State Of California The Resources Agency of California

Memorandum

Date : December 24, 2002
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ATSS

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

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

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

Attached please find staff's Addendum to the September 26, 2002 Staff Assessment (SA) for the Malburg Generating Station Project. This Addendum includes only the sections of the SA that require edits, clarifications or revised analysis based on comments received from agencies, the public, and the applicant. It includes: Air Quality, Hazardous Materials, Noise and Vibration, Public Health, Socioeconomic Resources, Visual Resources, Waste Management, Facility Design, and Compliance Monitoring and Closure Plan. The Addendum also contains the resumes and Declaration Statements of all staff that participated in the preparation of the SA and the Addendum.

The Addendum does not reissue the entire SA, but rather, contains only the edits to the SA, showing (underlined) new text and (strike out) text to be removed. Air Quality is the one area with substantive changes, including the revision to the Conditions of Certification with the recommended mitigation's.

Briefly, the SA identified Air Quality as an area of special concern. Staff concluded that the potential construction emissions would exceed State and Federal standards in all categories except SO2. These impacts would occur only in the immediate vicinity of the construction site and were attributed to fugitive dust, moving dirt and construction equipment emissions. Staff had identified these emissions as a significant impact during the first two months of construction, but has proposed mitigation measures to reduce this short term and localized impact to an acceptable level.

The SA Air Quality section also identified the project's direct and secondary PM10 emission impacts (which include the precursor emissions of SOx and NOx), resulting from the operation of the facility, could be significant if left unmitigated. However, the Addendum has identified that mitigation of the SOx and PM10 emission impacts through the purchase of Priority Reserve Credits (PRCs) on both a daily and annual basis has fully mitigated this impact.

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.

Staff recommends that with the resolution of the air quality issues and receipt of the Final Determination of Compliance (FDOC) from the South Coast Air Quality Management District (SCAQMD), the project will have no significant environmental impacts and will comply with all LORS. The projects Pre-Hearing Conference Statement will be filed on January 3, 2003, and the Pre-Hearing Conference will be scheduled for January 9, 2003, beginning at 10:00 A.M., in the California Energy Commission Hearing Room A.

Cc: Susan Gefter
Agency (7165)
Libraries (7166)

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

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EXECUTIVE SUMMARY

Supplemental Testimony of William Pfanner

Page 1-4: Under "OVERVIEW OF STAFF'S CONCLUSIONS,"
Delete the following text, "…significant levels ~~in all areas except Air Quality, which will require further mitigation~~."

Page 1-4: Under "**OVERVIEW OF STAFF'S CONCLUSIONS**" table of **LORS**
first row, second column that reads, "Unresolved":
Amend to read, "Impacts Mitigated"

OVERVIEW OF STAFF'S CONCLUSIONS

Staff believes that in general 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 ~~in all areas except Air Quality, which will require further mitigation~~. Staff's analysis also indicates that the project can comply with all LORS. Below is a summary of the potential environmental impacts and LORS compliance for each technical area.

Technical Discipline	Environmental/ System Impact	Conforms with LORS
Air Quality	~~Unresolved~~ Impacts Mitigated	~~Unresolved~~ Yes
Biological Resources	None	Yes
Cultural Resources	Impacts mitigted	Yes
Power Plant Efficiency	None	N/A
Power Plant Reliability	None	N/A
Facility Design	N/A	Yes
Geology, Mineral Resources, and Paleontology	Impacts mitigated	Yes
Hazardous Materials	Impacts mitigated	Yes
Land Use	N/A	Yes
Noise and Vibration	Impacts mitigated	Yes
Public Health	None	Yes
Socioeconomics	None	Yes
Traffic and Transportation	Impacts mitigated	Yes
Transmission Line Safety	None	Yes
Transmission System Engineering	Impacts mitigated	Yes
Visual Resources	Impacts mitigated	Yes
Waste Management	None	Yes
Water and Soil Resources	Impacts mitigated	Yes
Worker Safety	None	Yes

Page 1-4: Under "**OVERVIEW OF STAFF'S CONCLUSIONS**," first paragraph that reads " The following summarizes staff's…"

Delete all remaining text from the beginning of, "The following summarizes staff's…" from 1-4 through 1-5.

ENVIRONMENTAL ASSESSMENT

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** and **AQ-C13** have been added in accordance with the Air Quality District's Final Determination of Compliance (FDOC).

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

The City has developed a set of six operational scenarios that refine their expected emissions primarily differentiating between summer and winter seasons, as well as full and curtailed production. From these scenarios, the emission tables from 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 emission for the cooling tower is 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	~~1.20~~0.59	~~49.80~~49.19	a,c,d
NOx	26.2	0	~~3.46~~1.73	~~29.66~~27.93	a,c,d
PM10	7.78	~~0.25~~0.26	~~0.15~~0.08	~~8.18~~8.12	b,c,d
VOC	3.3	0	~~0.09~~0.05	~~3.39~~3.35	a,c,d
SOx	0.3	0	~~0.004~~0.002	~~0.304~~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. Primarily the City wants to reflect the fact that 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 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 reflect the City's refined operational scenarios.

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

	Gas Turbines (2)	Cooling Tower	Firewater Pump	Facility Total	Assumptions
CO	~~165.14~~104.00	0	~~1.20~~0.59	~~166.34~~104.59	a,d,e,
NOx	~~217.96~~175.00	0	~~3.46~~1.73	~~221.42~~176.73	a,d,e,
PM10	~~186.72~~158.00	~~6.00~~6.20	~~0.15~~0.08	~~192.87~~164.28	~~B~~a,d,e
VOC	~~40.9~~36.00	0	~~0.09~~0.05	~~40.99~~36.05	~~C~~a,d,e
SOx	~~7.26~~.00	0	~~0.004~~0.002	~~7.20~~6.00	~~B~~a,d,e
Ammonia	182.4	0	0.00	182.40	~~B~~a,d,e

Assumptions

a The gas turbines are undergoing ~~cold~~warm startup (~~2~~1.5 hours) per month, ~~21.5 hours of baseload operation~~8 hours/day full load with duct firing, 16 hours/day full load without duct firing and 0.5 hours shutdown per month @ ~~38~~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	~~44,647~~ 37,145	0	~~478~~235	~~45,125~~ 37,380	~~22.56~~18.69	A,c,d
NOx	~~70,558~~ 52,674	0	~~1,377~~689	~~71,935~~ 53,363	~~35.97~~26.68	~~A~~b,c,d
PM10	~~68,153~~ 56,676	~~2,190~~ 2,278	~~58~~32	~~70,401~~ 58,986	~~35.20~~29.49	~~B~~a,c,d
VOC	~~14,892~~ 13,027	0	~~35~~20	~~14,927~~13,047	~~7.46~~6.52	a,c,d
SOx	~~2,628~~ 2,122	0	~~2~~1	~~2,630~~2,123	~~1.31~~1.06	~~B~~a,c,d
Ammonia	66,576	0	0	66,576	3.29	~~B~~a,c,d

Assumptions

a ~~The gas turbines are undergoing initial commissioning for three months then 3 cold startups, 39 warm startups, 42 shutdowns and 6486 hours at full load with the duct burners on @ 65 deg F.~~ 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.

~~B~~c The cooling tower at full load for 8760 hours/year.

~~C~~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) and are thus exempt from mitigation. 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.

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 Offsets Provided
(lbs/year)

	Liability[1]	RTC Or ERC Procured[2]	Offsets/Mitigation	
			Excess	Shortfall
CO	37,380 ~~45,125~~	111,252 ~~99,098~~	~~53,972~~ 73,872	
NOx	53,363 ~~71,935~~	71,215 ~~71,215~~	17,852	~~720~~
PM10	58,986 ~~70,401~~	70,956 ~~67,890~~	11,970	~~2,511~~
VOC	13,047 ~~14,927~~	47,450 ~~47,450~~	~~32,523~~ 34,403	
SOx	2,123 ~~2,630~~	3,154 ~~2,731~~	~~102~~ 1,031	

1 ~~These emissions include startup, shutdown and normal operations of the CTGs, testing of the firewater pump and full load operation of the cooling tower~~See AIR QUALITY Table 11 Amended.
2 (SCAQMD 2002~~b~~c)

~~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 Offsets Provided
(pounds/day)

	Daily Liability[1]	RTC Or ERC Procured[2]	Offsets/Mitigation	
			Excess	Shortfall
CO	104.59 ~~166.3~~	304.80 ~~271.5~~	~~105.2~~ 200.21	
NOx	176.73 ~~221.4~~	195.11 ~~195.1~~	18.38	~~26.3~~
PM10	164.28 ~~192.8~~	194.40 ~~186.0~~	30.12	~~6.8~~
VOC	36.05 ~~41.0~~	130.00 ~~130.0~~	~~89.0~~ 93.95	
SOx	6.00 ~~7.2~~	8.66 ~~0.46~~	2.66	~~6.8~~
1 See AIR QUALITY Table 10 2 (SCAQMD 2002~~b~~c)				

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.

Page 4.1-61 Under the heading "**CONDITIONS OF CERTIFICATION**,"
Remove: sections AQ-C1 through AQ-C11, and
Replace with the following text.
NOTE that the section **AQ-C12** and **AQ-C13** have been added.

RECOMMENDED STAFF 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)Perform construction activities during non-business hours only.~~

~~4)~~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).

~~5)~~4) Use only 1996 CARB or EPA Certified or better diesel engines.

~~6)~~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.

~~7)~~6) Identify the employee parking area(s) and surface composition of those parking area(s)

~~8)~~7) Watering of all disturbed areas ~~to maintain a soil moisture content of 12%~~twice daily.

~~9)Evaluate the application of chemical dust suppressants.~~

~~10)~~8) Use sandbags to prevent run off.

~~11)~~9) Use wheel-washing areas prior to large trucks leaving the project site.

~~12)~~10)Describe methods that will be used to clean mud and dirt that has been tracked-out from the project site onto public roads.

~~13)~~11)For any transportation of solid bulk material

1) Use vehicle covers
2) Wet the transported material
3) Use appropriate amount of freeboard

~~14)~~12)Identify methods for the stabilization of storage piles and disturbed areas.

~~15)~~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 ~~112,311~~	0	478	~~112,789~~ 113,221	a,b,c
NOx	229,531 ~~565,695~~	0	1,377	~~567,072~~ 230,908	a,b,c
PM10	48,873 ~~48,668~~	2,190	58	~~50,917~~ 51,121	a,b,c
ROG	40,518 ~~40,370~~	0	35	~~40,405~~ 40,553	a,b,c
SOx	4,294 ~~4,276~~	0	2	~~4,277~~ 4,296	a,b,c
Ammonia	49,514 ~~49,294~~	0	0	49,514 ~~49,294~~	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 ~~6486~~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)~~	~~Firewater Pump~~	~~Facility Total~~	~~Assumptions~~
~~CO~~	~~48.6~~	~~1.20~~	~~49.80~~	~~a,c,d~~
~~NOx~~	~~26.2~~	~~3.46~~	~~29.66~~	~~a,c,d~~
~~PM10~~	~~7.78~~	~~0.15~~	~~8.18~~	~~b,c,d~~
~~ROG~~	~~3.3~~	~~0.09~~	~~3.39~~	~~a,c,d~~
~~SOx~~	~~0.3~~	~~0.004~~	~~0.304~~	~~b,c,d~~
~~Ammonia~~	~~7.6~~	~~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.~~

	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~~	~~165.14~~	~~0~~	~~1.20~~	~~166.34~~	~~a,d,e,~~
~~NOx~~	~~217.96~~	~~0~~	~~3.46~~	~~221.42~~	~~a,d,e,~~
~~PM10~~	~~186.72~~	~~6.00~~	~~0.15~~	~~192.87~~	~~b,d,e~~
~~ROG~~	~~40.9~~	~~0~~	~~0.09~~	~~40.99~~	~~c,d,e~~
~~SOx~~	~~7.2~~	~~0~~	~~0.004~~	~~7.20~~	~~b,d,e~~
~~Ammonia~~	~~182.4~~	~~0~~	~~0.00~~	~~182.40~~	~~b,d,e~~

~~**Assumptions**~~

~~a The gas turbines are undergoing cold startup (2 hours), 21.5 hours of baseload operation and 0.5 hours shutdown @ 38 deg F.~~
~~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~~

	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~~
~~CO~~	~~44,647~~	~~0~~	~~478~~	~~45,125~~	~~a,c,d~~
~~NOx~~	~~70,558~~	~~0~~	~~1,377~~	~~71,935~~	~~a,c,d~~
~~PM10~~	~~68,153~~	~~2,190~~	~~58~~	~~70,401~~	~~b,c,d~~
~~ROG~~	~~14,892~~	~~0~~	~~35~~	~~14,927~~	~~a,c,d~~
~~SOx~~	~~2,628~~	~~0~~	~~2~~	~~2,630~~	~~b,c,d~~
~~Ammonia~~	~~66,576~~	~~0~~	~~0~~	~~66,576~~	~~b,c,d~~

~~**Assumptions**~~
~~a The gas turbines are undergoing initial commissioning for three months then 3 cold startups, 39 warm startups, 42 shutdowns and 6486 hours at full load with the duct burners on @ 65 deg F.~~
~~b The cooling tower at full load for 8760 hours.~~
~~c The Firewater pump is being tested 199 hours.~~

	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 and AQ-C13) has 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
Certificate Number Needed	65	CO
Priority Reserve	199.8	CO
Total	**304.8**	**CO**
AQ004367	108	VOC
AQ004493	22	VOC
Total	**130**	**VOC**
Priority Reserve	**194.4**	**PM10**
1304 Exempted Emissions	**2,628**	**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.

Page 4.1-65 Under the heading "**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RECOMMENDED CONDITIONS OF CERTIFICATION**,"
Remove: sections **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}	~~5,568~~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: ~~37.56~~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 ~~4.65~~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: ~~7.61~~7.397 lb/mmscf, VOC: 1.63 lb/mmscf & SOx: ~~0.39~~ 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, Sstart-ups shall not exceed 2 hours and the number of start-ups shall not exceed one per day per turbine. Following commissioning, Sshutdowns 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, Sstart-ups shall not exceed 2 hours and the number of start-ups shall not exceed one per day per turbine. Following commissioning, Sshutdowns 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 ~~firewater pump~~ammonia storage tank.

Verification: The City of Vernon shall make the ~~firewater pump~~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.

~~**AQ-27** The City of Vernon shall install and maintain a Continuous Emission Monitoring Device to accurately indicate the ammonia concentration at the SCR outlet, and alert the City of Vernon (via audible or visible signal alarm) whenever ammonia concentrations are near, or at, or in excess of the permitted ammonia limit of 5 ppmv, corrected to 15 percent oxygen. It shall continuously monitor, compute, and record the following parameters:~~

~~Ammonia concentration, uncorrected in ppmv~~

~~Oxygen concentration in percent~~

~~Ammonia concentration in ppmv, corrected to 15 percent oxygen~~

~~Date, time, extent (in time) of all excursion above 5 ppmv, corrected to 15% oxygen~~

~~The Continuous Emission Monitoring Device described above shall be operated and maintained according to a Quality Assurance Plan (QAP) approved by the Executive Officer and the CPM. The QAP must address contingencies for monitored ammonia concentrations near at, or above the permitted compliance limit, and remedial actions to reduce ammonia levels once an exceedance has occurred.~~

~~The Continuous Emission Monitoring Device may not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.~~

~~The Continuous Emission Monitoring Device 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.~~

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 MM 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 ~~diesel fuel~~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

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 4.4-13: Under the heading of "**SEISMIC ISSUE",** last paragraph, last sentence that reads "…proposing **HAZ-6** & **7** address….":

Insert: "to" after "**7**", sentence should read "…**HAZ 6** & **7** to address.."

Page 4.4-15: Under the heading "**STAFF'S PROPOSED MITIGATION,**" first sentence:

Delete: the word "nine," and

Insert: the word "eight" the sentence should read "Staff proposes eight Conditions…"

Page 4.4-15: After the heading "**STAFF'S PROPOSED MITIGATION**" and before the heading "**ENVIRONMENAL JUSTICE**";

Insert the following:

Site Security

This facility proposes to use hazardous materials which have been identified by the US EPA as materials where special site security measures should be developed and implemented to ensure that unauthorized access is prevented. The EPA published a Chemical Accident Prevention Alert regarding Site Security (EPA 2000a) and the US Department of Justice published a special report on Chemical Facility Vulnerability Assessment Methodology (US DOJ 2002). In order to ensure that this facility or a shipment of hazardous material is not the target of unauthorized access, staff's proposed General Condition of Certification on Construction and Operations Security Plan **COM-9** will require the preparation of a Vulnerability Assessment and the implementation of Site Security measures consistent with the above-referenced documents.

The level of security should be dependent upon the threat imposed and the consequences of a successful breach of the facility boundaries. In order to determine the level of security, the CEC staff will provide guidance in the form of a decision matrix modeled after the U.S. Department of Justice Chemical Vulnerability Assessment Methodology (July 2002). Basic site security measures should be required at all locations in order to protect the infrastructure and electrical power generation within the state. These measures will include perimeter fencing, guards, alarms, law enforcement contact in the event of security breach, and fire detection systems. Other locations will have additional security measures dependant upon the results of the vulnerability assessment.

The level of security at each power plant should be a function of the likelihood of an adversary attack, the likelihood of adversary success in causing a catastrophic event, and the severity of consequences of that event. It is only after conducting a vulnerability assessment will the level of security required be known. The vulnerability assessment will be based, in part, on the use and storage of certain quantities of acutely hazardous materials as described by the California Accidental Release Prevention Program (Cal-ARP - Health and Safety Code, section 25531).

This will allow staff to use the results of the off-site consequence analysis prepared as part of the Risk Management Plan (RMP) to determine the severity of consequences of a catastrophic event.

Site personnel background checks should be required for this site and will most likely be limited to ascertaining that the employee's claims of identity and employment history are accurate. All site personnel background checks would be consistent with state and federal law regarding security and privacy.

Site access for vendors should be strictly controlled. Consistent with recent state and current federal regulations governing the transport of hazardous materials, hazardous materials vendors will have to maintain their transport vehicle fleet and employ only drivers properly licensed and trained. The project owner will be required through the use of contractual language with vendors to ensure that vendors supplying hazardous materials conduct background security checks on any employee involved in the transportation and delivery of hazardous materials to the power plant. This requirement will be similar to those Conditions of Certification which require a project owner to ensure that hazardous materials deliveries are made only in approved vehicles and only via an approved delivery route. All hazardous materials vendor delivery personnel background checks would be consistent with state and federal law regarding security and privacy.

Page 4.4-16: Under the heading "**Verification of HAZ-2**", first sentence, after "…prior to…" and before "…receiving…,";

Insert: "first"
The sentence should read "...prior to first receiving…"

Page 4.4-17: Verification of **HAZ-3**, first sentence, after "…prior to the…" and before "…delivery…":

Insert: "initial"
The sentence should read "…prior to the initial delivery…"

Page 4.4-17; HAZ-4, incorporate the marked changes:

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, <u>it shall be surrounded by</u> a secondary containment basin capable of holding 125% of the storage volume ~~shall protect the storage tank~~ <u>or the volume of the tank</u> 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.

Page 4.4-17: Under the heading "Verification of **HAZ-4**", first sentence, after "prior to" and before "delivery":

Insert: "initial"
The sentence should read, "…prior to initial delivery…"

Page 4.4-17: Under the heading "**HAZ-5,**" second line:
Delete: "100 feet"
Insert: "50 feet"

Page 4.4-17: Verification of **HAZ-5**, after "prior to" and before "receipt":
Insert: "initial"
The sentence should read, "…prior to initial receipt…"

Page 4.4-17: Verification of **HAZ-8**, after "prior to" and before "receipt":
Insert: "initial"
The sentence should read, "…prior to initial receipt…"

Page 4.4-18: Under the heading "**REFERENCES**":
Insert:

EPA (Environmental Protection Agency). 2000a. Chemical Accident Prevention: Site Security. Environmental Protection Agency, Office of Solid Waste and Emergency Response. February 2000.

US Department of Justice (US DOJ) 2002. Special Report: Chemical Facility Vulnerability Assessment Methodology. Office of Justice Programs, Washington, D.C. July 2002.

Page 4.4-18: Under the heading "**REFERENCES,**" 8th reference from top of page:
Delete: "(CEC)"
Insert: "(COV)"

NOISE AND VIBRATION

Supplemental Testimony of Ron Brown

Page 4.6-1: Second paragraph, first line:

Delete the comma after the word, “Project”.

Delete the parenthetical, “(01-AFC-25)”.

Page 4.6-5: Second paragraph, last line,

Amend “**Noise: Table 3**” at the end of paragraph titled EXISTING NOISE LEVELS to read “**Noise: Table 2**”.
Amend **“NOISE: Table 3”** title to read “**NOISE: Table 2**”.

Page 4.6-6: First paragraph under **“General Construction Noise”:**
Insert: the following sentence to the end of this paragraph: “Noisy construction, that is, any activity that generates legitimate noise complaints, is limited to specific hours as required in proposed Condition of Certification **NOISE-8**.”

Page 4.6-7: Under the paragraph heading of “**Steam Blows,”** Paragraph beginning “The project is located in…”: fourth sentence:

Amend the end of this sentence from “64 dBA at the nearest receptor” to read “64 dBA at the nearest residential receptor.”

Page 4.6-7: Paragraph beginning “The project is located in…”: fifth sentence; change “(see **NOISE-Table 3**)” to read “(see **NOISE: Table 2**)”.

Page 4.6-7: Paragraph beginning “The project is located in…”: Sixth sentence:

Amend this sentence from, “Staff is recommending the addition of a silencer to reduce the noise to a level that is less than 5 dBA above this ambient; see proposed Condition of Certification **NOISE-4**” to read “Staff is recommending the addition of a silencer to reduce the noise to a combined noise level of 52 dBA; see proposed Condition of Certification **NOISE-4**.”

Immediately after,

Insert the following sentence: “The resulting increase of 5 dBA should be tolerable to residents for the relatively short duration of the steam blows.”

Page 4.6-8: Third paragraph under the heading, “**Power Plant Operation**”, first sentence, second line:

Amend “**NOISE: Table 3**” to read “**NOISE: Table 2**”.

Page 4.6-8: **NOISE: Table 5**:

Amend the title of this table to read "**NOISE: Table 3**".

Page 4.6-9: First sentence, first line:

Amend "(**NOISE: Table 5**)" to read "(**NOISE: Table 3**)".

Page 4.6-9: **NOISE: Table 6**:
Amend the title of this table to read ("**NOISE: Table 4**".)

Page 4.6-12: Under heading of "**Condition of Certification**" **NOISE-4**: First paragraph, second sentence:

Amend "…steam blow noise does not produce a noise level greater than 46 dBA at Site R3…" to read "…steam blow noise does not produce a combined noise level greater than 52 dBA at Site R3…".

PUBLIC HEALTH

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 4.7-11: Under the heading "**Public Health Table 1**",

Delete **"**Public Health Table 1**"**

Insert this revised **"**Public Health Table 1", noting the underlined checkmarks

Substance	Oral Cancer	Oral Noncancer	Inhalation Cancer	Noncancer (Chronic)	Noncancer (Acute)
Acetaldehyde			✔	✔	
Acrolein				✔	✔
Ammonia				✔	✔
Arsenic	✔	✔	✔	✔	✔
Benzene			✔	✔	✔
Beryllium			✔	✔	
1,3-Butadiene			✔	✔	
Cadmium			✔	✔	
Chromium			✔	✔	
Copper				✔	✔
Ethylbenzene				✔	
Formaldehyde			✔	✔	✔
Hexane				✔	
Lead	✔	✔	✔	✔	
Manganese				✔	
Mercury		✔		✔	✔
Napthalene		✔		✔	
Nickel			✔	✔	✔
Polynuclear Aromatic Hydrocarbons (PAHs)	✔	✔	✔	✔	
Propylene				✔	
Propylene oxide			✔	✔	✔
Silver				✔	
Toluene				✔	✔
Xylene				✔	✔

Source: AFC Table 8.6-1 using reference exposure levels and cancer unit risks from CAPCOA Air Toxics "Hot Spots" Program Revised 1992 Risk Assessment Guidelines, October 1993 and SRP 1998.

SOCIOECONOMICS

Supplemental Testimony of Joseph Diamond, Ph.D.

Page 4.8-5: Under **B. "Induced Population Growth**

Amend: First paragraph should read, "As mentioned in Item A, the vast majority of construction and operation labor will be local. Therefore, construction and operation of the MGS is expected to cause little, if any, population growth in the affected area."

Page 4.8-7; Under the heading **Section F**," **People of Color and Low-Income Populations (Environmental Justice Outreach and Screening Analysis**)

Delete paragraph 3 as follows

~~However, the **Air Quality** section of this initial staff assessment, one of the nine technical areas that consider EJ in the analysis, does show that there may be potentially significant adverse cumulative environmental impact from PM10 emissions. (See the **Air Quality** analysis of this staff assessment for further information.) This is a preliminary finding of potential significant impact that may yet be mitigated prior to the Final Staff Assessment. If mitigation is found to be acceptable, no further analysis is warranted under the three-step approach. However, if this potential impact still exists after the planned staff air quality workshop, then Air Quality Staff will prepare an analysis of the potential for disproportionate impacts on nearby EJ populations.~~

VISUAL RESOURCES

Supplemental Testimony of Eric Knight

Page 4.12-15: Under the heading "**VIS-2**" First sentence reads,

"Prior to the first turbine roll…"

Amend the sentence to read, " ~~Prior to the first turbine roll~~ The project owner shall paint or treat..."

Page 4.12-16: Under the heading "**Verification of VIS-2**" First sentence reads "Prior to first turbine roll…";

Amend the sentence to read, "~~Prior to first turbine roll~~ Prior to start of commercial operation, the project owner shall..."

Page 4.12-16: Under the heading "**Verification of VIS-3**," first sentence reads, "Prior to first turbine roll,…"

Amend the sentence to read, "~~Prior to first turbine roll~~ Prior to start of commercial operation, the project owner shall…"

WASTE MANAGEMENT

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 4.13-5: Under the heading "**Hazardous Wastes,**" third paragraph, last sentence reads, "...Conditions of Certification **WASTE-4** and **WASTE-5**…":

Delete: "**WASTE-4** and **WASTE-5**"
Insert: "**WASTE-1** and **WASTE-2**"

ENGINEERING ASSESSMENT

FACILITY DESIGN

Supplemental Testimony of Shahab Khoshmashrab, Al McCuen and Steve Baker

Page 5.1-8: in the table titled **"Table 1: Major Structures and Equipment List":**

Delete the sentence that reads "Substation/Switchyard, Buses and Towers,"

GENERAL CONDITIONS
INCLUDING
COMPLIANCE MONITORING AND CLOSURE PLAN

Supplemental Testimony of Christopher Meyer

This section replaces the General Conditions included in the Staff Assessment. The only substantive change is the elimination of **COM-4** from the SA, which requires the renumbering of all subsequent **COM**.

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);
1. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
2. 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;
3. a cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM;
4. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
5. a listing of filings made to, or permits issued by, other governmental agencies during the year;
6. a projection of project compliance activities scheduled during the next year;
7. a listing of the year's additions to the on-site compliance file;
8. 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
9. 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.
10. 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: ▪ property owners living within one mile of the project have been notified of a telephone number to contact for questions, complaints or concerns, ▪ a pre-construction matrix has been submitted identifying only those conditions that must be fulfilled before the start of construction, ▪ all pre-construction conditions have been complied with, ▪ 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.)

CITY OF VERNON—MALBURG GENERGATING PLANT
STAFF ASSESSMENT PREPARATION TEAM

Executive Summary ..... William Pfanner

Introduction ..... William Pfanner

Project Description ..... William Pfanner

Environmental Assessment

Air Quality ..... Joseph M. Loyer

Biological Resources ..... Stuart Itoga

Cultural Resources ..... Mary Maniery, John Dougherty, and Dorothy Torres

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

Land Use ..... David Flores

Noise and Vibration ..... Ron Brown

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

Socioeconomics ..... Joseph Diamond, Ph.D.

Soil and Water ..... Antonio Mediati

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

Transmission Line Safety and Nuisance ..... Obed Odoemelam, Ph.D.

Visual Resources ..... Eric Knight

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

Worker Safety and Fire Protection ..... Alvin J. Greenberg, Ph.D. and Rick Tyler

Engineering Assessment

Facility Design ..... Shahab Khoshmashrab, Al McCuen, and Steve Baker

Geology, Mineral Resources, and Paleontology ..... Dal Hunter, Ph.D., C.E.G.

Power Plant Efficiency ..... Kevin Robinson and Steve Baker

Power Plant Reliability ..... Kevin Robinson and Steve Baker

Transmission System Engineering ..... Ajoy Guha, P.E. and Sudath Arachchige

Alternatives ..... William Pfanner

General Conditions ..... Christopher Meyer

Project Assistant ..... Evelyn Johnson

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

DECLARATIONS AND RESUMES