Walnut Creek Energy, LLC
3 MacArthur Place, Suite 100
Santa Ana, CA 92707

Walnut Creek Energy Park

September 29, 2011

Ms. Felicia Miller
Compliance Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95661

Subject: Walnut Creek Energy Park - Docket No. 05-AFC-2C
Petition for Modification #5 – Cooling Tower Modification

Dear Ms. Miller:

Walnut Creek Energy, LLC (WCE) (a wholly owned subsidiary of Edison Mission Energy) petitions the California Energy Commission to modify the certification for Walnut Creek Energy Park (WCEP) (05-AFC-02C). As such please find the enclosed Petition for Modification #5 (Petition) for the WCEP, submitted for your approval. This Petition is intended to address modifications to the cooling tower.

As described in the enclosed Petition, WCE does not suggest any revisions to the Conditions of Certification set forth in the February 2008 certification for the WCEP. With adherence to the Conditions of Certification, the WCEP, as modified, will not cause significant adverse impacts to the environment and will not cause environmental impacts substantially different than those addressed in the Commission Decision.

Should you have any questions or require additional information related to this submittal, please contact me at (714) 513-8100.

Sincerely,

R. Garcia R.

Ramiro R. Garcia
Environmental Program Manager

Attachment

Petition for Modification No. 5

Cooling Tower Modification

for the

Walnut Creek Energy Park

City of Industry, California

(05-AFC-02C)

Submitted to the:

California Energy Commission

Submitted by:

Walnut Creek Energy, LLC

A wholly owned subsidiary of

EDISON MISSION ENERGY®

An *EDISON INTERNATIONAL®* Company

With Technical Assistance by:

CH2MHILL

Sacramento, California

September 2011

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Acronyms and Abbreviations

AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AFC	Application for Certification
BPIP-PRIME	Building Profile Input Program
CCR	California Code of Regulations
CEC	California Energy Commission
CO	Carbon Monoxide
EME	Edison Mission Energy
ISCST3	Industrial Source Complex Short Term 3
LORS	laws, ordinances, regulations, and standards
NO2	Nitrogen Dioxide
PM	Particulate Matter
WCE	Walnut Creek Energy, LLC
WCEP	Walnut Creek Energy Park

Executive Summary

Walnut Creek Energy, LLC (WCE) (a wholly owned subsidiary of Edison Mission Energy) petitions the California Energy Commission to modify the certification for Walnut Creek Energy Park (WCEP) (05-AFC-02C). This Petition for Modification proposes to modify the dimensions and location of the cooling tower for the WCEP.

The new cooling tower will be a four cell (4) design with a deck height of 42 feet and a cone height of 48 feet. The overall length will be 168 feet with a width of 36 feet, with a fan diameter of 28 feet. The location of the revised cooling tower will be an incremental change, locating it approximately 11.4 feet south of the previous tower design, which places it in a location further away from the facility fence line, but still within the original project boundary. The emissions profile for the new equipment will change slightly, as detailed in Attachment 1, Revised Cooling Tower Modeling Assessment, and in Section 2.0.

WCE does not suggest any revisions to the Conditions of Certification set forth in the February 2008 certification for WCEP. With adherence to the Conditions of Certification, the WCEP, as modified, will not cause significant adverse impacts to the environment and will not cause environmental impacts substantially different than those addressed in the Commission Decision.

SECTION 1.0

Introduction

1.1 Overview of Modifications

Walnut Creek Energy, LLC (WCE) petitions the California Energy Commission (CEC) to modify the certification for Walnut Creek Energy Park (WCEP) (05-AFC-02C). The Application for Certification (AFC) for this project was filed in 2005 (WCE, 2005) and the facility received CEC certification on February 27, 2008 (CEC, 2008).

This Petition for Modification proposes to modify the cooling tower dimensions and location. A detailed description of the proposed modifications to the WCEP is included in Section 2.0.

This Petition for Modification contains all of the information that is required pursuant to the CEC's Siting Regulations (California Code of Regulations [CCR] Title 20, Section 1769, Post Certification Amendments and Changes). The information necessary to fulfill the requirements of Section 1769 is contained in Sections 1.0 through 6.0, as summarized in Table 1.1-1.

TABLE 1.1-1
Informational Requirements for Post-Certification Modifications

Section 1769 Requirement	Section of Petition Fulfilling Requirement
(A) A complete description of the proposed modifications, including new language for any conditions that will be affected	Section 2.0—Proposed modifications Sections 3.1 to 3.15—Proposed changes to Conditions of Certification, if necessary, are located at the end of the technical section
(B) A discussion of the necessity for the proposed modifications	Section 1.3
(C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at that time	Section 1.3
(D) If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted	Sections 1.4, 3.1
(E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts	Section 3.1
(F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards;	Section 3.1
(G) A discussion of how the modification affects the public	Section 4.0
(H) A list of property owners potentially affected by the modification	Section 5.0
(I) A discussion of the potential effect on nearby property	Section 6.0

TABLE 1.1-1
Informational Requirements for Post-Certification Modifications

Section 1769 Requirement	Section of Petition Fulfilling Requirement
owners, the public and the parties in the application proceedings.	

1.2 Ownership of the Facility Property

WCE will own the WCEP, and is a wholly-owned subsidiary of Edison Mission Energy (EME). EME is an independent power developer, owner, and operator engaged in the business of owning or leasing, operating, and selling energy and capacity from electric power generation facilities.

1.3 Necessity of Proposed Changes

The Siting Regulations require a discussion of the necessity for the proposed revision to WCEP certification and whether the modification is based on information known by the petitioner during the certification proceeding (Title 20, CCR, Sections 1769 [a][1][B] and [C]). This Petition for Modification requests approval to modify the dimensions and location of the original WCEP cooling tower, as described in the Commission Decision. The purpose of the modification is to align the dimensions to the current cooling tower design, as needed, to meet the plant performance and noise requirements of the project.

1.4 Consistency of Changes with Certification

The Siting Regulations also require a discussion of the consistency of the proposed project revision with the applicable laws, ordinances, regulations, and standards (LORS) and whether the modifications are based on new information that changes or undermines the assumptions, rationale, findings, or other basis of the final decision (Title 20, CCR Section 1769 [a][1][D]). If the project is no longer consistent with the certification, the Petition for Modification must provide an explanation why the modification should be permitted.

The proposed project revisions are consistent with all applicable LORS. This Petition for Modification is not based on new information that changes or undermines any basis for the Final Decision. The findings and conclusions contained in the Commission Decision for WCEP (CEC, 2008) are still applicable to the project, as modified.

1.5 Summary of Environmental Impacts

The CEC Siting Regulations require that an analysis be conducted to address the potential impacts the proposed modifications may have on the environment, and proposed measures to mitigate any potentially significant adverse impacts (Title 20, CCR, Section 1769 [a][1][E]). The regulations also require a discussion of the impact of the modification on the facility's ability to comply with applicable LORS (Section 1769 [1][a][F]). Section 3.0 of this Petition for Modification includes a discussion of the potential environmental impacts associated

with the modifications, as well as a discussion of the consistency of the modification with LORS. Section 3.0 also includes updated environmental baseline information if changes have occurred since the AFC that would have a bearing on the environmental analysis of the Petition for Modification. Section 3.0 concludes that there will be no significant environmental impacts associated with implementing the actions specified in the Petition for Modification and that the project as modified will comply with all applicable LORS.

1.6 Conditions of Certification

The addition of the new cooling tower identified in this petition would require no changes to the CEC Conditions of Certification, as described in the Commission Decision for the WCEP.

1.7 References

California Energy Commission (CEC). 2008. Final Commission Decision on Walnut Creek Energy Park. California Energy Commission, Sacramento, California. February.

Walnut Creek Energy, LLC (WCE). 2005. Application for Certification for the Walnut Creek Energy Park. Submitted to the California Energy Commission. Submitted by Walnut Creek Energy, LLC, a wholly owned subsidiary of Edison Mission Energy.

South Coast Air Quality Management District (SCAQMD) "SC*AQMD Modeling Guidance for AERMOD"* October 2009.

SECTION 2.0

Description of Project Modifications

This section includes a description of the proposed project modifications, consistent with CEC Siting Regulations (Title 20, CCR, Section 1769 [a][1][A]). This Petition for Modification proposes to modify the dimensions and location of the original WCEP cooling tower.

The new cooling tower will be a four cell (4) design with a deck height of 42 feet and a cone height of 48 feet. The overall length will be 168 feet with a width of 36 feet, with a fan diameter of 28 feet. The location of the revised cooling tower will be an incremental change, locating it approximately 11.4 feet south of the previous tower design, which places it in a location further away from the facility fence line. The emissions profile for the new equipment will change slightly, as detailed in Attachment 1, Revised Cooling Tower Modeling Assessment.

WCE does not suggest any revisions to the Conditions of Certification set forth in the February 2008 certification for the WCEP. With adherence to the Conditions of Certification, the WCEP, as modified, will not cause significant adverse impacts to the environment and will not cause environmental impacts substantially different than those addressed in the Commission Decision.

This Petition for Modification requests approval to modify the dimensions and location of the original WCEP cooling tower, as described in the Commission Decision. The purpose of the modification is to align the dimensions to the current cooling tower design, as needed, to meet the plant performance and noise requirements of the project.

No Conditions of Certification will be changed, therefore no new language is proposed.

SECTION 3.0

Environmental Analysis of Proposed Project Modifications

The proposed modifications to the WCEP would be limited to the modification of the dimensions and location of the cooling tower. As a result, the environmental analysis for all of the environmental disciplines does not differ significantly from that described in the AFC, and the impacts associated with this Petition for Modification would be less than significant. The environmental analysis for the following environmental disciplines would not differ significantly from the AFC and Supplement IV:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Paleontology
- Hazardous Materials Management
- Land Use
- Noise
- Public Health
- Socioeconomics
- Soil and Water Resources
- Traffic and Transportation
- Visual Resources
- Waste Management
- Worker Safety and Fire Protection

For the environmental disciplines of Air Quality and Public Health , additional evaluation and verification by technical resource experts was undertaken in order to confirm that the proposed cooling tower modifications would not change the environmental analysis presented in the AFC. Sections 3.1 and 3.2 below describe the additional evaluation performed for the aforementioned two resource areas. The cooling tower modification does not require changes to the Conditions of Certification.

3.1 Air Quality

The Commission Decision determined that the WCEP would not have significant impacts on Air Quality. Pursuant to this proposed Petition for Modification, the cooling tower modifications are not expected to have a significant impact on Air Quality.

3.1.1 Environmental Baseline Information

This Petition for Modification does not require changes to the Environmental Baseline Information as described in the AFC. There have been no significant changes that would alter the analysis or conclusions for Air Quality.

3.1.2 Environmental Consequences

The proposed cooling tower modifications are not expected to cause any significant change to air quality, as discussed in the AFC. In preparation of the WCEP AFC, no issues or significant impacts were identified for air quality, and as such, no Conditions of Certification for air quality were issued by the CEC for construction or operation of the WCEP.

A revised air quality impact analysis of the proposed cooling tower modifications was conducted on September 21, 2011 by Atmospheric Dynamics, Inc. To assess the potential for changes to the project's impact on air quality, the new cooling tower location was analyzed with the AERMOD dispersion model. As part of the inputs into AERMOD model, the Building Profile Input Program (BPIP-PRIME) was also used to calculate the revised structure dimensions based on the new location of the cooling tower. No other changes to emissions or source locations are currently proposed, with the exception of a slight decrease in the total dissolved solids from 5,000 ppm down to 4,850 ppm.

In order to determine the potential for a revised magnitude and location of the maximum impacts for each pollutant and averaging period, the AERMOD model was used in order to directly compare the potential for changes with the new cooling tower. Based upon output from BPIP-PRIME, the revised cooling tower location will have no effect on the turbine's or fire pump air quality impacts.

Additionally, to directly compare the previous dispersion modeling analyses with the revised assessment, the previous ISCST3 modeling input files were converted into an AERMOD format and rerun. Also indicated by the AERMOD outputs, the combustion emission sources (turbines and fire pump) will not be affected by the new cooling tower size or placement. For particulate matter emissions directly emitted by the cooling tower, the AERMOD modeling results demonstrate that there will be a slight decrease in modeled concentrations. Table 1-1 summarizes maximum-modeled concentrations for PM10/2.5 as well as 1-hour NO_2.

As a surrogate for the cooling tower HAP emissions, the annual PM10/2.5 modeling results demonstrate a slight decrease in overall annual impacts. Based on the revised cooling tower modeling results and that the HAP emissions remain essentially unchanged, it would be expected that the annual HAP impacts would also slightly decrease. For the 1-hour acute impacts from HAP emissions, a normalized emission rate of 1 gram/sec was run for both the previously permitted cooling tower and the new proposed tower. The results, summarized in Table 1-1 clear demonstrate that the acute impacts from the proposed cooling tower would be lower than the permitted cooling tower. Thus, the revised towers overall impacts for public health would be reduced.

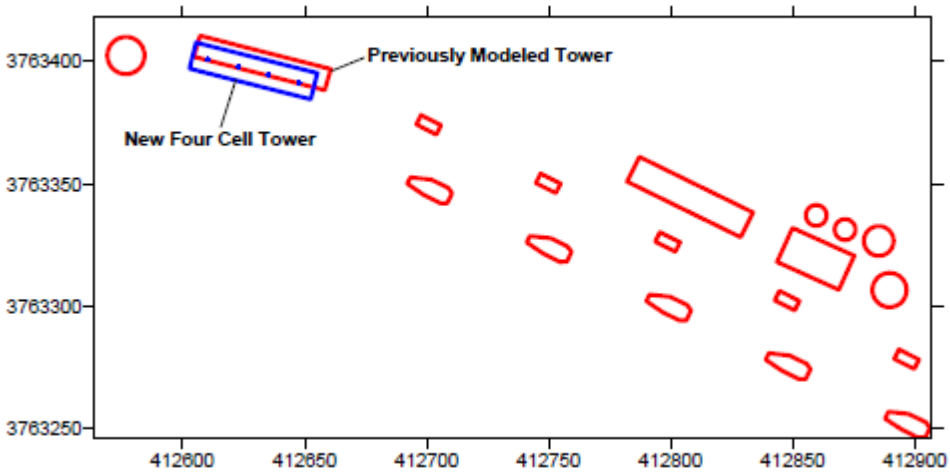
All other pollutants and averaging times would have no changes in the magnitude or location of modeled impact. The following Table 1-1 and Figure 1-1 are excerpted from Attachment 1.

Table 1-1 AERMOD Modeling Results

Pollutant	Averaging Time	Maximum Facility Impact ($\mu g/m^3$) Previous Impact is listed in ( )
NO_2	1-hour Annual	56.71 (56.71) 0.197 (0.197)
HAPs[1]	1-hour	7.198 (7.198)
PM10/2.5[1]	24-hour Annual[2]	0.837 (0.849) 0.131 (0.137)

Notes:
[1]Normalized Chi/Q emission rate used to determine significance
[2]Annual Arithmetic Mean
Worst-case one-hour NO_x impacts are dominated by the fire pump.

Figure 1-1



Based on the new cooling tower design and placement, no impacts to air quality are expected to occur, with the exception of a slight decrease in PM10/2.5 modeled impacts. Based on the revised air quality analysis, no significant impacts to Air Quality are anticipated as a result of the proposed cooling tower modifications.

3.1.3 Mitigation Measures

The impacts on air quality will be slightly reduced for PM10/2.5 and HAPs as a result of the proposed cooling tower modifications. These new impacts are less than significant, and therefore will not require additional mitigation measures.

3.1.4 Consistency with LORS

The proposed modifications to the WCEP cooling tower will remain consistent with all applicable LORS related to Air Quality.

3.1.5 Conditions of Certification

The proposed modifications to the WCEP cooling tower will not require changes to the Conditions of Certification for Air Quality.

3.2 Public Health

The Commission Decision determined that the WCEP would not have significant impacts on Public Health. Pursuant to this proposed Petition for Modification, the proposed cooling tower modifications are not expected to have a significant impact on Public Health.

3.2.1 Environmental Baseline Information

This Petition for Modification does not require changes to the Environmental Baseline Information as described in the AFC. There have been no significant changes in terms of local development that would change the analysis or conclusions for Public Health.

3.2.2 Environmental Consequences

The proposed cooling tower modifications are not expected to cause any significant change to Public Health, as discussed in the AFC. In preparation of the WCEP AFC, no issues or significant impacts were identified for Public Health.

In order to confirm that there would be no new issues or potential impacts associated with Public Health as it relates to the proposed cooling tower modifications, both 1-hour and annual normalized concentrations were assessed. The results demonstrate that there will be a net reduction in the cooling towers contribution to facility wide health risk significance levels.

Based on these results, no significant impacts to Public Health are anticipated as a result of the proposed cooling tower modifications.

3.2.3 Mitigation Measures

The impacts on Public Health as a result of the proposed cooling tower modifications are less than significant, and therefore will not require additional mitigation measures.

3.2.4 Consistency with LORS

The proposed modifications to the WCEP cooling tower will remain consistent with all applicable LORS related to Public Health.

3.2.5 Conditions of Certification

The proposed modifications to the WCEP cooling tower will not require changes to the Conditions of Certification for Public Health.

3.3 LORS

The Commission Decision certifying the WCEP project concluded that the project is in compliance with all applicable LORS. The project, as modified, will continue to comply with all applicable LORS.

SECTION 4.0

Potential Effects on the Public

This section discusses the potential effects on the public that may result from the modifications proposed in this Petition for Modification application, pursuant to CEC Siting Regulations (Title 20, CCR, Section 1769[a][1][G]).

No adverse effects on the public will occur because of the changes to the project, as proposed in this Petition for Modification.

SECTION 5.0

List of Property Owners

This section lists the property owners in accordance with the CEC Siting Regulations (Title 20, CCR, Section 1769[a][1][H]). A list of property owners within 1,000 feet of the proposed facility is included as Attachment 2. The list is provided in a format suitable for copying to mailing labels.

SECTION 6.0

Potential Effects on Property Owners

This section addresses potential effects of the project changes proposed in this Petition for Modification on nearby property owners, the public, and parties in the application proceeding, pursuant to CEC Siting Regulations (Title 20, CCR, Section 1769 [a][1][I]).

The project, as modified, will not differ significantly in potential effects on adjacent land owners, compared with the project as previously proposed. The project, therefore, would have no adverse effects on nearby property owners, the public, or other parties in the application proceeding.

Figures

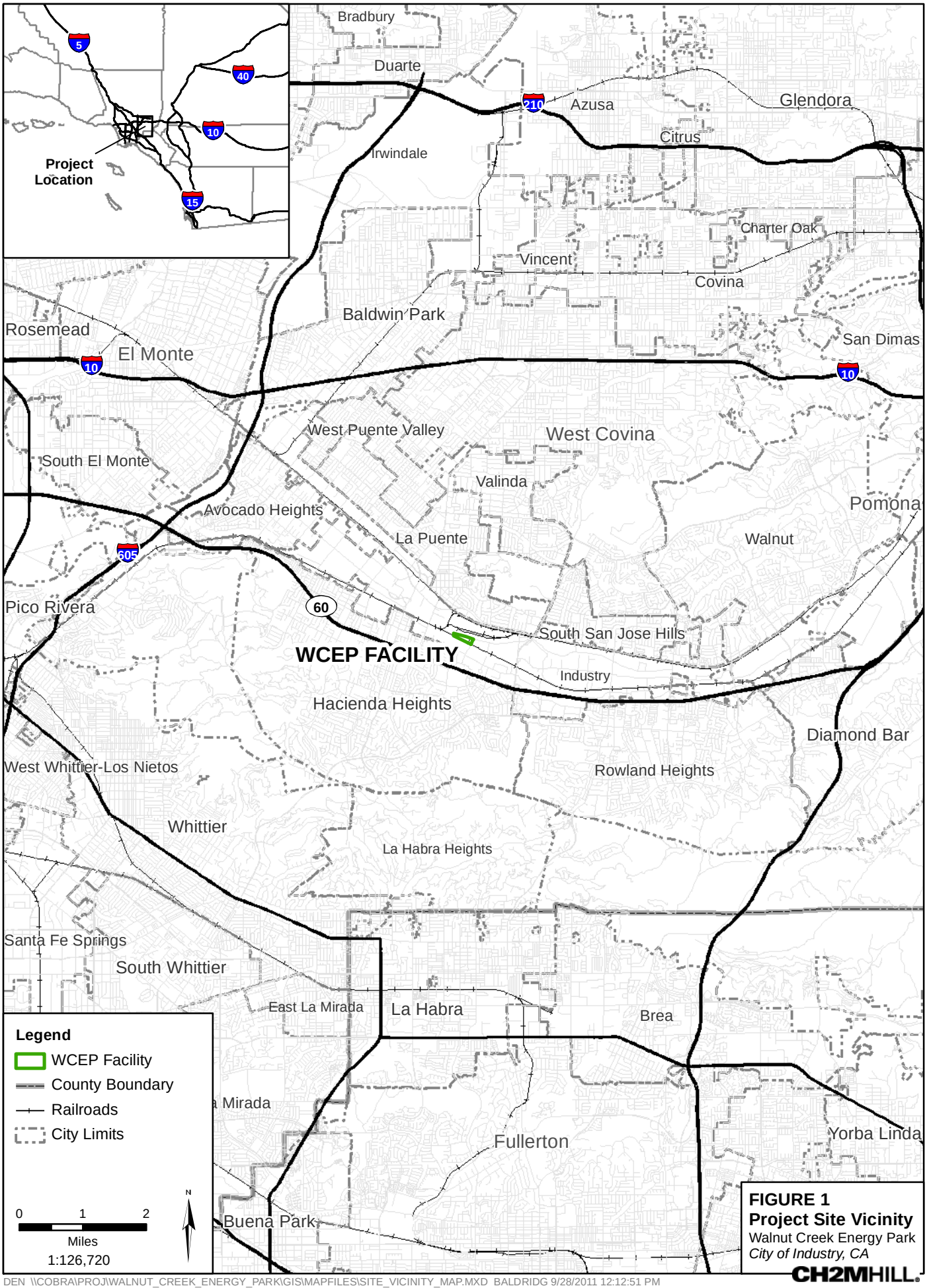
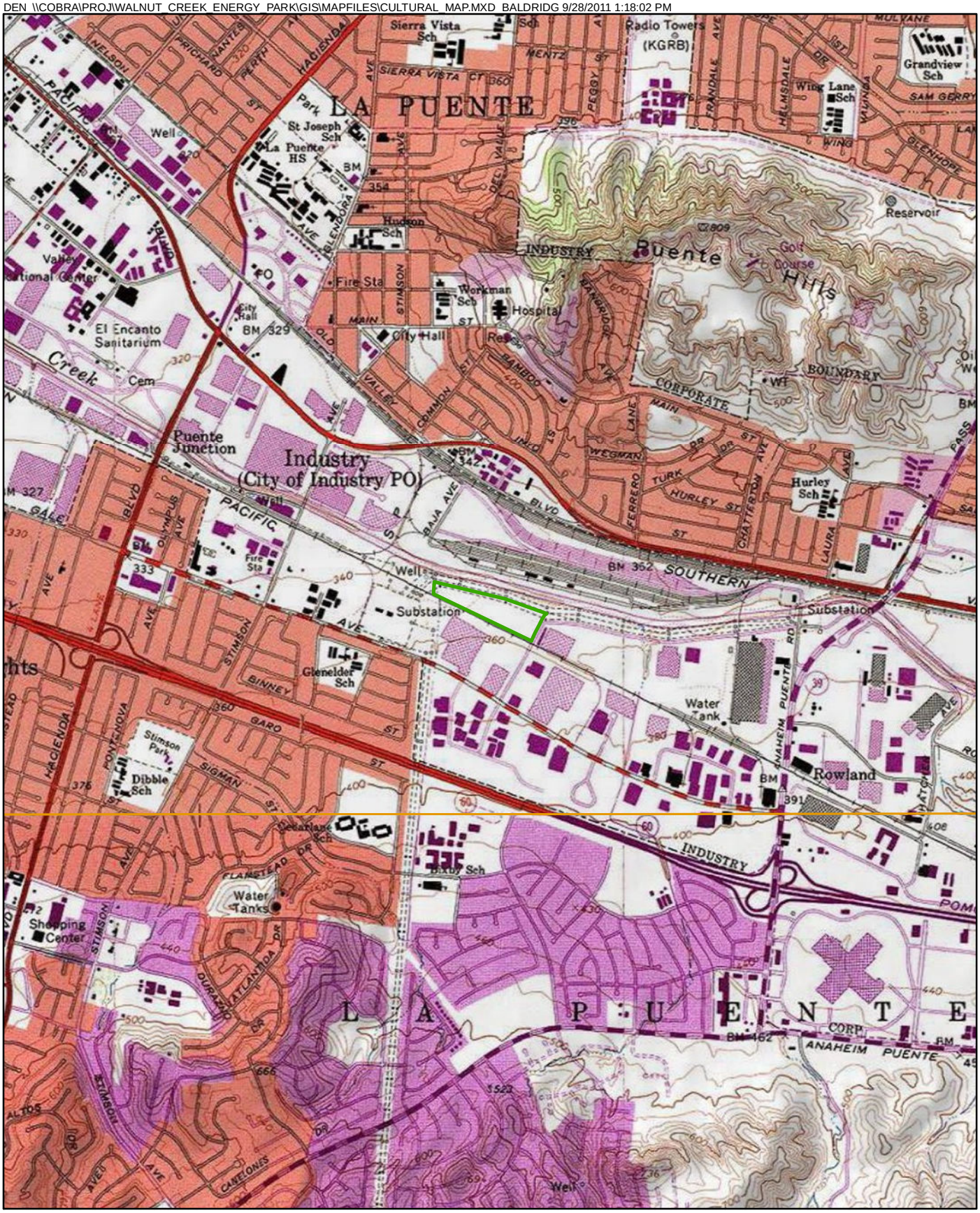


FIGURE 1
Project Site Vicinity
Walnut Creek Energy Park
City of Industry, CA

CH2MHILL.

DEN \\COBRA\PROJ\WALNUT_CREEK_ENERGY_PARK\GIS\MAPFILES\SITE_VICINITY_MAP.MXD BALDRIDG 9/28/2011 12:12:51 PM

DEN \\COBRA\PROJ\WALNUT_CREEK_ENERGY_PARK\GIS\MAPFILES\CULTURAL_MAP.MXD BALDRIDG 9/28/2011 1:18:02 PM



Legend

- WCEP Facility
- Quad Sheet Boundary

0 1,000 2,000

Feet

FIGURE 2
Project Site
Walnut Creek Energy Park
City of Industry, CA

ATTACHMENT 1

Revised Cooling Tower Modeling Assessment and South Coast Air Quality Management District Letter of Notification

Walnut Creek Energy, LLC
3 MacArthur Place, Suite 100
Santa Ana, CA 92707

Walnut Creek Energy Park

September 28, 2011

Mr. Tom Chico
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Revised Cooling Tower Air Quality Impact Assessment

Dear Mr. Chico:

Walnut Creek Energy, LLC (WCE) has petitioned the California Energy Commission to modify the certification for Walnut Creek Energy Park (WCEP) (05-AFC-02C). The petition proposes to modify the dimensions and location of the cooling tower for WCEP. This letter serves as WCE's notification to the District of the plans to revise the cooling tower. The attached report includes the air quality modeling results for the proposed cooling tower modifications.

The modified cooling tower will be a four (4) cell design with a deck height of 42 feet and a cone height of 48 feet. The overall length will be 168 feet with a width of 36 feet, with a fan diameter of 28 feet. The location of the revised cooling tower will be an incremental change, locating it approximately 11.4 feet south of the previous tower design, which places it in a location further away from the facility fence line, but still within the original project boundary. In addition to the modified dimensions, the stack parameter will change slightly.

The results of the modeling analysis demonstrate that the proposed cooling tower modifications will have no impact on the turbine modeling results and will decrease cooling tower impacts for PM10/2.5 and HAPs. The revised modeling input files and results are included on the attached compact disk.

Should you have any questions or require additional information related to this submittal, please contact me at (714) 513-8100.

Sincerely,

R. Garcia R.

Ramiro R. Garcia
Environmental Program Manager

Attachments
Cc: Ken Coats, SCAQMD
Felicia Miller, CEC
WCEP File: 2.1.4

ATMOSPHERIC DYNAMICS, INC
Meteorological & Air Quality Modeling

September 28, 2011

Mr. Ramiro Garcia
Edison Mission Energy
3 MacArthur Place, Suite 100
Santa Ana, Ca. 92707

Re: Transmittal Letter for the Revised Walnut Creek Cooling Tower Modeling Analysis

Dear Mr. Garcia

The attached report describes the Walnut Creek Energy Park (WCEP) air quality modeling results for the revised four cell cooling tower. This report is in support of your petition to the California Energy Commission to modify the certification for Walnut Creek Energy Park (WCEP) (05-AFC-02C).

The revised modeling input files are included on the compact disk. Please let me know if you need any other data or have trouble reading the files. If you have any questions or comments, please don't hesitate to call me at (831) 620-0481.

Regards.

Atmospheric Dynamics, Inc.

Gregory S. Darvin

attachments

REVISED COOLING TOWER MODELING ASSESSMENT

For the:

WALNUT CREEK ENERGY PARK

Prepared for:

WALNUT CREEK ENERGY, LLC.
911 Bixby Drive,
City of Industry, California 91744

Prepared by:

Atmospheric Dynamics, Inc.
Torres 3 SW of Mountain View
P.O. Box 5907
Carmel-by-the-Sea, CA. 93921-5907

ATMOSPHERIC DYNAMICS, INC
Meteorological & Air Quality Modeling

September 2011

Walnut Creek Energy Project–Revised Cooling Tower Air Quality Impact Assessment

This report describes the Walnut Creek Energy Park (WCEP) air quality modeling results for the revised four cell cooling tower. The WCEP cooling tower revision is based on a new dimension and location, as well as modified design. The proposed cooling tower will be a four (4) cell design with a deck height of 42 feet and a cone height of 48 feet. The overall length will be 168 feet with a width of 36 feet. The fan diameter is 28 feet with an exit temperature of 109.0 degrees F. The location of the new cooling tower has shifted slightly to the south by approximately 11.4 feet, which places it in a location further away from the facility fence line. To assess the potential for changes to the project's impact on air quality, the new cooling tower location was analyzed with the AERMOD dispersion model. As part of the inputs into AERMOD model, the Building Profile Input Program (BPIP-PRIME) was also used to calculate the revised structure dimensions based on the new location of the cooling tower. No other changes to emissions or source locations are currently proposed. The purpose of the revised AERMOD modeling analysis is to evaluate the potential for increased air quality and toxics impacts.

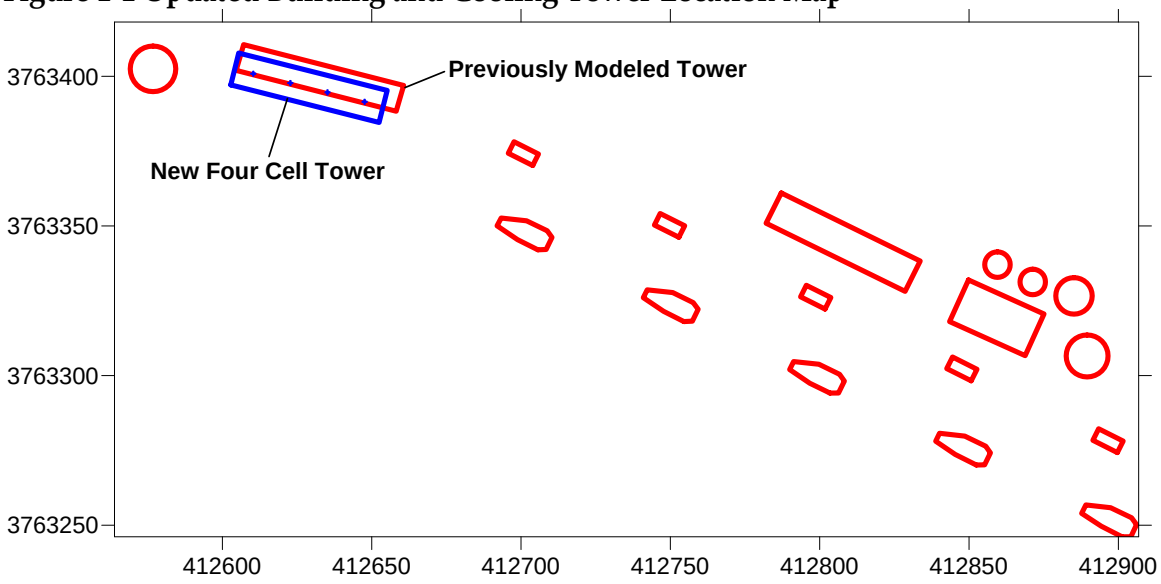
The modeling analyses were performed using the techniques and methods outlined by the South Coast Air Quality Management District (SCAQMD) "*AQMD Modeling Guidance for AERMOD*" (SCAQMD, October 2009).

DISPERSION MODELING

For modeling the potential impact of the revised cooling tower, the USEPA guideline model AERMOD (version 11103) was used following SCAQMD Modeling Guidance Procedures. These procedures are summarized below and include three years of SCAQMD processed meteorology. The revisions to the cooling tower location as well as revisions to the administration building and water storage tanks (highlighted in red) are presented in Figure 1-1.

The receptor data sets used in this revised analysis were based on the data used in the December 20th, 2010 "1-Hour NO_2 Modeling Assessment". Receptor and source base elevations were determined from USGS Digital Elevation Model (DEM) data using the most recent 7½-minute format (i.e., 10 to 30-meter spacing between grid nodes) and were processed using the most recent version of AERMAP. All coordinates were referenced to UTM North American Datum 1927 (NAD27), zone 11. The receptors used in the analysis were based on 10 and 30-meter DEM data and had a minimum 30-meter resolution which extended from the fence line outwards to 1000 meters in all directions. The receptor resolution was then based on 180 meter resolution which was extended to 10,000 meters in all directions. Areas on the coarse grid where the maximum impacts occurred were then assessed with a 30 meter resolution grid(s). This resulted in over 50,000 coarse and refined grid receptors used in the AERMOD modeling analysis. The receptor grids used in the modeling analysis are presented in Figure 1-2. The turbine and fire pump stack locations were not revised from the original submittal.

Figure 1-1 Updated Building and Cooling Tower Location Map



The proposed four (4) cell cooling tower will also incorporate the following revisions:

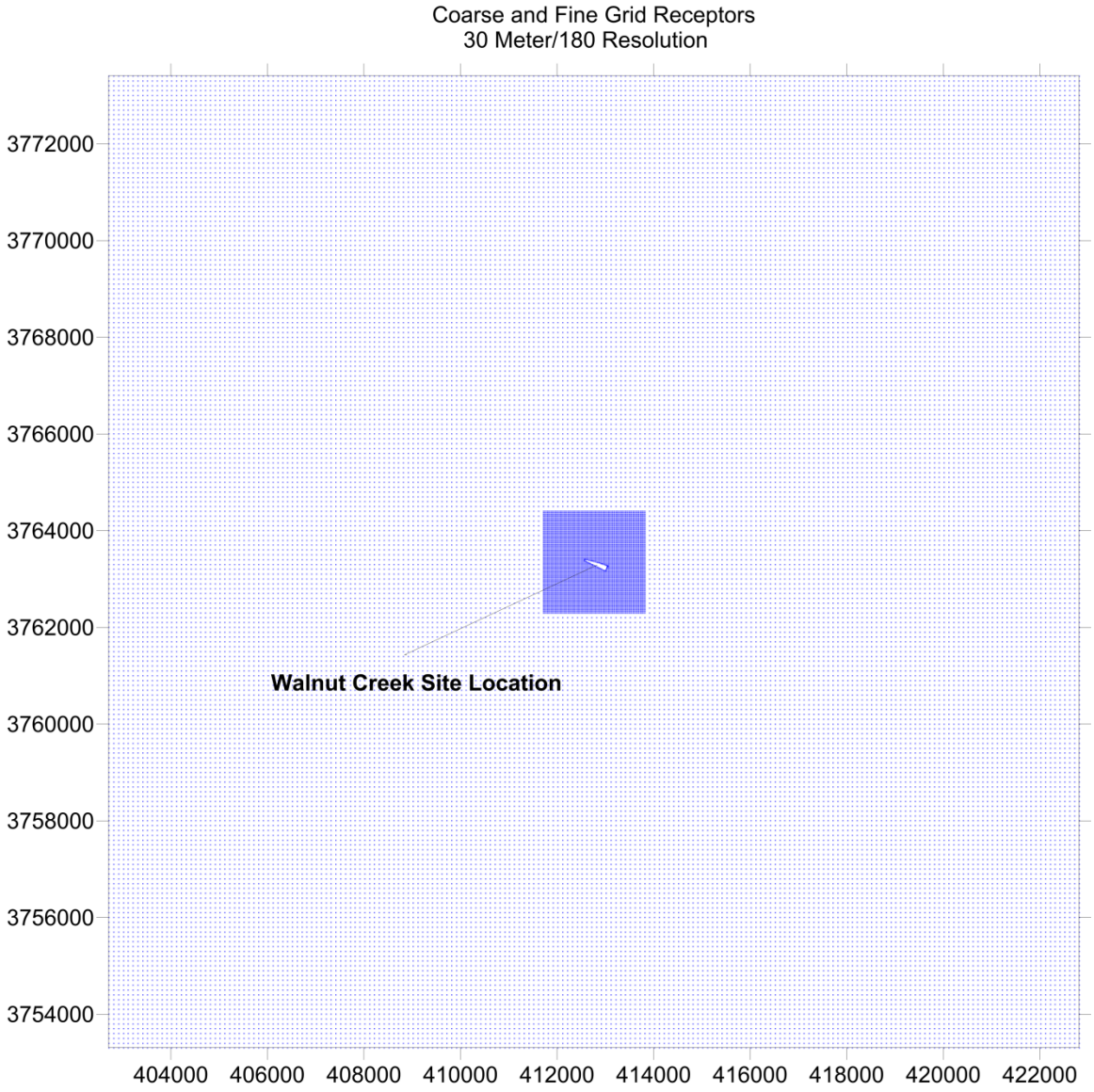
- TDS at 4,850 ppm
- Water circulation rate at 36,500 gpm
- Cycles of concentration at 7.9
- Exhaust flow rate per cell at 952,058 ACFM
- Exit diameter is 28 feet
- Deck height at 42 feet and cone height (release height) at 48 feet
- Exit dry bulb temperature is 109 degrees F (worst-case summer temperature)
- PM10/2.5 emissions at 0.442 lb/hr (entire cooling tower) which is slightly less than the previous tower's emission rate of 0.444 lb/hr
- A slight decrease in the quantity of hazardous air pollutants

These revised parameters were input into AERMOD. Based on SCAQMD Guidance Documents, the following options were used to assess the air quality impacts for the revised cooling tower:

- Urban option set to default population of 9,862,049 (LA County)
- AERMAP was used to develop receptor elevations and hill height scales
- Based on SCAQMD Guidance, the closest monitoring data to the project (La Habra at 9.7 km) was used and included both preprocessed surface and upper air meteorological data. The data set contained three years of data (2005-2007)
- Based on the 7-acre project area, the maximum receptor spacing was set to 30 meters for fence line and downwash grids

- No Flagpole receptor heights were used

Figure 1-2 Receptor Grids used in AERMOD



AERMOD MODELING RESULTS

In order to determine the potential for a revised magnitude and location of the maximum impacts for each pollutant and averaging period, the AERMOD model was used in order to directly compare the potential for changes with the new cooling tower. Based upon output from BPIP-PRIME, the revised cooling tower location will have no effect on the turbine's or fire pump air quality impacts.

Additionally, to directly compare the previous dispersion modeling analyses with the revised assessment, the previous ISCST3 modeling input files were converted into an AERMOD format and rerun. Also indicated by the AERMOD outputs, the combustion emission sources (turbines

and fire pump) will not be affected by the new cooling tower size or placement. For particulate matter emissions directly emitted by the cooling tower, the AERMOD modeling results demonstrate that there will be a slight decrease in modeled concentrations. Table 1-1 summarizes maximum-modeled concentrations for PM10/2.5 as well as 1-hour NO_2.

As a surrogate for the cooling tower HAP emissions, the annual PM10/2.5 modeling results demonstrate a slight decrease in overall annual impacts. Based on the revised cooling tower modeling results and that the HAP emissions remain essentially unchanged, it would be expected that the annual HAP impacts would also slightly decrease. For the 1-hour acute impacts from HAP emissions, a normalized emission rate of 1 gram/sec was run for both the previously permitted cooling tower and the new proposed tower. The results, summarized in Table 1-1 clear demonstrate that the acute impacts from the proposed cooling tower would be lower than the permitted cooling tower. Thus, the revised towers overall impacts for public health would be reduced.

All other pollutants and averaging times would have no changes in the magnitude or location of modeled impact.

Table 1-1 AERMOD Modeling Results

Pollutant	Averaging Time	Maximum Facility Impact ($\mu g/m^3$) Previous Impact is listed in ( )
NO_2	1-hour	56.71 (56.71)
	Annual	0.197 (0.197)
HAPs[1]	1-hour	7.198 (7.198)
PM10/2.5[1]	24-hour	0.837 (0.849)
	Annual[2]	0.131 (0.137)

Notes:
[1]Normalized Chi/Q emission rate used to determine significance
[2]Annual Arithmetic Mean
Worst-case one-hour NO_x impacts are dominated by the fire pump.

CONCLUSION

The results of the revised WCEP modeling analysis demonstrates, that the proposed cooling tower will safely comply with all ambient air quality standards as well as all public health significance thresholds.

ATTACHMENT 2

List of Property Owners within 1,000 feet

JOSE L CERVANTES
16315 FOLGER ST
HACIENDA HEIGHTS CA 91745

GON WIN MAUNG
16321 FOLGER ST
HACIENDA HEIGHTS CA 91745

DONALD V SHORKEY
16327 FOLGER ST
HACIENDA HEIGHTS CA 91745

SHOU Y TSAI
16333 FOLGER ST
HACIENDA HEIGHTS CA 91745

DALE D CUMMINGS
16339 FOLGER ST
LA PUENTE CA 91745

CARLOS J & LUZ M MOSQUEDA
16345 FOLGER ST
HACIENDA HEIGHTS CA 91745

JUAN & MARGARITA FIERRO
16351 FOLGER ST
HACIENDA HEIGHTS CA 91745

HELEN HERNANDEZ
1104 FIELDGATE AVE
HACIENDA HEIGHTS CA 91745

SO CALIF EDISON CO
16408 GALE AVE
CITY OF INDUSTRY CA 91745

JAMES N FRIZE
131 S EL DORADO LN
ANAHEIM CA 92807

JACK L PERRIN
1020 BIXBY DR
CITY OF INDUSTRY CA 91745

LBA RIV COMPANY I LLC
17901 VON KARMAN AVE #950
IRVINE CA 92614

L A CO FLOOD CONTROL DIST
500 W TEMPLE ST #754
LOS ANGELES CA 90012

CITY OF INDUSTRY
15625 STAFFORD ST #200
CITY OF INDUSTRY CA 91744

INDUSTRY CITY
15625 STAFFORD ST #100
CITY OF INDUSTRY CA 91744

BEAR INVESTMENTS LLC
16150 STEPHENS ST
CITY OF INDUSTRY CA 91745

SUBURBAN WATER SYSTEMS
1211 CENTER COURT DR
COVINA CA 91724

VENUS FOODS INC
770 S STIMSON AVE
CITY OF INDUSTRY CA 91745

ABI PROPERTIES LLC
935 LAWSON ST
CITY OF INDUSTRY CA 91748

UNION PACIFIC R R CO
1700 FARNAM ST 10TH FL S
OMAHA NE 68102

B & K ELECTRIC WHOLESALE
1225 S JOHNSON DR
CITY OF INDUSTRY CA 91745

PAN AMERICAN CERAMICS
16610 GALE AVE
CITY OF INDUSTRY CA 91745

FRANK E RAPER
2010 AINSLEY CT
CARMICHAEL CA 95608

16500 GALE LLC
16500 GALE AVE
CITY OF INDUSTRY CA 91745

JOHNNY CO LIN
3408 S FLEMINGTON DR
WEST COVINA CA 91792

CHIA DEVELOPMENT CORP
PO BOX 307
WILSONVILLE OR 97070

KIM LIGHTING INC
584 DERBY MILFORD RD
ORANGE CT 06477

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EASTGROUP PROPERTIES L P
PO BOX 23636
JACKSON MS 39225

MARTIN CO HUI
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ARCADIA CA 91006