

DOCKETED

Docket Number:	15-AFC-01
Project Title:	Puente Power Project
TN #:	207118
Document Title:	Response to Comments - To City of Oxnard for time Schedule Order
Description:	Response to Comments for Tentative Time Schedule Order (TSO) for the NRG California South LP Mandalay Generating Station, Oxnard, CA (NPDES No. CA0001180, CI No. 2093). Other related documents: Notice of Public Hearing, Comments from City of Oxnard, and Final TSO. 12/21/15
Filer:	Cathy Hickman
Organization:	Los Angeles Regional Water Quality Control Board
Submitter Role:	Public Agency
Submission Date:	12/24/2015 9:40:30 AM
Docketed Date:	12/24/2015

Los Angeles Regional Water Quality Control Board

December 21, 2015

Ms. Ashley Golden
Development Services Director
City of Oxnard
214 South C. Street
Oxnard, CA 93030

Dear Ms. Golden:

RESPONSE TO COMMENTS FOR THE TENTATIVE TIME SCHEDULE ORDER (TSO) FOR NRG CALIFORNIA SOUTH LP MANDALAY GENERATING STATION, OXNARD, CA. (NPDES NO. CA0001180, CI NO. 2093).

In a letter dated October 15, 2015, the Regional Water Quality Control Board, Los Angeles Region (Regional Board) transmitted the tentative Time Schedule Order (TSO) for NRG California South LP, which would establish a schedule to achieve compliance with the discharge limitations contained in the Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit, Order No. R4-2015-0201 (NPDES Permit No. CA0001180). Order No. R4-2015-0201 regulates the discharge of wastewater to surface waters from NRG California South LP, Mandalay Generating Station Facility. The Regional Water Board received your comments on November 13, 2015, via email, regarding the tentative TSO. Regional Board staff evaluated the comments and, attached herewith are staff responses to the comments.

The comments received and associated responses do not warrant changes to the tentative order. Therefore, this item will be approved by the Executive Officer as per the public notice dated October 15, 2015. It will become effective on January 1, 2016.

If you have any questions, please contact Rosario Aston at (213) 576-6653.

Sincerely,



for Cassandra D. Owens, Chief
Industrial Permitting Unit

Enclosures: Response to Comments
cc: See Mailing List

RESPONSE TO COMMENTS ON THE TENTATIVE TIME SCHEDULE ORDER
NRG California South, LP
Mandalay Generating Station
NPDES Permit No. CA0001180

This Table described the comments received from interested persons with regard to the above-mentioned tentative Time Schedule Order (TSO). Each comment has a corresponding response and action taken.

Commenter	No.	Comment	Response
City of Oxnard	1	<p>On July 1, 2014, the City Council adopted interim urgency ordinance O-2882 prohibiting the expansion of existing, or development of new, energy generation facilities within the Oxnard Coastal Zone pending studies and changes in the Local Coastal Program (LCP), implementing coastal zoning ordinance, and other applicable regulations. On July 28, 2014, the 45-day emergency ordinance was extended for an additional 10 ½ months by ordinance O-2884. On May 19, 2015, the emergency ordinance was extended for an additional 12 months by ordinance O-2891. With this extension, the ordinance is in force until June 30, 2016.</p> <p>The necessary modification to comply with the pH limitations may be subject to the City's moratorium ordinance and, if so, the City could not issue a building permit until the ordinance expires or the City Council rescinded the ordinance.</p>	<p>The Interim Urgency Ordinance No. 2882 Prohibiting the Expansion of Existing, or Development of New, Electrical Generating Facilities Within the Coastal Zone Pursuant to the Southern California Edison (SCE) Request For Offer (RFO) Process Pending Studies and Changes in the Local Coastal Program (LCP), Zoning Ordinances and Other Land Use Regulations addresses the expansion of existing or the development of new electrical generating facilities within the Oxnard Coastal Zone.</p> <p>The proposed Time Schedule Order (TSO) provides six months for the Mandalay Generating Station (MGS) to modify the flow of wastewater associated with boiler blowdown and the low volume wastes in the retention basins such that it meets the final effluent limitations of between 6 and 9 pH units for the instantaneous minimum and maximum, as prescribed in federal regulations for the in-plant waste streams. The actions that would be necessary to comply with the proposed TSO would not result in the expansion of the current facility or for the development of new electrical generating facilities in the coastal zone of the City of Oxnard. The Board understands concerns that the City of Oxnard has raised regarding the discharge structure at the MGS and its adverse impacts on the quality of life</p>

Commenter	No.	Comment	Response
			<p>for the community's residents and visitors. The Board will consider the impacts of proposed plant upgrades with reference to Ordinance No. 2882 at the appropriate time.</p> <p>The MGS meets the final effluent limitations for pH contained in Order No. R4-2015-0201. The discharge of combined wastewater consisting of once-through cooling water, internal process wastewaters (low volume wastes), and storm water into the Pacific Ocean through Discharge Point 001 has complied with the pH limitations of 6 to 9 pH Units. There was only one violation of pH (9.5 pH Units, second Quarter 2010) in the effluent discharged to the Pacific Ocean since 2001.</p> <p>MGS has demonstrated that it will not be able to immediately comply with the new pH limitations for internal wastewater discharges from the retention basins and boiler blowdown at INT-001A and INT-001B, respectively. The TSO would provide the time necessary to implement appropriate control measures or make necessary modifications to its operations to bring the MGS into full compliance with the final limitations for pH for internal wastewater discharges from the retention basin and boiler blowdown.</p> <p>MGS has considered two options. One option is to redirect the boiler blowdown to the North and/or South retention basins, thereby eliminating the discrete discharge of the boiler blowdown represented as INT-001B. MGS proposes to design, permit, fabricate and</p>

Commenter	No.	Comment	Response
			<p>install tankage, and above and below grade piping to accomplish this transfer if it is the selected option. Wastewater in the retention basins, including the boiler blowdown, would be treated to lower the pH to within 6 to 9 pH Units using acid injection or a carbon dioxide gas (CO₂) injection system prior to discharge to INT-001A.</p> <p>The second option is to control the pH level of the boiler blowdown prior to discharge to INT-001B, instead of directing it to the retention basins. If this option is selected, MGS will design, procure, install, and test the pH control system.</p> <p>The options considered for the retention basin and boiler blowdown would not expand the existing facilities, or develop new, energy generation facilities within the Oxnard Coastal Zone. The proposed options and the proposed TSO are not within the scope of the City's Interim Urgency Ordinance No. 2882.</p>
City of Oxnard	2	<p>NRG is currently seeking an Application of Certification (AFC) from the California Energy Commission (CEC) for the Puente Power Project (P3) that will replace the two aging gas-fired steam-generating units (Units 1 and 2) at the existing Mandalay Generating Station (MGS) with a new state of the art General Electric (GE) Frame 7HA.01 single-fuel combustion turbine generator (CTG) and associated auxiliaries. P3 will be developed on approximately 3 acres of previously disturbed vacant brownfield land located within the existing boundaries of MGS.</p>	<p>The infrastructure modification proposed to ensure compliance with the final pH limitations for internal wastewater discharges from the retention basin and boiler blowdown will not affect the ability of the MGS to generate power. Decisions regarding repowering, facility upgrades and/or modifications are outside of the scope of the National Pollutant Discharge Elimination System (NPDES) Program, or the issuance of the TSO.</p>

Response to Comments on Tentative TSO
 NRG California South LP
 Mandalay Generating Station
 NPDES No. CA0001180

Commenter	No.	Comment	Response
		<p>The Los Angeles Regional Water Quality Control Board (Regional Water Board) should have adequate information from NRG as to how the construction of the P3 project, if the AFC is approved by the CEC, does not interfere with the continued operation of the MGS during construction of the P3. Will the addition of infrastructure required for the existing MGS to comply with its NPDES permit interfere with the proposed P3?</p>	
City of Oxnard	3	<p>The new P3 proposes to continue to use the existing ocean outfall structure referenced as Discharge Point 001. The proposed operating period for the P3 is 30 years, from 2021 to 2050. The City has completed extensive coastal hazard analysis that includes estimates of sea level rise consistent with the Coastal Commission's recently adopted Seal Level Rise Policy Guidance. The City's coastal hazard research and mapping indicate that Discharge Point 001 is currently consistently, and increasingly at risk from coastal flooding, erosion, and storm surge inundation. The maps, analysis, and methodology are all on file with the California Public Utilities Commission under Docket A14-11-016.</p> <p>Discharge Point 001 is also likely to become State property at some point in the next 30 years as the mean high tide moves inland, defining State Tide Lands. This could put the State in a position of maintenance and/or liability for the aging structure.</p> <p>The Coastal Commission has notified NRG that NRG must apply for a five-year best practices san management coastal permit that would regulate when and how NRG may use</p>	<p>The proposed TSO addresses the existing MGS facility and does not alter the facility's methodology of generating power or the amount of power generated. It was developed since MGS requires additional time to make infrastructure changes and implement appropriate control measures to comply with the final pH limitations for the internal wastewater discharges from the retention basins and/or the boiler blowdown. The required changes must be completed no later than July 1, 2016 (six months).</p> <p>The purpose of the NPDES permit and the associated TSO is to regulate discharges of wastewater from industrial operations.</p>

Commenter	No.	Comment	Response
		<p>bulldozers to break through naturally-occurring beach sand berms so that the MGS discharge does not pond and back up into the outflow structure.</p> <p>Finally, the beach over which the discharge water travels is a public beach. The discharge, moving at a visible current when the MGS is fully operating, presents an attractive nuisance and safety hazard to the public and inhibits horizontal coastal access in possible violation of the Coastal Act. Photographs are included that show the discharge ponding, condition of the structure, and people and pets wading in the discharge. The proposed P3 facility application indicates NRG will continue to use the beach outfall discharge even though the greatly reduced amount of discharge (NRG's CEC application states total sanitary and wastewater discharge at 19 AFY) could be redirected either to the adjoining Edison Canal or into the City's sanitary sewer system, assuming appropriate water quality requirements and permits are obtained. Discharge into the Edison Canal may actually benefit the canal's water quality by introducing in-flow at what could otherwise be a stagnant "dead end" that is 1.7 miles from the Channel Islands harbor.</p> <p>The City requests that the Regional Water Board add a condition on the TSO that Discharge Point 001 be discontinued and demolished when MGS must comply with the Once-Through-Cooling policy. NRG has already indicated in the AFC application that the MGS will be decommissioned.</p>	

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

320 W. 4th Street, Suite 200
Los Angeles, California 90013
(213) 576-6600

Public Notice No. 15-045
NPDES No. CA0001180

NOTICE OF PUBLIC HEARING

TIME SCHEDULE ORDER

**REQUIRING NRG CALIFORNIA SOUTH LP
(MANDALAY GENERATING STATION)
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NO. R4-2015-0201
(NPDES PERMIT NO. CA0001180)**

NRG California South LP (hereinafter Discharger) discharges wastewater from its Mandalay Generating Station under waste discharge requirements (WDRs) contained in Order No. R4-2015-0201, adopted by this Regional Water Board on October 8, 2015. Order No. R4-2015-0201 serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0001180) Program. The permit authorizes the discharge of up to 255.3 million gallons per day (MGD) of combined wastewater consisting of once-through cooling water, internal process wastewaters, and storm water into the Pacific Ocean, a water of the United States through Discharge Point 001.

NRG California South LP, is the owner and operator of the Mandalay Generating Station (hereinafter Facility), a steam-electric generating facility. The Facility is located at 393 North Harbor Boulevard in Oxnard California. The Facility generates internal process waste streams consisting of low volume wastes and chemical metal cleaning wastes. The chemical metal cleaning wastes are transported to an approved disposal site and no discharges of these wastes have occurred since 2001. However, the permit includes requirements for the discharge of the chemical metal cleaning wastes.

The low volume wastes consist of boiler blowdown, boiler condensate overboard, reverse osmosis reject water, softener regeneration wastes, and equipment wash water collected in floor drains. The low volume wastes (except for boiler blowdown) are conveyed to the north and south retention basins (retention basins) for settling and stabilization. Storm water collected in the yard drains is conveyed to the retention basins and combined with other process wastewater. The internal process waste streams as well as the storm water from the retention basins are routed to combine with the once-through cooling water prior to discharge to the Pacific Ocean through Discharge Point 001. The boiler blowdown is also combined with other process water and cooling water prior to discharge to the receiving water.

Order No. R4-2015-0201 prescribes new limits for pH for the low volume waste stream (i.e., retention basins discharge, and boiler blowdown discharge), and chemical metal cleaning waste stream. The previous Order No. 01-057 included the same pH limitations but the limitations were applied to the final combined effluent in accordance with the 1997 California Ocean Plan. These pH limitations for the final combined effluent are retained in Order No. R4-2015-0201. The new limits prescribed are based on Section 423, title 40 of the Code of Federal Regulations

Public Notice No. 15-045
NRG California South LP
Mandalay Generating Station

(40 C.F.R), effluent limitations, guidelines and standards (ELGs) for steam electric power generating point sources. These ELGs are applicable to the Facility.

NRG California South LP cannot consistently meet the effluent limits for pH limitations (for the retention basins and boiler blowdown discharges) contained in Order No. R4-2015-0201. Therefore, a tentative Time Schedule Order (TSO) has been developed for NRG California South LP with interim limits for pH that will expire on July 1, 2016. The TSO will provide the Discharger with the required time needed to make infrastructure changes and implement appropriate control measures or make necessary modifications to its operations to bring the Facility into full compliance with the final limitations for pH.

On the basis of preliminary staff review and application of lawful standards and regulations, the California Regional Water Quality Control Board, Los Angeles Region, tentatively proposes to issue this TSO, including interim effluent limitations and special conditions.

HEARING DATE AND LOCATION

Date: December 10, 2015
Time: 9:00 a.m.
Place: Metropolitan Water District, Board Room
700 N. Alameda Street,
Los Angeles, California

AVAILABILITY OF DOCUMENTS

The Report of Waste Discharge, related documents, tentative requirements, comments received, and other information received on the discharge are available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. at the following address:

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Arrangements for file review and/or obtaining copies of the documents may be made by calling the Los Angeles Regional Water Board at (213) 576-6600. The entire file will become a part of the administrative record of this proceeding, irrespective of whether individual documents are specifically referenced during the hearing. The entire file will not be present in the hearing room. Should any interested persons desire staff to bring to the hearing any particular documents that are not included in the agenda packet, they must submit a written or electronic request to staff during business hours, not later than 5 business days before the hearing. The request must identify the documents with enough specificity for staff to locate them.

NATURE OF HEARING

This will be a formal adjudicative hearing pursuant to section 648 et seq. of title 23 of the California Code of Regulations. Chapter 5 of the California Administrative Procedure Act (commencing with section 11500 of the Government Code) will not apply to this proceeding.

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Mandalay Generating Station

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no board member may discuss the subject of this hearing with any person, except during the public hearing itself. Any communications to the Regional Board must be directed to staff.

COMMUNICATIONS WITH STAFF BEFORE THE HEARING

The lead staff member responsible for this item is:

Rosario Aston
320 West 4th Street, Suite 200
Los Angeles, CA 90013
PHONE: (213) 576-6653
FAX: (213) 576-6660
Rosario.Aston@waterboards.ca.gov

PARTIES TO THE HEARING

The following are the parties to this proceeding:

1. The applicant/permittee

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

PUBLIC COMMENTS AND SUBMITTAL OF EVIDENCE

Persons wishing to comment upon or object to the tentative TSO, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be submitted to the Regional Water Board staff at losangeles@waterboards.ca.gov with a copy submitted to Rosario Aston at Rosario.Aston@waterboards.ca.gov no later than 5:00 p.m. on **November 16, 2015**. Comments or evidence received after that date will not be accepted into the record if it will prejudice any party or the Regional Water Board and only accepted as agreed by the Chair of the Board. Additionally, if the Board receives only supportive comments, the tentative TSO may be placed on the Board's consent calendar, and approved without an oral testimony.

HEARING PROCEDURE

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 3 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to

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NRG California South LP
Mandalay Generating Station

choose one representative to speak. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of business 15 business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

If minor comments are addressed to the satisfaction of the parties, this item may be issued by the Executive Officer.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on February 11, 2016. A continuance will not extend any time set forth herein.

Date: October 15, 2015

Development Services
Ashley Golden, Director

214 South C Street
Oxnard, CA 93030
(805) 385-7858
www.ci.oxnard.ca.us

November 13, 2015

Mr. Charles Stringer, Esq., Chair
c/o Cassandra D. Owens, Chief, Industrial Permitting Unit
Los Angeles Regional Water Quality Control Board
320 West 4th Street
Los Angeles, CA 90013

**RE: Comments on Tentative Schedule Order for NRG California South LP
Mandalay Generating Station, Oxnard, CA (NPDES No. CA0001180, CI NO. 2093)**

Dear Chair Stringer and Board Members:

This letter serves as a response from the City Manager of the City of Oxnard to the October 15, 2015 LARWQCB letter to NRG California South LP (NRG) regarding NRG's request for a Time Schedule Order (TSO) to come into compliance with the discharge limitations of NPDES permit Order No. R4-2015-0201. It is the City's understanding from the letter that the NRG Mandalay Generating Station (MGS) cannot meet effluent limitations for pH for discharges from the retention basins and boiler blowdown, and that NRG is requesting additional time to bring the MGS into compliance with the pH limitations. The tentative TSO would give NRG until July 2016 to seek approval of a work plan, complete the work, and come into compliance.

Without information as to the specific equipment and its location NRG will propose, the City asks that the LARWQCB consider the following comments and request in review of the TSO request:

- 1) On July 1, 2014, the City Council adopted interim urgency ordinance O-2882 prohibiting the expansion of existing, or development of new, energy generation facilities within the Oxnard Coastal Zone pending studies and changes in the Local Coastal Program (LCP), implementing coastal zoning ordinance, and other applicable regulations. On July 29, 2014, the 45-day emergency ordinance was extended for an additional 10 1/2 months by ordinance O-2884. On May 19, 2015, the emergency ordinance was extended for an additional 12 months by ordinance O-2891. With this extension, the ordinance is in force until June 30, 2016.

The necessary modification to comply with the pH limitations may be subject to the City's moratorium ordinance and, if so, the City could not issue a building permit until the ordinance expires or the City Council rescinded the ordinance.

- 2) NRG is currently seeking an Application for Certification (AFC) from the California Energy Commission (CEC) for the Puente Power Project (P3) that will replace the two aging gas-fired steam-generating units (Units 1 and 2) at the existing MGS with a new state-of-the-art General

Electric (GE) Frame 7HA.01 single-fuel combustion turbine generator (CTG) and associated auxiliaries. P3 will be developed on approximately 3 acres of previously disturbed vacant brownfield land located within the existing boundaries of MGS.

The LARWQCB should have adequate information from NRG as to how the construction of the P3 project, if the AFC is approved by the CEC, does not interfere with the continued operation of the MGS during construction of the P3. Will the addition of infrastructure required for the existing MGS to comply with its NPDES permit interfere with the proposed P3?

- 3) The new P3 proposes to continue to use the existing ocean outfall structure referenced as Discharge Point 001. The proposed operating period for the P3 is 30 years, from 2021 to 2050. The City has completed extensive coastal hazard analysis that includes estimates of sea level rise consistent with the Coastal Commission's recently adopted Sea Level Rise Policy Guidance. The City's coastal hazard research and mapping indicate that Discharge Point 001 is currently, consistently, and increasingly at risk from coastal flooding, erosion, and storm surge inundation. The maps, analysis, and methodology are all on file with the California Public Utilities Commission under Docket A14-11-016.

Discharge Point 001 is also likely to become State property at some point in the next 30 years as the mean high tide line moves inland, defining State Tide Lands. This could put the State in a position of maintenance and/or liability for the aging structure.

The Coastal Commission has notified NRG that NRG must apply for a five-year best practices sand management coastal permit that would regulate when and how NRG may use bulldozers to break through naturally-occurring beach sand berms so that the MGS discharge does not pond and back up into the outflow structure.

Finally, the beach over which the discharge water travels is a public beach. The discharge, moving at a visible current when the MGS is fully operating, presents an attractive nuisance and safety hazard to the public and inhibits horizontal coastal access in possible violation of the Coastal Act. Photographs are included that show the discharge ponding, condition of the structure, and people and pets wading in the discharge. The proposed P3 facility application indicates NRG will continue to use the beach outfall discharge even though the greatly reduced amount of discharge (NRG's CEC application states total sanitary and wastewater discharge at 19 AFY) could be redirected either to the adjoining Edison Canal or into the City's sanitary sewer system, assuming appropriate water quality requirements and permits are obtained. Discharge into the Edison Canal may actually benefit the canal's water quality by introducing in-flow at what could otherwise be a stagnant 'dead end' that is 1.7 miles from the Channel Islands harbor.

The City requests that the LARWQCB add a condition on the TSO that Discharge Point 001 be discontinued and demolished when the MGS ceases operation and is decommissioned after December 31, 2020 when the MGS must comply with the Once-Through-Cooling policy. NRG has already indicated in the AFC application that the MGS will be decommissioned.

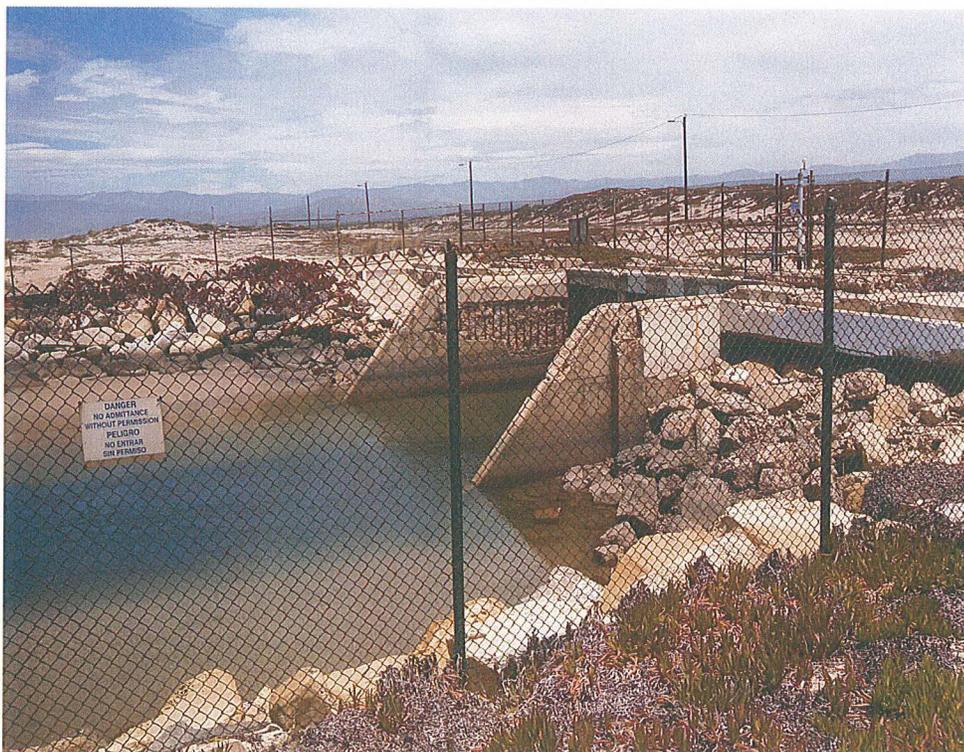
Please feel free to contact Chris Williamson, Principal Planner, for additional information or clarification at (805) 385-8156 or Chris.Williamson@ci.oxnard.ca.us.

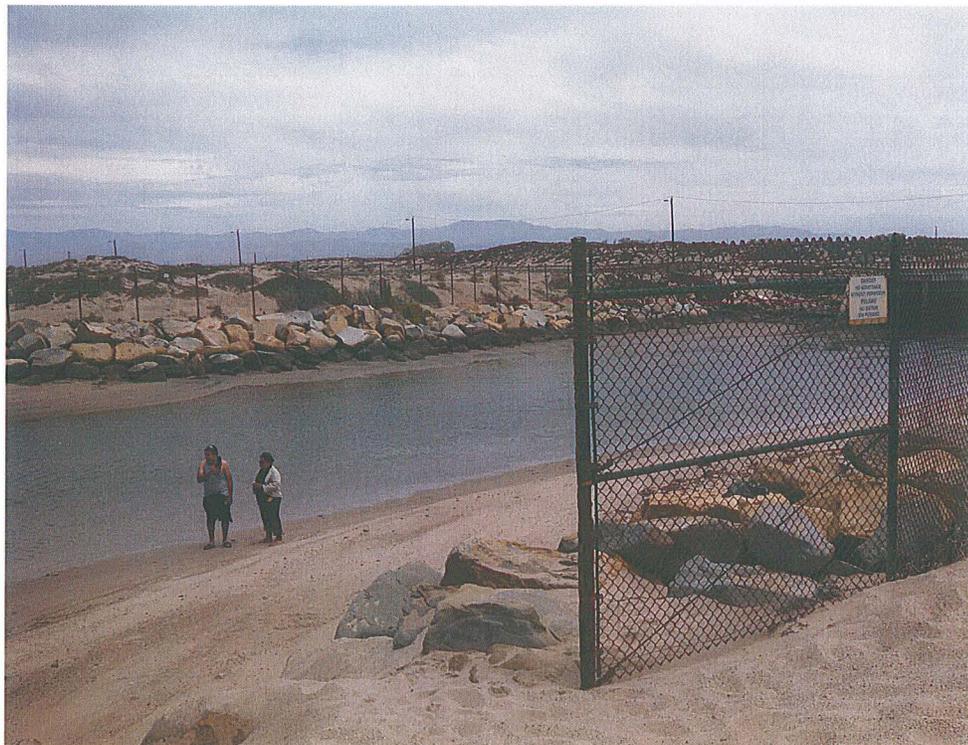
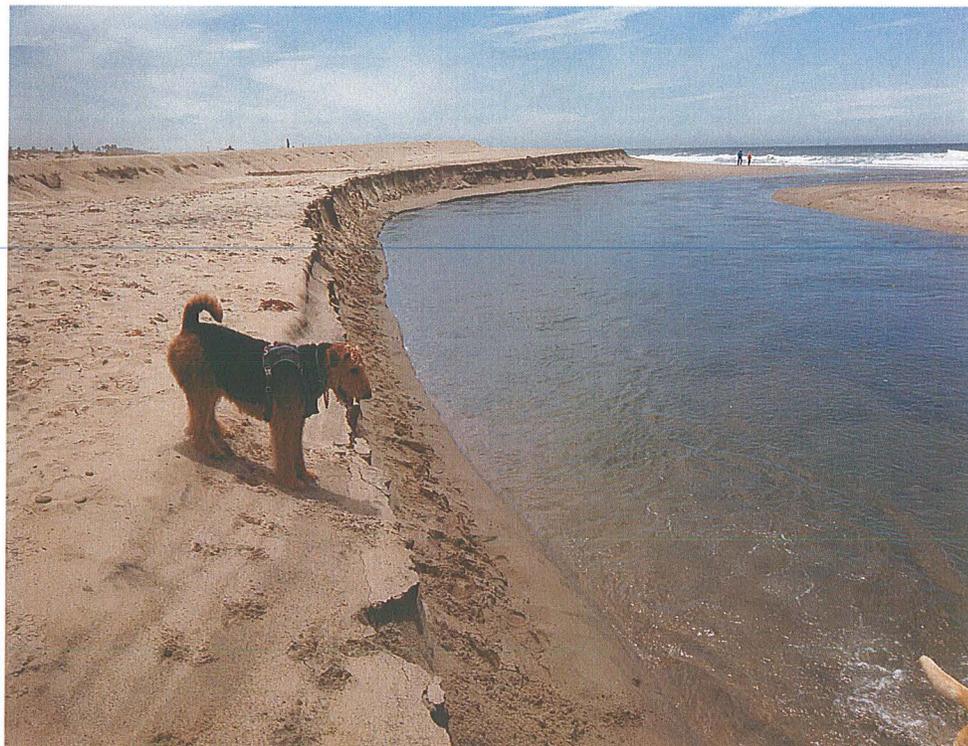
Sincerely:

 PRINCIPAL
PLANNER

 Ashley Golden
Development Services Director

Attachments: Aerial photo of MGS beach discharge
Photo of condition of discharge facility
Two Photos of public access to MGS beach discharge







EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

December 23, 2015

Mr. Thomas A. Di Ciolli
Plant Manager
NRG California South LP
393 North Harbor Blvd.
Oxnard, CA 93035

Dear Mr. Di Ciolli:

TRANSMITTAL OF TIME SCHEDULE ORDER NO. R4-2015-0479 FOR NRG CALIFORNIA SOUTH LP MANDALAY GENERATING STATION, OXNARD, CA. (NPDES NO. CA0001180, CI NO. 2093).

Our letter dated October 15, 2015, transmitted the tentative Time Schedule Order (TSO) for the Mandalay Generating Station (Facility). The Facility is currently regulated under waste discharge requirements (WDRs) contained in Order No. R4-2015-0201, adopted by this Regional Water Board on October 8, 2015. Order No. R4-2015-0201 will become effective on January 1, 2016. The tentative TSO included effluent interim limitations for pH for the retention basin and boiler blowdown discharges. The interim limitations for pH will expire on July 2, 2016. The tentative TSO will provide the required time to make infrastructure changes and implement appropriate control measures to bring the Mandalay Generating Station discharge into compliance with the final pH limitations.

On November 13, 2015, the Regional Water Board received comments from the City of Oxnard regarding the tentative TSO. The comments received and associated responses do not warrant changes to the tentative order. Therefore, the Executive Officer, pursuant to his delegated authority from the Regional Water Board, administratively issues this Time Schedule Order No. R4-2015-0479 without a public hearing. The TSO will become effective on January 1, 2016.

A hard copy of this TSO will be sent only to the Discharger. Other interested parties will receive a copy via email. The TSO is also available on the Regional Water Board's website: www.waterboards.ca.gov/losangeles/.

If you have any questions, please contact Rosario Aston at (213) 576-6653.

Sincerely,



Cassandra D. Owens, Chief
Industrial Permitting Unit

Enclosures: Time Schedule Order No. R4-2015-0479
cc: See Mailing List

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Mailing List (VIA Email Only)

Mr. David Smith, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Ms. Becky Mitschele, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Mr. Kenneth Wong, U.S. Army Corps of Engineers
Ms. Crystal Marquez, U.S. Army Corps of Engineers
Mr. Bryant Chesney, NOAA, National Marine Fisheries Service
Mr. Renan Jauregui, State Water Resources Control Board, Division of Water Quality
Ms. Marylou Taylor, California Energy Commission
Mr. Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service
Mr. William Paznokas, Department of Fish and Wildlife, Region 5
Ms. Sutida Bergguist, State Water Resources Control Board, Drinking Water Division
Ms. Teresa, Henry, California Coastal Commission, South Coast Region
Mr. Theodore Johnson, Water Replenishment District of Southern California
Mr. Tim Smith, Los Angeles County, Department of Public Works, Waste Management
Division
Mr. Angelo Bellomo, Los Angeles County, Department of Public Health
Mr. Gerhardt Hubner, County of Ventura, Flood Control District
Ventura Port District Harbor Patrol
Ms. Elena Brokaw, City of San Buenaventura
City of San Buenaventura, Parks and Recreation
Sierra Club, Southern Coastal Coordinator
Mr. Mati Waiya, Ventura CoastKeeper
Mr. Jason Weiner, Wishtoyo Foundation and its Ventura Coastkeeper Program
Mr. Al Wagner, California Coastal Commission, South Coast Region
Friends of the Ventura River
Mr. Paul Jenkin, Surfrider Foundation, Ventura County Chapter
Ms. Jessica Altstatt, Santa Barbara Channel Keeper
Ms. Betsy Weber, Environmental Defense Center
Mr. Greg Nyhoff, City of Oxnard
Mr. Chris Williamson, City of Oxnard
Ms. Rita Kampalath, Heal the Bay
Mr. Bruce Reznik Los Angeles WaterKeeper
Ms. Johanna Dryer, Natural Resources Defense Council
Mr. Damon Wing, Ventura County
Mr. Daniel Cooper, Lawyers for Clean Water
Mr. Jae Kim, Tetra Tech
Ms. Kristy Allen, Tetra Tech
Mr. Scott Warnock, NRG California South LP, Ormond Beach Generating Station
Mr. William Probasco, NRG California South, LP
Ms. Julie Babcock, NRG California South, LP
Mr. George Piantka, NRG California South, LP

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

TIME SCHEDULE ORDER NO. R4-2015-0479

**REQUIRING NRG CALIFORNIA SOUTH LP
(MANDALAY GENERATING STATION)
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NO. R4-2015-0201
(NPDES PERMIT NO. CA0001180)**

The California Regional Water Quality Control Board, Los Angeles Region, (hereinafter, Regional Water Board) finds:

1. The NRG California South LP, (hereinafter Discharger) is the owner and operator of the Mandalay Generating Station (hereinafter Facility), a steam-electric generating facility. The Facility is located at 393 North Harbor Boulevard in Oxnard California.
2. The Facility consists of three electric generating units (Units 1, 2, and 3) with a total combined generating capacity of approximately 560 megawatts (MW). Units 1 and 2 are steam-electric generating units which use once-through cooling water and each have a rated power generation capacity of 215 MW. Unit 3 is a 130 MW simple-cycle combustion turbine unit which does not utilize once-through cooling water.
3. On October 8, 2015, the Regional Water Board adopted Order No. R4-2015-0201, which renewed the waste discharge requirements and NPDES permit for the Mandalay Generating Station. Order No. R4-2015-0201 serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0001180) Program and regulates the discharge of the effluents at the Facility. The permit authorizes the discharge of up to 255.3 million gallons per day (MGD) of combined wastewater consisting of once-through cooling water, internal process wastewaters, and storm water into the Pacific Ocean, a water of the United States through Discharge Point 001. Order No. R4-2015-0201 becomes effective on January 1, 2016.
4. The Facility generates internal process waste streams consisting of low volume wastes and chemical metal cleaning wastes. The chemical metal cleaning wastes are transported to an approved disposal site and no discharges of these wastes have occurred since 2001. However, the permit includes requirements regulating the discharge of the chemical metal cleaning wastes if the Discharger chooses to discharge that process waste stream.

Low volume wastes consist of boiler blowdown, boiler condensate overboard, reverse osmosis reject water, softener regeneration wastes, and equipment wash water collected in floor drains. The low volume wastes (except for boiler blowdown) are conveyed to the north and south retention basins (retention basins) for settling and stabilization. Storm water collected in the yard drains is conveyed to the retention basins and combined with other process wastewater. The internal process waste streams as well as the storm water from the retention basins are routed to combine with the once-through cooling water prior to discharge to the Pacific Ocean through Discharge Point 001. The boiler blowdown is also combined with other process wastewater and cooling water prior to discharge to the

receiving water through Discharge Point 001. The maximum flow for the boiler blowdown is 0.227 MGD. Based on the hydraulic capacity of the retention basins outlet, a maximum flow of 0.086 MGD will be discharged from the retention basins.

5. Section 423, title 40 of the Code of Federal Regulations (40 C.F.R) provides effluent limitations, guidelines and standards (ELGs) for steam electric power generating point sources. These ELGs are applicable to this Facility. With respect to the pH, it states:

“The pH of all discharges, except once-through cooling water, shall be within the range of 6.0 – 9.0 standard units [40 C.F.R. § 423.12(b)(1)].”

6. Pursuant to the ELGs at 40 C.F.R section 423, Order No. R4-2015-0201 prescribes new pH limitations of 6.0 to 9.0 for the low volume waste stream (i.e., retention basins discharge, and boiler blowdown discharge), and the chemical metal cleaning waste stream. The previous Order No. 01-057 included the same pH limitations but the limitations were applied to the final combined effluent in accordance with the 1997 California Ocean Plan. These pH limitations for the final combined effluent are retained in Order No. R4-2015-0201.

7. Order No. 01-057 required MGS to monitor pH for the low volume wastes at the in-plant monitoring locations. Monitoring data for pH for the retention basins at INT-001A ranges from 7.8 to 9.9 (the maximum pH limit of 9 units was exceeded 8 times) during the period of January 2010 to June 2015. For the boiler blowdown at INT-001B, the reported pH levels (ranges from 9.21 to 9.9) during the period of January 2010 to June 2015 were always above the instantaneous maximum of 9.0 pH units. Based on the monitoring data, the Discharger will not be able to immediately comply with the pH limits of 6 to 9 pH units for instantaneous minimum and maximum. Accordingly, pursuant to Water Code section 13300, a discharge of waste is taking place and/or threatens to take place that violates or will violate the new effluent limitations for pH prescribed by the Regional Water Board.

8. Section 13300 of the California Water Code states, in part, that:

“Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”

9. On October 1, 2015, the Discharger submitted a request for a time schedule order (TSO) and preliminary work plan to implement the TSO. In the September 17, 2015, comment letter to the tentative waste discharge requirements and NPDES permit, the Discharger also requested additional time – up to July 1, 2016, to identify, design and install appropriate pH monitoring, controls and associated treatment to ensure the pH of the retention basins and the boiler blowdown discharges meet the new pH limitations. The Discharger indicated that the pH in the retention basins and boiler blowdown discharges will exceed the pH

instantaneous maximum limit of 9.0 pH Units based on the historical monitoring data. Currently, the retention basins and boiler blowdown discharges have no pH limitations and have no pH monitoring devices or controls systems.

10. Water Code section 13385, subdivisions (h) and (i), require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, *if all of the [specified] requirements are met.*" (emphasis added).
11. In order to comply with the pH limitations in the retention basins and boiler blowdown discharges, the Discharger has considered two options. One option is to redirect the boiler blowdown to the North and/or South retention basins, thereby eliminating the discrete discharge of the boiler blowdown represented as INT-001B. The Discharger will design, permit, fabricate and install tankage, and above and below grade piping to accomplish this transfer. Wastewater in the retention basins, including the boiler blowdown, would be treated to lower the pH to within 6 to 9 pH Units via acid injection or a carbon dioxide gas (CO₂) injection system prior to discharge to INT-001A. The second option is to control the pH level of the boiler blowdown prior to discharge to INT-001B, instead of directing it to the retention basins. If this option is selected, the pH control system will be designed, procured, installed and tested. Therefore, the Discharger is requesting a TSO that will allow until July 1, 2016, to implement the selected modification to meet the pH limits.
12. The Regional Water Board issues this Time Schedule Order (TSO) in recognition that the Discharger needs time to make infrastructure changes and implement appropriate control measures. Through this TSO, the Discharger will be required to comply with the final pH limitations in the retention basins discharge and/or the boiler blowdown no later than July 1, 2016.
13. In accordance with California Water Code section 13385(j)(3)(B)(i), the Regional Water Board finds that: (a) the final pH effluent limitations for the retention basins and boiler blowdown discharges is a new limitations in Order No. R4-2015-0201, (b) the Discharger needs to implement new or modified control measures in order to comply with the new pH effluent limitations, and (c) the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
14. This TSO includes interim limitations for pH based on the performance data. This TSO will provide the required time to make infrastructure changes and implement appropriate control measures or make necessary modifications to its operations to bring the Facility into full compliance with the final limitations for pH.
15. CWC section 13385(j)(3)(D) requires the Discharger to prepare and implement a Pollution Prevention Plan (PPP) pursuant to CWC section 13263.3.

16. A TSO is appropriate in these circumstances to allow time the Discharger to implement necessary control measures that will bring the Facility into compliance with the final pH limitations. The installation of necessary control measures cannot be completed within 30 calendar days. The temporary pH exceedances allowed by this TSO are in the public interest given the significant environmental benefits associated with promptly achieving compliance with the final pH effluent limitations for the retention basins and boiler blowdown discharges. The TSO allows the Facility to continue to generate the power required for the residents while implementing new controls and technologies to ensure compliance with the ELGs.
17. Pursuant to CWC section 13385(j)(3), full compliance with the requirements of this TSO exempts the Discharger from mandatory minimum penalties only for violations of the final pH limitations in the retention basins discharges or in the boiler blowdown discharge (INT-001B) contained in Order No. R4-2015-0201 that occur after the effective date of this TSO.
18. This TSO concerns an existing facility and does not significantly alter the status with respect to the facility. This TSO is also being taken for the protection of the environment. Therefore, issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et seq.) in accordance with sections 15301 and 15321(a)(2) of Title 14 of the California Code of Regulations (CCR).
19. The Regional Water Board has notified the Discharger, interested agencies, and persons of its intent to issue this TSO concerning compliance with waste discharge requirements. The Regional Water Board accepted written comments, and heard and considered all comments pertinent to this matter in a public hearing.
20. Any person aggrieved by this action of the Regional Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to California Water Code section 13300, NRG California South LP, as the owner and operator of the Mandalay Generating Station Facility, shall comply with the requirements listed below to ensure compliance with the final effluent limitations for pH contained in Order No. R4-2015-0201:

1. Comply immediately with the following interim effluent limitations:

Table 1. Interim Effluent Limitations

Constituents	Units	Interim Effluent Limitations	
		Instantaneous Minimum	Instantaneous Maximum
<i>Retention Basin:</i>			
pH	s.u.	6 ¹	9.5 ²
<i>Boiler Blowdown:</i>			
pH	s.u.	6 ¹	9.9 ³

¹ The effluent limitations were based on the ELGs.

² The interim effluent limitation was derived from the Facility's monitoring data collected from the retention basins obtained in January 2010 through June 2015 using the 99th percentile (instantaneous maximum).

³ The interim effluent limitation was derived from the Facility's monitoring data collected from the boiler blowdown obtained in January 2010 through June 2015 using the 99th percentile (instantaneous maximum)..

The foregoing interim effluent limitations for pH are in effect from January 1, 2016, through July 1, 2016. During this time, the Discharger shall investigate and implement any required upgrades to ensure compliance with the final effluent limitations for pH contained in Order No. R4-2015-0201.

2. Achieve full compliance with the final effluent limitations for pH in Order No. R4-2015-0201, no later than July 2, 2016.
3. Submit for approval to the Executive Officer as soon as possible, but no later than January 30, 2016, a workplan to evaluate and select actions/measures, including a feasibility study of the selected actions/measures, and implement the selected actions/measures to reduce the concentration of pH in the discharge. The workplan shall contain the following components:
 - a. A time schedule that achieves compliance with the final effluent limitations for pH as soon as possible, but no later than July 1, 2016;
 - b. A description of the actions/measures to be utilized, and
 - c. A schedule for the evaluation, design, installation or construction, and implementation of the selected actions/measures to bring Mandalay Generating Station's discharge into full compliance with the final effluent limitations for pH.
4. Submit as soon as possible, but no later than January 30, 2016, a Pollution Prevention Plan (PPP) pursuant to California Water Code section 13263.3.

5. Submit monthly progress reports of efforts towards compliance with the final effluent limitations for pH. The reports shall summarize the progress to date, activities conducted during the reporting period, and the activities planned for the upcoming reporting period. Each report shall be submitted to this Regional Water Board by 10th of the following month. and include milestones completed and any new pertinent updates. The first monthly report covering the activities in January 2016 shall be received by the Regional Water Board by February 10, 2016.
6. Submit a final report on the results of the implementation and evaluation of the selected actions/measures by August 10, 2016. The report shall include: a) a description of the actions/measures selected, b) the monitoring data collected after the implementation of the selected actions/measures including treatment process, if any, and c) an evaluation of the effectiveness of the selected actions/measures.
7. All technical reports required under this TSO are required pursuant to California Water Code sections 13267 and 13383. The Regional Water Board needs the required information in order to determine compliance with this TSO. The Regional Water Board believes that the burdens, including costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.
8. Any person signing a document submitted under this TSO shall make the following 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.”
9. If the Discharger fails to comply with any provision of this TSO, the Regional Water Board may take any further action authorized by law. The Executive Officer, or his/her delegee, is authorized to take appropriate administrative enforcement action pursuant, but not limited to, Water Code sections 13301, 13350 and/or 13385. The Regional Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.
10. All other provisions of Order No. R4-2015-0201, that do not conflict with this TSO, are in full force and effect.
11. This Time Schedule Order expires on July 2, 2016.

NRG California South LP
Mandalay Generating Station
Time Schedule Order No. R4-2015-0479

CA0001180

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 23, 2015.


Samuel Unger, P.E.
Executive Officer