State Of California The Resources Agency of California

Memorandum

Date : February 4, 2003
Telephone: (916) 654-4206
ATSS

To : James D. Boyd, Commissioner and Presiding Member
Robert Pernell, Commissioner and Associate Member

From : California Energy Commission - **BILL PFANNER**
1516 Ninth Street
Sacramento, CA 95814-5512
Energy Commission Project Manager

Subject : **MALBURG GENERATING STATION PROJECT FINAL ADDENDUM TO THE STAFF ASSESSMENT**

Attached please find staff's Final Addendum to the September 26, 2002 Staff Assessment (SA) for the Malburg Generating Station Project. This Final Addendum also supplements the December 24, 2002 Addendum to the SA.

The Final Addendum includes a variety of information. **Section I** provides responses to questions asked by the Commission and the Hearing Officer at the January 9, 2003 Prehearing Conference. This includes the identification of all text changes to the SA resulting from comments made at the Prehearing Conference. The Final Addendum does not reissue the entire SA, but rather contains only edits to the SA, showing (underlined) new text and (strike out) text to be removed. **Section II** reprints all the conditions of certification for: Air Quality, Hazardous Materials, Noise and Vibration, Public Health, Traffic and Transportation, Visual Resources, and Compliance Monitoring and Closure Plan. Conditions of Certification in the other technical areas remain unchanged from the Staff Assessment filed on September 26, 2002. Please note that there are five new conditions in three technical areas: Air Quality Condition AQ-C12, 13 & 14; Public Health Condition PH-1; and Traffic and Transportation Condition TRANS 8. **Section III** of the Final Addendum contains the Declaration Statements of all staff who contributed to the preparation of the Final Addendum.

Staff concludes that the project poses little potential for significant environmental impacts. Those potentially significant environmental impacts that have been identified can be mitigated to less than significant levels. Staff's analysis also concludes that the project can comply with all LORS.

cc: Susan Gefter
POS
Agency (7165)
Libraries (7166)

CITY OF VERNON – MALBURG GENERATING STATION
(01-AFC-25)
FINAL ADDENDUM TO STAFF ASSESSMENT

SECTION I
Malburg Generating Station (City of Vernon)
Response to Prehearing Conference Questions

The following are Staff's responses to questions and comments that were made at the Malburg Prehearing Conference on January 9. 2003.

Comment 1: Provide a simple outline describing how the South Coast Air Quality Management District (SCAQMD or District) offsets work and explain why the offset package is sufficient. Prepare a comparison of what SCAQMD requires, what the CEC requires, and where they differ. Please be prepared to present testimony on these issues at the Evidentiary Hearings.

Response: The Committee has requested that Staff and the City of Vernon (City) collaborate to create a special section describing the intended mitigation for the Malburg Generation Station (MGS) Power Project, particularly pertaining to PM_{10} and SO_x emissions. The Staff and the City have prepared a discussion in Appendix A in response to that request. The following summarizes that discussion.

Summary of District's New Source Review Requirements - Regulation XIII

The South Coast Air Quality Management District's New Source Review (NSR) Regulation XIII is designed to ensure that emissions increases from new and modified sources do not interfere with efforts to attain and maintain compliance with relevant ambient air quality standards while maintaining economic growth in the South Coast region. To accomplish this, Regulation XIII requires that all new emissions of non-attainment pollutants and precursors (CO, PM10, SOx, and VOC) be offset at a ratio of 1.2:1; that is, 1.2 credits must be used to offset every new unit of emissions. The USEPA has approved Regulation XIII as part of California's State Implementation Plan.

Pursuant to Rule 1306, the District requires emission offsets to be surrendered on a pound per day basis and at a ratio of 1.2:1, with the specific exemptions pursuant to Rule 1304. An applicant may meet this requirement by either buying emission reduction credits (ERCs) on the open market, or by purchasing priority reserve credits (PRCs) from the District's Priority Reserve bank. In the special case where an existing facility's post modification potential to emit (this includes emissions from the existing facility and emissions from the proposed project) for non-attainment pollutants is below the emission thresholds established in Rule 1304, the applicant is exempt from procuring offsets. The emission threshold for SOx emissions is 4 tons per year. However, in that case, the District will still deduct emissions credits from a separate account (the AQMD account) at a rate of 1.2 pounds of credits for every pound of increased project emissions (an offset ratio of 1.2:1). Thus, the District has assumed the responsibility to provide the necessary offsets from the AQMD account for exempt sources.

As far as timing is concerned, the District debits the required PRCs from the Priority Reserve and emission credits from the AQMD account when the District issues a Permit

to Construct. The timing of surrender of these offsets fully complies with District NSR rules and Public Resources Code § 25523.[1]
In summary, all emission increases from the proposed project will be offset with a ratio of 1.2:1, irrespective of whether the emissions were offset by ERCs procured on the open market, or offset by allocations from the District's Priority Reserve bank or the AQMD account.

SO_x Emissions Offsets

The post-modification SOx potential to emit emissions for the existing power plant and the proposed MGS project are estimated at 1.46 tons/year. Thus, the post-modification facility SOx potential to emit emissions would be below Rule 1304's threshold of 4 tons per year, exempting the City from procuring offsets for the MGS project. The maximum daily emissions from the MGS project are expected to be 7 lbs/day. Since under Regulation XIII the District offsets all SO_x as precursors to PM_{10} at a ratio of 1.2:1, the District will deduct 8 lbs/day of SO_x emissions (7 lbs x 1.2 = 8 lbs) from the AQMD account. The permanent removal of 8 lbs of SO_X emissions from the South Coast Air Basin more than offsets SO_x emission impacts calculated by Staff for purposes of demonstrating compliance with CEQA. (See AIR QUALITY Tables 10 and 26 Amended). Thus, in Staff's opinion, the District's mitigation under Regulation XIII will mitigate all CEQA impacts, and as stated in testimony, staff is requiring no additional CEQA mitigation for the MGS SO_x emission impacts.

PM_{10} Emissions Offsets

The MGS power project will increase PM_{10} emissions by 162 lbs/day. Under Rule 1306 these emissions must be offset by 194 lbs/day of PM_{10} credits (1.2:1). The City has procured 3 lbs/day of PM_{10} ERCs on the open market, which because of the 1.2:1 offset rule are discounted to 2 lbs/day. The City will purchase the remaining 160 lbs/day of credits from the Priority Reserve bank. As a result of District's NSR debit accounting procedure, the District will debit a total of 192 lbs/day from its Priority Reserve bank. Thus, a total of 194 pounds of PM_{10} emissions will be permanently retired from the bank, which meets all NSR, and state and federal Clean Air Act requirements. Because this policy will also result in the permanent removal of 194 lbs/day of PM_{10} emissions credits from the South Coast Air Basin, in Staff's judgment, these credits will more than offset residual emissions (6.2 lbs/day) from the project's new cooling tower. (See AIR QUALITY Tables 10 and 26 Amended). Thus, in Staff's opinion, the District's mitigation under Regulation XIII will mitigate all CEQA impacts. As stated in testimony, staff is requiring no additional CEQA mitigation for the MGS PM10 emission impacts.

Comment 2: Add language to the Final Addendum on the emissions contribution of the CO catalyst. This should be added to the Project Description and added as a condition to the Air Quality section.

[1] PRCode § 25523(d)(2) specifies that prior to licensing by the Commission the District must certify that the applicant has identified all emission offsets to comply completely with applicable local, regional, state and federal air quality standards, and that the applicant will obtain such offsets within the time required by District rules. The City's compliance with the District's rules will allow the District to make this certification.

Response: The new condition AQ-C14 has been added to the Final Addendum to address the Committee's request. See Section II, Final Conditions of Approval - Air Quality, page 4.1-8

Comment 3: Docket the letter from SCAQMD dated 1/8/03. CEC staff needs to respond to this letter in the Final Addendum. Specifically, consider revisions to Tables 25 and 26.

Response: The SCAQMD letter dated 1/8/03 has been docketed and is provided as Attachment B. Tables 10, 11, 25 and 26 have been revised accordingly and text has been added to explain the revisions. See Appendix C-Air Quality

Comment 4: Make sure there is a clear discussion of the difference between the applicant's plume simulation and staff's plume simulation.

Response: In the Malburg Generating Station Staff Assessment on page 4.12-11 (Visual Resources Figure 7), this topic is thoroughly covered. In summary, when conducting their visual analysis of the project, staff determined that the plume depicted in the applicant's response to data request was substantially oversized. Staff has provided in Figure 7 of the Staff Assessment the accurate appearance of the reasonable worst case plume as an observer would see from approximately 3,000 feet away

Comment 5: On page 4.13-5 of the Staff Assessment (Reference to Waste-4 and Waste-5), regarding the statement that diesel contaminated soil will be removed, is there a mitigation measure identified? Please clarify this issue.

Response: The reference in the Staff Assessment to Waste-4 and Waste-5 as the conditions to mitigate the impact of contaminated soil is incorrect. In the Addendum to the Staff Assessment (page 4.13-1), Staff corrected the mistaken reference by referencing conditions Waste-1 and Waste-2. These conditions address mitigation for potentially contaminated soils.

Comment 6: Page 4.10-16 regarding the route for delivery of aqueous ammonia. Staff and applicant need to prepare a condition establishing the safest route for delivery of aqueous ammonia.

Response: Page 4.10-16 has been revised accordingly:

> ~~In evaluating the roadways in the area during the site visit, it was felt that the applicant needed to look at alternate routes to ensure that the safest truck route for transporting hazardous materials is selected. In looking for alternative routes staff felt that either Bandini Boulevard or District Boulevard might be acceptable alternative route for the transporting of hazardous materials (Note: The Section on Hazardous Materials Management recommends the use of District Boulevard as the safest alternative). These roadways had less retail and commercial businesses located along the routes and few sensitive receptors were observed. The Applicant has agreed to review the aqueous ammonia truck delivery route (COV 2002e).~~

Aqueous ammonia will be delivered by truck. The preferred truck route will be from Freeway 710, exiting at Bandini Boulevard. Trucks will then travel west along Bandini Boulevard, south on Soto Avenue, and finally west on 50th Street to the MGS. Staff and the City believe that this route is the safest route because it passes through predominantly industrial areas.

In the event that conditions change along the preferred route, in the short term or long term, Staff and the City have identified an alternative route. This route requires delivery trucks to travel along Interstate 5, exiting at Garfield Avenue. Trucks will then travel west along Telegraph Road, south on Garfield Avenue, west on Bandini Boulevard, south on Soto Avenue, and finally west on 50th Street to the MGS. (Note: The Section on Hazardous Materials Management recommends the use of District Boulevard as the safest alternative. However, it is the conclusion of the Traffic and Circulation analysis that Bandini Boulevard is preferred to the use of District Boulevard).

In any event, Staff believes that some flexibility is necessary to allow the City to route trucks to the plant as conditions permit in order to avoid road hazards that may arise over time. For this reason, Staff is recommending that any new condition of certification include a provision that allows the City to re-route ammonia trucks from the preferred route to the alternative route, and if necessary, to another alternative route not yet identified, with the approval of the Compliance Project Manager.

A new condition **TRANS 8** has been added to the Staff Assessment to reflect the above, (see Section II, Traffic and Transportation page 4.10-20).

Comment 7: Throughout the Staff Assessment make sure that the numbers describing the off-site linear pipelines are consistent. The Traffic and Circulation section does not match the project description.

Response: The reason the descriptions of the project's linear facilities appear to be inconsistent is that different authors described the same linear dimensions in different ways. For example, the project description describes new 1,300-foot long natural gas and sewer system pipelines, and a new approximately 1.8-mile long reclaimed water pipeline. In some sections the 1,300-foot natural gas and sewer system pipeline is defined as 1,100 feet of pipeline in the public right-of-way and 200-feet on the project site, (which totals the 1,300 feet described in the project description). Similarly, the approximately 1.8-mile reclaimed water pipeline is defined as approximately 10,000 feet in some sections and as approximately 9,650 feet in the Traffic and Circulation section, both of which are approximately 1.8 miles.

Comment 8: There seems to be an inconsistency regarding efficiency levels the CTG will produce and nominal generating output. On page 5.3-2 it states that the facility will each have an output of approximately 51.58 percent LHV without duct burning and 49.33 percent LVH with duct burning. This is inconsistent with page 5.3-4, which talks about a 54% efficiency.

Response: Any power plant large enough to fall under the Energy Commission siting jurisdiction will consume large amounts of energy. The nominal rating of the Alstom GTX100 gas turbine in a two-on-one combined cycle power train at 124.5 MW output is 54 percent LHV when operating at ISO conditions.

Under the expected project conditions, for which the average annual temperature will be above ISO conditions, electricity will be generated from MGS at a full load efficiency of approximately 51.58 percent LHV without duct burning and 49.33 percent LHV with duct burning (MGS 2001a, AFC Tables 3.4-4, 3.4-5). The reason that the efficiency of the Malburg Generating Station is lower under expected project conditions than its rating under ISO conditions is that the average expected temperature (75 ^{o}F) is above the ISO temperature of 59 ^{o}F. This higher temperature causes the efficiency of the gas turbine to drop somewhat and at the same time reduces the overall efficiency of the steam turbine cycle due to a higher cooling water temperature from the cooling tower.

Comment 9: On page 4.3-5 is the term “materially impair.” Is this standard cultural resources language?

Response: The phrase "materially impair" is used in CEQA. CEQA Guidelines, Section 15064.5 (b) (1) says, "Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." The analysis by staff says that, "This addition is an impact to the district. This would not materially impair the district and does not represent a significant impact."

Comment 10: Are the “will serve” letters for recycled cooling water and sanitary wastewater discharged included in the AFC? Provide references.

Response: Will-serve letters have been supplied for the reclaimed water and for the wastewater discharge. The letter for reclaimed water can be found in Appendix E of the original AFC submitted in December 2001. The letter for the wastewater discharge was supplied in the Data Response document (submitted in May 2002) and can be found on pages 11-24 and 11-25 of the Data Response shown as Figure 11-1.

Comment 11: The Hearing Officer requested that the section of the Socioeconomic Assessment that uses 1990 data to define income levels be updated to use 2000 data. This information should supplement the Evidentiary Hearings.

Response: The 1990 data to define income levels in the Staff Assessment have been updated to use 2000 data. This will result in no change to the project’s environmental justice assessment. The Socioeconomic section has been amended to reflect the 2000 data for income levels. Page 4.8-6 in the Staff Assessment has been amended as follows:

> Staff has reviewed Census 2000 information that shows the populations of people of color are greater than fifty percent within a six-mile radius of the proposed power plant (See **Socioeconomics Figure 1**). Census ~~1990~~ 2000

information also that shows the low-income population is less than fifty percent (~~28.6~~ 32.03 percent) within the same radius.

Comment 12: After the Prehearing Conference was conducted on January 9, 2003, a new issue was identified by technical staff regarding the use of reclaimed water for cooling and the need for an additional LORS section and condition in the Public Health testimony of the Staff Assessment.

Response: Appendix E (Public Health) provides additional testimony to be added to the Public Hearing section of the Staff Assessment. This includes the addition of the condition **Public Health-1** to ensure compliance with the LORS involving the California Code Regulations, Title 22, Section 60306 regulating the use of reclaimed water in conjunction with air cooling towers. This new condition has been reviewed and agreed to by the City of Vernon (applicant).

APPENDIX A

SUMMARY OF NEW SOURCE REDUCTION REQUIREMENTS

APPENDIX A

Staff Response to Committee Request

The Committee has requested that Staff and the City of Vernon (City) collaborate to create a special section describing the intended mitigation for the Malburg Generation Station (MGS) Power Project. This description is to include the amount and source of offsets or other mitigation, their respective timing of surrender or implementation, and a comparison of the mitigation required by the District and that recommended by the Commission Staff.

In order to better explain the District's emission offset requirements and the City's compliance strategy, the Staff and the City are providing below the discussions in three steps. The first step presents a summary of the District's New Source Review Requirements (Regulation XIII). The second step details the MGS emission liability and the third step describes the City's compliance strategy.

Step 1: Summary of Districts' New Source Review Requirements - Regulation XIII

The District's New Source Review (NSR) Regulation XIII is designed to ensure that emissions increases from new and modified sources do not interfere with efforts to attain and maintain compliance with the ambient air quality standards while maintaining economic growth in the South Coast region. Regulation XIII applies to non-RECLAIM, non-attainment (including ozone and secondary PM10 precursors) pollutants (CO, PM10, SOx, and VOC) and includes provisions for emission offsets. It may be noted that though the South Coast Air Basin is in attainment for SO_2, the District requires emission offsets for SOx, because SOx is a precursor of PM10. Similarly, the District requires VOC emission offsets because VOC is a precursor of ozone. It is important to note that Regulation XIII has been approved by the United States Environmental Protection Agency (USEPA). As part of the District's NSR program (in addition to the Rules and Regulations), it is the District's policy to offset all non-RECLAIM emission increases within the boundaries of the South Coast Air Quality District with no exceptions. The USEPA has also approved the District's NSR program into California's State Implementation Plan.

The NSR emission offset requirements that the District implements through its permitting process ensure that sources provide emission reduction credits (ERCs) to offset their emission increases. The emission offsets are required to be implemented on an lbs/day basis. The District requires facilities to offset the emission increases using an offset ratio of 1.2:1. However, sources with potential to emit (PTE) emissions less than the specified thresholds in Rule 1304 are exempt from the District's offset requirements. For example, sources with SOx PTE less than 4 tons/year are exempt from offset requirements. In addition, the power plants (including the proposed Malburg Generating Station Power Project) also qualify for obtaining offsets from the District's Priority Reserve, pursuant to Rule 1309.1, at a ratio of 1:1. The District has determined that providing offset exemptions and the Priority Reserve is important to the NSR program and the local economy while encouraging the installation of control equipment.

Thus, the District has assumed the responsibility to provide the necessary offsets for exempt sources and additional offsets necessary for increasing the Priority Reserve offset ratio to 1.2:1.

District tracks all emission increases that are offset through the Priority Reserve as well as all increases that are exempt from offset requirements pursuant to Rule 1304. These increases are all debited from the District's account with an offset ratio of 1.2:1. That is, 1.2 pounds are deducted from the District's account for each pound of permitted increase at the facility. In summary, all emission increases at the facility are offset with a ratio of 1.2:1, irrespective of whether the emissions are offset by ERCs, or the increases that are exempt from the offset requirements, or the emission increases that are offset by allocations from the District's Priority Reserve. Thus, for every pound of pollutant allocated to the facility from the Priority Reserve (mitigation fee paid by the facility owner), the District would deduct an additional 0.2 pounds from the District's account for NSR purposes. The following example provides additional clarification regarding the District's emission offset program:

Example Facility Offset Analysis – An emission analysis for an example facility indicated that the increase in CO, PM10, SOx, and VOC emissions would be as follows:

Increase in Emissions for an Example Proposed Facility	
Pollutant	**Increase in Emissions, lbs/day**
CO	100
PM10	100
SOx	10
VOC	100

If PTE emissions for all pollutants for the example facility were higher than the significance thresholds established in Rule 1304, the ERCs required for the facility would be:

- CO: 120 lbs/day
- PM10: 120 lbs/day
- SOx: 12 lbs/day
- VOC: 120 lbs/day

However, if the facility PTE emissions for any pollutant was less than the significance threshold, ERC requirement for that pollutant would be zero. For example, if the SOx PTE was less than 4 tons/year, the SOx ERC required would be zero. Thus, for the example facility, the District would debit 12 lbs/day of SOx emissions from their account.

The net result would be that 12 lbs/day of SOx emissions would be reduced from the South Coast Air Basin.

If the facility owner was able to provide all the CO and VOC ERCs, but was able to provide only 10 lbs/day of PM10 ERCs, then the facility owner could request for allocation of remaining PM10 credits from the Priority Reserve. The following calculations explain the quantity of PM10 allocations required from the Priority Reserve:

PM10 Emission Increase (Example facility)	100 lbs/day
PM10 ERC Procured	10 lbs/day
Apply Discount Factor of 1.2 to the Procured ERC	10/1.2 = 8 lbs/day
PM10 Allocation Required from the Priority Reserve	100 – 8 lbs/day = 92 lbs/day
PM10 Emissions Debited from the District's Account	92 x 1.2 = 110 lbs/day
Total PM10 Emissions Reduced from the South Coast Air Basin	110 + 10 = 120 lbs/day

The above examples show that the reductions in the emissions would always be 20 percent more that the estimated increase in emissions of the non-attainment pollutants (or a ratio of 1.2:1), irrespective of whether the emissions were offset by ERCs, or the increases were exempt from the offset requirements, or the emission increases were offset by allocations from the District's Priority Reserve.

It may be noted that the District reconciles the required credits from the District's account on an annual basis (August–July time frame) as required by Rule 1310(b). It is also important to note that the City would pay for these credits before the District issues the Permit to Construct, but the MGS project would not be operational until the summer of 2004. Thus, all the debits from the District's account would be fully accounted before the MGS plant would go in operation.

Step 2: MGS Project Emission Liabilities

According to District's NSR requirements, the MGS Power Project is required to only offset the increase in CO, PM10 and VOC emissions. The project is exempt from SOx offset requirements because the SOx PTE emissions are estimated to be lower than the Rule 1304 SOx threshold of 4 tons/year. Table 1 shows the ERCs required to offset the increase in emissions at the MGS project (offset ratio of 1.2-to-1). Staff presents Table 1 as a means of comparison to the total offset package that both the City and the District will provide.

Table 1 – MGS Project Emission Liabilities		
Pollutant	**Emissions to be Offset (lbs/day)**	**ERCs Required (Offset Ratio 1.2-to-1)**
CO	254	305
PM10	162	194
VOC	108	130

Step 3: MGS Project Emission Offset Compliance Strategy

The proposed emission offset compliance strategy for the Malburg Generation Station Power Project is described below.

NOx Emission Offsets

In addition to the emission offset requirements for the non-attainments pollutants, as discussed in Step 1, the City will also be required to provide 229,531 lbs/year of NOx RECLAIM Trading Credits (RTCs) for the first year of operation. This first year NOx RTC requirement takes into consideration the initial commissioning emissions that are expected from the project. This emission estimate (229,531 lbs/year) does not take into account the post-combustion NOx emission control, which would be provided by the operation of the Selective Catalytic Reduction (SCR) system. According to the District's rules, credit for SCR control can be taken only after the certification of the NOx continuous monitoring systems (CEMS), which will be installed as part of the power plant project. The City can reduce the first year NOx RTC requirements by working with the District to get the CEMS certified as early as possible. It should be noted that the District does not require the City to obtain 229,531 lbs of NOx RTCs prior to getting the Permit to Construct. Instead, the City can just obtain the amount of NOx RTC, which the City estimates that would be required during the first year of operation, based upon the expected date of CEMS certification. For the second year (and generally the years there after) the City is required to hold 71,215 lbs/year of NOx RTCs. This value is reviewed on an annual basis and modified (up or down) as necessary. The project NOx emissions are offset at a 1:1 basis per District Regulation XX, unlike the non-other pollutants that are offset under Regulation 13, at a ratio of 1.2:1.

VOC Offsets

The City has procured 130 lbs/day of VOC ERCs, which is 1.2 times the Malburg Generation Station VOC emissions increase of 108 lbs/day (see Table 1).

CO Offsets

The City has procured 305 lbs/day of CO ERCs, which is 1.2 times the Malburg Generation Station CO emissions increase of 254 lbs/day (see Table 1).

SOx Offsets

The City is exempt from SOx offset requirements under Rule 1304 because the SOx PTE is less than 4 tons/year. The maximum monthly SOx emissions for the facility are estimated at 214 lbs (see condition AQ-5 in MGS Project Addendum to the Staff Assessment, dated December 24, 2002). Thus, the maximum daily emissions for the facility would be 7 lbs/day (214/30) and the District will debit from District's account 8 lbs/day of SOx emissions (7 x 1.2 = 8 lbs) at a ratio of 1.2:1.

PM10 Offsets

The City has procured 3 lbs/day pf PM10 ERCs. Discounting this ERC by a factor of 1.2 and subtracting this emission from the total increase in emissions of 162 lbs/day (see Table 1) from the MGS project, the total PM10 allocation required from the Priority Reserve is estimated at 160 pounds/day. The City will purchase this credit from the Priority Reserve at a cost of $ 4.0 Million. The District would debit a total of 192 lbs/day from the District's Account. Thus, the total PM10 emissions retired would be 194 lbs which is equal to 1.2 times the MGS PM10 emission liability of 162 lbs/day (see Table 1).

A summary is presented in Table 2 of the NSR offset requirements and the additional recommended CEQA mitigation for the MGS project. The data presented in Table 2 confirms that no additional offsets are required than what has already been purchased or planned for purchase from the District's Priority Reserve by the City

Table 2
District NSR Offset Description and Additional Recommended CEQA Mitigation for the Malburg Generation Station Project

Pollutant	Offset Description	Offsets to be Surrendered by the City of Vernon	Additional Mitigation to be provided by the District	Total Mitigation	Additional Mitigation Recommended by Staff for CEQA Compliance
NOx	RECLAIM Trading Credits (RTCs) offset at a 1:1 ratio reviewed on an annual basis.	229,531 lbs/year for the first year. 71,215 lbs/year for the second year.	0 lbs/year	229,531 lbs/year for the first year. 71,215 lbs/year for the second year. (1:1)	0 lbs/year
SOx	Exempted by Rule 1304.	0 lbs/day	District Account: 8 lbs/day to offset all the exempted SOx emissions at a 1.2:1 ratio to satisfy District policy.	8 lbs/day District (1.2:1)	0 lbs/day
CO	ERC surrendered at a 1.2:1 offset ratio.	305 lbs/day	0 lbs/day	305 lbs/day ERCs (1.2:1)	0 lbs/day
VOC	ERC surrendered at a 1.2:1 offset ratio	130 lbs/day	0 lbs/day	130 lbs/day ERCs (1.2:1)	0 lbs/day
PM10	ERC surrendered at a 1.2:1 offset ratio	3 lbs/day	0 lbs/day	3.0 lbs/day ERC (1.2:1) + 160 lbs/day PRCs (1:1) + 32 lbs/day (District (0.2:1); 194 lbs/day Total	
	Priority Reserve Credits **Purchased** at a 1:1 ratio	PRCs: $4.0 Million for 160 lbs/day	District Account: 32 lbs/day to increase the offset ratio from 1:1 to 1.2:1 in order to satisfy District policy.		0 lbs/day

APPENDIX B

SCAQMD LETTER 1/8/03

January 8, 2003

Paul Richins
Energy Facilities Siting Program Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Dear Mr. Richins,

Thank you for your letter of December 23, 2002 requesting comments on the addendum to the staff assessment for the City of Vernon – Malburg Generating Station (01-AFC-25). The South Coast Air Quality Management District (AQMD) has reviewed the addendum and has the following comments:

General comments:

Due to the calculation methodology used by the CEC in the addendum to the staff assessment, tables 25 and 26 show offsets/mitigations in excess of the liabilities for some pollutants. AQMD seeks clarification since under our regulations, offsets are required pursuant to our NSR Rules and the offsets provided are not in excess of the NSR offset liabilities.

Specific Comments:

1. Tables 10 and 11- It should be noted that while the CEC used emission factors consistent with the AQMD's FDOC, these tables reflect monthly (29-day-average) and annual operating emissions which are different than those presented in the FDOC. The AQMD's monthly (30-day-average) and annual emissions for NOx were calculated per procedures required by our New Source Review (NSR) Rules.
2. It should be also noted that the results presented in Table 10 and 11 are used to generate the emission numbers in CEC's table 25 and 26 and do not necessarily reflect AQMD's NSR requirements but rather the mitigation requirements of the AFC process. The AQMD would like the CEC to add specific language prefacing the tables as such; "*The emissions presented in tables 25 and 26 have been calculated for the purposes of demonstrating mitigation efforts as required by AFC process and do not necessarily reflect the South Coast AQMD NSR offset requirements.*"
3. Table 25 – The header and the emissions listed in columns 3 and 4 are misleading and should be clarified. In column 3, the numbers listed for CO, PM10, VOC and

SOx should indicate only the exact amounts of offsets procured from either ERC or priority reserve. Although this may be correct for the ERC amounts, the priority reserve credits are only purchased at a 1.0-to-1.0 ratio. However, the AQMD provides an additional 20% offsets from our internal offset accounts to ensure the project emissions are offset at an offset ratio consistent with federally approved ratios. The amounts currently shown include AQMD's federally approved offset factor for both ERC and priority reserve credits. It is inappropriate to reflect a higher amount of offsets than purchased for priority reserve credits. Instead, it would be more appropriate to include a separate column to illustrate any additional amounts as a result of the AQMD's internal offset account. In column 3, the RTC's procured for NOx should not exceed the AQMD's calculated RTC exposure for the new equipment. All excess RTC's can either be traded as per Regulation XX or permanently retired for a particular reporting period. Column 4 should only be entitled as Mitigation to avoid confusion of the term offsets used in our NSR analysis. It should be noted that the NSR offsets for CO, PM10, and VOC are based upon a maximum 30-day-average which have extrapolated in this table into an annual number for table 25 and a daily number for table 26. Similarly, NOx RTC and SOx are expressed on annual basis and have been recalculated into daily limits in table 26.

4. Table 26 – The issued raised above item 3 above would apply similarly to table 26 noting that NOx RTC has no daily offset component and may be incorrectly represented in this table as such.

Again, the AQMD appreciates your request to comment on the addendum to the staff assessment for the MGS project. If you should have any further questions, please contact Mr. Chandrashekhar S. Bhatt at (909) 396 - 2653 or Mr. John Yee at (909) 396 - 2531.

Sincerely,

John Yee
Senior Engineer
Refinery, Energy & RECLAIM Admin.
Engineering & Compliance

JTY:csb-1-8-03 response-to-vernon sa

CC: Bill Pfanner, CEC
Mohsen Nazemi
Pang Mueller
MGS file

APPENDIX C

AIR QUALITY SUPPLEMENTAL TESTIMONY OF JOSEPH M LOYER

AIR QUALITY

Supplemental Testimony of Joseph M. Loyer

This section supplements or replaces the **Air Quality** section of the Staff Assessment, showing edits in strike out or underline. The Recommended Staff Conditions of Certification have been amended and are reprinted in total. Note that Conditions **AQ-C12**, **AQ-C13 and AQ-C14** have been added.

Page 4.1-35 Under the heading, "**PROJECT OPERATING EMMISSIONS**," **Add** the following text:

The City has developed six operational scenarios that refine the expected emissions primarily differentiating between summer and winter seasons, as well as full and curtailed production. From these scenarios, the emission tables in the Staff Assessment are developed.

Amend: Tables 9,10, and 11

AIR QUALITY Table 9 amended primarily corrects the operational assumption of the firewater pump, which is only tested for one-half hour, not a full hour. Also, the PM10 emissions for the cooling tower are increased slightly at the City's request.

AIR QUALITY Table 9 Amended
Maximum Expected Hourly Emissions
(lbs/hr)

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total	Assumptions
CO	48.6	0	0.59	49.19	a,c,d
NOx	26.2	0	1.73	27.93	a,c,d
PM10	7.78	0.26	0.08	8.12	b,c,d
VOC	3.3	0	0.05	3.35	a,c,d
SOx	0.3	0	0.002	0.30	b,c,d
Ammonia	7.6	0	0.00	7.60	b,c,d

Assumptions
a The gas turbines are undergoing a cold startup @ 38 deg F.
b The gas turbines are at full load @ 38 deg F with the duct burners on.
c The cooling tower is at full load.
d The firewater pump is being tested for ½ hour.

AIR QUALITY Table 10 Amended reflects the operational scenarios submitted by the City: The MGS will be base loaded in almost all cases. Therefore, it is very unlikely that the MGS will undergo a startup and shutdown within the same day. As a compromise, the City and staff accept the averaging of the startups, shutdowns and all monthly operational emissions for a month into the average daily emissions as reasonably representative of the MGS maximum expected daily emissions. AIR QUALITY Table 11 Amended also reflects annual emissions for the City's refined operational scenarios.

It should be noted that the emissions shown in AIR QUALITY Tables 10 and 11 Amended are **different from** the 30-day-average or annual emissions calculated by the District **in the FDOC** per their New Source Review Rules.

AIR QUALITY Table 10 Amended
Average Expected Daily Emissions
(lbs/day)

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total	Assumptions
CO	104.00	0	0.59	104.59	a,d,e,
NOx	175.00	0	1.73	176.73	a,d,e,
PM10	158.00	6.20	0.08	164.28	a,d,e
VOC	36.00	0	0.05	36.05	a,d,e
SOx	6.00	0	0.002	6.00	a,d,e
Ammonia	182.4	0	0.00	182.40	a,d,e

Assumptions
a The gas turbines are undergoing warm startup (1.5 hours) per month, 8 hours/day full load with duct firing, 16 hours/day full load without duct firing and 0.5 hours shutdown per month @ 65 deg F averaged for 29 days/month.
b The gas turbines are at full load for 24 hours @ 38 deg F with the duct burners on
c The gas turbines are undergoing cold startup (2 hours) and baseload operation for 22 hours @ 38 deg F.
d The cooling tower is at full load for 24 hours
e The Firewater pump is being tested 0.5 hours

AIR QUALITY Table 11 Amended
Maximum Expected Annual Emissions
(lbs/year)

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total		Assumptions
				Lbs/yr	Tons/yr	
CO	37,145	0	235	37,380	18.69	A,c,d
NOx	52,674	0	689	53,363	26.68	b,c,d
PM10	56,676	2,278	32	58,986	29.49	a,c,d
VOC	13,027	0	20	13,047	6.52	a,c,d
SOx	2,122	0	1	2,123	1.06	a,c,d
Ammonia	66,576	0	0	66,576	3.29	a,c,d

Assumptions
a The gas turbines are undergoing one warm startup per month (1.5 hours), 8 hours/day of full load operation with the duct burner, 16 hours/day of full load operation without the duct burners and one shutdown per month (0.5 hours) @ 65 deg F.
b The gas turbines are undergoing 4 cold starts (2 hours), 52 warm starts (1.5 hours) 1314 hours of full load operation with the duct burner, 5782 hours of full load operation without the duct burner and 56 shutdowns (0.5 hours) per year.
c The cooling tower at full load for 8760 hours/year.
d The Firewater pump is being tested 199 hours/year.

Page 4.1-53 Under the heading, "**ADDITIONAL MITIGATION**,"
Insert: the following text after the first sentence at the top of the page:

ADDITIONAL MITIGATION

In addition to the emission reduction credits (ERCs) and Priority Reserve Credits (PRCs) that the City will surrender or purchase through the District to offset the MGS emission impacts, the District will contribute 2,628 pounds per year of SO2 emission

reduction credits through their District Account. The District is obligated to provide this additional mitigation due to the fact that the MGS SO2 emissions do not trigger offset requirements in Rule 1304 (i.e., they total less than 4 tons per year), thus exempt**ing the City from procuring offsets.** Additionally, the District will retire these credits at a 1.2:1 ratio for both the 1304 Exemption and the PRCs. However, because the rules surrounding the qualifications for purchasing PRCs not only dictate access but also the amount of credits that can be purchased, the District has lowered the allocation of PM10 PRCs from 186 lbs/day to 162 lbs/day for offsetting the MGS project PM10 emission impacts.

Therefore, the City may include in their offsets for the MGS project emission impacts 8.66 lbs/day of SO2 (1.2 x 2,628/364) and 194.4 lbs/day of PM10 (1.2x162). Also, because a portion of the CO emission reductions are PRCs (166.50 lbs/day), they also will be retired by the District at a 1.2:1 ratio for a total of 199.80 lbs/day. With this additional mitigation and the lower emission estimates, the project will be fully mitigated, as is shown in Amended AIR QUALITY Tables 25 and 26.

It should be noted that the emissions liabilities shown in AIR QUALITY Tables 25 and 26 Amended are as a result of the emissions calculated in AIR QUALITY Tables 10 and 11 and are thus not representative of the District calculation procedures in the District New Source Review rules. Thus the emission liability presented in AIR QUALITY Tables 25 and 26 Amended have been calculated for the purposes of demonstrating mitigation efforts **pursuant to Staff's application of CEQA** and do not necessarily reflect the District NSR offset requirements. As such, AIR QUALITY Tables 25 and 26 Amended do not represent an excess or shortfall of NSR offsets, rather they represent as excess or shortfall of mitigation required for CEQA compliance purposes only and have no reflection at all **of** NSR requirements. It should be further noted that the offsets and mitigation shown in AIR QUALITY Table 25 Amended for CO, VOC and PM10 are extrapolated values presented by Commission staff for the purposes of demonstrating CEQA compliance and are not representative of the District NSR Offsets requirements. It should be further noted that the any excess NOx **RECLAIM Trading Credits (**RTCs**)** can either be traded as per Regulation XX or permanently retired for a particular reporting period. Finally, it should be noted that the NOx RTC and SOx are extrapolated by Commission staff from an annual basis to daily limits in AIR QUALITY Table 26 and thus do not represent District NSR requirements.

Page 4.1-53 Amend: Table 25 as shown below:
Remove: The two paragraphs that follow Table 25

AIR QUALITY Table 25 Amended
Comparison of Expected Annual Emissions to Mitigation Provided for CEQA Compliance Purposes Only
(lbs/year)

	Liability[1]	Offsets[2]	District Mitigation[2]	Mitigation	
				Excess	Shortfall
CO	37,380	99,098	12,154	73,872	
NOx	53,363	71,215	0	17,852	
PM10	58,986	59,130	11,826	11,970	
VOC	13,047	47,450	0	34,403	
SOx	2,123	0	3,154	1,031	
1 See AIR QUALITY Table 11 Amended 2 (SCAQMD 2002c)					

~~The MGS project NOx emissions are not causing a direct impact, but may contribute to the down wind formation of ozone (ie., NOx emissions are a precursor to ozone formation). However, the VOC emissions (also a precursor to ozone formation) are mitigated to such an excess on an annual basis, that they more than offset the excess NOx emissions (by a ratio of more than 45:1). Therefore, it is staff's opinion that the excess NOx emissions are mitigated to a level of insignificance by the excess VOC offsets.~~

~~AIR QUALITY Table 26 (the daily balance of emissions and mitigation) shows an excess amount of Sox, PM10 and NOx emissions from the MGS project. This amount of excess Sox emissions may contribute to secondary PM10 impacts, but is not expected to cause or contribute to a direct impact on the Sox ambient air quality standards. It is staff's opinion that the excess SOx emissions can be mitigated with the same source of mitigation eventually used for the staff proposed PM10 mitigation. Staff will outline the recommendations for PM10 and Sox mitigation that in the Staff Proposed Mitigation Section. As is the case for the annual balance of the offsets that mitigate the slight excess of NOx emissions by a ratio greater than 3:1 (typical trading ratios of VOC for NOx are 2:1).~~

Page 4.1-54 Amend Table 26 as shown below:

AIR QUALITY Table 26 Amended
Comparison of Expected Daily Emissions to Mitigation Provided for CEQA Compliance Purposes Only
(pounds/day)

	Daily Liability[1]	Offsets[2]	District Mitigation[2]	Mitigation	
				Excess	Shortfall
CO	104.59	271.5	33.3	200.21	
NOx	176.73	195.1	0	18.38	
PM10	164.28	162.0	32.4	30.12	
VOC	36.05	130.0	0	93.95	
SOx	6.00	0	8.66	2.66	

1 See AIR QUALITY Table 10 Amended
2 (SCAQMD 2002c)

Page 4.1-55 Under the heading "**ENVIRONMENTAL JUSTICE IMPACTS,"**
Replace: The following text:

ENVIRONMENTAL JUSTICE IMPACTS

Since the MGS project emission impacts are fully mitigated, there are no residual emission impacts to cause an environmental justice impact. Therefore, staff finds that there is no potential for the MGS emissions to cause an environmental justice impact.

Page 4.1-59 Under the heading "**CONCLUSIONS AND RECOMMENDATION**,"
Replace: entire text with the following:

CONCLUSIONS AND RECOMMENDATION

The MGS's emissions of NOx, SO2 and CO will not cause a violation of any NO2, SO2 or CO ambient air quality standards, and therefore, their impacts are not significant. The project's air quality impacts from directly emitted PM10 and of the ozone precursor emissions of NOx and VOC and PM10 precursors of NOx and SO2 could be significant if left unmitigated. MGS will reduce emissions to the extent feasible and provide emission offsets in the form of ERCs, PRCs and will be granted further offsets by the District from the District Account for the Rule 1304 Offset Exemptions of SO2. Thus these mitigation measures will reduce the potential for directly emitted PM10, as well as ozone and secondary PM10 formation, to a level of insignificance.

The District has submitted a Final Determination of Compliance (SCAQMD 2002c) that concludes that the MGS will comply with all applicable District rules and regulations and therefore has proposed a set of conditions presented here as Conditions of Certification AQ-1 through AQ-36.

CEC staff recommends the inclusion of additional Conditions of Certification AQ-C1 through AQ-C12 that address the construction impacts and ensures that the City of Vernon complies with the assumptions made in this assessment.

Staff therefore recommends the certification of the MGS with the following proposed Conditions of Certification.

See Section II-AIR QUALITY, page 4.1-61, Recommended Staff **CONDITIONS OF CERTIFICATION.**

APPENDIX D

PUBLIC HEALTH SUPPLEMENTAL TESTIMONY OF ALVIN GREENBERG, PH.D. AND MIKE RINGER

PUBLIC HEALTH

Supplemental Testimony of Mike Ringer and Alvin Greenberg, Ph.D.

The following is an addendum to the Public Health section of the September 26, 2002 Malburg Generating Station Staff Assessment.

INTRODUCTION

The proposed Malburg Generating Station (MGS) plans to use reclaimed water for cooling. Its proposed design would include wet cooling towers that produce associated drift (water droplets released to the atmosphere). These factors have led staff to identify an additional state regulation (below) which it believes should be included in the Laws, Ordinances, Regulations, and Standards (LORS) section of the Public Health testimony of its staff assessment.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS (LORS)

CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 60306

Section 60306 states in pertinent part:

c) Whenever a cooling system, using recycled water in conjunction with an air conditioning facility, utilizes a cooling tower or otherwise creates a mist that could come into contact with employees or members of the public, the cooling system shall comply with the following:

(1) A drift eliminator shall be used whenever the cooling system is in operation.

(2) A chlorine, or other, biocide shall be used to treat the cooling system recirculating water to minimize the growth of Legionella and other micro-organisms.

PROJECT OPERATION AND LEGIONELLA

In accordance with section 60306, the cooling tower for the facility will have a high efficiency drift eliminator designed to reduce drift to 0.0005 percent of circulating water (cooling water). In addition, the circulating water will contain conditioning chemicals, including sodium hypochlorite, which will be shock fed into the system to act as an effective biocide. Finally, a proprietary nonoxidizing biocide will be available onsite for direct feed into the circulating water system to control algae, if necessary.

Section 60306 also requires the use of biocides to minimize the growth of Legionella and other micro-organisms in cooling systems using recycled water. Legionella is a type of bacteria that grows in water (optimal temperature of 37∀C) and causes Legionellosis, otherwise known as Legionnaires' disease. Untreated or inadequately treated cooling systems in the United States have been correlated with outbreaks of Legionellosis. These outbreaks are usually associated with indoor heating, ventilating, and air conditioning (HVAC) systems, but it is possible for growth to occur in industrial cooling towers and expose receptors through ambient air pathways. In response to this health concern, the California Department of Health Services (DHS) promulgated the

regulation referenced above to require treatment of recycled water used in cooling water towers with biocides to minimize the growth of Legionella and other micro-organisms.

To minimize the risk from Legionella, the Cooling Technology Institute (CTI) noted that consensus recommendations include minimization of water stagnation, minimization of process leads into the cooling system that provide nutrients for bacteria, maintenance of overall system cleanliness, the application of scale and corrosion inhibitors as appropriate, the use of high-efficiency mist eliminators on cooling towers, and the overall general control of microbiological populations.

Good preventive maintenance is very important in the efficient operation of cooling towers and other evaporative equipment (ASHRAE 1998). Preventive maintenance includes having effective drift eliminators, which the project would have, periodically cleaning the system if appropriate, maintaining mechanical components in working order, and maintaining an effective water treatment program with appropriate biocide concentrations to minimize the growth of micro-organisms.

Staff notes that most water treatment programs are designed to minimize scale, corrosion, and biofouling and not to control Legionella. Thus, in order to ensure that the use of biocide at MGS to treat the cooling water would also minimize the growth of Legionella bacteria and other micro-organisms, as required by section 60306, staff recommends that the applicant be required to implement a management plan that includes periodic monitoring and the maintenance and testing of the cooling water system. Staff, thus, proposes the Condition of Certification below.

See Section II-Public Health page 4.7-15, **Proposed Conditions of Certification.**

SECTION II

PROPOSED CONDITIONS OF CERTIFICATION

AIR QUALITY-PROPOSED CONDITIONS OF CERTIFCATION

Supplemental Testimony of Joseph M. Loyer

PROPOSED CONDITIONS OF CERTIFICATION

These recommended Conditions of Certification have been amended in accordance with the District FDOC (SCAQMD 2002c) and the October 16, 2002 Workshop held in the City of Vernon.

AQ-C1 The City of Vernon shall develop and submit to the CPM for approval an Air Quality Construction Mitigation Plan (AQCMP) using any or all of the elements listed below to maintain construction related NOx, PM10 and CO emissions below the short-term ambient air quality standards and no more than 10 ug/m^3 difference between upwind and downwind monitoring for any of the three pollutants identified. The City shall identify the placement of upwind and downwind monitoring for NOx, PM10 and CO in the AQCMP. In addition to or in place of the measures identified below, the City may develop alternative measures to be approved by the CPM in order to achieve the identified goals.

1) Redirect pedestrian traffic from the square block area described by the intersections of Leonis, 50th, Seveille and Soto Avenues.
2) Restrict the use of multiple heavy construction equipment at the MGS project site.
3) Unless shown to be impractical, use a water emulsion diesel fuel in all diesel powered construction equipment to reduce both PM10 and NOx emissions (equipment tanks must be emptied and refilled with this fuel prior to operation on-site). Otherwise, use ultra low sulfur diesel fuel (equipment tanks must be emptied and refilled with this fuel prior to operation on-site).
4) Use only 1996 CARB or EPA Certified or better diesel engines.
5) In the event that a 1996 CARB or EPA certified engine is not available, use in conjunction with ultra low sulfur diesel fuel, a catalyzed diesel particulate filters (CDPF) on all diesel engines over 100 bhp with the exemptions listed. All exempted equipment must use water emulsion diesel fuel if available on-site. If water emulsion diesel fuel is not available on-site, then all exempted equipment must use CARB certified ultra low sulfur diesel fuel. Exempted equipment are:
    1) Cranes,
    2) On-road licensed vehicles,
    3) and loaders, skiffs or backhoes that operate less than 2 hours at a time.
6) Identify the employee parking area(s) and surface composition of those parking area(s)
7) Watering of all disturbed areas twice daily.
8) Use sandbags to prevent run off.
9) Use wheel-washing areas prior to large trucks leaving the project site.
10) Describe methods that will be used to clean mud and dirt that has been tracked-out from the project site onto public roads.

11) For any transportation of solid bulk material
    1) Use vehicle covers
    2) Wet the transported material
    3) Use appropriate amount of freeboard
12) Identify methods for the stabilization of storage piles and disturbed areas.
13) Employ windbreaks at appropriate locations.

Verification: The City of Vernon shall submit the AQCMP for approval to the CPM no later than 45 days prior to site mobilization.

AQ-C2 The City of Vernon shall identify the individual(s), for approval by the CPM, that will be on-site during all construction activities to ensure that all measures called for in the AQCMP are carried out.

Verification: The City of Vernon shall submit the name and contact information along with a resume of the individual(s) for approval to the CPM 10 days prior to site mobilization.

AQ-C3 The City of Vernon shall submit to the CPM for approval a monthly compliance report signed by the individual(s) identified in **Condition of Certification AQ-C2**, that identifies all upwind-downwind monitoring results and mitigation measures implemented per the AQCMP. The City of Vernon shall submit for approval the format of this monthly report to the CPM.

Verification: The City of Vernon shall submit the format for the Monthly Compliance Report to the CPM no later than 10 days prior to site mobilization. The City of Vernon shall submit the Monthly Compliance Report for each month that construction activities occur for approval by the CPM no later than the 15th of the following month.

AQ-C4 The City of Vernon shall submit to the CPM for approval prior to construction of the cooling tower, the cooling tower design details including following elements:

1) The cooling tower type,
2) materials of construction,
3) drift eliminator design and details (to be designed to a drift rate of 0.0005%),
4) vendor specific justification for the correction factor to be used to correlate blowdown total dissolved solid (TDS) to drift TDS in **Condition of Certification AQ-C7**, and
5) the circulating water recirculation rate.

Verification: The City of Vernon shall submit the information required above for approval to the CPM, no later than 45 days prior to commencement of construction of the cooling towers.

AQ-C5 No chromium containing compounds shall be added to cooling tower circulating water.

Verification: The City of Vernon shall make the site available for inspection by representatives of the District, CARB and the Commission.

AQ-C6 The City of Vernon shall determine the TDS levels in the blowdown water by independent laboratory testing prior to initial operation and periodically thereafter.

Verification: The City of Vernon shall submit for approval to the CPM, a protocol for initial and weekly testing and the identification of the independent laboratory to be used 90 days prior to cooling tower operation. The City of Vernon shall submit weekly TDS reports for the blowdown water as part of the quarterly emission report to the CPM for approval.

AQ-C7 PM10 emissions from the cooling tower (in total) shall not exceed 6.0 lb/day.

Protocol: Compliance with the PM10 daily emission limit shall be demonstrated as follows:

PM10 lb/day = A*B*C*D

where:

A = circulating water recirculation rate (**Condition of Certification AQ-C4**)

B = total dissolved solids concentration in the blowdown water to be updated on a weekly basis(**Condition of Certification AQ-C6**)

C = design drift rate (**Condition of Certification AQ-C4**)

D = correction factor (**Condition of Certification AQ-C4**)

Verification: The City of Vernon shall calculate the daily PM10 emissions from the cooling tower and submit all calculations and results on a quarterly basis in the quarterly emission reports to the CPM for approval.

AQ-C8 The City of Vernon shall refrain from testing the firewater pump on the same day as either gas fire combustion turbines have been started up or shutdown as defined by **Condition of Certification AQ-C9**.

Verification: The City of Vernon shall submit for approval all testing times and results of the diesel fired emergency firewater pump in the quarterly emissions report.

AQ-C9 The City of Vernon shall use the following definitions to determine compliance with startup, shutdown and any related emission or operational limitations.

Startup is defined as beginning when fuel is first delivered to the combustors of the combustion turbine and ending when the combustion turbine reaches all NOx and CO emission limits for normal operation.

Shutdown is defined as beginning during normal operation with the intent to shutdown and ends with the secession of fuel being delivered to the combustors of the combustion turbine.

Verification: See Verification for **Condition of Certification AQ-6**.

AQ-C10 The City of Vernon shall commission and operate the Malburg Generation Station within the following emission limits.

Commissioning
During the first year of commissioning and operation, the following emission limits shall apply.

Annual Commissioning Emission Limits
Units are in Pounds per year

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total	Assumptions
CO	112,743	0	478	113,221	a,b,c
NOx	229,531	0	1,377	230,908	a,b,c
PM10	48,873	2,190	58	51,121	a,b,c
ROG	40,518	0	35	40,553	a,b,c
SOx	4,294	0	2	4,296	a,b,c
Ammonia	49,514	0	0	49,514	a,b,c

Assumptions
a The gas turbines are undergoing initial commissioning for three months (2,160 hours) then 3 cold startups, 39 warm startups, 42 shutdowns and 4,355 hours at full load with the duct burners on @ 65 deg F.
b The cooling tower at full load for 8760 hours/year.
c The Firewater pump is being tested 199 hours/year.

Post Commissioning
After the end of the commissioning period, the following hourly and daily emission limits shall apply. The following annual emission limits shall only apply until after the first calendar year of operation is complete.

Hourly Emission Limits
Units are in pounds per hour

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total	Assumptions
CO	48.6	0	0.59	49.19	a,c,d
NOx	26.2	0	1.73	27.93	a,c,d

PM10	7.78	0.26	0.08	8.12	b,c,d
VOC	3.3	0	0.05	3.35	a,c,d
SOx	0.3	0	0.002	0.30	b,c,d
Ammonia	7.6	0	0.00	7.60	b,c,d

Assumptions

a The gas turbines are undergoing a cold startup @ 38 deg F.
b The gas turbines are at full load @ 38 deg F with the duct burners on.
c The cooling tower is at full load.
d The Firewater pump is being tested for ½ hour.

Daily Emission Limits
Units are in pounds per day

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total	Assumptions
CO	104.00	0	0.59	104.59	a,d,e,
NOx	175.00	0	1.73	176.73	a,d,e,
PM10	158.00	6.20	0.08	164.28	a,d,e
VOC	36.00	0	0.05	36.05	a,d,e
SOx	6.00	0	0.002	6.00	a,d,e
Ammonia	182.4	0	0.00	182.40	a,d,e

Assumptions

a The gas turbines are undergoing 1 warm startup (1.5 hours) per month, 8 hours/day full load with duct firing, 16 hours/day full load without duct firing and 0.5 hours shutdown per month @ 65 deg F averaged for 29 days/month.
b The gas turbines are at full load for 24 hours @ 38 deg F with the duct burners on
c The gas turbines are undergoing cold startup (2 hours) and baseload operation for 22 hours @ 38 deg F.
d The cooling tower is at full load for 24 hours/day
e The Firewater pump is being tested 0.5 hours/day

Annual Emission Limits
Units are in pounds per year

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total		Assumptions
				Lbs/yr	Tons/yr	
CO	37,145	0	235	37,380	18.69	A,c,d
NOx	52,674	0	689	53,363	26.68	b,c,d
PM10	56,676	2,278	32	58,986	29.49	a,c,d
VOC	13,027	0	20	13,047	6.52	a,c,d
SOx	2,122	0	1	2,123	1.06	a,c,d
Ammonia	66,576	0	0	66,576	3.29	a,c,d

Assumptions

a the gas turbines are undergoing one warm startup per month (1.5 hours), 8 hours/day of full load operation with the duct burner, 16 hours/day of full load operation without the duct burners and one shutdown per month (0.5 hours) @ 65 deg F.

b The gas turbines are undergoing 4 cold starts (2 hours), 52 warm starts (1.5 hours) 1314 hours of full load operation with the duct burner, 5782 hours of full load operation without the duct burner and 56 shutdowns (0.5 hours) per year.

c The cooling tower at full load for 8760 hours/day.

d The Firewater pump is being tested 199 hours/day.

Verification: The City of Vernon shall submit to the CPM for approval on a quarterly basis all emission records and calculations to demonstrate compliance with the emission limits stated herein as part of the quarterly emissions report.

AQ-C11 The City of Vernon shall submit a quarterly emissions report on a quarterly basis to the CPM for approval. The quarterly emissions report shall generally report all ammonia, NOx, SOx, CO, PM10 and VOC emissions from the Malburg Generation Station as necessary to demonstrate compliance with all emission limits. The fourth quarter emission report shall include an annual summary of all emissions of ammonia, NOx, SOx, CO, PM10 and VOC as necessary to demonstrate compliance with all annual emission limits.

Verification: The City of Vernon shall submit the quarterly emissions report no less than 30 days after the end of each calendar quarter.

The following Conditions of Certification (AQ-C12, AQ-C13, and AQ-C14) have been added so as to ensure that the proper offsets from the City and the District are surrendered in the appropriate amounts.

AQ-C12 The project owner shall commit specific emission reduction credits certificates for the MGS to offset the project emissions provided as provided for in Table AQ-C12-1. The project owner shall not use any ERCs identified in Table AQ-C12-1 for purposes other than offsetting the MGS.

TABLE AQ-C12-1 – Emission Offset Requirements

Certificate Number	Amount (lbs/day)	Pollutant

AQ004457	8	CO
AQ004458	13	CO
AQ004466	13	CO
AQ004474	2	CO
AQ004475	4	CO
AQ004804	14	CO
AQ004840	60	CO
AQ004801	45	CO
AQ004798	2	CO
Additional ERCs Certificate numbers not available, but are purchased and total	144	CO
Total	**305**	**CO**
AQ004367	108	VOC
AQ004493	22	VOC
Total	**130**	**VOC**
AQ004763	**3**	**PM10**
Priority Reserve – Purchased by the City	**160**	**PM10**
Priority Reserve – provided by the District	**32**	**PM10**
Total	**195**	**PM10**
1304 Exempted Emissions – provided by the District	**8**	**SO2**

The project owner shall request from the District a report of the NSR Ledger Account for the MGS after the District has granting the MGS a Permit to Construct. This report is to specifically identify the ERCs, Priority Reserve Credits and Rule 1304 Exempted Emissions used to offset the project emissions. The project owner shall submit this report to the CPM prior to turbine first fire.

Verification: No more than 15 days following the issuance of the District's Permit to Construct, the project owner shall request from the District the report of the NSR Ledger Account for the ESPR. The project shall submit the report of the NSR Ledger Account for the ESPR to the CPM no less than 30 days prior to turbine first fire.

AQ-C13 The City of Vernon shall submit to the CPM for review and approval any modification proposed by either the City or issuing agency to any project air permit.

Verification: The City of Vernon shall submit any proposed air permit modification to the CPM within five working days of its submittal either by 1) the City to an agency, or 2) receipt of proposed modifications from an agency. The City of Vernon shall submit all modified air permits to the CPM within 15 days of receipt.

AQ-C14 The City of Vernon shall install and render operational an oxidation catalyst prior to initiating operation for commissioning. The City of Vernon shall maintain the oxidation catalyst in an operational status during the commissioning period and shall refrain from operation if the catalyst is inoperable. The City of Vernon shall replace the oxidation catalyst if necessary prior to initial source testing and the beginning of commercial operation.

Verification: The City of Vernon shall submit engineering drawing or other such material showing the intended location of instillation of the oxidation catalyst 90 days prior to initial startup to the CPM and District for review and approval. The City of Vernon shall notify the CPM of the intended installation date at least 30 days prior to the date of installation. The City of Vernon shall notify the CPM of the date of completed installation no less than 10 days following the date of completed installation. The City of Vernon shall report the operability of the oxidation catalyst, CO CEMS (when available), date and time of turbine operations and fuel burned as part of the Monthly Construction Report to the CPM as required during construction. The City of Vernon shall notify the CPM of the date of the intended oxidation catalyst replacement if necessary at least 30 days prior to replacement. The City of Vernon shall notify the CPM of the date the oxidation catalyst replacement is complete (if replacement is necessary) no less than 10 days following completion.

Page 4.1-65 Under the heading "**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RECOMMENDED CONDITIONS OF CERTIFICATION**,"
Remove: Conditions **AQ-1** through **AQ-36**, and
Replace with the following text:

South Coast Air Quality Management District Recommended Conditions of Certification

AQ-1 Except for open abrasive blasting operations, the City of Vernon shall not discharge into the atmosphere from any single source of emissions whatsoever any contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No. 1 on the Ringlemann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

Verification: The City of Vernon shall make the Malburg Generating Facility site accessible for inspection to the District, CARB and Commission.

AQ-2 The City of Vernon shall not use diesel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

Verification: The City of Vernon shall submit fuel purchase records for approval to the CPM on a quarterly basis in the quarterly emissions report.

AQ-3 The city of Vernon shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Purchase records of fuel oil and sulfur content of the fuel

Verification: The City of Vernon shall submit fuel purchase records for approval to the CPM on a quarterly basis in the quarterly emissions report.

AQ-4 Accident release prevention requirements of Section 112 (r)(7):

a). The City of Vernon shall comply with the accidental release prevention requirements pursuant to 40CFR Part 68 and shall submit to the Executive Officer and the CPM, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and admission of a risk management plan (RMP).

b). The City of Vernon shall submit any additional relevant information requested by the Executive Officer, designated agency or CPM.

Verification: The City of Vernon shall submit for approval to the CPM the above required statement of compliance and any further information requested on an annual basis as part of the annual compliance report.

AQ-5 The City of Vernon shall limit the emissions from both gas fired combustion turbine-heat recovery steam generator train exhaust stacks as follows:

Contaminant	Emissions Limit
CO	7,633 lbs in any one month
PM_{10}	4,876 lbs in any one month
VOC	3,236 lbs in any one month
SOx	214 lbs in any one month

For the purpose of this condition, the limit(s) shall be based on the total combined emissions from the exhaust stacks.

The City of Vernon shall calculate the emission limit(s) for CO during commissioning period, using fuel consumption data and the following emission factors: 78.43 lb/mmscf

The City of Vernon shall calculate the emission limit(s) for CO after commissioning period and prior to the CO CEMS certification, using fuel consumption data and the following emission factors: 23.80 lbs/startup and 13.94 lb/mmscf

The City of Vernon shall calculate the emission limit(s) for CO after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan.

The City of Vernon shall calculate the emission limit(s) by using the monthly fuel use data and the following emission factors:- PM10: 7.397 lb/mmscf, VOC: 1.63 lb/mmscf & SOx: 0.28lb/mmscf.

Verification: The City of Vernon shall submit all emission calculations, fuel use, CEM records and a summary demonstrating compliance of all emission limits stated in this Condition for approval to the CPM on a quarterly basis in the quarterly emissions report.

AQ-6 The 2 ppm NOx emission limit shall not apply during turbine commissioning, start-up and shutdown. The commissioning period shall not exceed 573 operating hours per turbine from the initial start-up. Following commissioning, start-ups shall not exceed 2 hours and the number of start-ups shall not exceed one per day per turbine. Following commissioning, shutdowns shall not exceed 30 minutes and the number of shutdowns shall not exceed one per day per turbine. The City of Vernon shall provide the District and the CPM with the written notification of the initial start-up date. Written records of commissioning, start-ups and shutdowns shall be kept and made available to District and submitted to the CPM for approval.

Verification: The City of Vernon shall provide the District and the CPM with the written notification of the initial start-up date no later than 60 days prior to the startup date. The City of Vernon shall report to the CPM for approval all emissions, fuel use and emission calculations during the commissioning period on a monthly basis as part of the monthly compliance report. The City of Vernon shall submit to the CPM for approval, a record of all startups and shutdowns including duration and date of occurrence on a quarterly basis as part of the quarterly emission report.

AQ-7 The 2 ppm CO emission limit shall not apply during turbine commissioning, start-up and shutdown. The commissioning period shall not exceed 573 operating hours per turbine from the initial start-up. Following commissioning, start-ups shall not exceed 2 hours and the number of start-ups shall not exceed one per day per turbine. Following commissioning, shutdowns shall not exceed 30 minutes and the number of shutdowns shall not exceed one per day per turbine. The City of Vernon shall provide the District and CPM with the written notification of the initial start-up date. Written records of commissioning, start-ups and shutdowns shall be kept and made available to District and reported for approval to the CPM.

Verification: See Verification for **Condition of Certification AQ-6**.

AQ-8 The 80.13 lb/mmscf NOx emission limit(s) shall only apply during interim period to report RECLAIM emissions. The interim period shall not exceed 12 months from the initial start-up date.

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-9 The 2 PPM NOx emissions limit(s) are averaged over 1 hour at 15 percent oxygen, dry basis.

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-10 The 2 ppm CO emission limit(s) are averaged over 3 hours at 15 percent oxygen, dry basis.

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-11 The 2 ppm ROG emission limit(s) are averaged over 1 hour at 15 percent oxygen, dry basis.

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-12 The 5 ppm NH_3 emission limit(s) are averaged over 1 hour at 15 percent oxygen, dry basis. The City of Vernon shall calculate and continuously record the ammonia slip concentration using the following:

NH3 (ppmv) = [a-(b*c/1,000,000)*(1,000,000/b)] where
a = ammonia injection rate (lbs/hr)/17 (lbs/lb-mole)
b = dry exhaust gas flow rate (lbs/hr)/29 (lbs/lb-mole)
c = change in measured NOx across the SCR (ppmv dry basis)

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-13 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both emission limits at the same time.

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-14 The City of Vernon shall not use engine cylinder lubricating oil containing the following specified compounds:

Compound		Weight percent
Ash Content	Greater than	0.038

Verification: The City of Vernon shall submit fuel purchase records for approval to the CPM on a quarterly basis in the quarterly emissions report.

AQ-15 The City of Vernon shall limit the operating time of the diesel fueled emergency backup generators and the firewater pump to no more than 199 hours each in any one year.

Verification: See Verification for **Condition of Certification AQ-C8**.

AQ-16 The City of Vernon shall install and maintain a pressure relief valve set at 25 psig in the ammonia storage tank.

Verification: The City of Vernon shall make the ammonia storage tank available for inspection by the District, Commission or CARB.

AQ-17 The City of Vernon shall install and maintain a(n) non-resettable elapsed time meter into the firewater pump to accurately indicate the elapsed operating time of the engine.

Verification: The City of Vernon shall make the firewater pump available for inspection by the District, Commission or CARB.

AQ-18 The City of Vernon shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage of the turbines.

Verification: The City of Vernon shall make the firewater pump available for inspection by the District, Commission or CARB.

AQ-19 The City of Vernon shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH_3).

The City of Vernon shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

Verification: The City of Vernon shall submit to CPM for approval the design drawing that clearly show the flow meter and recording device for the ammonia injection grid no less than 90 days prior to installation of the ammonia injection grid. The City of Vernon shall submit to the CPM for approval the annual calibration report for the flow meter and recording device as part of the annual compliance report.

AQ-20 The City of Vernon shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The City of Vernon shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

Verification: The City of Vernon shall submit to CPM for approval the design drawing that clearly show the temperature gauge and recording device for the inlet to the SCR reactor no less than 90 days prior to installation of the SCR. The City of Vernon shall submit to the CPM for approval the annual calibration report for the temperature gauge and recording device as part of the annual compliance report.

AQ-21 The City of Vernon shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The City of Vernon shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

Verification: The City of Vernon shall submit to CPM for approval the design drawing that clearly show the pressure gauge and recording device across the SCR reactor no less than 90 days prior to installation of the SCR. The City of Vernon shall submit to the CPM for approval the annual calibration report for the pressure gauge and recording device as part of the annual compliance report.

AQ-22 The City of Vernon shall conduct source test (s) for the pollutant(s) identified below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
CO Emissions	District Method 100.1	1 hour	Outlet of SCR
NOx Emissions	District Method 100.1	1 hour	Outlet of SCR
PM Emissions	Approved District Method	District approved averaging time	Outlet of SCR
VOC Emissions	Approved District Method	1 hour	Outlet of SCR
SOx Emissions	Approved District Method	District approved averaging time	Fuel Sample
NH_3 Emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of SCR

The test (s) shall be conducted after approval of the source test protocol, but no later than 180 days after initial start up.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine and steam turbine generating output (MW).

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the District engineer and the CPM no later than 45 days before the proposed test date and shall be approved by the District and the CPM before the test commences. The test protocol shall include the proposed operating conditions of the turbines during the test the identity of the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted with and without duct burner firing when this equipment is operating at loads of 100, 75, and 50 percent of maximum

load for the NOx, CO, VOC and ammonia tests. For all other pollutants, the test shall be conducted with and without the duct burner firing at 100% load only.

The District and the CPM shall be notified of the date and time of the test at least 10 days prior to the test.

Verification: The City of Vernon shall submit for approval to the District and the CPM the required initial source testing protocol no less than 45 days prior to the date of the source test. The City of Vernon shall notify the District and CPM of the date and time of the source test no less than 10 days prior to the test. The City of Vernon shall submit to the District and CPM for approval the results of the initial source test no later than 60 days following the date of the source test.

AQ-23 The City of Vernon shall conduct source test(s) for the pollutant(s) identified below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
VOC Emissions	Approved District Method	1 hour	Outlet of SCR
SOx Emissions	Approved District Method	District approved averaging time	Fuel Sample
PM Emissions	Approved District Method	District approved averaging time	Outlet of SCR

The test shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District and the CPM within 60 days after the test date The District and the CPM shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emissions limits.

The test shall be conducted 1) when the gas turbine and the duct burners are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input.

Verification: The City of Vernon shall submit for approval to the District and the CPM the required source testing protocol no less than 45 days prior to the date of the source test. The City of Vernon shall notify the District and CPM of the date and time of the source test no less than 10 days prior to the test. The City of Vernon shall submit to the District and CPM for approval the results of the source test no later than 60 days following the date of the source test.

AQ-24 The City of Vernon shall conduct source test(s) for the pollutant(s) identified below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH_3 Emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of SCR

The test shall be conducted and the results submitted to the District and the CPM within 60 days after the test date The District and the CPM shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60-minute averaging period.

Verification: The City of Vernon shall submit for approval to the District and the CPM the required source testing protocol no less than 45 days prior to the date of the source test. The City of Vernon shall notify the District and CPM of the date and time of the source test no less than 10 days prior to the test. The City of Vernon shall submit to the District and CPM for approval the results of the source test no later than 60 days following the date of the source test.

AQ-25 The City of Vernon shall install and maintain a CEMS in each exhaust stack of the combustion turbine-HRSG trains to measure the following parameters:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis

The CEMS will convert the actual CO concentrations to mass emission rates (lb/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated in accordance with an approved District Rule 218 CEMS plan application. The City of Vernon shall not install the CEMS prior to receiving initial approval from District.

The CEMS shall be installed and operated to measure CO concentration over a 15minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial start-up of the turbine.

Verification: The City of Vernon shall make the Malburg Generation Station available for inspection by the District, Commission or CARB.

AQ-26 The City of Vernon shall install and maintain a CEMS to measure the following parameters:

NOx concentration in ppmv

Concentration shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 12 months after the initial start-up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the City of Vernon shall comply with the monitoring requirements of Rule 2012 (h)(2) and Rule 2012 (h)(3). Within two weeks of the turbine start-up date, the City of Vernon shall provide written notification to the District of the exact date of start-up.

Verification: The City of Vernon shall make the Malburg Generation Station available for inspection by the District, Commission or CARB.

Condition of Certification AQ-27 is being deleted in favor of the calculation method for monitoring ammonia slip out lined in Condition of Certification AQ-12. Staff is replacinf Condition of Certification AQ-27 with the following Condition that was added by the District.

AQ-27 The City of Vernon shall limit the fuel usage of each turbine-duct burner pair to no more than 330 million cubic feet per month. The purpose of this condition is to ensure that the total PM10 emission shall not exceed 2,438 lbs/month. The City of Vernon shall keep records, in a manner approved by the District, for the operational status of the duct burners and their fuel use.

Verification: The City of Vernon shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report.

AQ-28 The City of Vernon shall vent combustion turbines and HRSGs to the CO oxidation/SCR control system whenever the turbines are in operation.

Verification: The City of Vernon shall make the Malburg Generation Station available for inspection by the District, Commission or CARB.

AQ-29 The City of Vernon shall vent ammonia storage tank, during filling, only to the vessel from which it is being filled.

Verification: The City of Vernon shall make the Malburg Generation Station available for inspection by the District, Commission or CARB.

AQ-30 For the purpose of the following condition number(s), "continuously record" shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition of Certification AQ-17

Condition of Certification AQ-18

Verification: The City of Vernon shall make the Malburg Generation Station available for inspection by the District, Commission or CARB.

AQ-31 For the purpose of the following condition number(s), "continuously record" shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month.

Condition of Certification AQ-19

Verification: The City of Vernon shall make the Malburg Generation Station available for inspection by the District, Commission or CARB.

AQ-32 The MGS electric generating equipment shall not be operated unless the City of Vernon demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the City of Vernon demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility hold sufficient RTCs in an amount equal to the annual emission increase. The City of Vernon shall submit all such information to the CPM for approval.

Verification: The City of Vernon shall submit all identified evidence demonstrating compliance to the CPM on an annual basis as part of the annual compliance report.

AQ-33 The City of Vernon shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emissions data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, dry basis.

All exhaust flow rates shall be expressed in terms of dry standard cubic feet per minute (DCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of % corrected to 15% oxygen.

Emissions data shall be expressed in terms of mass rate (lb/hr), and lbs/mm cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Source test results shall also include turbine fuel flow rate under which the test was conducted.

Source test report shall also include the oxygen level in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the turbine and generator output (MW) under which the test was conducted.

Verification: The City of Vernon shall submit the required source test of Conditions of Certification AQ-21, -22 and -23 in compliance with this condition.

AQ-34 The City of Vernon shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coatings consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less, water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as applied in g/l of coating, less, water and exempt solvent, for other coatings.

Verification: The City of Vernon shall make these records available to the CPM upon request.

AQ-35 The City of Vernon shall keep records, in a manner approved by the District, for the following parameters or items:

Date of operation, the elapsed time, in hour and the reason for operation of the emergency diesel powered generators and/or the firewater pump.

Verification: The City of Vernon shall submit these records to the CPM on an annual basis in the annual compliance report.

AQ-36 The City of Vernon shall keep records, in a manner approved by the District, for the following parameters or items:

Natural gas fuel use during the commissioning period in the combustion turbines and HRSGs.

Verification: See verification of Condition of Certification AQ-6.

ADDITIONAL REFERENCES

South Coast Air Quality Management District (SCAQMD) 2002c. /Pang Mueller: FDOC received. Dated 12/13/02 and docketed 12/16/02.

California Energy Commission (CEC)/Bill Pfanner 2002a. Staff Assessment. Dated 9/26/02 and docketed 9/26/02.

HAZARDOUS MATERIALS MANAGEMENT-PROPOSED CONDITIONS OF CERTIFICATION

Supplemental Testimony of Alvin J. Greenberg, Ph.D. and Rick Tyler

PROPOSED CONDITIONS OF CERTIFICATION

HAZ-1 The project owner shall not use any hazardous materials not listed in Appendix C, below, or in greater quantities than those identified by chemical name in Appendix C, below, unless approved in advance by City of Vernon and the CPM.

Verification: The project owner shall provide to the Compliance Project Manager (CPM), in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.

HAZ-2 The project owner shall concurrently provide a Business Plan and a Risk Management Plan (RMP) to the Certified Unified Program Authority (CUPA) (City of Vernon Environmental Health Department) and the CPM for review at the time the RMP is first submitted to the U.S. Environmental Protection Agency (EPA). The project owner shall reflect all recommendations of the CUPA and the CPM in the final documents. Copies of the final Business Plan and RMP, reflecting all comments, shall be provided to the CPM.

Verification: At least sixty (60) days prior to receiving any hazardous material on the site, the project owner shall provide a copy of a final Business Plan to the CPM. At least 60 days prior to delivery of aqueous ammonia to the site, the project owner shall provide the final EPA-approved RMP, to the CUPA and the CPM.

HAZ-3 The project owner shall develop and implement a Safety Management Plan for delivery of aqueous ammonia. The plan shall include procedures, protective equipment requirements, training and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of aqueous ammonia with incompatible hazardous materials.

Verification: At least sixty (60) days prior to the delivery of aqueous ammonia to the facility, the project owner shall provide a safety management plan as described above to the CPM for review and approval.

HAZ-4 The aqueous ammonia storage facility shall be designed to either the ASME Pressure Vessel Code and ANSI K61.6, or to API 620. In either case, it shall be surrounded by a secondary containment basin capable of holding 125% of the storage volume or the volume of the tank plus the volume associated with 24 hours of rain assuming the 25-year storm. The final design drawings and specifications for the ammonia storage tank and secondary containment basins shall be submitted to the CPM.

Verification: At least sixty (60) days prior to initial delivery of aqueous ammonia to the facility, the project owner shall submit final design drawings and specifications for the ammonia storage tank and secondary containment basin to the CPM for review and approval.

HAZ-5 The project owner shall ensure that no combustible or flammable material is stored within 50 feet of the sulfuric acid tank.

Verification: At least sixty (60) days prior to initial receipt of sulfuric acid on-site, the Project Owner shall provide copies of the facility design drawings showing the location of the sulfuric acid storage tank and the location of any tanks, drums, or piping containing any combustible or flammable materials within 50 feet of the sulfuric acid storage facility to the CPM for review and approval.

HAZ-6 The project owner shall require that the gas pipeline undergo a complete design review and detailed inspection 30 years after initial startup and every 5 years thereafter.

Verification: At least thirty (30) days prior to the initial flow of gas in the pipeline, the project owner shall provide outline of the plan to accomplish a full and comprehensive pipeline design review to the CMP for review and approval. The full and complete plan shall be amended, as appropriate, and submitted to the CPM for review and approval, not later than one year before the plan is implemented by the project owner.

HAZ-7 After any significant seismic event in the area where surface rupture occurs within one mile of the pipeline, the gas pipeline shall be inspected by the project owner.

Verification: At least thirty (30) days prior to the initial flow of gas in the pipeline, the project owner shall provide a detailed plan to accomplish a full and comprehensive pipeline inspection in the event of an earthquake to the CPM for review and approval. This plan shall be reviewed and amended, as appropriate, and submitted to the CPM for review and approval, at least every five years.

HAZ-8 The project owner shall direct all vendors delivering aqueous ammonia to the site to use only tanker truck transport vehicles that meet or exceed the specifications of DOT Code MC-307.

Verification: At least sixty (60) days prior to initial receipt of aqueous ammonia on site, the project owner shall submit copies of the notification letter to supply vendors indicating these transport vehicle specifications to the CPM for review and approval.

NOISE AND VIBRATION-PROPOSED CONDITIONS OF CERTIFICATION

Supplemental Testimony of Ron Brown

PROPOSED CONDITIONS OF CERTIFICATION

NOISE-1 At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within one mile of the site, by mail or other effective means, of the commencement of project construction. This notification must include residents of Vernon and Huntington Park. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

Verification: The project owner shall transmit to the Energy Commission Compliance Project Manager (CPM) in the first Monthly Construction Report following the start of ground disturbance, a statement, signed by the project manager, attesting that the above notification has been performed, and describing the method of that notification. This statement shall also attest that the telephone number has been established and posted at the site.

NOISE-2 Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project related noise complaints.

The project owner or authorized agent shall:

- Use the Noise Complaint Resolution Form (see Exhibit 1), or functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;
- Attempt to contact the person(s) making the noise complaint within 24 hours;
- Conduct an investigation to determine the source of noise related to the complaint;
- If the noise is project related, take all feasible measures to reduce the noise at its source; and
- Submit a report documenting the complaint and the actions taken. The report shall include a complaint summary, including final results of noise reduction efforts; and, if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.

Verification: Within 30 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the City of Vernon Director of Community Services & Water and the City of

Huntington Park Senior Planner. and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.

NOISE-3 Prior to the start of ground disturbance, the project owner shall submit a noise control program to the CPM for review. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal-OSHA standards.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the above referenced program. The project owner shall make the program available to OSHA upon request.

NOISE-4 The project owner shall employ a low-pressure continuous steam blow process. The project owner shall submit a description of this process, with expected noise levels and projected period of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting steam blow noise does not produce a combined noise level greater than 52 dBA at Site R3 where the average nighttime ambient L_{90} value is 47 dBA. If the low-pressure process is approved by the CPM, the project owner shall implement it in accordance with the requirements of the CPM.

Verification: At least 15 days prior to any steam blow activity, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the projected time schedule for execution of the process.

NOISE-5 At least 15 days prior to the first steam blow, the project owner shall notify all residents within one mile of the site, of the planned activity, and shall make the notification available to other area residents in an appropriate manner. The notification may be in the form of letters to the area residences, telephone calls, fliers or other effective means. The notification shall include a description of the purpose and nature of the steam or air blow(s), the proposed schedule, the expected sound levels, and the explanation that it is a one-time operation and not a part of normal plant operations.

Verification: Within 5 days of notifying these entities, the project owner shall send a letter to the CPM confirming that they have been notified of the planned steam or air blow activities, including a description of the method(s) of that notification.

NOISE-6 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the noise level produced by operation of the power plant will not exceed an hourly L_{eq} of 48 dBA measured at any residence. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

A. Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at Locations R1, R2, and R3 as a minimum. The noise survey shall also include short-term measurement of one-third octave band sound pressure levels at each of the above locations to

ensure that no new pure-tone noise components have been introduced.

B. If the results from the noise surveys (pre-construction vs. operations) indicate that the noise level due to the plant operations exceeds 48 dBA at any residence for any given hour during the 25-hour period, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.

C. If the results from the noise surveys (pre-construction vs. operations) indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Within 15 days after completing the post-construction survey, the project owner shall submit a summary report of the survey to the City of Vernon Director of Community Services and Water, and to the CPM. Included in the post-construction survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. Within 15 days of completion of installation of these measures, the project owner shall submit to the CPM a summary report of a new noise survey, performed as described above and showing compliance with this condition.

NOISE-7 Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility. The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations, sections 5095-5099 (Article 105) and Title 29, Code of Federal Regulations, section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure. The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

Verification: Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal-OSHA upon request.

NOISE-8 Noisy construction or demolition work shall be restricted to the times of day delineated below:

Weekdays	7 a.m. to 7 p.m.
Weekends and Holidays	8 a.m. to 5 p.m.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Horizontal drill rigs may be operated on a continuous basis, provided that the rigs are fitted with adequate mufflers and engine enclosures, and that the rigs are shielded from view of residences by berms, canal banks or other suitable barriers.

Verification: The project owner shall transmit to the CPM in the first Monthly Construction Report a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

PUBLIC HEALTH-PROPOSED CONDITIONS OF CERTIFICATION

Supplemental Testimony of Mike Ringer and Alvin Greenberg, Ph.D.

PROPOSED CONDITION OF CERTIFICATION

Public Health-1 The project owner shall develop and implement a Cooling Water Management Plan to minimize the potential for bacterial growth in cooling water. The Plan may include weekly monitoring of biocide and chemical biofilm prevention agents, periodic maintenance of the cooling water system to remove bio-film buildup, and testing to determine the concentrations of Legionella bacteria in the cooling water.

Verification: At least 60 days prior to the commencement of cooling tower operations, the Cooling Water Management Plan shall be provided to the CPM for review and approval.

TRAFFIC AND TRANSPORTATION-PROPOSED CONDITIONS OF CERTIFICATION

Supplemental Testimony of James Fore

PROPOSED CONDITIONS OF CERTIFICATION

TRANS-1 The project owner shall comply with Caltrans and other relevant jurisdictions' limitations on vehicle sizes and weights. In addition, the project owner or its contractor shall obtain necessary transportation permits from Caltrans and all relevant jurisdictions for roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-2 The project owner or its contractor shall comply with Caltrans and other relevant jurisdictions' limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.

Verification: In Monthly Compliance Reports, the project owner shall submit copies of permits received during the reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-3 The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol and Caltrans for the transport of hazardous materials.

Verification: The project owner shall include in its Monthly Compliance Reports, copies of all permits/licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances.

TRANS-4 During construction of the power plant and all related facilities, the project shall develop a parking and staging plan for all phases of project construction to enforce a policy that all project-related parking occurs on-site or in designated off-site parking areas.

Verification: At least 60 days prior to start of site mobilization, the project owner shall submit the plan to the (City and/or County) for review and comment, and to the CPM for review and approval.

TRANS-5 The project owner shall consult with the City of Vernon and the City of Huntington Park, and prepare and submit to the CPM for approval of a construction traffic control plan and implementation program which addresses the following issues:

- Timing of heavy equipment and building materials deliveries;
- Redirecting construction traffic with a flagperson;

- Signing, lighting, and traffic control device placement if required;
- Need for construction work hours and arrival/departure times outside of peak traffic periods;
- Insure access for emergency vehicles to the project site;
- Temporary travel lane closure; and
- Access to adjacent residential and commercial property during the construction of all linears.

Verification: At least 30 days prior to site mobilization, the project owner shall provide to the CPM a copy of the referenced documents.

TRANS-6 Prior to the start of site mobilization the project owner shall make all necessary arrangements to allow the use of the existing rail line for delivery of construction material and heavy equipment.

Protocol: The project owner shall reach an agreement with the owner of the rail line to permit the use of the line for the purpose described above.

At least 30 days prior to the start of site mobilization the project owner shall reach an agreement with the owner of the rail line for use of the line for the purpose described above.

TRANS-7 Following construction of the MGS project, the applicant shall meet with the CPM and the Cities of Vernon and Huntington Park to determine if any action is necessary and develop a schedule to complete the repair of any roadways damaged due to project construction.

Prior to start of construction, the project owner shall photograph, videotape or digitally record images of the roadways directly adjacent to the project site and between the laydown area and project site. This would include the following roadway segments: Seville Avenue between the plant site and Fruitland Avenue, 50th Street between Seville Avenue and Boyle Road, Boyle Road between 50th Street and Slauson Avenue, State Street between Slauson Avenue and Randolph Street, and Randolph Street between State Street and Newell Street.

Protocol: The project owner shall provide the Compliance Project Manager (CPM), the Cities of Vernon and Huntington Park with a copy of these images. Prior to start of construction, the project owner shall also notify the Cities of Vernon and Huntington Park about the schedule for project construction. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction related activities associated with other projects.

Within 30 days after completion of the project, the project owner shall meet with the CPM and the Cities of Vernon and Huntington Park to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near original condition as possible. Following completion of any regional road improvements, the project owner shall provide to the

CPM a letter from the Cities of Vernon and Huntington Park stating their satisfaction with the road improvements.

TRANS-8 The City shall supply the MGS with aqueous ammonia ammonia along preferred and alternate truck travel routes. The preferred route shall be from Freeway 710, exiting at the Bandini Boulevard. Trucks will then travel west along Bandini Boulevard, south on Soto Avenue, and finally west on 50th Street to the MGS. The City shall use this route unless it notifies the CPM otherwise and the CPM approves.

In the event that conditions are such that the City and CPM believe that the preferred route is not the safest route, the City shall supply the MGS along the following alternative route. Delivery trucks shall travel along Interstate 5, exiting at Garfield Avenue. Trucks will then travel west along Telegraph Road, south on Garfield Avenue, west on Bandini Boulevard, south on Soto Avenue, and finally west on 50th Street to the MGS.

The City may re-route ammonia trucks from the alternative route to another alternative route not yet identified should the City and the CPM agreed that another alternative route is the safest route.

Verification:

The final preferred and alternative truck travel routes for aqueous ammonia delivery will be submitted to the Compliance Project Manager for approval 30 days prior to the first delivery of aqueous ammonia to the MGS. During operations, the City may alter the final truck travel route only upon prior approval of the CPM.

VISUAL RESOURCES-PROPOSED CONDITIONS OF CERTIFICATION

Supplemental Testimony of Eric Knight

PROPOSED CONDITIONS OF CERTIFICATION

VIS-1 The project owner shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, the vicinity, and the nighttime sky is minimized. To meet these requirements the project owner shall ensure that:

a) Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary;

b) All lighting shall be of minimum necessary brightness consistent with worker safety;

c) High illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have switches or motion detectors to light the area only when occupied;

d) A lighting complaint resolution form (following the general format of that in Appendix VR-1) shall be used by plant operations to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file.

Verification: At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and comment written documentation describing the lighting control measures and fixtures, hoods, shields proposed for use, and incorporate the CPM's comments in lighting equipment orders.

Prior to first turbine roll, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection. If the CPM notifies the project owner that modifications to the lighting are needed to minimize impacts, within 30 (thirty) days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed.

The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report, accompanied by any lighting complaint resolution forms for that year.

VIS-2 The project owner shall paint or treat the surfaces of all project structures and buildings visible to the public in a gray color to blend with the existing Station A building. Surfaces shall be treated with finishes that minimize glare. The project owner shall ensure proper treatment maintenance for the life of the project.

Verification: Prior to start of commercial operation, the project owner shall notify the CPM that all buildings and structures are ready for inspection. The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

VIS-3 The project owner shall plant trees along the east side of the MGS site to enhance views of the new power plant from Soto Street, consistent with the City of Vernon General Plan policy 1.3. The project owner shall ensure proper maintenance of the trees for the life of the project.

Verification: Prior to start of commercial operation, the project owner shall notify the CPM that the trees are ready for inspection. The project owner shall provide a status report regarding tree maintenance in the Annual Compliance Report.

VIS-4 The project owner shall ensure that any outdoor activities and storage at the MGS site are not visible from public rights-of-way, consistent with the City of Vernon Zoning Ordinance, Article III, Section 26.3.5-4(C). Screening materials may consist of fences covered with polyethylene screening strips, industrial fabric, or other opaque (or appears essentially opaque when viewed from public rights-of-way) material. The color of the screening material shall minimize visual intrusion and contrast by blending with the landscape.

Verification: At least 60 days prior to ordering any screening materials, the project owner shall submit to the CPM for review and comment written documentation describing the type and color of screening material proposed for use, and incorporate the CPM's comments in screening material orders.

Prior to start of commercial operation, the project owner shall notify the CPM that outdoor activities and storage have been screened and are ready for inspection. If the CPM notifies the project owner that modifications to the screening are needed to ensure compliance with the ordinance, within 30 (thirty) days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed.

GENERAL CONDITIONS
INCLUDING
COMPLIANCE MONITORING AND CLOSURE PLAN-PROPOSED CONDITIONS OF CERTIFICATION

Supplemental Testimony of Christopher Meyer

INTRODUCTION

The project General Conditions Including Compliance Monitoring and Closure Plan (Compliance Plan) have been established as required by Public Resources Code section 25532. The plan provides a means for assuring that the facility is constructed, operated and closed in compliance with air and water quality, public health and safety, environmental and other applicable regulations, guidelines, and conditions adopted or established by the California Energy Commission (Energy Commission) and specified in the written decision on the Application for Certification or otherwise required by law.

The Compliance Plan is composed of elements that:

- set forth the duties and responsibilities of the Compliance Project Manager (CPM), the project owner, delegate agencies, and others;
- set forth the requirements for handling confidential records and maintaining the compliance record;
- state procedures for settling disputes and making post-certification changes;
- state the requirements for periodic compliance reports and other administrative procedures that are necessary to verify the compliance status for all Energy Commission approved conditions;
- establish requirements for facility closure plans.
- Identify specific conditions of certification that follow each technical area and contain the measures required to mitigate any and all potential adverse project impacts associated with construction, operation and closure to an insignificant level. Each specific condition of certification also includes a verification provision that describes the method of assuring that the condition has been satisfied.

GENERAL CONDITIONS OF CERTIFICATION

DEFINITIONS

To ensure consistency, continuity and efficiency, the following terms, as defined, apply to all technical areas, including Conditions of Certification:

SITE MOBILIZATION

Moving trailers and related equipment onto the site, usually accompanied by minor ground disturbance, grading for the trailers and limited vehicle parking, trenching for construction utilities, installing utilities, grading for an access corridor, and other related activities. Ground disturbance, grading, etc. for site mobilization are limited to the

portion of the site necessary for placing the trailers and providing access and parking for the occupants. Site mobilization is for temporary facilities and is, therefore, not considered construction.

GROUND DISTURBANCE

Onsite activity that results in the removal of soil or vegetation, boring, trenching or alteration of the site surface. This does not include driving or parking a passenger vehicle, pickup truck, or other light vehicle, or walking on the site.

GRADING

Onsite activity conducted with earth-moving equipment that results in alteration of the topographical features of the site such as leveling, removal of hills or high spots, or moving of soil from one area to another.

CONSTRUCTION

[From section 25105 of the Warren-Alquist Act.] Onsite work to install permanent equipment or structures for any facility. Construction does **not** include the following:

- ∉ the installation of environmental monitoring equipment;
- ∉ a soil or geological investigation;
- ∉ a topographical survey;
- ∉ any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility; or
- ∉ any work to provide access to the site for any of the purposes specified above

START OF COMMERCIAL OPERATION

For compliance monitoring purposes, “commercial operation” is that phase of project development which begins after the completion of start-up and commissioning, where the power plant has reached steady-state production of electricity with reliability at the rated capacity. For example, at the start of commercial operation, plant control is usually transferred from the construction manager to the plant operations manager.

COMPLIANCE PROJECT MANAGER RESPONSIBILITIES

A Compliance Project Manager (CPM) will oversee the compliance monitoring and shall be responsible for:

1. ensuring that the design, construction, operation, and closure of the project facilities are in compliance with the terms and conditions of the Energy Commission Decision;
2. resolving complaints;
3. processing post-certification changes to the conditions of certification, project description, and ownership or operational control;
4. documenting and tracking compliance filings; and
5. ensuring that the compliance files are maintained and accessible.

The CPM is the contact person for the Energy Commission and will consult with appropriate responsible agencies and the Energy Commission when handling disputes, complaints and amendments.

All project compliance submittals are submitted to the CPM for processing. Where a submittal required by a condition of certification requires CPM approval the approval will involve all appropriate staff and management.

The Energy Commission has established a toll free compliance telephone number of **1-800-858-0784** for the public to contact the Energy Commission about power plant construction or operation-related questions, complaints or concerns.

Pre-Construction and Pre-Operation Compliance Meeting

The CPM may schedule pre-construction and pre-operation compliance meetings prior to the projected start-dates of construction, plant operation, or both. The purpose of these meetings will be to assemble both the Energy Commission's and the project owner's technical staff to review the status of all pre-construction or pre-operation requirements contained in the Energy Commission's conditions of certification to confirm that they have been met, or if they have not been met, to ensure that the proper action is taken. In addition, these meetings shall ensure, to the extent possible, that Energy Commission conditions will not delay the construction and operation of the plant due to oversight and to preclude any last minute, unforeseen issues from arising. Pre-construction meetings held during the certification process must be publicly noticed unless they are confined to administrative issues and processes.

Energy Commission Record

The Energy Commission shall maintain as a public record, in either the Compliance file or Docket file, for the life of the project (or other period as required):

- all documents demonstrating compliance with any legal requirements relating to the construction and operation of the facility;
- all monthly and annual compliance reports filed by the project owner;
- all complaints of noncompliance filed with the Energy Commission; and
- all petitions for project or condition changes and the resulting staff or Energy Commission action.

PROJECT OWNER RESPONSIBILITIES

It is the responsibility of the project owner to ensure that the general compliance conditions and the conditions of certification are satisfied. The general compliance conditions regarding post-certification changes specify measures that the project owner must take when requesting changes in the project design, compliance conditions, or ownership. Failure to comply with any of the conditions of certification or the general compliance conditions may result in reopening of the case and revocation of Energy Commission certification, an administrative fine, or other action as appropriate. A summary of the General Conditions of Certification is included as **Compliance Table 1** at the conclusion of this section. The designation after each of the following summaries

of the General Compliance Conditions (**Com-1, Com-2,** etc.) refers to the specific General Compliance Condition contained in **Compliance Table 1.**

Construction Milestones, Compliance Condition of Certification-1 (COM-1)

The following is the procedure for establishing and enforcing milestones, which include milestone dates for pre-construction and construction phases of the project. As required in the 6-month AFC process, start of substantial construction must occur within 1-year of the Commission Decision. Therefore, construction milestones have been included as noted below. Milestones and method of verification must be established and agreed upon by the project owner and the CPM no later than 30 days after docketing of the Commission's final decision. If this deadline is not met, the CPM will establish the milestones.

I. ESTABLISH PRE-CONSTRUCTION MILESTONES TO ENABLE START OF SUBSTANTIAL CONSTRUCTION WITHIN ONE YEAR OF CERTIFICATION

1. Obtain site control.
2. Obtain financing.
3. Mobilize site.
4. Begin rough grading for permanent structures (start of construction).

II. ESTABLISH CONSTRUCTION MILESTONES FROM DATE OF START OF CONSTRUCTION

1. Begin pouring major foundation concrete.
2. Begin installation of major equipment.
3. Complete installation of major equipment.
4. Begin gas pipeline construction.
5. Complete gas pipeline interconnection.
6. Begin T-line construction.
7. Complete T-line interconnection.
8. Begin commercial operation within three years of the Commission's final decision.

The CPM will negotiate the above-cited pre-construction and construction milestones with the project owner based on an expected schedule of construction. The CPM may agree to modify the final milestones from those listed above at any time prior to or during construction if the project owner demonstrates good-cause for not meeting the originally-established milestones. Otherwise, failure to meet milestone dates without a finding of good cause is considered cause for possible forfeiture of certification or other penalties.

III. A FINDING THAT THERE IS GOOD CAUSE FOR FAILURE TO MEET MILESTONES WILL BE MADE IF ANY OF THE FOLLOWING CRITERIA ARE MET:

1. The change in any milestone does not change the established commercial operation date milestone.

2. The milestone will be missed due to circumstances beyond the project owner's control.
3. The milestone will be missed, but the project owner demonstrates a good-faith
4. The milestone will be missed due to unforeseen natural disasters or acts of God which prevent timely completion of the milestones.
5. The milestone will be missed due to requirements of the California ISO to maintain existing generation output.

Access, COM-2

The CPM, responsible Energy Commission staff, and delegate agencies or consultants, shall be guaranteed and granted unrestricted access to the power plant site, related facilities, project-related staff, and the records maintained on site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

Compliance Record, COM-3

The project owner shall maintain project files onsite or at an alternative site approved by the CPM, for the life of the project unless a lesser period of time is specified by the conditions of certification. The files shall contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents.

Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files.

Compliance Verification Submittals, COM-4

Each condition of certification is followed by a means of verification. The verification describes the Energy Commission's procedure(s) to ensure post-certification compliance with adopted conditions. The verification procedures, unlike the conditions, may be modified as necessary by the CPM, and in most cases without full Energy Commission approval.

Verification of compliance with the conditions of certification can be accomplished by:

1. reporting on the work done and providing the pertinent documentation in monthly and/or annual compliance reports filed by the project owner or authorized agent as required by the specific conditions of certification;
2. providing appropriate letters from delegate agencies verifying compliance;
3. Energy Commission staff audits of project records; and/or
4. Energy Commission staff inspections of mitigation or other evidence of mitigation.

Verification lead times (e.g., 90, 60 and 30-days) associated with start of construction may require the project owner to file submittals during the certification process, particularly if construction is planned to commence shortly after certification.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. **The cover letter subject line shall identify the involved condition(s) of certification by condition number and include a brief description of the subject of the submittal**. The project owner shall also identify those submittals **not** required by a condition of certification with a statement such as: "This submittal is for information only and is not required by a specific condition of certification." When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal.

The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether such condition was satisfied by work performed by the project owner or an agent of the project owner.

All submittals shall be addressed as follows:

Compliance Project Manager
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

If the project owner desires Energy Commission staff action by a specific date, they shall so state in their submittal and include a detailed explanation of the effects on the project if this date is not met.

Pre-Construction Matrix and Tasks Prior to Start of Construction COM-5

Prior to commencing construction a compliance matrix addressing only those conditions that must be fulfilled before the start of construction shall be submitted by the project owner to the CPM. This matrix will be included with the project owner's **first** compliance submittal or prior to the first pre-construction meeting, whichever comes first. It will be in the same format as the compliance matrix referenced above.

Construction shall not commence until the pre-construction matrix is submitted, all pre-construction conditions have been complied with, and the CPM has issued a letter to the project owner authorizing construction. Various lead times (e.g., 30, 60, 90 days) for submittal of compliance verification documents to the CPM for conditions of certification are established to allow sufficient staff time to review and comment and, if necessary, allow the project owner to revise the submittal in a timely manner. This will ensure that project construction may proceed according to schedule.

Failure to submit compliance documents within the specified lead-time may result in delays in authorization to commence various stages of project development.

Project owners frequently anticipate starting project construction as soon as the project is certified. In those cases, it may be necessary for the project owner to file compliance submittals prior to project certification if the required lead-time for a required compliance event extends beyond the date anticipated for start of construction. It is also important that the project owner understand that the submittal of compliance documents prior to project certification is at the owner's own risk. Any approval by Energy Commission staff is subject to change based upon the Final Decision

COMPLIANCE REPORTING

There are two different compliance reports that the project owner must submit to assist the CPM in tracking activities and monitoring compliance with the terms and conditions of the Commission Decision. During construction, the project owner or authorized agent will submit Monthly Compliance Reports. During operation, an Annual Compliance Report must be submitted. These reports, and the requirement for an accompanying compliance matrix, are described below. The majority of the conditions of certification require that compliance submittals be submitted to the CPM in the monthly or annual compliance reports.

COMPLIANCE MATRIX, COM-6

A compliance matrix shall be submitted by the project owner to the CPM along with each monthly and annual compliance report. The compliance matrix is intended to provide the CPM with the current status of all compliance conditions in a spreadsheet format. The compliance matrix must identify:

1. the technical area;
2. the condition number;
3. a brief description of the verification action or submittal required by the condition;
4. the date the submittal is required (e.g., 60 days prior to construction, after final inspection, etc.);
5. the expected or actual submittal date;
6. the date a submittal or action was approved by the Chief Building Official (CBO), CPM, or delegate agency, if applicable;
7. the compliance status of each condition (e.g., “not started,” “in progress” or “completed” (include the date); and
8. the project’s pre-construction and construction milestones, including dates and status.

Satisfied conditions do not need to be included in the compliance matrix after they have been identified as satisfied in at least one monthly or annual compliance report.

MONTHLY COMPLIANCE REPORT, COM-7

The first Monthly Compliance Report is due one month following the Energy Commission business meeting date on which the project was approved, unless otherwise agreed to by the CPM. The first Monthly Compliance Report shall include an initial list of dates for each of the events identified on the **Key Events List. The Key Events List Form is found at the end of this section.**

During pre-construction and construction of the project, the project owner or authorized agent shall submit an original and five copies of the Monthly Compliance Report within 10 working days after the end of each reporting month. Monthly Compliance Reports shall be clearly identified for the month being reported. The reports shall contain, at a minimum:

1. a summary of the current project construction status, a revised/updated schedule if there are significant delays, and an explanation of any significant changes to the schedule;
2. documents required by specific conditions to be submitted along with the Monthly Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Monthly Compliance Report;
3. an initial, and thereafter updated, compliance matrix which shows the status of all conditions of certification and pre-construction and construction milestones (fully satisfied conditions do not need to be included in the matrix after they have been reported as closed);
4. a list of conditions and milestones that have been satisfied during the reporting period, and a description or reference to the actions which satisfied the condition;
5. a list of any submittal deadlines that were missed accompanied by an explanation and an estimate of when the information will be provided;
6. a cumulative listing of any approved changes to conditions of certification;
7. a listing of any filings with, or permits issued by, other governmental agencies during the month;
8. a projection of project compliance activities scheduled during the next two months. The project owner shall notify the CPM as soon as any changes are made to the project construction schedule that would affect compliance with conditions of certification or milestones;
9. a listing of the month's additions to the on-site compliance file; and
10. any requests to dispose of items that are required to be maintained in the project owner's compliance file.

ANNUAL COMPLIANCE REPORT, COM-8

After the air district has issued a Permit to Operate, the project owner shall submit Annual Compliance Reports instead of Monthly Compliance Reports. The reports are for each year of commercial operation and are due to the CPM each year at a date agreed to by the CPM. Annual Compliance Reports shall be submitted over the life of the project unless otherwise specified by the CPM. Each Annual Compliance Report shall identify the reporting period and shall contain the following:

1. an updated compliance matrix which shows the status of all conditions of certification (fully satisfied and/or closed conditions do not need to be included in the matrix after they have been reported as closed);
2. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
3. documents required by specific conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Annual Compliance Report;
4. a cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM;

5. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
6. a listing of filings made to, or permits issued by, other governmental agencies during the year;
7. a projection of project compliance activities scheduled during the next year;
8. a listing of the year's additions to the on-site compliance file;
9. an evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to date [see General Conditions for Facility Closure addressed later in this section]; and
10. a listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved complaints, and the status of any unresolved complaints.
11. a listing of all outages planned for the coming year and a listing of all outages that occurred during the previous year, including the anticipated duration and the reason for each outage occurrence.

CONSTRUCTION AND OPERATION SECURITY PLAN, COM-9

Prior to commencing construction, a site-specific Security Plan for the construction phase shall be developed and maintained at the project site. Prior to commercial operation, a site-specific Security Plan for the operational phase shall be developed and maintained at the project site. The plans may be reviewed at the site by the CPM during compliance inspections.

Construction Security Plan

The Construction Security Plan must address:

1. site fencing enclosing the construction area;
2. use of security guards;
3. check-in procedure or tag system for construction personnel and visitors;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
5. evacuation procedures.

Operation Security Plan

The Operations Security Plan must address:

1. permanent site fencing and security gate;
2. use of security guards;
3. security alarm for critical structures;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
5. evacuation procedures;
6. perimeter breach detectors and on-site motion detectors;

7. video or still camera monitoring system; and
8. fire alarm monitoring system.
9. site personnel background checks.
10. site access for vendors and requirements for Hazardous Materials vendors to conduct personnel background security checks.

In addition, the project owner shall prepare a Vulnerability Assessment and implement site security measures addressing hazardous materials storage and transportation consistent with US EPA and US Department of Justice guidelines.

The CPM may authorize modifications to these measures, or may require additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

CONFIDENTIAL INFORMATION, COM-10

Any information that the project owner deems confidential shall be submitted to the Energy Commission's Docket with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information, that is determined to be confidential shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

DEPARTMENT OF FISH AND GAME FILING FEE, COM-11

Pursuant to the provisions of Fish and Game Code Section 711.4, the project owner shall pay a filing fee in the amount of $850. The payment instrument shall be provided to the Energy Commission's Project Manager (PM), not the CPM, at the time of project certification and shall be made payable to the California Department of Fish and Game. The PM will submit the payment to the Office of Planning and Research at the time of filing of the notice of decision pursuant to Public Resources Code Section 21080.5.

REPORTING OF COMPLAINTS, NOTICES, AND CITATIONS, COM-12

Prior to the start of construction, the project owner must send a letter to property owners living within one mile of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering with date and time stamp recording. All recorded inquiries shall be responded to within 24 hours. The telephone number shall be posted at the project site and made easily visible to passersby during construction and operation. The telephone number shall be provided to the CPM who will post it on the Energy Commission's web page at:

http://www.energy.ca.gov/sitingcases/power_plants_contacts.html

Any changes to the telephone number shall be submitted immediately to the CPM who will update the web page.

In addition to the monthly and annual compliance reporting requirements described above, the project owner shall report and provide copies of all complaint forms, notices

of violation, notices of fines, official warnings, and citations, within 10 days of receipt, to the CPM. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the **NOISE** conditions of certification. All other complaints shall be recorded on the complaint form (Attachment A).

FACILITY CLOSURE

At some point in the future, the project will cease operation and close down. At that time, it will be necessary to ensure that the closure occurs in such a way that public health and safety and the environment are protected from adverse impacts. Although the project setting for this project does not appear, at this time, to present any special or unusual closure problems, it is impossible to foresee what the situation will be in 30 years or more when the project ceases operation. Therefore, provisions must be made that provide the flexibility to deal with the specific situation and project setting that exist at the time of closure. Laws, Ordinances, Regulations and Standards (LORS) pertaining to facility closure are identified in the sections dealing with each technical area. Facility closure will be consistent with LORS in effect at the time of closure.

There are at least three circumstances in which a facility closure can take place, planned closure, unplanned temporary closure and unplanned permanent closure**.**

CLOSURE DEFINITIONS

Planned Closure

A planned closure occurs at the end of a project's life, when the facility is closed in an anticipated, orderly manner, at the end of its useful economic or mechanical life, or due to gradual obsolescence.

Unplanned Temporary Closure

An unplanned temporary closure occurs when the facility is closed suddenly and/or unexpectedly, on a short-term basis, due to unforeseen circumstances such as a natural disaster or an emergency.

Unplanned Permanent Closure

An unplanned permanent closure occurs if the project owner closes the facility suddenly and/or unexpectedly, on a permanent basis. This includes unplanned closure where the owner remains accountable for implementing the on-site contingency plan. It can also include unplanned closure where the project owner is unable to implement the contingency plan, and the project is essentially abandoned.

GENERAL CONDITIONS FOR FACILITY CLOSURE

Planned Closure, COM-13

In order to ensure that a planned facility closure does not create adverse impacts, a closure process that provides for careful consideration of available options and applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of closure, will be undertaken. To ensure adequate review of a

planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least twelve months prior to commencement of closure activities (or other period of time agreed to by the CPM). The project owner shall file 120 copies (or other number of copies agreed upon by the CPM) of a proposed facility closure plan with the Energy Commission.
The plan shall:

1. identify and discuss any impacts and mitigation to address significant adverse impacts associated with proposed closure activities and to address facilities, equipment, or other project related remnants that will remain at the site;
2. identify a schedule of activities for closure of the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project;
3. identify any facilities or equipment intended to remain on site after closure, the reason, and any future use; and
4. address conformance of the plan with all applicable laws, ordinances, regulations, standards, local/regional plans in existence at the time of facility closure, and applicable conditions of certification.

In the event that there are significant issues associated with the proposed facility closure plan's approval, or the desires of local officials or interested parties are inconsistent with the plan, the CPM shall hold one or more workshops and/or the Energy Commission may hold public hearings as part of its approval procedure.

In addition, prior to submittal of the proposed facility closure plan, a meeting shall be held between the project owner and the Energy Commission CPM for the purpose of discussing the specific contents of the plan.

As necessary, prior to or during the closure plan process, the project owner shall take appropriate steps to eliminate any immediate threats to public health and safety and the environment, but shall not commence any other closure activities, until Energy Commission approval of the facility closure plan is obtained.

Unplanned Temporary Closure/On-Site Contingency Plan, COM-14

In order to ensure that public health and safety and the environment are protected in the event of an unplanned temporary facility closure, it is essential to have an on-site contingency plan in place. The on-site contingency plan will help to ensure that all necessary steps to mitigate public health and safety impacts and environmental impacts are taken in a timely manner.
The project owner shall submit an on-site contingency plan for CPM review and approval. The plan shall be submitted no less that 60 days (or other time agreed to by the CPM) prior to commencement of commercial operation. The approved plan must be in place prior to commercial operation of the facility and shall be kept at the site at all times.

The project owner, in consultation with the CPM, will update the on-site contingency plan as necessary. The CPM may require revisions to the on-site contingency plan over the life of the project. In the annual compliance reports submitted to the Energy Commission, the project owner will review the on-site contingency plan, and

recommend changes to bring the plan up to date. Any changes to the plan must be approved by the CPM.

The on-site contingency plan shall provide for taking immediate steps to secure the facility from trespassing or encroachment. In addition, for closures of more than 90 days, unless other arrangements are agreed to by the CPM, the plan shall provide for removal of hazardous materials and hazardous wastes, draining of all chemicals from storage tanks and other equipment and the safe shutdown of all equipment. (Also see specific conditions of certification for the technical areas of Hazardous Materials Management and Waste Management.)

In addition, consistent with requirements under unplanned permanent closure addressed below, the nature and extent of insurance coverage, and major equipment warranties must also be included in the on-site contingency plan. In addition, the status of the insurance coverage and major equipment warranties must be updated in the annual compliance reports.

In the event of an unplanned temporary closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the circumstances and expected duration of the closure.

If the CPM determines that an unplanned temporary closure is likely to be permanent, or for a duration of more than twelve months, a closure plan consistent with the requirements for a planned closure shall be developed and submitted to the CPM within 90 days of the CPM's determination (or other period of time agreed to by the CPM).

Unplanned Permanent Closure/On-Site Contingency Plan, COM-15

The on-site contingency plan required for unplanned temporary closure shall also cover unplanned permanent facility closure. All of the requirements specified for unplanned temporary closure shall also apply to unplanned permanent closure.

In addition, the on-site contingency plan shall address how the project owner will ensure that all required closure steps will be successfully undertaken in the unlikely event of abandonment.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the status of all closure activities.

A closure plan, consistent with the requirements for a planned closure, shall be developed and submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

CBO DELEGATION AND AGENCY COOPERATION

In performing construction and operation monitoring of the project, Commission staff acts as, and has the authority of, the Chief Building Official (CBO). Commission staff may delegate CBO responsibility to either an independent third party contractor or the local building official. Commission staff retains CBO authority when selecting a delegate CBO including enforcing and interpreting state and local codes, and use of discretion, as necessary, in implementing the various codes and standards.

Commission staff may also seek the cooperation of state, regional and local agencies that have an interest in environmental control when conducting project monitoring.

ENFORCEMENT

The Energy Commission's legal authority to enforce the terms and conditions of its Decision is specified in Public Resources Code sections 25534 and 25900. The Energy Commission may amend or revoke the certification for any facility, and may impose a civil penalty for any significant failure to comply with the terms or conditions of the Energy Commission Decision. The specific action and amount of any fines the Energy Commission may impose would take into account the specific circumstances of the incident(s). This would include such factors as the previous compliance history, whether the cause of the incident involves willful disregard of LORS, oversight, unforeseeable events, and other factors the Energy Commission may consider. Moreover, to ensure compliance with the terms and conditions of certification and applicable LORS, delegate agencies are authorized to take any action allowed by law in accordance with their statutory authority, regulations, and administrative procedures.

NONCOMPLIANCE COMPLAINT PROCEDURES

Any person or agency may file a complaint alleging noncompliance with the conditions of certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1230 et seq., but in many instances the noncompliance can be resolved by using the informal dispute resolution process. Both the informal and formal complaint procedure, as described in current State law and regulations, are described below. They shall be followed unless superseded by current law or regulations.

Informal Dispute Resolution Procedure

The following procedure is designed to informally resolve disputes concerning the interpretation of compliance with the requirements of this compliance plan. The project owner, the Energy Commission, or any other party, including members of the public, may initiate this procedure for resolving a dispute. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents.

This procedure may precede the more formal complaint and investigation procedure specified in Title 20, California Code of Regulations, section 1230 et seq., but is not intended to be a substitute for, or prerequisite to it. This informal procedure may not be used to change the terms and conditions of certification as approved by the Energy

Commission, although the agreed upon resolution may result in a project owner, or in some cases the Energy Commission staff, proposing an amendment.

The procedure encourages all parties involved in a dispute to discuss the matter and to reach an agreement resolving the dispute. If a dispute cannot be resolved, then the matter must be referred to the full Energy Commission for consideration via the complaint and investigation process. The procedure for informal dispute resolution is as follows:

Request for Informal Investigation

Any individual, group, or agency may request the Energy Commission to conduct an informal investigation of alleged noncompliance with the Energy Commission's terms and conditions of certification. All requests for informal investigations shall be made to the designated CPM.

Upon receipt of a request for informal investigation, the CPM shall promptly notify the project owner of the allegation by telephone and letter. All known and relevant information of the alleged noncompliance shall be provided to the project owner and to the Energy Commission staff. The CPM will evaluate the request and the information to determine if further investigation is necessary. If the CPM finds that further investigation is necessary, the project owner will be asked to promptly investigate the matter and within seven working days of the CPM's request, provide a written report of the results of the investigation, including corrective measures proposed or undertaken, to the CPM. Depending on the urgency of the noncompliance matter, the CPM may conduct a site visit and/or request the project owner to provide an initial report, within 48 hours, followed by a written report filed within seven days.

Request for Informal Meeting

In the event that either the party requesting an investigation or the Energy Commission staff is not satisfied with the project owner's report, investigation of the event, or corrective measures undertaken, either party may submit a written request to the CPM for a meeting with the project owner. Such request shall be made within 14 days of the project owner's filing of its written report. Upon receipt of such a request, the CPM shall:

1. immediately schedule a meeting with the requesting party and the project owner, to be held at a mutually convenient time and place;
2. secure the attendance of appropriate Energy Commission staff and staff of any other agencies with expertise in the subject area of concern, as necessary;
3. conduct such meeting in an informal and objective manner so as to encourage the voluntary settlement of the dispute in a fair and equitable manner; and
4. after the conclusion of such a meeting, promptly prepare and distribute copies to all in attendance and to the project file, a summary memorandum which fairly and accurately identifies the positions of all parties and any conclusions reached. If an agreement has not been reached, the CPM shall inform the complainant of the formal complaint process and requirements provided under Title 20, California Code of Regulations, section 1230 et seq.

Formal Dispute Resolution Procedure-Complaints and Investigations

If either the project owner, Energy Commission staff, or the party requesting an investigation is not satisfied with the results of the informal dispute resolution process, such party may file a complaint or a request for an investigation with the Energy Commission's General Counsel. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents. Requirements for complaint filings and a description of how complaints are processed are in Title 20, California Code of Regulations, section 1230 et seq.

The Chairman, upon receipt of a written request stating the basis of the dispute, may grant a hearing on the matter, consistent with the requirements of noticing provisions. The Energy Commission shall have the authority to consider all relevant facts involved and make any appropriate orders consistent with its jurisdiction (Cal. Code Regs., tit. 20, §§ 1232-1236).

POST CERTIFICATION CHANGES TO THE ENERGY COMMISSION DECISION: AMENDMENTS, INSIGNIFICANT PROJECT CHANGES AND VERIFICATION CHANGES, COM-16

The project owner must petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to 1) delete or change a condition of certification; 2) modify the project design or operational requirements; and 3) transfer ownership or operational control of the facility.

A petition is required for **amendments** and for **insignificant project changes**. For verification changes, a letter from the project owner is sufficient. In all cases, the petition or letter requesting a change should be submitted to the Energy Commission's Docket in accordance with Title 20, California Code of Regulations, section 1209.

The criteria that determine which type of change process applies are explained below.

AMENDMENT

A proposed change will be processed as an amendment if it involves a change to the requirement or protocol, or in some cases the verification portion of a condition of certification, an ownership or operator change, or a potential significant environmental impact.

INSIGNIFICANT PROJECT CHANGE

The proposed change will be processed as an insignificant project change if it does not require changing the language in a condition of certification, have a potential for significant environmental impact, and cause the project to violate laws, ordinances, regulations or standards.

VERIFICATION CHANGE

As provided in Title 20, Section 1770 (d), California Code of Regulations, a verification may be modified by staff without requesting an amendment to the decision if the change does not conflict with the conditions of certification.

KEY EVENTS LIST, COM-8

PROJECT: **Malburg Generating Station Combined Cycle Project**

DOCKET #: **01-AFC-25**

COMPLIANCE PROJECT MANAGER: **Christopher Meyer**

EVENT DESCRIPTION	**DATE**
Certification Date/Obtain Site Control	
Online Date	
POWER PLANT SITE ACTIVITIES	
Start Site Mobilization	
Start Ground Disturbance	
Start Grading	
Start Construction	
Begin Pouring Major Foundation Concrete	
Begin Installation of Major Equipment	
Completion of Installation of Major Equipment	
First Combustion of Gas Turbine	
Start Commercial Operation	
Complete All Construction	
TRANSMISSION LINE ACTIVITIES	
Start T/L Construction	
SYNCHRONIZATION WITH GRID AND INTERCONNECTION	
COMPLETE T/L CONSTRUCTION	
FUEL SUPPLY LINE ACTIVITIES	
Start Gas Pipeline Construction and Interconnection	
COMPLETE GAS PIPELINE CONSTRUCTION	
WATER SUPPLY LINE ACTIVITIES	
START WATER SUPPLY LINE CONSTRUCTION	
COMPLETE WATER SUPPLY LINE CONSTRUCTION	

TABLE 1
COMPLIANCE SECTION
SUMMARY of GENERAL CONDITIONS OF CERTIFICATION

CONDITION NUMBER	PAGE #	SUBJECT	DESCRIPTION
COM-1	4	Start of Construction	The project owner shall commence substantial construction within one year of the Commission decision.
COM-2	5	Access	The project owner shall grant Energy Commission staff and delegate agencies or consultants unrestricted access to the power plant site.
COM-3	5	Compliance Record	The project owner shall maintain project files on-site. Energy Commission staff and delegate agencies shall be given unrestricted access to the files.
COM-4	5	Compliance Verification Submittals	The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether such condition was satisfied by work performed or the project owner or his agent.
COM-5	6	Pre-construction Matrix and Tasks Prior to Start of Construction	Construction shall not commence until the all of the following activities/submittals have been completed: Á property owners living within one mile of the project have been notified of a telephone number to contact for questions, complaints or concerns, Á a pre-construction matrix has been submitted identifying only those conditions that must be fulfilled before the start of construction, Á all pre-construction conditions have been complied with, Á the CPM has issued a letter to the project owner authorizing construction.
COM-6	7	Compliance Matrix	The project owner shall submit a compliance matrix (in a spreadsheet format) with each monthly and annual compliance report which includes the status of all compliance conditions of certification.
COM-7	8	Monthly Compliance Report including a Key Events List	During construction, the project owner shall submit Monthly Compliance Reports (MCRs) which include specific information. The first MCR is due the month following the Commission business meeting date on which the project was approved and shall include an initial list of dates for each of the events identified on the Key

CONDITION NUMBER	PAGE #	SUBJECT	DESCRIPTION
			Events List.
COM-8	8	Annual Compliance Reports	After construction ends and throughout the life of the project, the project owner shall submit Annual Compliance Reports (ACRs) which include specific information. The first ACR is due after the air district has issued a Permit to Operate.
COM-9	9	Security Plans	Prior to commencing construction, the project owner shall submit a Construction Security Plan. Prior to commencing operation, the project owner shall submit an Operation Security Plan.
COM-10	10	Confidential Information	Any information the project owner deems confidential shall be submitted to the Commission's Dockets Unit.
COM-11	10	Dept of Fish and Game Filing Fee	The project owner shall pay a filing fee of $850 at the time of project certification.
COM-12	11	Reporting of Complaints, Notices and Citations	Within 10 days of receipt, the project owner shall report to the CPM, all notices, complaints, and citations.
COM-13	12	Planned Facility Closure	The project owner shall submit a closure plan to the CPM at least twelve months prior to commencement of a planned closure.
COM-14	13	Unplanned Temporary Facility Closure	To ensure that public health and safety and the environment are protected in the event of an unplanned temporary closure, the project owner shall submit an on-site contingency plan no less than 60 days prior to commencement of commercial operation.
COM-15	14	Unplanned Permanent Facility Closure	To ensure that public health and safety and the environment are protected in the event of an unplanned permanent closure, the project owner shall submit an on-site contingency plan no less than 60 days prior to commencement of commercial operation.
COM-16	16	Post-certification changes to the Decision	The project owner must petition the Energy Commission to delete or change a condition of certification, modify the project design or operational requirements and/or transfer ownership of operational control of the facility.

ATTACHMENT A

COMPLAINT REPORT/RESOLUTION FORM

PROJECT NAME: **Malburg Generating Station Combined Cycle**
AFC Number: **01-AFC-25**

COMPLAINT LOG NUMBER _____
Complainant's name and address:

Phone number:

Date and time complaint received:

Indicate if by telephone or in writing (attach copy if written):
Date of first occurrence:

Description of complaint (including dates, frequency, and duration):

Findings of investigation by plant personnel:

Indicate if complaint relates to violation of a CEC requirement:
Date complainant contacted to discuss findings:

Description of corrective measures taken or other complaint resolution:

Indicate if complainant agrees with proposed resolution:
If not, explain:

Other relevant information:

If corrective action necessary, date completed:
Date first letter sent to complainant: _____(copy attached)
Date final letter sent to complainant: _____(copy attached)

This information is certified to be correct.
Plant Manager's Signature: _____ Date:

(Attach additional pages and supporting documentation, as required.)

SECTION III

CITY OF VERNON—MALBURG GENERGATING PLANT
FINAL ADDENDUM PREPARATION TEAM

Environmental Assessment

Air Quality ..... .Joseph M. Loyer

Hazardous Materials ..... Alvin Greenberg, Ph.D. and Rick Tyler

Noise and Vibration..... Ron Brown

Public Health ..... Alvin Greenberg, Ph.D.

Traffic and Transportation ..... James Fore and Eileen Allen

Visual Resources ..... Eric Knight

Waste Management ..... Alvin J. Greenberg, Ph.D.

Project Assistant ..... Evelyn Johnson

Support Staff ..... Angela Hockaday, Luz Manriquez

DECLARATIONS AND RESUMES