

AUG 21 2017

Dan Beck
Mid-Set Cogeneration Facility
PO Box 81438
Bakersfield, CA 93380

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: S-2592
Project Number: S-1171326

Dear Mr. Dan Beck:

Enclosed for your review and comment is the District's analysis of Mid-Set Cogeneration Facility's application for Emission Reduction Credits (ERCs) resulting from the shutdown of a gas turbine engine, at 13705 Shale Rd, Fellows, CA. The quantity of ERCs proposed for banking is 39,687 lb/yr NOx, 373 lb/yr SOx, 15,545 lb/yr PM10, and 17,278 lb/yr CO..

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice comment period, the District intends to issue the ERCs. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Richard Edgehill of Permit Services at (661) 392--5617.

Sincerely,



Arnaud Marjollet
Director of Permit Services

AM:rue

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Emission Reduction Credit Banking Application Review

Shutdown of Natural Gas-Fired Cogeneration Facility

Facility Name: Mid-Set Cogeneration Facility
Mailing Address: PO Box 81438
Bakersfield, CA 93380

Contact Name: Cory Eager and Dan Beck
Telephone: (661) 615-4681 (CE), (661) 654-7141 (DB)
Engineer: Richard Edgehill, Air Quality Engineer
Date: June 6, 2017

Lead Engineer: Richard Karrs, Supv. AQE
Date:

Project Number: S-2592, 1171326

ERC Certificate #s: S-4680-2 through '5
Date Received: March 29, 2017
Date Complete: June 28, 2017

I. Summary:

Chevron Power and Energy Management (CPEM) has applied for Emission Reduction Credits (ERCs) for the shutdown of a 40 MW natural gas-fired cogeneration unit (formerly S-2592-1). The application to bank ERC was received on March 29, 2017. The PTOs were cancelled on January 26, 2017.

The District accepts that the date of actual emission reductions is the date the facility was shutdown, January 26, 2017. The following permit units have been cancelled:

S-2592-0-3	Facility Wide PTO
S-2592-1-12	39.86 MW GENERAL ELECTRIC, FRAME 6, MODEL PG6531(B) GAS-FIRED GAS TURBINE ENGINE COGENERATION SYSTEM
S-2592-2-3	TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED IC ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR

ERCs are only requested for the shutdown of S-2592-1. Cancelled PTO S-2592-1-12 is included in **Attachment I**.

Based on the historical operating data prior to the shutdown, the amounts of bankable Actual Emission Reductions (AER) for NO_x, CO, VOC, PM₁₀ and SO_x emissions are as shown in the table below. These values are calculated in Section V of this document:

ERC (lbs/Qtr)	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
NO _x (S-4860-2)	9,685	9,949	10,041	10,012
SO _x (S-4860-5)	92	94	94	93
PM ₁₀ (S-4860-4)	3,847	3,914	3,899	3,885
CO (S-4860-3)	5,478	1,937	4,448	5,415

II. Applicable Rules:

Rule 2301 Emission Reduction Credit Banking (Amended January 19, 2012)

III. Location of Reduction:

The facility location is:

13705 Shale Rd, Fellows, CA

IV. Method of Generating Reduction:

The natural gas fired turbine was shutdown on December 31, 2016. The permits for the entire facility were surrendered for banking on January 26, 2017.

V. ERC Calculations:

Criteria emission reductions are banked in accordance with Section 4.2 of Rule 4301.

A. Assumptions and Emission Factors

CPEM's cogeneration unit was required to operate and maintain a continuous emissions monitoring system (CEMS) for NO_x, and CO. AER for these pollutants is determined from a review of CEMS data (please see **Attachment II**). For PM₁₀ and SO_x, AER is calculated by using emissions factors obtained during source testing emission and 2015 and 2016 fuel use data. The source test data is included in **Attachment III**.

Emission factors or data used in calculating AER are listed in the table below.

Unit	Pollutant	Emission Factor
S-2592-1	NO _x	CEMS
	SO _x	0.00011 lb/MMBtu*
	PM ₁₀	0.0046 lb/MMBtu
	CO	CEMS

*Monthly samples show below the detection limit for SO₂. Annual emissions inventory results used the factor 0.11 lb SO_x/MMscf (0.11 lb SO_x/MMscf x 1/1000 MMBtu/MMscf) = 0.00011 lb/MMBtu. 2/24/15 source test result for SO_x was 0.00054 lb/MMBtu. Therefore, the emissions factor is conservatively low.

In addition, the turbine is subject to Rule 4703 Table 5.2d, standard option, which limits NO_x to 5 ppmv and CO to 25 ppmv both at 15% O₂. A review of the CEMS data for the turbine indicates that NO_x and CO emissions are below the Rule 4703 limit. Therefore, the emissions reductions are surplus of the rule requirement.

B. Historic Annual Average Period Determination

Pursuant to District Rule 2201, Section 3.8, the baseline period for determining actual historical emissions for banking purposes shall be a period of time equal to either:

- 3.8.1 the two consecutive years of operation immediately prior to the submission date of the Complete Application; or
- 3.8.2 at least two consecutive years within the five years immediately prior to the submission date of the Complete Application if determined by the APCO as more representative of normal source operation; or
- 3.8.3 a shorter period of at least one year if the emissions unit has not been in operation for two years and this represents the full operational history of the emissions unit, including any replacement units; or
- 3.8.4 zero years if an emissions unit has been in operation for less than one year (only for use when calculating AER).

CPEM provided monthly fuel use (MMBtu) data for the years 2012 through 2016. The monthly fuel use data was used to calculate the total annual fuel use for each of the years. Consecutive two-year averages for the years 2012 through 2016 were compared with the overall average value in the following table.

Year	Total (MMBtu)	2 year average (MMBtu)
2012	3,630,639	
2013	3,928,211	3,779,425 (2012, 2013)
2014	3,738,080	3,833,146 (2013, 2014)
2015	3,861,871	3,799,976 (2014, 2015)
2016	3,648,205	3,755,038 (2015, 2016)
5 year average		3,761,401

The average for the years 2015 and 2016 (3,755,038 MMBtu) was closest to the overall average for the five-year period 2012 through 2016 (3,761,401 MMBtu). Therefore, the baseline period is January 2015 through December 2016.

The monthly fuel use data used to calculate total annual fuel use are included in **Attachment IV**.

C. Criteria Emission Reductions

Section 4.5.4 of Rule 2301 states that the actual emission reductions (AER) are calculated in accordance with the procedures of Rule 2201.

A. Actual Emission Reductions (AER)

CPEM has applied for ERC banking credits for the permanent cessation of the cogeneration system S-2592-1 which is not being replaced. Therefore, the HAE is equal to the actual emissions reductions (AER). NOx and CO HAE are calculated using monthly CEMS data. PM10 and SOx HAE are calculated using average fuel use data and above source test emissions factors. The results of the calculations are listed in the tables below.

The following monthly CEMs data for the years 2015 and 2016 were submitted by applicant.

2015	NOx (lb)	CO (lb)
January	3,619	3221
February	3,545	2290
March	3,977	2289
Qtr 1	11,141	7,800
April	3,974	2307
May	3,854	1982
June	3,702	1813
Qtr 2	11,530	6,102
July	3,962	1921
August	3,576	1729
September	3,858	1784
Qtr 3	11,396	5,434
October	3,950	1892
November	3,813	2246
December	3,670	2380
Qtr 4	11,433	6,518

2016	NOx (lb)	CO (lb)
January	3,124	1813
February	3,511	1165
March	3,745	1396
Qtr 1	10,380	4,374
April	3,699	1339
May	3,243	1386
June	3,638	1579
Qtr 2	10,580	4,304
July	3,790	1635
August	3,037	1199
September	4,090	1615
Qtr 3	10,917	4,449
October	4,040	1844
November	3,693	1963
December	3,084	1708
Qtr 4	10,817	5,515

Note that the above data were obtained from CEM reports produced on a monthly basis with summaries of each day's emissions, and a total at the bottom which listed the emissions for the month (**Attachment II**). However, for days when a manual calibration lasted longer than a calendar hour, the sheets appeared to leave the emissions as a zero (this happened on 26 days in 2015, and 23 days in 2016). For these hours, CPEM assumed emissions remained constant for those missing hours, and have listed that data as the "corrections". The small correction for January 2015 (27.30 lb NOx), is illustrated in **Attachment II**.

Pollutant	Year	Q1 (lb/qtr)	Q2 (lb/qtr)	Q3 (lb/qtr)	Q4 (lb/qtr)
NO _x	2015	11,141	11,530	11,396	11,433
	2016	10,380	10,580	10,917	10,817
	Average	10,761	11,055	11,157	11,125
CO	2015	7,800	6,102	5,434	6,518
	2016	4,374	4,304	4,449	5,515
	Average	6,087	2,152	4,942	6,017

	Year	Q1 (MMBtu/qtr)	Q2 (MMBtu/qtr)	Q3 (MMBtu/qtr)	Q4 (MMBtu/qtr)
Fuel Use	2015	963,230	954,399	973,229	971,013
	2016	895,358	936,510	910,258	906,079
	Average	929,294	945,455	941,744	938,546

	Average Fuel Use (AFU)	PM10*	SOx**
Q1	929,294	4,275	102
Q2	945,455	4,349	105
Q3	941,744	4,332	104
Q4	938,546	4,317	103

*0.0046 lb/MMBtu x AFU

**0.00011 lb/MMBtu x AFU

AER = HAE

AER (lbs/Qtr)	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
NOx	10,761	11,055	11,157	11,125
SOx	102	105	104	103
PM10	4,275	4,349	4,332	4,317
CO	6,087	2,152	4,942	6,017

A. Air Quality Improvement Deduction (10% of AER)

AQID (lbs/Qtr)	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
NOx	1,076	1,106	1,116	1,113
SOx	10	11	10	10
PM10	428	435	433	432
CO	609	215	494	602

B. Increases in Permitted Emissions (IPE)

No IPE is associated with this project.

C. Bankable Emissions Reductions Credits (AER – AQID)

ERC (lbs/Qtr)	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
NOx	9,685	9,949	10,041	10,012
SOx	92	94	94	93
PM10	3,847	3,914	3,899	3,885
CO	5,478	1,937	4,448	5,415

VI. COMPLIANCE

To be eligible for banking, emission reduction credits (ERC's) must be verified as being real, surplus, permanent, quantifiable, and enforceable pursuant to District Rules 2201 and 2301. In addition, the application must be submitted within the timelines specified in Rule 2301.

A. Real

The emission reductions (ERCs) proposed for banking result from the shutdown of the cogeneration system. The ERCs were calculated using actual CEMS (NOx and CO) and source test data (PM10). CPEM has stated that the decrease in steam production with shutdown of the cogen will not be provided by existing steam generators as there are no steam needs in the area. CPEM also notes that the Mid-Set Cogeneration Facility has only provided electricity to the grid (PG&E) and that PG&E has no further need for the CPEM electricity. Therefore, the electricity provided by the cogen will not be supplied by other Chevron equipment.

The emissions reductions are therefore real.

B. Enforceable

CPEM has surrendered the operating permit for all units for which it proposes to bank ERC. Operation without the PTO would be subject to enforcement action for a violation of District Rule 2010 (Permits Required). Therefore, the emission reductions are enforceable.

C. Quantifiable

As shown in Section V of this evaluation, emission reductions were calculated using data from a properly installed and calibrated CEMS, or were calculated using actual operating data and source test results. Therefore, the emission reductions are quantifiable.

D. Permanent

CPEM has surrendered the operating permit for the unit for which it proposes to bank ERC. Operation of the equipment without a valid PTO is subject to enforcement action. Construction of replacement equipment must be authorized by the District after evaluation under all applicable rules, including District Rule 2201 (New and Modified Stationary Source Review Rule), under which any increase in emissions over the applicable threshold must be offset. Therefore, the emission reductions are permanent.

E. Surplus

Until the operation was shut down, CPEM complied with all applicable emission limits contained in the permit to operate and developed from the applicable rules and regulations. Therefore, the AER calculated in Section V are surplus to all current requirements. Furthermore, the CEMs data used to calculate the ERCs for NO_x and CO are below the NO_x and CO lb/hr permit limits. Therefore, the reductions are surplus.

F. Timeliness

CPEM cancelled the PTOs on ceased operation on January 26, 2017, from which time it had 180 days to submit the ERC application. Since the ERC application was received by the District March 29, 2017, therefore the application is timely.

I. Recommendation:

The ERC banking application complies with all applicable rules and regulations. Issue ERC certificates in the amounts shown in Table 2 above.

VII. RECOMMENDATION

After public notice, comments and review, issue ERC Banking Certificates S-4680-2 through S-4680-5 to CPEM:

ERC Certificates				
Pollutant	Q1 ERC (lb/qtr)	Q2 ERC (lb/qtr)	Q3 ERC (lb/qtr)	Q4 ERC (lb/qtr)
S-4860-2 (NO _x)	9,685	9,949	10,041	10,012
S-4860-5 (SO _x)	92	94	94	93
S-4860-4 (PM ₁₀)	3,847	3,914	3,899	3,885
S-4860-3 (CO)	5,478	1,937	4,448	5,415

The draft ERC certificates are included in **Attachment V**.

Mid-Set Cogen
S-2592, 1171326

ATTACHMENT I
CANCELLED PTO S-2592-1-12

INSPECTION
 EXPIRATION DATE: 02/28/2021
WORKSHEET

LEGAL OWNER OR OPERATOR: MID-SET COGENERATION COMPANY
MAILING ADDRESS: PO BOX 81438
 BAKERSFIELD, CA 93380

LOCATION: 13705 SHALE RD
 FELLOWS, CA

SECTION: 36 **TOWNSHIP:** 31S **RANGE:** 22E

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:

39.86 MW GENERAL ELECTRIC, FRAME 6, MODEL PG6531(B) GAS-FIRED GAS TURBINE ENGINE COGENERATION SYSTEM

CONDITIONS

1. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 4703, 6.2.6; 40 CFR 60.332(a),(b) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
2. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
3. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
4. Cogeneration unit shall include General Electric, Frame 6, mode PG6531(B), natural gas fired turbine engine, Pneumafil PVC media type inlet air evaporative cooler and turbine combustor water injection system for NOx control. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Cogeneration unit shall include 215,000 pounds per hour unfired heat recovery steam generator, Mitsubishi selective catalytic reduction NOx control system with ammonia injection and continuously recorded emission monitors for NOx, CO and CO2. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
6. All gas turbine engine exhaust shall flow through catalyst bed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with ammonia slip limit shall be demonstrated by continuously recording the following parameters: inlet air mass flow rate (lbm/sec), fuel gas mass flow rate (lbm/sec), injected water mass flow rate (lbm/sec), ammonia injection volumetric flow rate (scf/hr), fuel f factor (scf dry gas/scf wet gas), NOx concentration into SCR catalyst (ppm), and NOx concentration out of SCR catalyst (ppm); and calculating the ammonia slip using the following equation: ammonia slip ppm (uncorrected) = ammonia injection volumetric flow rate/[fuel f factor x (3600/10^6) x 379.5 x (inlet air mass flow rate + fuel gas mass flow rate + injected water mass flow rate)/exhaust gas molecular weight] - (NOx concentration into the SCR catalyst - NOx concentration out of the SCR catalyst). Uncorrected ammonia slip calculated using the above equation shall be corrected to 15% O2. [District Rule 4102]
8. Turbine maximum heat input rate shall not exceed 500 MMBtu/hr (LHV) when fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum daily emission limitations (DEL) shall not exceed the following: PM-10: 60.0 lb./day, SOx (as SO2): 14.4 lb./day, NOx (as NO2): 259.7 lb./day, VOC: 24.0 lb./day and CO: 259.2 lb./day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR Subpart 60.2] Federally Enforceable Through Title V Permit

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WORKSHEET

11. Except during periods of startup/shutdown, gas turbine engine emission rates (three-hour average) shall not exceed: PM10: 2.50 lb/hr, SOx as SO2: 0.6 lb/hr, NOx as NO2: 9 lb/hr, VOC: 1.00 lb/hr and CO: 10.8 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall report the following emission exceedences to the District: emission rates of NOx & CO on a three hour average, NSPS emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Except during periods of gas turbine engine startup/shutdown, inlet gas temperature to catalyst bed shall be maintained within the range recommended by catalyst manufacturer of 392 degrees and 752 degrees F. [District Rule 2201] and 40 CFR Part 64] Federally Enforceable Through Title V Permit
14. Except during periods of gas turbine engine startup/shutdown, gas turbine engine shall not be operated unless water injection and SCR system are operating. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If water injection or SCR system are inoperative, gas turbine engine operation shall be curtailed such that compliance with emission limits is achieved. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Except during periods of gas turbine engine startup/shutdown, gas temperature at ammonia injection grid shall be maintained below 2000 F. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
17. On days of gas turbine engine startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emission limitations by records of calculations using CEM data, fuel rate data, and daily hours of operation data. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate records of daily fuel consumption of gas turbine engine and continuous emission monitoring printouts. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
19. Ammonia concentration in exhaust stream shall not exceed 20 ppmv @15% O2 (three hour average). [District Rule 4102]
20. The Relative Accuracy Audit and annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, and witnessed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Non-compliance with emission limits shall result in either shutdown or curtailment (reduced fuel consumption) for the permit unit, and an Authority to Construct to modify emission limits shall be required. A variance from this requirement cannot be obtained. [District Rule 1100, 6.3] Federally Enforceable Through Title V Permit
22. Failure of catalysts to perform as required because of catalyst poisoning or fouling shall not be recognized as basis for Rule 1100, Section 4.0 (amended 12/17/92) enforcement exemptions. [District Rule 1100, 4.0] Federally Enforceable Through Title V Permit
23. Compliance source testing for NOx, CO, SOx, VOCs & ammonia shall be conducted annually (or as approved by the District) within 60 days prior to permit anniversary and official test results & field data submitted within 60 days thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
24. No annual source testing shall be required for SOx emissions if the turbine is fired on PUC-regulated natural gas. [District Rule 2201 and 40 CFR Part 60.334(h)(3)] Federally Enforceable Through Title V Permit
25. Samples shall be collected during maximum fuel consumption, use of water and NH3 injection at desired rates, and use of evaporative coolers (if necessary, to test at maximum fuel consumption). [District Rule 2201] Federally Enforceable Through Title V Permit
26. Each one-hour period in a three-hour average shall commence upon the hour. The three hour average will be compiled from the three most recent one hour periods. [District Rule 2201] Federally Enforceable Through Title V Permit
27. This facility is part of Chevron's the heavy oil western stationary source, which includes facilities S-1128, S-1129, S-1141, S-1549, and S-2592. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Permittee shall report exceedances of daily emissions limits to the District. [District Rule 2201] Federally Enforceable Through Title V Permit

- INSPECTION WORKSHEET
29. Source testing shall be performed for VOCs according to EPA Method 25 or 18, for CO according to EPA Method 10 or 10B, and for SOx according to EPA Method 6 or 8. [District Rule 2520, 9.3.2, District Rule 4701, 6.4] Federally Enforceable Through Title V Permit
 30. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption, and the exhaust gas NOx and O2 concentrations. [District Rule 2201, District Rules 2520, 9.3.2, 4703, 6.2.1, 6.2.3 and 40 CFR 60.334(a) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
 31. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
 32. The continuous NOx and O2 monitoring system shall meet all the applicable requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit
 33. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
 34. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080, Section 4.0 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
 35. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 2201 and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
 36. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by District Rule 1080, Section 11.0 (amended 12/17/92) to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
 37. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081, Sections 3.0 through 7.0 (as amended 12/16/93). [District Rule 1081, 3.0 through 7.0] Federally Enforceable Through Title V Permit
 38. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [District Rule 2201, District Rule 4801; 40 CFR 60.333(a) and (b); and Kern County Rule 407] Federally Enforceable Through Title V Permit
 39. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201, District Rule 4801; 40 CFR 60.334(h)(1); and Kern County Rule 407] Federally Enforceable Through Title V Permit
 40. If this unit is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using the Gas Processors Association Method 2377 or ASTM method D 1072, D 4084 or D 3246. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
 41. If this unit is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2 and Kern County Rule 407] Federally Enforceable Through Title V Permit

INSPECTION
WORKSHEET

42. The owner or operator shall annually source test the exhaust emissions for NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods. [District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit
43. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
44. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
45. Results of the CEM system shall be averaged over a one hour period, using consecutive 15-minute sampling periods in accordance with 40 CFR 60.13(c)(2) and (h). [40 CFR 60.13(c)(2) and (h); 40 CFR 60.334(a), (b)(2), (c) and District Rule 4703, 6.2.2 and 6.2.3 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
46. The owner or operator shall not operate the gas turbine under load conditions, excluding the thermal stabilization period or reduced load period, which results in the measured NO_x emissions concentration exceeding the following: 5 ppmv @ 15% O₂ averaged over a three hour period, for the standard option. [District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
47. The owner or operator shall not operate the gas turbine under load conditions, excluding the thermal stabilization period or reduced load period, which results in the measured CO emissions concentration exceeding 200 ppmv @ 15% O₂ averaged over a three hour period. [District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
48. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.332(a) and (b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
49. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 407 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
50. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1) and (b), 60.333 (a) and (b); 60.334(a), (c)(2), (c)(3), and 60.335(b), (c)(3), and (d); District Rule 4201 (as amended 12/25/92), Section 3 and 4703 (as amended 4/25/02), Sections 5.1.2, 5.2, 6.1, 6.2.1, 6.3.1, 6.3.3, 6.4.1, 6.4.2, 6.4.3, and 6.4.5 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
51. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

ATTACHMENT II
CEMS DATA

5-25-17 email

	2015	2016	Avg	2015 Corrections			2016 Corrections								
Jan	3,618.77	3,124.03		27.30	3.13	10.56	30-Jan	5.96	14.01	08-Jan	5.77	15-Jan	5.40	20-Jan	2.84
Feb	3,545.29	3,511.09		23.77	5.30	2.88	19-Feb	6.44	25.06	04-Feb	5.73	9-Feb	15.99	18-Feb	3.34
Mar	3,976.70	3,745.09		9.09	3.04				12.82	04-Mar	3.41	23-Mar	3.31	31-Mar	6.10
1st Qtr	11,140.76	10,380.21	10,760.49												
Apr	3,974.24	3,699.27		22.39	3.70	3.82	29-Apr	11.00	5.95	06-Apr	5.95				
May	3,854.25	3,242.89		9.34	3.76				6.50	10-May	3.18	25-May	3.32		
Jun	3,701.46	3,638.33		10.95	5.62				15.15	03-Jun	9.90	14-Jun	5.25		
2nd Qtr	11,529.95	10,580.49	11,055.22												
Jul	3,962.26	3,790.09		22.07	17.01				5.07	19-Jul	5.07				
Aug	3,576.48	3,037.41		0.00					22.02	04-Aug	5.49	09-Aug	10.90	10-Aug	5.63
Sep	3,857.58	4,090.00		0.00					11.59	09-Sep	5.68	27-Sep	5.91		
3rd Qtr	11,396.32	10,917.50	11,156.91												
Oct	3,949.70	4,039.46		13.11	7.84				0.00						
Nov	3,813.03	3,693.27		24.72	5.97	6.16	18-Nov	6.31	6.32	02-Nov	6.32				
Dec	3,670.50	3,084.26		6.31	2.97				9.82	01-Dec	6.38	02-Dec	3.44		
4th Qtr	11,433.23	10,816.99	11,125.11												

KON

MS-K100 Monthly Day Report For: Jan 2015

Company: Mid-Set Cogeneration Company
Facility: Mid-Set Cogen
Location: 13705 Shale Road, Fellows, CA

Source: 39.86 MW GE Frame 6 Cogen
Tagname: MS-K100
Permit: PTO#S-2592-1-6

Tag Desc:	Fuel Gas 1d sum	Fuel Heat Rate	GTG Water Inj 1d su	H2O:Fuel Ratio	CO2 %	O2 calc. %	NH3 Slip ppm	NH3 mass slip 1d su	NOx uncorr. ppmv	NOx corr. ppm15%O2	NOx em. factor lb/mmbtu	NOx mass lbm/hr	NOx mass 1d su PL	CO uncorr. ppmv	CO corr. ppm15%O2	CO em. factor lb/mmbtu	CO mass lb/hr	CO mass 1d su PL	Daily Run Time Sum
Units:	Uday sum	mmbtu/hr	Uday su	lbm/lbm	%	%	ppm	lb/d sum	ppmv	ppm15%O2	lb/mmbtu	lbm/hr	lb/d sum	ppmv	ppm15%O2	lb/mmbtu	lb/hr	lb/d sum	hrs/day
Hi Limit:													259.75					259.2	
Lo Limit:																			
01	246.1	425.9	187.9	0.7604	3.7	14.3	12.8	178.6	3.5	3.1	0.0125	5.39	129.35	5.7	5.1	0.0124	5.3	126.1	24.003
02	250.8	434.1	192.7	0.7654	3.7	14.3	14.9	213.1	3.4	3.0	0.0122	5.34	128.26	5.5	4.9	0.0120	5.2	124.5	24.003
03	259.7	449.4	202.5	0.7798	3.7	14.3	16.1	239.8	3.5	3.1	0.0126	5.64	135.44	5.2	4.7	0.0113	5.1	122.4	24.003
04	234.8	406.4	173.9	0.7352	3.7	14.3	13.9	187.2	3.1	2.8	0.0112	4.66	111.84	5.6	5.0	0.0122	4.9	118.3	24.003
05	243.3	421.1	183.4	0.7492	3.7	14.3	14.5	203.1	3.3	3.0	0.0119	5.07	121.74	5.3	4.7	0.0116	4.8	116.1	24.003
06	244.9	423.1	187.4	0.7626	3.7	14.3	14.7	207.1	3.3	3.0	0.0119	5.07	121.68	5.0	4.5	0.0110	4.6	110.9	24.003
07	239.7	413.5	181.9	0.7550	3.7	14.4	14.9	205.1	3.2	2.9	0.0116	4.86	116.59	5.0	4.5	0.0109	4.5	108.1	24.003
08	235.9	406.9	176.0	0.7410	3.7	14.4	14.7	179.3	3.3	3.0	0.0120	5.05	108.00	4.8	4.4	0.0106	4.4	92.6	24.003
09	235.5	406.3	172.0	0.7254	3.7	14.4	14.3	194.0	3.2	2.9	0.0117	4.82	115.60	4.9	4.4	0.0106	4.3	102.9	24.003
10	239.7	413.5	175.7	0.7298	3.7	14.4	14.9	204.9	3.3	3.0	0.0119	4.98	119.46	4.7	4.2	0.0103	4.2	101.6	24.003
11	239.1	410.8	168.9	0.7054	3.7	14.4	14.9	203.6	3.2	2.9	0.0115	4.78	114.61	4.6	4.2	0.0102	4.1	99.6	24.003
12	235.7	406.6	167.7	0.7049	3.7	14.4	14.2	193.2	3.2	2.9	0.0115	4.75	113.97	4.8	4.4	0.0107	4.3	103.2	24.003
13	236.5	408.0	170.3	0.7155	3.7	14.4	14.1	192.3	3.2	2.9	0.0116	4.83	115.82	4.9	4.4	0.0107	4.3	104.2	24.003
14	234.7	404.9	170.2	0.7196	3.7	14.4	13.9	181.6	3.2	2.9	0.0116	4.79	110.16	4.9	4.5	0.0109	4.4	101.6	24.003
15	236.6	408.2	170.4	0.7142	3.7	14.4	13.4	182.6	3.2	2.9	0.0115	4.77	114.52	5.2	4.7	0.0115	4.7	112.0	24.003
16	237.8	410.2	172.3	0.7187	3.7	14.4	13.7	187.1	3.3	3.0	0.0118	4.91	117.92	5.1	4.6	0.0112	4.6	109.4	24.003
17	242.0	417.5	176.4	0.7248	3.7	14.3	14.8	203.4	3.2	2.9	0.0117	4.93	118.21	5.0	4.5	0.0110	4.6	109.5	24.003
18	243.2	419.5	176.4	0.7213	3.7	14.3	14.8	206.8	3.2	2.9	0.0116	4.91	117.93	5.2	4.7	0.0114	4.8	114.4	24.003
19	241.7	417.1	173.0	0.7100	3.7	14.4	14.7	205.4	3.2	2.9	0.0116	4.89	117.43	5.2	4.7	0.0114	4.7	112.9	24.003
20	236.9	408.8	167.7	0.7021	3.7	14.4	14.2	194.0	3.2	2.9	0.0115	4.78	114.81	5.1	4.6	0.0111	4.5	107.4	24.003
21	237.4	409.6	170.4	0.7125	3.7	14.3	13.9	163.1	3.4	3.0	0.0121	5.18	103.51	4.9	4.4	0.0107	4.5	89.9	24.003
22	239.3	412.8	172.5	0.7151	3.7	14.4	13.4	185.2	3.2	2.9	0.0117	4.92	118.03	5.1	4.6	0.0113	4.6	110.5	24.003
23	237.4	409.6	172.2	0.7197	3.7	14.4	13.2	182.0	3.2	2.9	0.0117	4.86	116.72	5.2	4.7	0.0115	4.7	111.8	24.003
24	232.3	400.8	166.0	0.7064	3.7	14.4	12.6	168.7	3.2	2.9	0.0115	4.68	111.85	5.3	4.8	0.0117	4.6	110.8	24.003
25	240.7	415.2	178.9	0.7383	3.7	14.4	13.4	189.3	3.4	3.1	0.0122	5.13	123.22	5.0	4.6	0.0111	4.6	110.1	24.003
26	SB 60.9	SB 280.0	SB 45.0	SB 0.4902	SBC 2.6	SBC 11.9	SBC 8.2	SBC 43.5	SBC 4.8	SBC 7.5	SBC 0.0301	SBC 6.59	SBC 59.33	SCB 6.9	SCB 19.9	SCB 0.0484	SCB 5.0	SBC 44.9	8.475
27	234.4	404.5	168.3	0.7117	3.7	14.4	12.7	173.2	3.4	3.1	0.0125	5.14	123.32	4.5	4.1	0.0101	4.0	96.0	24.003
28	243.0	419.2	174.3	0.7138	3.7	14.4	14.3	200.2	3.4	3.1	0.0123	5.22	125.40	4.2	3.8	0.0093	3.9	92.5	24.003
29	239.5	413.3	171.8	0.7138	3.7	14.4	13.7	189.9	3.4	3.0	0.0121	5.07	121.58	4.2	3.8	0.0092	3.8	90.3	24.003
30	236.3	407.7	170.1	0.7167	3.7	14.4	13.7	172.6	3.4	3.1	0.0122	5.10	112.20	4.1	3.7	0.0090	3.7	81.5	24.003

MS-K100 Monthly Day Report For: Jan 2015

Company: Mid-Set Cogeneration Company
 Facility: Mid-Set Cogen
 Location: 13705 Shale Road, Fellows, CA

Source: 39.86 MW GE Frame 6 Cogen
 Tagname: MS-K100
 Permit: PTO#S-2592-1-6

Tag	Fuel Gas	Heat Rate	GTG Water Inj	Water Inj	Ratio	CO2	NH3 Slip	NH3 mass slip	NOx	NOx em factor	Mix mass	CO	CO em factor	CO mass	CO mass	Daily Run
Desc:	1d sum	min/hr	1d su	1d su	lb/sum	%	ppm	slip 1d su	ppm15%O2	lb/hr	lb/hr	ppm15%O2	lb/hr	1d su PL	1d su PL	Time Sum
Units:	1d sum	min/hr	1d su	1d su	lb/sum	%	ppm	slip 1d su	ppm15%O2	lb/hr	lb/hr	ppm15%O2	lb/hr	1d su PL	1d su PL	Time Sum
Hi Limit:																
Lo Limit:																

31	286.3	407.7	170.4	0.7167	3.7	14.4	14.4	195.5	3.2	2.9	0.0116	4.79	114.97	4.0	3.6	0.0068	3.6	85.5	24.003
AVG	233.9	408.4	171.2	0.7192	3.7	14.3	13.9	187.8	3.3	3.1	0.0124	5.03	115.95	5.0	5.0	0.0121	4.5	103.9	23.602
MAX	290.7	449.4	202.5	0.7798	3.7	14.4	16.1	236.8	4.8	7.8	0.0391	8.99	135.44	6.9	19.9	0.0484	5.3	126.1	26.003
MIN	60.9	280.0	45.0	0.4902	2.5	11.9	8.2	43.5	3.1	2.8	0.0112	4.66	69.33	4.0	3.6	0.0058	3.5	44.9	8.475
SUM	7250.9	12982.0	5306.6			5822.5					55.83		3591.47				139.1	3221.3	723.588

+ 27.30

3618.77

ATTACHMENT III
SOURCE TEST DATA

COMPLIANCE VERIFICATION DATA SUMMARY

Client: Chevron
 Facility: Mid-Set Cogeneration Company
 Test Date: 24-Feb-15

Permit # 3-2592-1-11
 Source: Gas Turbine Stack

PARAMETER		ppm(v)	ppm(v) @ 15% O2	lbs/hr	lbs/MMBtu	lbs/day	g S/100 scf
AMMONIA SLIP (NH ₃)							
Run 1		9.06	8.38	5.52			
2		9.77	8.99	5.89			
3		10.42	9.60	6.26			
Mean		9.75	8.99	5.89			
District Permit Limit			20				
Pass/Fail			Pass				
NO _x as NO ₂ , dry							
Run 1		3.89	3.60	6.40	0.0132	153.6	
2		3.97	3.65	6.47	0.0134	155.3	
3		3.93	3.62	6.38	0.0132	153.1	
Mean		3.93	3.62	6.42	0.0133	154.0	
District Permit Limit			5			259.7	
Pass/Fail			Pass			Pass	
CO, dry							
Run 1		3.62	3.35	3.62	0.0075	87	
2		3.60	3.31	3.67	0.0074	86	
3		3.66	3.37	3.62	0.0075	87	
Mean		3.62	3.34	3.60	0.0074	86	
District Permit Limit			200			259.2	
Pass/Fail			Pass			Pass	
SO ₂ (fuel based)							
Run 1		1.2		0.091	0.0054	2.18	0.068
2		1.2		0.091	0.0054	2.18	0.068
3		1.2		0.091	0.0054	2.18	0.068
Mean		1.2		0.091	0.0054	2.18	0.068
District Permit Limit						14.4	1.00
Pass/Fail						Pass	Pass
ROC (C ₂ -C ₆)							
Run 1		ND<1.00	ND<1.02	ND<0.631	ND<0.0013	ND<15.1	
2		ND<1.00	ND<1.01	ND<0.625	ND<0.0013	ND<15	
3		ND<1.00	ND<1	ND<0.617	ND<0.0013	ND<14.8	
Mean		ND<1.00	ND<1.01	ND<0.624	ND<0.0013	ND<15	
District Permit Limit				1.00		24.0	
Pass/Fail				Pass		Pass	
Fuel "F-Factor": 8,647 (DSCF/MMBTU)							
Comments:							
For Regulatory Agency Use Only:							

COMPLIANCE VERIFICATION DATA SUMMARY

Client: Chevron
 Facility: Mid-Set Cogeneration Facility
 Test Date: 23-Feb-16

Permit # S-2592-1-11
 Source: Gas Turbine Stack

PARAMETER	ppm(v)	ppm(v) @ 15% O2	lbs/hr	lbs/MMBtu	lbs/day	g S/100 scf
AMMONIA SLIP (NH₃)						
Run 1	10.53	9.58				
2	10.29	9.52				
3	10.38	9.58				
Mean	10.39	9.55				
District Permit Limit		20				
Pass/Fail		Pass				
NO_x as NO₂, dry						
Run 1	3.70	3.50	5.81	0.0128	139.4	
2	3.60	3.40	5.62	0.0124	134.0	
3	3.73	3.45	5.66	0.0126	135.9	
Mean	3.70	3.45	5.70	0.0126	136.7	
District Permit Limit		5			259.7	
Pass/Fail		Pass			Pass	
CO, dry						
Run 1	1.48	1.38	1.39	0.0031	33	
2	2.07	1.91	1.92	0.0043	48	
3	2.08	1.93	1.92	0.0043	48	
Mean	1.87	1.74	1.75	0.0039	42	
District Permit Limit		200			259.2	
Pass/Fail		Pass			Pass	
SO₂ (fuel based)						
Run 1	ND< 1.00		ND< 0.039	ND< 0.0047	ND< 0.94	ND< 0.058
2	ND< 1.00		ND< 0.039	ND< 0.0047	ND< 0.94	ND< 0.058
3	ND< 1.00		ND< 0.039	ND< 0.0047	ND< 0.94	ND< 0.058
Mean	ND< 1.00		ND< 0.039	ND< 0.0047	ND< 0.94	ND< 0.058
District Permit Limit					14.4	1.00
Pass/Fail					Pass	Pass
ROC (C₂-C₆)						
Run 1	ND<1.00	ND<1.05	ND<0.607	ND<0.0013	ND<14.6	
2	ND<1.00	ND<1.02	ND<0.686	ND<0.0013	ND<14	
3	ND<1.00	ND<1.02	ND<0.682	ND<0.0013	ND<14	
Mean	ND<1.00	ND<1.03	ND<0.691	ND<0.0013	ND<14.2	
District Permit Limit			1.00		24.0	
Pass/Fail			Pass		Pass	
Fuel "F-Factor": 8,645 (DSCF/MMBTU)						
Comments:						
For Regulatory Agency Use Only:						

SUMMARY OF SOURCE TEST RESULTS FOR KCAPCD

Company: Mid-Set Cogeneration Company
 Test Date: April 27, 1989

APCD # 4003597D
 Unit: Gas Turbine
 (Natural Gas)

EMISSIONS

	gr/SCF	ppm(v/v)	ppm(v/v) @15%O2	lb/hr	lb/MMBTU	Other
Particulate	0.0012			2.37		
	0.0012			2.33		
	<u>0.0013</u>			<u>2.59</u>		
	Mean	0.0012		2.43		
Sulfate	<0.00003			<0.058		
	<0.00003			<0.063		
	<u><0.00003</u>			<u><0.059</u>		
	Mean	<0.00003		<0.060		
SO2 (wet)		<0.04	<0.04	<0.10		
		<0.05	<0.04	<0.12		
		<u><0.04</u>	<u><0.04</u>	<u><0.11</u>		
	Mean	<0.04	<0.04	<0.11		
NOX as NO2 (dry)		9.2	8.4	15.25	0.029	
		8.9	7.9	14.40	0.029	
		<u>9.1</u>	<u>8.1</u>	<u>14.70</u>	<u>0.029</u>	
	Mean	9.1	8.1	14.78	0.029	
HC		<1.0	<1.0	<0.57	<0.001	
		<1.0	<1.0	<0.57	<0.001	
		<u><1.0</u>	<u><1.0</u>	<u><0.57</u>	<u><0.001</u>	
	Mean:	<1.0	<1.0	<0.57	<0.001	
CO		6.7	6.1	6.76	0.013	
		6.8	6.1	6.70	0.013	
		<u>6.5</u>	<u>5.8</u>	<u>6.39</u>	<u>0.013</u>	
	Mean:	6.7	6.0	6.62	0.013	
NH3 Slip from SCR:		1.1	<1.0			
		2.1	1.9			
		<u>1.6</u>	<u>1.5</u>			
	Mean:	1.6	1.5			

For Kern County Use Only:

Standard Conditions: 29.92 inches Hg & 60 deg F

SUMMARY OF SOURCE TEST RESULTS FOR EPA

Company: Mid-Set Cogeneration Co. Permit: None
 Unit Number: Gas Turbine Location: Gas Turbine
 (Natural Gas)

Pollutant	Test Method	Test Date	Emissions	
			Test Results	Limit
Particulates	EPAM5	04/27/89	2.47 lb/hr	
Sulfates	EPAM8	04/27/89	<0.07 lb/hr	
Sulfur Dioxide	EPAM6	04/27/89	<0.11 lb/hr	
NOX as NO2	EPAM7E	04/27/89	15.00 lb/hr 8.2 PPM@15%O2	
Carbon Monoxide	EPAM10	04/27/89	6.80 lb/hr 6.0 PPM@15%O2	
Hydrocarbons (as Methane)	EPAM18	04/5/89	0.58 lb/hr	
Sulfur Content			None Detected	
Fuel Usage:			6.4 lbs/sec	
Water Usage:			5.2 lbs/sec	
Water to Fuel Ratio:			0.81	
Ammonia Slip from SCR		04/5/89	1.5 ppm@15%O2	

Emissions reported using standard conditions of:

Barometric Pressure: 29.92 (" HG)
 Temperature: 68 (deg F)

Prepared By: Dennis Becvar
 Title: Manager of Field Operations
 Date: May 23, 1989

**ATTACHMENT IV
FUEL USE DATA**

Mid Set Cogen Fuel Usage (MMBtu)														
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total	2-yr avg.
2012	85,172	263,225	333,520	331,207	320,764	336,901	324,950	339,606	328,989	332,734	290,488	343,083	3,630,639	
2013	353,204	321,585	334,722	337,278	280,043	334,267	338,207	346,350	316,436	324,493	334,946	306,680	3,928,211	3,779,425
2014	342,222	319,675	329,926	324,036	318,846	329,982	337,637	338,428	314,545	278,897	193,671	310,215	3,738,080	3,833,146
2015	332,587	305,056	325,587	327,004	317,139	310,256	338,492	303,531	331,206	337,866	321,298	311,849	3,861,871	3,799,976
2016	266,448	308,306	320,604	324,534	280,775	331,201	339,919	243,393	326,946	331,956	312,938	261,185	3,648,205	3,755,038

5-yr avg. 3,761,401

ATTACHMENT V
DRAFT ERC CERTIFICATES

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
DS-4860-4

ISSUED TO: MID-SET COGENERATION COMPANY

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 13705 SHALE RD
FELLOWS, CA

For PM10 Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
3,847 lbs	3,914 lbs	3,899 lbs	3,885 lbs

Portion of above PM10 Reductions that is PM2.5:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
100.0%	100.0%	100.0%	100.0%
3,847 lbs	3,914 lbs	3,899 lbs	3,885 lbs

Method Of Reduction

Shutdown of Entire Stationary Source

Shutdown of Emissions Units

Other

Shutdown of cogeneration facility

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
DS-4860-5

ISSUED TO: MID-SET COGENERATION COMPANY

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 13705 SHALE RD
FELLOWS, CA

For SOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
92 lbs	94 lbs	94 lbs	93 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shutdown of cogeneration facility

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
S-4860-2

ISSUED TO: MID-SET COGENERATION COMPANY
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: 13705 SHALE RD
FELLOWS, CA

For NOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
9,685 lbs	9,949 lbs	10,041 lbs	10,012 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shutdown of cogeneration facility

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director /APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
DS-4860-3

ISSUED TO: MID-SET COGENERATION COMPANY
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: 13705 SHALE RD
FELLOWS, CA

For CO Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
5,478 lbs	1,937 lbs	4,448 lbs	5,415 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Shutdown of cogeneration facility

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services