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Pio Pico Energy Center, LLC

Petition to Amend
Wastewater Storage Modification for
Pio Pico Energy Center
(11-AFC-1C)

Submitted to:
California Energy Commission

Prepared by:
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July 31, 2015

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ACRONYMS AND ABBREVIATIONS

AFC	Application for Certification
AGL	above ground level
APN	Assessor's Parcel Number
CEC	California Energy Commission
COC	Condition of Certification
CTG	combustion turbine generators
EWTS	Enhanced Water Treatment System
FDOC	Final Determination of Compliance
ft	feet
FWST	Final Wastewater Storage Tank
KOP	Key Observation Point
LORS	Laws, Ordinances, Regulations, and Standards
MW	megawatt
PPEC	Pio Pico Energy Center
PM	particulate matter
PTA	Petition to Amend
RWCT	Raw Water Collection Tank
SDAPCD	San Diego Air Pollution Control District
WCT	Wastewater Collection Tank
WSM	Wastewater Storage Modification

SECTION 1
INTRODUCTION

1.1 Background

The California Energy Commission (CEC) certified the Pio Pico Energy Center (PPEC) project on September 17, 2012 (11-AFC-01C). The PPEC is a peaking and load following power plant with a nominal net generating capacity of 300 megawatts (MW) that uses three General Electric LMS100 natural gas-fired combustion turbine generators (CTGs). The PPEC is owned and operated by Pio Pico Energy Center, LLC (PPEC, LLC). The project site is adjacent to the Otay Mesa Energy Center, an existing natural gas-fired power plant, in an unincorporated area of San Diego County, California (refer to Figure 1). The PPEC site is comprised of a 10-acre parcel of disturbed and development-prepared land within an industrial area. The site is located in the southeast quadrant of the Alta Road and Calzada de la Fuente intersection. The project site comprises the entire parcel with Assessor's Parcel Number (APN) 648-040-45, and the construction laydown area consists of 6.00 acres of an adjacent parcel to the south (APN 648-040-46).

PPEC, LLC began construction of the PPEC in March 2015. Commercial operations are anticipated by September 2016.

Pursuant to Section 1769 of the CEC Siting Regulations, PPEC, LLC (also referred to herein as "Petitioner") petitions the CEC for approval to amend the PPEC Commission Decision to modify the size of the Raw Water Collection Tank (RWCT), size of the Wastewater Collection Tank (WCT), size of the Final Wastewater Storage Tank (FWST), and size of the Water Treatment Building along with substitution of two (2) small clarifiers for the reaction tank, collectively referred to as the Wastewater Storage Modification (WSM).

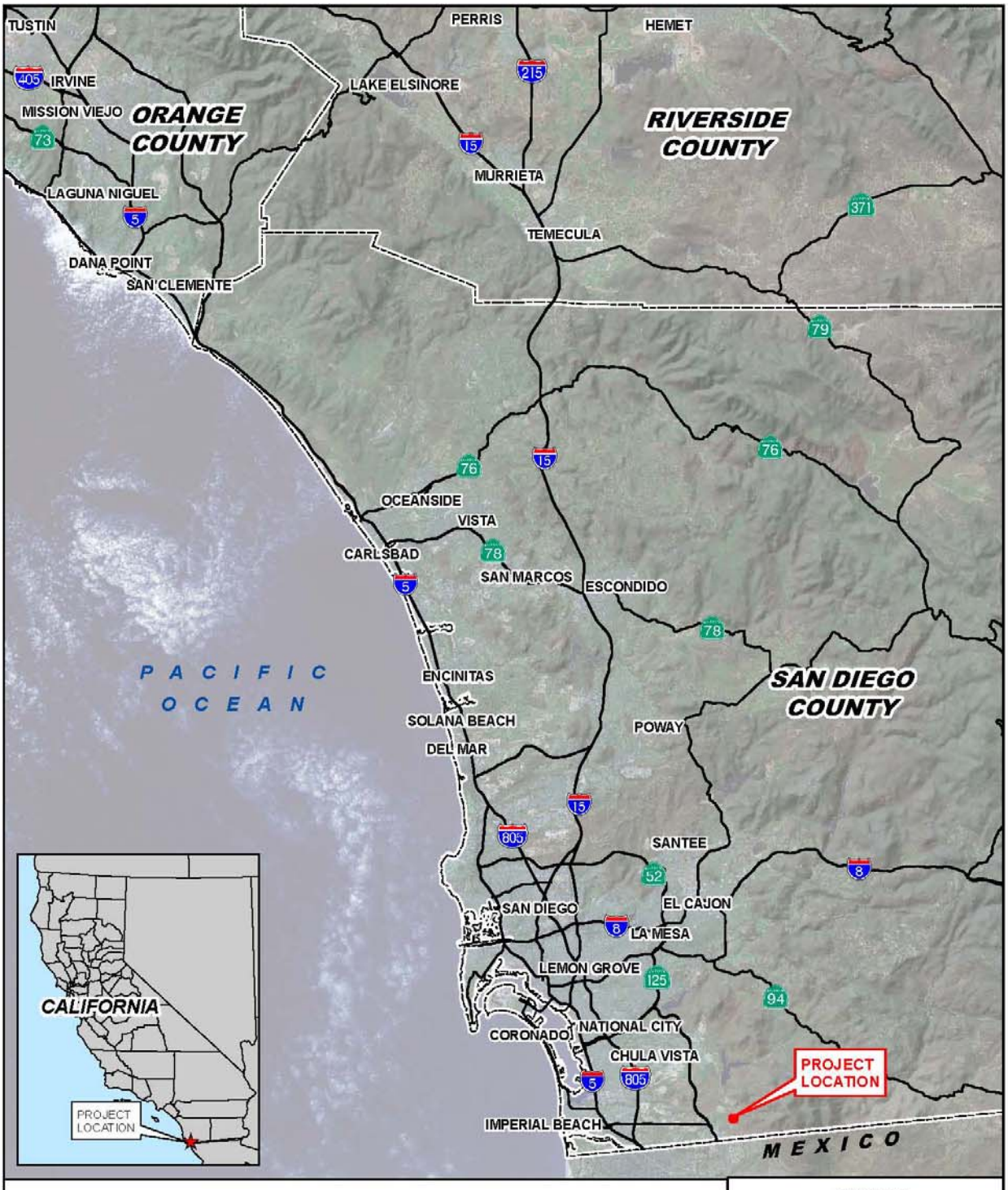

FIGURE 1
PROJECT LOCATION

PIO PICO
ENERGY CENTER

PROJECT NO.: 1790-1-2
DATE: June 2014

SAGE
ENVIRONMENTAL CONSULTING

1.2 Description of Proposed Amendment

The proposed change to the PPEC certification would be limited to the proposed WSM. As part of the WSM, the process WCT, RWCT, and FWST will be upsized and two (2) small clarifiers will be substituted in place of the reaction tank to support flexibility and variances in operating conditions associated with a peaker plant. The modifications to the Water Treatment Building are limited to a slight reduction in square footage and slight increase in height, which will optimize existing site space to accommodate the final design. The wastewater treatment processes remains consistent with the processing steps described in the October 2011 AFC Refinement for the Enhanced Water Treatment System (EWTS).

This Petition to Amend (PTA) addresses all issues associated with the proposed WSM, and includes the following:

- Demonstration that the WSM does not result in any new significant impacts to environmental resources;
- Analysis that the WSM does not result in any changes to the existing Conditions of Certification; and
- Analysis demonstrating compliance with all applicable laws, ordinances, standards and regulations (LORS).

The amendment proposed herein would not result in changes to any of the existing Conditions of Certification, would not require the deletion of existing Conditions of Certification or the addition of new Conditions of Certification to the existing license. As demonstrated below, the project as amended will comply with all existing PPEC Conditions of Certification.

1.3 Summary of Environmental Impacts

Section 1769 (a)(1)(E) of the CEC Siting Regulations requires that an analysis be conducted to address impacts that the proposed change may have on the environment and proposed measures to mitigate significant adverse impacts. Section 1769 (a)(1)(F) requires a discussion of the impacts of proposed change on the facility's ability to comply with applicable laws, ordinances, regulations, and standards (LORS).

The proposed change analyzed in this PTA will not result in any additional impacts beyond those already identified in the original Commission Decision. Section 3 herein discusses the potential impacts of the proposed change on the environment, as well as the consistency of the proposed change with LORS. Further, the project as amended will comply with all existing PPEC Conditions of Certification.

1.4 Consistency of Amendment with License

Section 1769 (a)(1)(D) of the CEC Siting Regulations requires a discussion of the consistency of each proposed project revision with the assumptions, rationale, findings, or other basis of the Commission Decision and whether the revision is based on new information that changes or undermines the basis of the Commission Decision. Also required is an explanation of why the change should be permitted.

Consistent with the CEC Siting Regulations Section 1769(a)(1)(A), Section 2 herein includes a description of the proposed change, as well as the necessity for the change. As set forth in the following sections, the proposed change does not undermine the assumptions, rationale, findings, or other basis of the Commission Decision for the project.

SECTION 2
DESCRIPTION OF PROPOSED CHANGE

Consistent with Sections 1769(a)(1)(A) and (B) of the Siting Regulations, this section includes a complete description of the proposed change as well as a discussion of the necessity for the proposed change. Consistent with Section 1769(a)(1)(C) and (D) of the Siting Regulations, this section explains that the Petitioner was unaware of the need for the proposed WSM prior to certification of PPEC, and that the proposed change is not based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the Commission Decision.

2.1 Proposed Change

The proposed WSM includes increased tank capacities for storage of raw water and wastewater, increasing the height and decreasing the footprint of the Water Treatment Building, and substitution of two smaller clarifiers in place of the reaction tank described in the October 2011 AFC Refinement for the Enhanced Water Treatment System. Note that overall *processes* for treating the raw and wastewater remain unchanged from those described in the EWTS and previously approved by the Commission.

Because PPEC needs to be capable of operation immediately when called upon, a larger WCT upstream of the clarifiers are necessary. The permitted process WCT is 95,000 gallons and the proposed process WCT is 500,000 gallons. The larger WCT will allow for collecting and storing of all wastewater produced for more than 24 hours before clarifier startup from either a cold start or from idle start. The increase in tank size ensures satisfaction of even the most demanding operational needs.

The permitted RWCT is 500,000 gallons and the proposed RWCT is 650,000 gallons. The larger RWCT will allow for additional storage of recycled water from the Waste Water treatment system. This will allow the WW treatment system to operate with minimal starts and stops.

The FWST will be increased from 20,000 gallons to 30,000 gallons. The increased size of the FWST will provide additional storage capacity for conservative measures only. The total final wastewater generated and disposed offsite will not change from that permitted in the Final Decision.

The WSM also includes two (2) small clarifiers in place of the permitted reaction tank to support flexibility and variances in operating conditions associated with a peaker plant. The smaller clarifiers will allow for better turndown and quicker start-up of the WW treatment system. Preliminary data estimates the size of the clarifiers to be 18 feet (ft) long by 9 ft wide by 25 ft high.

The modifications to the Water Treatment Building are limited to a slight reduction in square footage and slight increase in height, which will optimize existing site space to accommodate the final design. The permitted Wastewater Treatment Building is 15,500 square ft and 155 ft long

by 100 ft wide by 15 ft high. The proposed modification will reduce the footprint to 13,200 square ft and the modified dimensions are 165 ft long by 80 ft wide by 23 ft high.

2.2 Necessity of Proposed Change

Sections 1769 (a)(1)(B) and 1769 (a)(1)(C) of the CEC Siting Regulations require a discussion of the necessity for the proposed change to the project and whether this modification is based on information that was known by the Petitioner during the certification proceeding.

The plant design basis for the AFC was preliminary and appropriate for planning and permitting purposes. Now the plant design is being finalized and the contractors "lessons learned" are being incorporated. The design goal of greater than 80% wastewater recovery is very aggressive for a peaker plant. It is customary that wastewater recovery systems are built around continuous facility operation. As described in the AFC and Final Decision, PPEC will operate on an intermittent, peaking basis that supports renewable generation and load demand swings. During the final plant design phase, PPEC evaluated the operating scenarios with the contractor and determined that tank sizing must be adjusted to achieve its operating reliability goals. The capacity of the permitted water and wastewater storage tanks outlined in the October 2011 AFC Refinement for the EWT were considered appropriate and suitable at that time for peaker plants such as PPEC. The modification proposed herein is better capable of operating the system in batch mode. By increasing the sizes of the tanks, the plant will be able to operate continuously for up to three days without running the treatment system, thereby significantly reducing the number of starts and stops of the treatment system. Further, upsizing of the process WCT, RWCT and FWST provides an additional measure of conservatism associated with varied operating scenarios typical of a peaker plant.

SECTION 3
ENVIRONMENTAL ANALYSIS OF THE PROPOSED CHANGE

The only change being requested in this Petition to Amend is to modify the sizes of the process WCT, RWCT, FWST, dimensions of the Water Treatment Building, and two (2) small clarifiers in lieu of the permitted reaction tank. There would be no changes to the environmental baseline or to the environmental effects of the PPEC as to most environmental disciplines.

3.1 Subject Matter Affected by the Proposed Change

The WSM was analyzed for potential project effects on the environment. Analysis was performed as part of this Petition to Amend to demonstrate that there are no significant impacts associated with the proposed change. Accordingly, the discussion that follows focuses on the disciplines of Air Quality, Waste Management, Water Resources, Traffic and Transportation, and Visual Resources. There would be no changes to the environmental effects of the PPEC regarding all other environmental areas addressed in the Commission Decision. As demonstrated below, the proposed WSM will not affect the findings of no significant impact for any of the issue areas addressed in the Final Decision. Moreover, the WSM will not require changes to existing Conditions of Certification, nor are additional Conditions of Certification required or proposed. Moreover, the project will remain in compliance with all applicable LORS.

3.2 Air Quality

Modeling was performed using 2010-2012 meteorological data to determine the impacts associated with the proposed WSM. Comparisons with previous modeling indicated that for all pollutants except 24-hour average particulate matter (PM), project impacts will be lower than in the modeling performed in support of the original application.

Maximum 24-hour project impacts from PM will be slightly higher with the WSM, due to the downwash effects of the larger, relocated tanks on dispersion of cooling tower emissions. Nevertheless, a more detailed review of relevant individual daily impacts shows that PM impacts from the project will not cause or contribute to new violations of 24-hour standards.

For the reasons noted above, the changes to tank size and location do not affect the conclusions of the Final Determination of Compliance (FDOC).

Please refer Appendix A of this PTA, which includes a memo dated July 13, 2015 submitted by Sierra Research on behalf of PPEC, LLC to Steve Moore at the San Diego Air Pollution Control District (SDAPCD), for the complete revised modeling and project impact analysis for the proposed WSM.

3.2.1 Conditions of Certification and Proposed Change

No changes to any of the air quality-related COCs are required with the proposed change.

3.2.2 LORS

The Commission Decision certifying the PPEC concluded that the project is in compliance with all applicable LORS. The PPEC project, as modified with the proposed change described in this PTA, will continue to comply with all applicable LORS.

3.3 Waste Management

The WSM method of wastewater disposal remains unchanged from the October 2011 AFC Refinement for Enhanced Wastewater Treatment System that was approved in the 2012 Commission Decision. The final wastewater will be stored in the 30,000 gallon FWST. Water from the FWST will be pumped into tanker trucks and transported to the City of San Diego's industrial wastewater disposal facility referred to as Pump Station Number 1.

The final process wastewater characteristics are the same as those described in the October 2011 AFC Refinement. Further, the quantity of final wastewater remains unchanged from the quantities described in Table 3.5-4 of the AFC Refinement. The WSM will include treatment to ensure that the final wastewater stream meets the requirements of the City of San Diego's industrial wastewater disposal facility.

The WSM does not alter the sanitary waste stream as originally described in the February 2011 AFC and approved in the 2012 Commission Decision. The sanitary wastewater will still be discharged to the East Otay Mesa Sewer Maintenance District's sewer system.

3.3.1 Conditions of Certification

No changes to any of the waste management COCs are required with the proposed change.

3.3.2 LORS

The Commission Decision certifying the PPEC concluded that the project is in compliance with all applicable LORS. The PPEC project, as modified with the proposed change described in this PTA, will continue to comply with all applicable LORS.

3.4 Water Resources

The volume of process water required for the WSM remains unchanged from the quantities described in the October 2011 AFC Refinement and as approved in the 2012 Commission Decision. The WSM is simply an adjustment to the onsite tank sizes to balance the peaking operations of the units with the need for continuous operations associated with the wastewater recovery equipment. Therefore, no impacts to water resources will result from the proposed WSM.

3.4.1 Conditions of Certification

No changes to any of the Water Resources COCs are required with the proposed change.

3.4.2 LORS

The Commission Decision certifying the PPEC concluded that the project is in compliance with all applicable LORS. The PPEC project, as modified with the proposed change described in this PTA, will continue to comply with all applicable LORS.

3.5 Traffic and Transportation

Construction of the WSM is not anticipated to require additional construction traffic or truck trips than that analyzed in the October 2011 AFC Refinement and CEC Commission Decision. Nor will the proposed WSM modification require additional traffic during operation of PPEC. As identified in the CEC Commission Decision, during PPEC operation, the project would rely on contracted tanker trucks to transport wastewater approximately 21 miles to the City of San Diego's industrial wastewater disposal facility, referred to as Pump Station Number 1. From the project site, tanker trucks would use State Route 125 (SR-125), State Route 54 (SR-54) and Interstate 5 (I-5). This truck route is the most efficient route with the least amount of surface street and traffic signal interruption. The volume of wastewater needed to be transported off-site will not change from that of the approved PPEC project. Therefore, no impacts to traffic and transportation will result from the proposed WSM.

3.5.1 Conditions of Certification

No changes to any of the traffic and transportation COCs are required with the proposed change.

3.5.2 LORS

The Commission Decision certifying the PPEC concluded that the project is in compliance with all applicable LORS. The PPEC project, as modified with the proposed change described in this PTA, will continue to comply with all applicable LORS.

3.6 Visual Resources

The 2012 Commission Decision describes the inventory of visual resources within the vicinity of the previously approved PPEC project site, including a description of the regional landscape setting, the visual sphere of influence (VSOI) of the approved PPEC, and inventory methods and results. The WSM would include modification to the size and height of the process Wastewater Collection Tank, Raw Water Collection Tank, FWST and Water Treatment Building. The dimensions of the structures associated with the WSM are included in Table 3.6-1 below.

Table 3.6-1 WSM Structure Dimensions

Structure	Permitted/Licensed	Proposed
Wastewater Treatment Building	15,500 square feet 155'x100'x15' high	13,200 square feet 165' x 80' x 23' high
Raw Water Collection Tank (RWCT)	500,000 gallons 54' diameter 30' high	650,000 gallons 58' diameter 49' high
Wastewater Collection Tank (WCT)	95,000 gallons 26' diameter 24' high	500,000 gallons 61' diameter 39' high
Final Wastewater Storage Tank (FWST)	20,000 gallons 11' diameter 30' high	30,000 gallons 12' diameter 35.5' high
Clarifiers[1]	*Reaction tank specifications were not available*	18' length 9' width 25' high

[1] Proposed dimension of clarifiers is based on preliminary data.

The WSM would be visually consistent with the approved PPEC facility structures. The approved PPEC AFC and CEC Commission Decision identified four Key Observation Points (KOPs) for the PPEC project. The KOPs will not be significantly affected by the proposed WSM. While the WSM would increase the size and heights of the process Wastewater Collection Tank, and Raw Water Collection Tank, FWST and Water Treatment Building, these changes would not add any visual point of interest to PPEC. Furthermore, none of the structures would visually dominate the site, nor would they create a visual point of interest due to their size or color in relation to the other plant facilities. Therefore, while the change in size and slight relocation of these structures will slightly alter the layout of the project as a whole, these changes will not modify the existing analysis or conclusions presented in the AFC or October 2011 AFC Refinement approved in the Commission Decision. Visual impacts associated with the WSM would remain less than significant with the implementation of the existing visual resources COCs identified in the CEC Commission Decision.

3.6.1 Conditions of Certification

No changes to any of the visual resources COCs are required with the proposed change.

3.6.2 LORS

The Commission Decision certifying the PPEC concluded that the project is in compliance with all applicable LORS. The PPEC project, as modified with the proposed change described in this PTA, will continue to comply with all applicable LORS.

SECTION 4
POTENTIAL EFFECTS ON THE PUBLIC AND PROPERTY OWNERS

This section addresses potential effects of the PPEC proposed change set forth in this PTA on nearby property owners, the public, and parties in the application proceeding, pursuant to Section 1769(a)(1)(I) of the CEC Siting Regulations.

The PPEC project, as modified, will not differ in potential effects on adjacent land owners as compared with the previously approved project. PPEC would continue to have no significant environmental effects and would remain in compliance with applicable LORS. Therefore, the proposed change set forth in this PTA will have no adverse effects on nearby property owners, the public, or other parties to the application proceeding.

SECTION 5
LIST OF PROPERTY OWNERS

As required by the Section 1769(a)(1)(H) of the CEC Siting Regulations, a list of property owners potentially affected by the proposed change is provided herewith. A list of property owners within 1,000 feet of the PPEC site boundary is included as Appendix B. Fewer properties are potentially affected by the proposed change than the owners listed in the AFC because the proposed change does not affect the natural gas or electrical transmission lines.

APPENDIX A
MEMO TO SDAPCD

July 13, 2015

sierra research
A Trinity Consultants Company
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Sacramento, CA 95811
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Fax: (916) 444-8373
Ann Arbor, MI
Tel: (734) 761-6666
Fax: (734) 761-6755

Memo to: Steve Moore

From: Steve Hill

Subject: Pio Pico Energy Center Water Storage Tanks

As we discussed on July 2, minor changes are proposed to the water storage tank designs for the Pio Pico Energy Center: the water tanks will be in slightly different locations, and two of the tanks will be increased in size. The Raw Service Water Tank will be increased from 500,000 gallons to 650,000 gallons, and the Process Wastewater Tank will be increased from 95,000 gallons to 500,000 gallons. The tank locations are shown in the attached drawing. The cooling tower design, operation and water quality are assumed to be the same as originally modeled.

The new tank dimensions are provided below.

- (039) Raw water tank: 49'H X 58' dia
- (637) Process wastewater tank" 39'H X 61' dia

To assess the potential impact these changes might have on the conclusions in the District's Final Determination of Compliance (FDOC), we have modeled project impacts using CY 2010-2012 meteorological data (the same data used for the heat input amendment), the heat input amendment stack parameters, and the proposed new tank configuration (larger tanks at new locations). Based upon that modeling, we have determined that the proposed new tank configuration will not change any of the conclusions in the FDOC.

- All of the maximum pollutant impacts (except those related to PM) are due to turbine emissions, and the turbine stacks are too tall to be affected by the proposed changes to the water tanks. As a result, the conclusions in the FDOC with regard to all pollutants (except for PM) are unaffected by the proposed tank changes.

- Although downwash due to the larger water tanks results in higher PM impacts from the cooling tower, those impacts are not high enough to result in new exceedances of either state or federal ambient air quality standards. As a result, the conclusions in the FDOC with regard to PM are unaffected by the tank changes.

Discussion

An overview of the revised modeling and project impact analysis is presented below. It should be noted that with respect to this discussion, "original modeling" refers to the modeling performed for the initial application (2008-2010 meteorological data, original turbine stack parameters, original tank configuration); and "tank change modeling" refers to the most recent modeling, performed to demonstrate that the tank changes did not change FDOC conclusions (2010-2012 meteorological data, revised stack parameters, changed tank size and location).

1. Impacts for all pollutants except PM

    a. The cooling tower emits only PM. Therefore, for all pollutants except PM, project impacts are equal to the turbine impacts.

    b. Annual turbine impacts in the tank change modeling are lower than annual turbine impacts in the original modeling for all pollutants.

    c. The only year common to both meteorological data sets is 2010. Using 2010 data for a direct apples-to-apples comparison, 1-hour turbine impacts for 2010 in the tank change modeling are lower than 1-hour turbine impacts for 2010 in the original modeling.

    d. Therefore, the change in tank size and location does not change the compliance demonstration for all pollutants other than PM.

2. PM impacts

    a. 24-hour $PM_{2.5}$

        i. Based on the original modeling, the peak 24-hour PM impacts were due to turbine impacts on the nearby hillside. Peak impacts for 2008 and 2009 met data were turbine impacts. The peak impacts using 2010 met data were at the project fence line, and were due to cooling tower emissions.

        ii. Turbine impact areas are barely affected by cooling system emissions, and vice versa.

        iii. The 24-hour PM impact area due to turbine emissions is smaller and the peak concentration is lower (consistent with the improved overall dispersion from the slight increase in exit velocity and volume associated with the heat input changes) for tank change modeling when compared with the original modeling, while the 24-hour impact area due to cooling tower is larger and the peak impact is higher (consistent with increased downwash related to the larger water tanks).

iv. Under the tank change modeling, the project's peak 24-hour PM impact increases from 3.9 $\mu g/m^3$ to 4.6 $\mu g/m^3$, and the maximum impacts are due to cooling tower emissions for all three years.

v. The $PM_{2.5}$ 24-hour design value[1] for 2010-2012 at the Chula Vista monitoring station is 21.4 $\mu g/m^3$—the average of 21.2 (2010), 18.7 (2011), and 24.3 (2012). The sum of the design value and the maximum project impact is 25.8 $\mu g/m^3$. This is lower than the $PM_{2.5}$ 24-hour standard of 35 $\mu g/m^3$.

vi. The project therefore continues to comply with the $PM_{2.5}$ 24-hour standard.

b. 24-hr PM_{10}

i. The highest 24-hour PM_{10} average at Otay Mesa in 2010-2012 was 57.0 $\mu g/m^3$. The sum of this value and the project impact from the tank change modeling (4.6 $\mu g/m^3$) is well below the federal PM_{10} standard of 150 $\mu g/m^3$.

ii. However, there are several days in 2010-2012 that are less than 5 $\mu g/m^3$ below the state standard of 50 $\mu g/m^3$. (The District considers any impact that would change a day from non-exceedance to exceedance to be a violation.)

iii. For each day where the background PM_{10} measurement from Otay Mesa/Donovan or Chula Vista was between 46 and 50 $\mu g/m^3$, the project impact from the tank change modeling was added to the background measurement to determine if the project impact would cause a new exceedance of the state standard (i.e., exceed a combined impact of 50 $\mu g/m^3$). As shown in Table 1, no impact was above 50 $\mu g/m^3$.

iv. The project therefore complies with the PM_{10} 24-hour standards.

c. Annual PM

i. Project impacts using the tank change modeling are lower than the original modeled impacts.

ii. The project therefore complies with the annual PM standards.

[1] The design value is the three-year average of the 98th percentile of 24-hour PM2.5 averages. In 2010 and 2011, values were determined at the Chula Vista site every three days. The 98th percentile for each calendar year is therefore the second-highest recorded value. The 98th percentile for 2012 is the third-highest value.

Table 1
Combined Maximum 24-Hour Average PM_{10} Project Impact Plus Background

Date[a]	Max 24-hour project PM impact (µg/m³)	Max 24-hour background PM_{10} (µg/m³)	Total (µg/m³)[b]	Monitor
8-Jan-10	0.50	46	47	OTAY MESA
26-Jan-10	0.15	49	49	OTAY MESA
4-Dec-10	0.15	50	50	OTAY MESA
10-Dec-10	0.25	50	50	OTAY MESA
15-Apr-11	0.43	46	46	CHULA VISTA
8-Jul-11	0.92	49	50	OTAY MESA
12-Oct-11	0.40	46	46	OTAY MESA
10-Jan-12	0.18	48	48	OTAY MESA
8-Jun-12	0.32	45	45	OTAY MESA
5-Nov-12	0.46	45	45	OTAY MESA
11-Dec-12	0.61	48	49	OTAY MESA

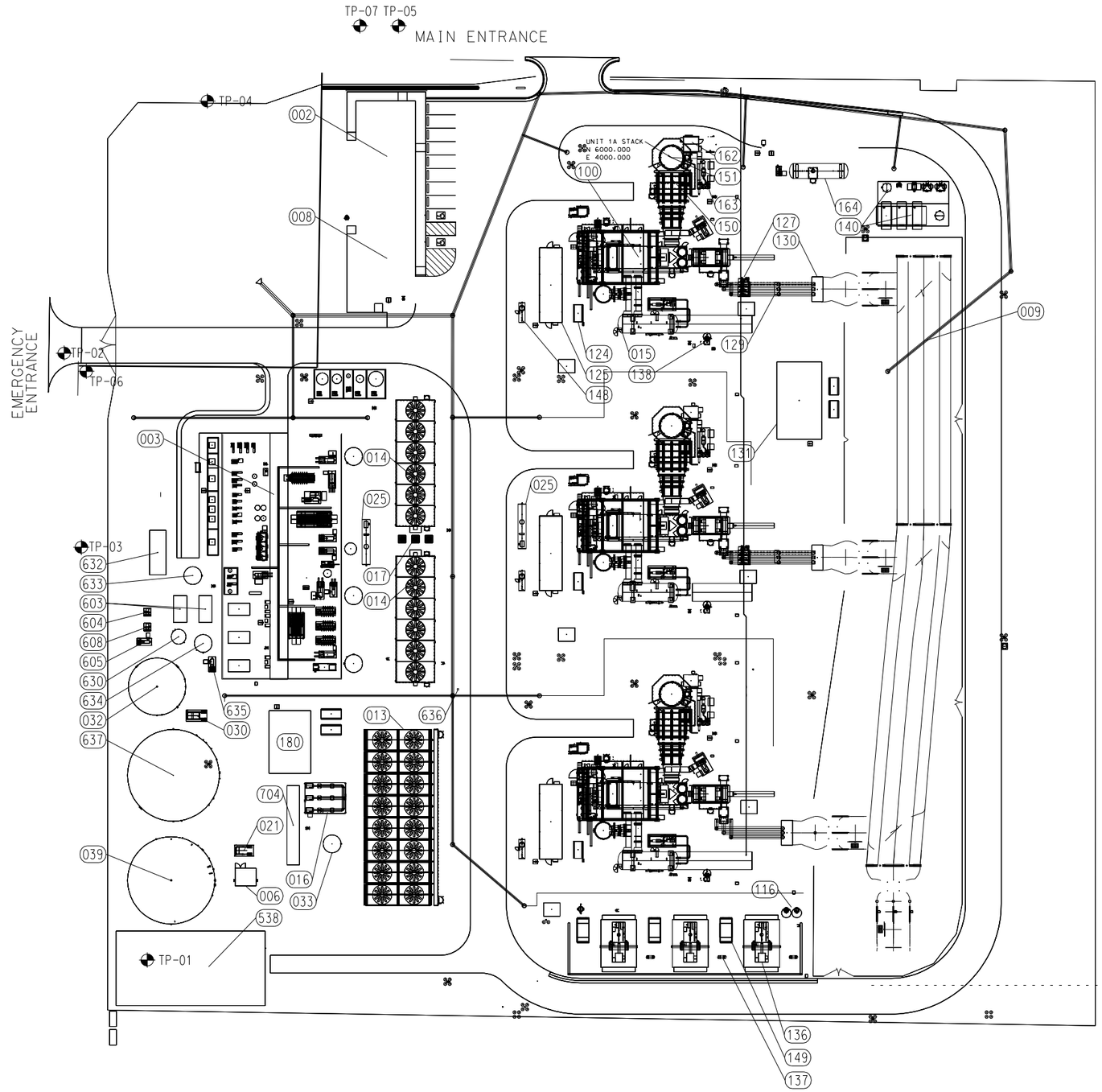
Notes
a. Includes all dates in the three-year modeling period with a background concentration above 44 µg/m³.
b. State 24-hour PM_{10} standard is 50 µg/m³. A value of 51 or higher exceeds the standard.

Conclusion

Modeling was performed using 2010-2012 meteorological data to determine the impacts of the Pio Pico Energy Center project with a revised water storage tank configuration. Comparisons with previous modeling indicated that for all pollutants except 24-hour average PM, project impacts will be lower than in the modeling performed in support of the original application.

Maximum 24-hour project impacts from PM will be higher with the revised water storage tank configuration, due to the downwash effects of the larger, relocated tanks on dispersion of cooling tower emissions. Nevertheless, a more detailed review of relevant individual daily impacts shows that PM impacts from the project will not cause or contribute to new violations of 24-hour standards.

For the reasons noted above, the changes to tank size and location do not affect the conclusions of the FDOC. Please let me know if you have any questions.



NO	EQUIPMENT TITLE
636	WASTEWATER TANKER TRUCK CONNECTION
637	WASTEWATER COLLECTION TANK
704	DEMINERALIZER TRAILER

TIE-IN LOCATIONS	
TP-01	FUEL GAS
TP-02	POTABLE WATER
TP-03	RECYCLED WATER
TP-04	STORM WATER
TP-05	SEWER
TP-06	FIRE WATER
TP-07	VOICE/DATA

NO	EQUIPMENT TITLE
002	CONTROL ROOM
003	WATER / WASTEWATER TREATMENT
006	FIRE WATER PUMP
008	WAREHOUSE
009	SWITCHYARD
013	AIR COOLED HEAT EXCHANGER (ACHE)
014	WET SURFACE AIR COOLER (WSAC)
015	INTERCOOLER
016	CIRCULATING WATER PUMPS
017	WSAC RECIRC PUMPS
021	SERVICE WATER PUMP SKID
025	OIL/WATER SEPARATOR
030	DEMINERALIZED WATER PUMPS
032	DEMINERALIZED WATER TANK
033	CIRCULATING WATER EXPANSION TANK
039	SERVICE WATER / FIRE WATER TANK
100	COMBUSTION TURBINE
116	FUEL GAS COMPRESSOR DISCHARGE FILTER/SEPARATOR
124	PAD MOUNTED TRANSFORMER
125	CTG POWER/CONTROL MODULE
127	GENERATOR BREAKER
129	AUXILIARY TRANSFORMER
130	GENERATOR TRANSFORMER
131	5KV ELECTRICAL MODULE
136	FUEL GAS COMPRESSOR
137	FUEL GAS DRAIN TANK
138	FINAL FUEL GAS FILTER/SEPARATOR
140	AIR COMPRESSOR / DRYER / RECEIVERS
148	COMBUSTION TURBINE DRAINS TANK
149	FUEL GAS COMPRESSOR RECYCLE COOLER
150	EMISSIONS CONTROL MODULE (ECM)
151	STACK
162	CONTINUOUS EMISSIONS MONITORING SYSTEM ((CEMS)
163	AMMONIA INJECTION SKID
164	AQUEOUS AMMONIA STORAGE TANK
180	WATER TREATMENT / WSAC ELECTRICAL MODULE
538	GAS METERING STATION (BY OTHERS)
603	CLARIFIER
604	CLARIFIER FEED PUMP
605	FILTERED WATER FORWARDING PUMP
608	THICKENED SLUDGE PUMP
630	THICKENING TANK
632	FUTURE FILTER PRESS
633	RECARBONATION TANK
634	WWT WASTE TANK
635	WASTEWATER FORWARDING PUMP SKID

30 0 30 60
SCALE IN FEET

N

– PRELIMINARY –
NOT FOR CONSTRUCTION

REV	DESIGN BY	DRAWN BY	CHECKED BY	DATE
C	ISSUED FOR INFORMATION	A. FILIP	A. FILIP	-	OPEN
B	ISSUED FOR INFORMATION	A. FILIP	A. FILIP	C. YIM	04-24-14
A	ISSUED FOR INFORMATION	A. FILIP	A. FILIP	L. POLLOCK	10-31-12

PIO PICO ENERGY CENTER, LLC.

PIO PICO ENERGY CENTER

Kiewit

Kiewit Power
9401 Renner Boulevard
Lenexa, Kansas 66219

OPEN

PLOT PLAN

ENGINEER/DESIGN ORIGINATOR	A. FILIP
LEAD ENG	A. TAYLOR
ENG MGR	C. ANDERSON
PROJ MGR	M. WHEELER

DRAWING NUMBER

2012-055-PP-001

APPENDIX B
LIST OF PROPERTY OWNERS WITHIN 1,000 FEET OF PROJECT SITE

Pio Pico Energy Center
List of Property Owner's Within 1,000 Feet of Project Site

APN	OWNER NAME		OWNER ADDRESS			Detail
64804011	INTERNATIONAL INDUSTRIAL PARK INC		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804013	LEE SOON WOO & YUEN LING FAMILY TRUST 01-14-91		2760 E 4TH ST #515	NATIONAL CITY CA	91950	Within 1,000 feet of Site
64804023	RANCHO VISTA DEL MAR		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804026	STATE OF CALIFORNIA	PUBLIC AGENCY			00000	Within 1,000 feet of Site
64804035	O M C PROPERTIES L L C		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804038	O M C PROPERTIES L L C	C/O CALPINE CORP	ATTN:PROPERTY TAX	717 TEXAS ST #1000	77002	Within 1,000 feet of Site
64804045	ALTA PARCELS L P		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804046	ALTA PARCELS L P		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804047	CALPINE CORP	CALIFORNIA STATE ASSESSED			00000	Within 1,000 feet of Site
64804048	ALTA PARCELS L P		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804049	INTERNATIONAL INDUSTRIAL PARK INC		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804051	INTERNATIONAL INDUSTRIAL PARK INC		5440 MOREHOUSE DR #4000	SAN DIEGO CA	92121	Within 1,000 feet of Site
64804056	C C A WESTERN PROPERTIES INC	ATTN: CLINTON JAGGER	10 BURTON HILLS BLVD	NASHVILLE TN	37215	Within 1,000 feet of Site