quality, 15th Floor
1001 I Street
Sacramento, CA 95814

SUBJECT: CALIFORNIA 316(b) POLICY - IMPLEMENTATION PLAN
EL SEGUNDO GENERATING STATION
EL SEGUNDO POWER, LLC
NPDES PERMIT NO. CA0001147

Dear Mr. Isorena,

On May 4, 2010 the State Water Resources Control Board ("State Water Board") adopted a Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("Policy") which became effective on October 1, 2010. The intent of the Policy is "...to ensure that the beneficial uses of the State's coastal and estuarine waters are protected while also ensuring that the electrical power needs essential for the welfare of the citizens of the State are met." This Policy establishes uniform technology-based standards for the implementation of the federal Clean Water Act Section 316(b) (33 U.S.C. §1326 et seq.).

The State Water Board sent El Segundo Power, LLC ("ESP") a letter dated November 30, 2010 to inform them of the Policy and the requirement to submit an Implementation Plan for the El Segundo Generating Station ("ESGS") (Letter from Thomas Howard, Executive Director to George Piantka, NRG West). An attachment to the letter entitled, Implementation Plan and Report of Waste Discharge Requirements, described these requirements. El Segundo Power, LLC is the owner of ESGS.

Background

ESGS is located in the city of El Segundo, Los Angeles County and consists of four natural gas fired steam electric generating units. Units 1 and 2 were each rated at 175 megawatts ("MW") and have been demolished. Units 3 and 4 are each rated at 335 MW. Units 3 and 4 employ the use of once through cooling and withdraw water from the Santa Monica Bay at a location approximately 2,000 feet offshore at a depth of approximately 20 feet. The offshore intake is equipped with a velocity cap. Water is drawn through an approximately 3 foot deep opening. This opening is covered by a series of

1 ¼ inch diameter rods which are 14-inch on center. This leaves an opening between the rods of 12 ¾ inch.

Cooling water is transported from the offshore intake to the onshore portion of the intake structure through a buried pipe which is 12 feet in diameter. The onshore portion of the intake structure includes two vertical traveling screens for each of the two remaining operating units. There is one circulating water pump for each screen. Each pump is rated at 69,200 gallons per minute ("gpm"), for a total design offshore cooling water flow of 276,800 gpm. Discharge from the once through cooling system is via an outfall pipe, designated as 002. Discharge from retired Units 1 and 2 have ceased effective May 2010 in preparation for the demolition of those units.

On December 21, 2000, ESP filed an Application for Certification ("AFC") seeking approval from the California Energy Commission ("CEC") to repower the existing ESGS Units 1 and 2. Units 1 and 2 were shutdown in December 2002, and the air permit for those units has been relinquished. The CEC in February 2005 issued a Final Decision (i.e., license) approving the repowering project with conditions. On June 18, 2007, ESP filed a petition to amend ("PTA") the license with the CEC. ESP subsequently filed an amendment with the CEC to change the owner and name of the "R2C2" project to El Segundo Energy Center LLC and El Segundo Energy Center ("ESEC"), respectively. The PTA proposed the replacement of Units 1 and 2 with two trains of fast start, highly efficient combined cycle generation, referred to as rapid response combined cycle, or "R2C2" (Units 5, 6, 7 and 8). Each train, when constructed will consist of one gas turbine generator, one heat recovery steam generator, and one steam turbine generator. The combustion turbines are referred to as Units 5 and 7, while the steam turbines are referred to as Units 6 and 8. The repowered units are expected to have a capacity of 560 MW. ESEC will utilize air cooled condensers which do not use cooling water from the ocean, equivalent to that of dry cooling towers. This type of rapid response technology is very compatible with California's increased reliance on renewables in that when adequate renewable power is not available, ESEC can quickly come on line and provide replacement electricity.

CEC approved the ESEC on June 30, 2010 and subsequently published the written decision on July 13, 2010. Demolition of Units 1 and 2 was completed January 2011 and construction is scheduled to commence June 1, 2011. Construction is scheduled to be completed by March 2013 and the new generation will subsequently be commissioned to be online by the summer of 2013.

Compliance Track

ESGS will comply with the requirements of the Policy under Track 1. Units 1 and 2 have been removed; construction will begin by June 2011 with the new generation being online by the summer of 2013. The repowered units will employ air cooled condensers which are the equivalent of dry cooling towers. The Policy states that,"The installation of closed cycle dry cooling systems meets the intent and minimum reduction requirements of this compliance alternative." (Policy Section 2.A.(1). Pg. 4). Therefore, the new Units 5, 6, 7 and 8 will be in compliance with the Policy.

As required by the revised Title V Facility Permit, dated July 16, 2010 as issued by the South Coast Air Quality Management District ("SCAQMD"), Unit 3 will be permanently shut down within 90 days after Units 5, 6, 7 and 8 commence commercial operation (i.e., summer of 2013). The corresponding ocean intake flow to Unit 3 will cease within 6 months of shutdown of Unit 3. This will result in the reduction of the Unit 3 cooling water flow by 100% (199.3 MGD). ***Unit 3 will therefore be in compliance with the Policy 2 years in advance of the current Policy compliance date of December 31, 2015 for ESGS.***

ESEC currently intends to file with the CEC and other requisite agencies applications for the repowering of Unit 4 by 2012. Unit 4 is currently required to be in compliance with the policy by December 31, 2015. ***With this Implementation Plan we are requesting an extension to the current Policy compliance date to December 31, 2017.*** Unit 4 will comply via Track 1 by replacing the steam boiler with additional fast-start, air-cooled, combined cycle generation. The projected date of operation of the proposed new generation to replace Unit 4 is not known at this time, but irrespective of the permitting and commercial timelines for Unit 4 replacement, ESEC is committed to retire Unit 4 by December 31, 2017. Intake flow would cease by December 31, 2017. When modifications of the intake structure are complete, the retirement of Unit 4 will amount to the elimination of an additional 199.3 MGD of once-through cooling discharge.

ESGS Units 3 and 4 currently comply with the impingement mortality criteria in the Policy. Policy Section 2.A.(2)(c) states that technology-based improvements that are specifically designed to reduce impingement mortality that were implemented prior to October 1, 2010 may be counted towards meeting Track 2 requirements. El Segundo has a submerged offshore intake structure equipped with a velocity cap to reduce impingement mortality[1]. Velocity caps are a proven technology for the reduction of impingement mortality. Early studies conducted at coastal California power plants, including El Segundo, originally demonstrated this. Weight (1958)[2] reported that the Huntington Beach Steam Station had an offshore intake structure which consisted of a conduit which extended approximately 0.5 mile from the beach. The conduit terminated in an upturned elliptical bowl rising 10 ft above the bottom. It was constructed with a velocity cap "to change the entry flow characteristics for the control of fish." They report that earlier intake systems were constructed without velocity caps and experienced system operation problems due to schools of fish entering the system. It was hypothesized that fish were unable to sense the vertical currents resulting from the upward facing intake pipes. The installation of a steel plate redirected the velocity horizontally allowing the fish to sense the velocity and to avoid the flow. Weight reported test results, both with and without the velocity cap, resulting in a 95% reduction of fish in the intake.

[1] Details of the cooling water system are described in, El Segundo Power, LLC. 2008. Final Report El Segundo Generating Station Clean Water Act Section 316(b) Impingement Mortality And Entrainment Characterization Study. El Segundo, CA. 384p.
[2] Weight, R. H. 1958. Ocean cooling water system for 800 MW power station. Journal of the Power Division; Proceedings of the American Society of Civil Engineers. Proc Paper 1888. pp 1888-1 through 1888-22

A recent study has been performed at the Scattergood Generating Station offshore cooling water intake structure (Los Angeles Department of Water and Power 2007)[3]. The study was performed during the period October 11, 2006 through January 2, 2007. The study measured impingement alternating between cooling water withdrawn through the velocity cap intake structure for two weeks and through the discharge structure[4] for two weeks. In addition, hydroacoustic monitoring of fish abundances was performed at the two locations were used to verify that there were no differences in fish abundances between locations that could have affected the results (no statistically significant differences were found between the two locations).

The Scattergood Velocity Cap Study calculated that the reduction in the impingement rate on all fishes was 97.56 percent based on abundance and 95.30 percent based on biomass. The difference was statistically significant for abundance; however, the results for biomass were not statistically significant. This was possibly due to the impingement of relatively low numbers of high-biomass species, such as Pacific electric ray and thornback, during one of the test periods. The authors found these results to be higher than those calculated in prior studies. This may be due to higher Pacific sardine abundance during this study as compared to the earlier studies.

These studies clearly demonstrate that offshore velocity caps reduce impingement rates well in excess of the comparable level of wet cooling (i.e., 90% of 93% reduction commensurate with wet cooling) required by the Policy under Track 2. Therefore, El Segundo is and will continue to be in compliance with the impingement criteria required by the Policy during its operation.

El Segundo must also comply with the entrainment reductions in the Policy. Total El Segundo withdrawal rates per the NPDES permit equaled 607 MGD. The repowering of Units 1 and 2 with a system that will employ air cooled condensers has resulted in the elimination of the use of up to 207.4 MGD of ocean water for cooling. As stated earlier, the use of an additional 199.3 MGD will cease with the shutdown of Unit 3. The repowering of Units 1 and 2 and the shutdown of Unit 3 equates to 406.7 MGD of seawater for cooling no longer being withdrawn. This represents a 67% reduction in the withdrawal of seawater for cooling, which will occur no later than December 31, 2013. As currently planned, the repowering of Unit 4 will also employ air cooled condensers resulting in the reduction of an additional 199.3 MGD of ocean water for cooling. This would result in a 100% reduction of 607 MGD of seawater cooling withdrawal and the elimination of once-through cooling at the site by December 31, 2017 – the requested compliance extension date for ESGS.
The Policy also requires that existing power plants "shall install large organism exclusion devices having a distance between exclusion bars no greater than nine inches, or install other exclusion devices, deemed equivalent by the State Water Board" and "implement measures to mitigate the

[3] Los Angeles Department of Water and Power. 2007. Final Report Scattergood Generating Station; Clean Water Act Section 316(b) Velocity Cap Effectiveness Study. 212p.
[4] The discharge pipe terminates in a 2.3 m (7.5 ft) diameter vertical riser, without a velocity cap, located 122 m (400 ft) away from the intake velocity cap.

interim impingement and entrainment impacts resulting from the cooling water intake structure(s), commencing October 1, 2015 and continuing up to and until the owner or operator achieves final compliance. The owner or operator must include in the implementation plan, described in Section 3.A, the specific measures that will be undertaken to comply with this requirement."

As stated earlier, ESGS has an offshore velocity cap intake structure. Cooling water is withdrawn through a velocity cap inlet located approximately 2,600 ft from the onshore seawall. The bottom of the cooling water inlet is located at a depth of approximately 10 ft above the bottom of the Santa Monica Bay. The top of the velocity cap is located at a depth of approximately 16 ft below MLLW. Water is drawn through an approximately 3 foot deep opening. This opening is covered by a series of 1 ¼ in diameter rods on 14 in centers. This leaves an opening between the rods of 12 ¾ in. The intake will therefore require retrofit with bars with a minimum of 9 inch spacing, as stated in the Policy by October 1, 2011.

The State Water Board has identified the preferred mitigation method as providing funding to the California Coastal Conservancy that will ultimately be used "for mitigation projects directed toward increases in marine life associated with the State's Marine Protected Areas in the geographic region of the facility." The California Coastal Conservancy has identified several restoration projects in the South Coast region that, when implemented, would provide increases in habitat and production of marine life.

The CEC in its original decision, dated February 2005, required El Segundo to fund up to $5 million Bay-wide study and enhancement activities which should assist the Los Angeles Regional Water Quality Control Board in its performance of its 316(b) responsibilities, not only for the ESGS project but also for other future projects around the Bay (CEC 2005, Conditions of Certification BIO-1 at 66)[5]. This was based on the project description using once through cooling contained in the original CEC application. As part of the requirement of the CEC decision and prior to the submission of the amended application, El Segundo paid $1 million to the Santa Monica Bay Restoration Commission (SMBRC).

These payments were spent on completed projects or encumbered in projects that are near completion to the following SMBRC projects:

- Economic valuation study of non-consumptive uses of the bay;
- Rocky Reef Assessment;
- County-wide funding feasibility study;
- Support for SMBRC Marine Technical Advisory Committee;
- Bight '08 rocky reef survey; and

[5] California Energy Commission. 2005. El Segundo Power Redevelopment Project: Commission Decision. CEC-800-2005-001-CMF.

- Dolphin study.

The CEC subsequently rescinded that requirement in their approval of the amended ESEC[6] (BIO 1 at 36) stating:

> 2. The revised Conditions of Certification set forth below are appropriate and will ensure that the project is designed and constructed both in accordance with applicable law and in a manner that protects environmental quality and public health and safety and to ensure compliance with all applicable LORS.
>
> 3. The Biological Resources aspects of the amended project do not create significant direct or cumulative environmental effects.

Based on the projects funded and since these payments are no longer a requirement, ESP requests that this prior mitigation payment to be considered a prepayment against the interim mitigation requirement and therefore does not propose additional interim mitigation at this time.

Proposed Compliance Schedule

Below is the proposed schedule for ESGS to comply with the Policy:

- May 2010 – Compliance achieved for Unit 1 and 2 with ceasing of intake flows
- April 1, 2011 - Submit Implementation Plan to outline Track 1 and/or Track 2 compliance with impingement and entrainment.
- October 1, 2011 – Verify Policy requirement that no greater than nine inch spacing between bars for the intake structure is in compliance with the large organism exclusion devices. This requirement will be satisfied with the retrofitting of the bars to a minimum spacing distance of nine inches.
- October 31, 2011 – Potential State Water Board approval of the Implementation Plan.
- Summer 2013 – Unit 3 will be shutdown and retired.
- December 31, 2013 – Unit 3 intake flow will cease.
- October 1, 2015 – December 31, 2017 – El Segundo Power proposes the $1 million paid to the Santa Monica Bay Restoration Commission ("SMBRC") be considered a prepayment against the interim mitigation requirement satisfying the interim mitigation fee for this time period.
- December 31, 2017 – Unit 4 will be shutdown and retired. Intake flows associated with Unit 4 will cease at this time.

[6] California Energy Commission. 2010. El Segundo Power Redevelopment Project: Commission Decision to the Amendment. CEC-800-2010-015.

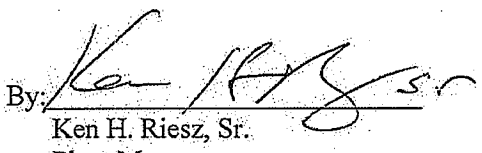
ESP believes a reasonable approach to meeting the compliance requirements of the Policy has been presented in this Implementation Plan. This approach balances the need for the protection of the marine resources and the need for cost effective electric power in the Los Angeles Basin. We would be happy to review and discuss any part of this Implementation Plan.

"I certify under penalty of law that this document and all attachments were repaired under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person and persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. "I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations."

If you should have any questions concerning this report please contact George Piantka at (760) 710-2156.

Sincerely,

El Segundo Power, LLC
By: NRG El Segundo Operations Inc.,
Its Authorized Agent

By: 

Ken H. Riesz, Sr.
Plant Manager

Attachments
cc: Mr. Jonathan Bishop
Ms. Marleigh Wood -
Ms. Joanna Jensen -

El Segundo Power, LLC
301 Vista Del Mar Blvd
El Segundo, CA 90245
Phone: 310.615.6030
Fax: 310.615.6028

March 30, 2011

Mr. Philip Isorena
Chief
NPDES Unit
State Water Resources Board
Division of Water Quality, 15th Floor
1001 I Street
Sacramento, CA 95814

Subject: Status of Implementation Plan and Report of Waste Discharge *(Resubmittal)*
El Segundo Generating Station
El Segundo Power, LLC
NPDES Permit No. CA0001147

Dear Mr. Isorena,

El Segundo Power, LLC ("ESP") has received the State Water Resources Control Board's ("SWRCB") November 30, 2010 request for an Implementation Plan to comply with State's recently adopted Clean Water Act ("CWA") Section 316(b) Policy ("316(b) Policy"). The SWRCB's request, included herein as Attachment A, outlines the requirements for the Implementation Plan and the necessity to also resubmit the Report of Waste Discharge ("RWD") Requirements for the El Segundo Generating Station ("ESGS") per 40 CFR Section 122.21(d)(2), Duty to Reapply. ESP will submit the Implementation Plan under separate cover on or before the April 1, 2011 deadline. While the November 30, 2010 request does not specifically indicate the due date for the RWD resubmittal, ESP is requesting a due date of June 1, 2011. This request to resubmit the RWD was discussed with Mr. Jonathan Bishop, Ms. Marleigh Wood, and Ms. Joanna Jensen in a meeting regarding ESGS on March 16, 2011.

A due date of June 1, 2011 for the RWD resubmittal is needed to complete the design of facility modifications associated with the El Segundo Energy Center ("ESEC") – the CA Energy Commission licensed project (Docket 00-AFC-14C, approved June 30, 2010) that entails the demolition of retired Units 1&2; elimination of once-through cooling and discharge of other permitted wastewaters via Outfall 001; and construction of fast-start, combined-cycle, air cooled power plant in place of the former Units 1&2. You may recall that ESP had previously received a CEC license in February 2005 for a combined-cycle ocean cooled power plant (Docket 00-AFC-14), but later elected to amend the license in 2007 to current licensed (i.e., air-cooled) configuration.

ESP currently discharges under the NPDES Permit No. CA0001147, which expired on May 10, 2005. The NPDES Permit renewal application was timely submitted to the SWRCB, Los Angeles Region on September 24, 2004. The Los Angeles Region subsequently issued three data requests to the renewal application (dated November 22, 2004; February 15, 2005; and February 9, 2007.) ESP responded to

each of these data requests in January 2005, May 2005, and March 2007, respectively. As a result of EPA's 2007 suspension of CWA 316(b) for existing Phase II facilities' cooling water intake structures, the Los Angeles Region had not issued a new NPDES permit for ESGS based on the previously submitted RWD and supplemental data responses. ESP has continued to discharge under an administrative extension since the expiration of the permit.

ESGS will undergo progressive modifications during the next 2 years. With the CEC licensing of the El Segundo Energy Center ("ESEC") and the parallel Title V permit enabling the construction of the new generation, ESGS will transition to highly efficient, fast start, combined cycle generation that will support growing renewable generation and result in the elimination of once-through cooling associated with former Units 1&2. The ESGS site is currently being prepared for construction of the new units. The facility design is in the final stages which will result in elimination and modifications of wastewater discharges associated with former Units 1&2 (Outfall 001) and corresponding modifications of wastewater discharges associated with Units 3&4 (Outfall 002). ESP intends to incorporate these changes as a modification to the prior NPDES renewal application and RWD. The additional 2 months will allow for the new changes to be accounted for.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person and persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. "I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations."

If you should have any questions concerning this report please contact George Piantka at (760) 710-2156.

Sincerely,

El Segundo Power, LLC
By: NRG El Segundo Operations Inc.,
It's Authorized Agent

By: _____
Ken H. Riesz, Sr.
Plant Manager

Attachments
cc: Mr. Jonathan Bishop
Ms. Marleigh Wood
Ms. Joanna Jensen

ATTACHMENT A

Request for Implementation Plans and Immediate and Interim Requirements for the Once-Through Cooling Water Policy
El Segundo Generating Station

State Water Resources Control Board

Executive Office

Linda S. Adams
Secretary for Environmental Protection

Charles R. Hoppin, Chairman
1001 I Street • Sacramento, California 95814 • (916) 341-5600
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5621 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

NOV 3 0 2010

Mr. George L. Piantka
El Segundo Generating Station
NRG West
1817 Aston Avenue, Suite 104
Carlsbad, CA 92008

Dear Mr. Piantka,

IMPLEMENTATION PLANS AND IMMEDIATE AND INTERIM REQUIREMENTS FOR THE ONCE-THROUGH COOLING WATER POLICY

On May 4, 2010, the State Water Resources Control Board (State Water Board) adopted a Statewide Policy (Policy) on the Use of Coastal and Estuarine Waters for Power Plant Cooling under Resolution No. 2010-0020. The Policy establishes uniform, technology-based standards to implement federal Clean Water Act section 316(b), which requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. The purpose of this letter is to require, pursuant to the Policy and California Water Code section 13383, information you must submit in your implementation plan. In addition, this letter provides requirements for you to submit a Report of Waste Discharge.

The Policy requires the owner or operator of an existing fossil fuel power plant using once-through cooling to submit an implementation plan to the State Water Board within six months after the effective date of the Policy (April 1, 2011). In your implementation plans, you must select an alternative on a unit-by-unit basis that will achieve compliance by the date specified for your facility within the Policy. The State Water Board must receive responses to the information detailed below by April 1, 2011. If certain aspects of your implementation plan and associated information change after submittal, you may amend the information at a later date. We have provided the specific requirements in the Enclosure.

Please submit an original and an electronic copy (in word-searchable PDF format) of the requested documents to Mr. Philip Isorena, Chief of the NPDES Unit, at pisorena@waterboards.ca.gov, or by mail at:

State Water Resources Control Board
Division of Water Quality, 15th Floor
1001 I Street
Sacramento, CA 95814

Please feel free to contact Mr. Renan Jauregui at (916) 341-5505 (rjauregui@waterboards.ca.gov), or Ms. Joanna Jensen at (916) 341-5582 (jjensen@waterboards.ca.gov) if you have questions about this request for information.

Sincerely

Thomas Howard
Executive Director

Enclosure: Implementation Plan and Report of Waste Discharge Requirements

cc: Mr. Samuel Unger, Executive Officer
Los Angeles Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013-2343

Implementation Plan and Report of Waste Discharge Requirements

Pursuant to the Policy and California Water Code section 13383, no later than April 1, 2011, you must submit an implementation plan that satisfies the following requirements:

1. Identifies the compliance alternative (Track 1, Track 2 or retirement) that you have selected. If Track 2 is selected, it must be accompanied by a demonstration that compliance with Track 1 is not feasible. If you decide to retire one or more units, please identify the specific closure date for each unit when power generation and water inflows will cease. If one or more units will be repowered or new units will be constructed as replacement, please identify a specific on-line date for each new or repowered unit.

2. Describes the general design, construction, or operational measures that will be undertaken to implement your selected alternative.

   a. If Track 1 is selected, will the units be re-powered, or retrofitted, and will closed-cycle wet cooling or dry cooling be employed?

   b. If Track 2 is selected, what combination of impingement and entrainment control measures has been or will be employed on each unit at your facility? For example, such control measures may include, but are not limited to, closed-cycle cooling (wet or dry), reductions in velocity at the intake, movement of the intake structure, application of screens on the intake structure, reductions in flow, either operationally or mechanically (e.g., variable frequency drive pumps), installation of fish return systems, etc.

   c. If closed-cycle wet cooling is selected as a compliance alternative, the plan must address whether recycled water of suitable quality is available for use as makeup water.

3. Proposes a realistic schedule for implementing these measures that is as short as possible. In proposing a schedule, identify specific milestones and associated dates for measure implementation, including: procurement cycles for entities to which plant output is sold, any necessary permits, demolition of existing facilities, and construction of new components.

4. Identifies the time period, if any, when generating power is infeasible and describes measures taken to coordinate this activity through the appropriate electrical system balancing authority's maintenance scheduling process and/or infrastructure planning process. For each period when power generation is infeasible, describe the reason for this constraint.

5. If implementation plans include re-powering of existing units, please provide as much detail as possible on the new generating units, as specified below:

   a) The size (in Mega Watt) of the re-powered generating units;

b) Technology of the re-powered units (i.e., combined-cycle, single gas turbines, etc.);

c) The amount of power that would still be generated during repowering process, and the ultimate generating output once the repowered process has been completed;

d) Timetable for the above repowering process;

e) Electrical characteristics of the new repowered generating units if available when implementation plans are submitted; and

f) Available information on obtaining required air permits and required offsets.

6. Identifies the transmission configuration around the units, and specifies planned upgrades and known contingencies related to these transmission facilities, so as to document awareness of transmission improvements as part of the generation planning process.

7. In addition to the implementation plan, please provide any prior studies that accurately reflect current impingement or entrainment impacts. Prior impingement studies must accurately characterize the species currently impinged and their seasonal abundance. Prior entrainment studies must account for seasonal variation in oceanographic conditions and larval abundance and behavior such that abundance estimates are reasonably accurate and must have used a mesh size of 333 or 335 microns for entrained larvae sampling.

According to 40 CFR Section 122.21(d)(2), Duty to Reapply, if you have an expired National Pollutant Discharge Elimination System (NPDES) Permit or are within 180 days before your permit expires, a new application is required in order to renew your NPDES Permit. We are requesting you to submit a new application which consists of a new Report of Waste Discharge (RWD), other supporting information and a completed form 200 (http://www.waterboards.ca.gov/publications_forms/forms/docs/form200.pdf). With your RWD, please include the last five years of monitoring information prescribed by your permit.

In addition, you must also comply with the Immediate and Interim Requirements in Section 2.C. of the Policy. Your proposed method of compliance with the Immediate and Interim Requirements must be included in the implementation plan. This portion of the implementation plan must address the following requirements:

1. No later than October 1, 2011, an existing power plant with an offshore intake shall install large organism exclusion devices having a distance between exclusion bars of no greater than nine inches, or install other exclusion devices, deemed equivalent by the State Water Board. Therefore, if your facility has an offshore intake, by April 1, 2011 you must provide your planned method of compliance with this

requirement, including the design and schedule for installation of the exclusion device.

2. No later than October 1, 2011, an existing power plant that includes a unit that is not directly engaging in power-generating activities or critical system maintenance must cease intake flows, unless you demonstrate to the State Water Board that a reduced minimum flow is necessary for operations. Therefore, by April 1, 2011, you must provide information regarding when it is likely that each unit in your facility may not be generating power, or when you are performing critical system maintenance that would result in the cessation of intake flows. This information may be provided in terms of likely months when there will be no intake flow, with the understanding that if a need for power arises, that intake flows will re-start, as long as appropriate documentation is later provided regarding that unexpected power demand. If a reduced minimum flow is necessary for operations during the period when power is not typically generated, then you must define specifically why that is the case and provide an estimate of minimum flows as compared to historic flows during corresponding months 2000-2005 when power is not typically generated.

3. For those facilities that have not achieved final compliance by October 1, 2015, the owner or operator must implement measures to mitigate the interim impingement and entrainment impacts resulting from the cooling water intake structure(s), and continuing up to and until the facility achieves final compliance with the requirements of the Policy. If you do not plan to achieve final compliance by October 1, 2015, you must include in your implementation plan to be submitted no later than April 1, 2011, the specific measures that will be undertaken to comply with this additional requirement. The options you may choose from include:

   a. A demonstration that existing mitigation efforts, including any projects that are required by state or federal permits as of October 1, 2010, compensate for the interim impingement and entrainment impacts; or

   b. A demonstration that the interim impacts will be compensated for by providing funding to the California Coastal Conservancy, which will work with the California Ocean Protection Council to fund an appropriate mitigation project. It is the preference of the State Water Board that this option be selected; or

   c. A proposal for the development and implementation of a mitigation project for the facility, which would compensate for the interim impingement and entrainment impacts. Included in this proposal must be a description of how the habitat production foregone method, or a comparable alternate method, is to be used to determine the habitat and area, based on replacement of the annual entrainment, for funding the mitigation project.

SECTION 4

Attachment 4.2 – NPDES Monitoring Data for the Previous 5 Year Period (CD Only)