

**DOCKETED**

<b>Docket Number:</b>	85-AFC-03C
<b>Project Title:</b>	Compliance - Application for Certification for Midway-Sunset Cogeneration Project
<b>TN #:</b>	240050
<b>Document Title:</b>	San Joaquin Valley Air Pollution Control District - Order Granting Short Variance
<b>Description:</b>	San Joaquin Valley Air Pollution Control District - Order Granting Short Variance
<b>Filer:</b>	Mary Dyas
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	10/12/2021 11:37:21 AM
<b>Docketed Date:</b>	10/12/2021

BEFORE THE HEARING BOARD  
OF THE  
SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT  
SOUTHERN REGION  
STATE OF CALIFORNIA

<b>In the matter of:</b>	)	<b>DOCKET NO. S-15-05S</b>
Aera Energy LLC / Midway Sunset	)	
Cogeneration Company	)	
P O Box 457	)	
Fellows, CA 93224	)	
	)	<b>ORDER GRANTING</b>
	)	<b>A SHORT VARIANCE</b>
<b>For a variance from:</b>	)	
2010 – <i>Permits Required</i>	)	
2070 – <i>Standards for Granting Applications</i>	)	
2201 – <i>New and Modified Stationary Source</i>	)	
<i>Review Rule</i>	)	
2520 – <i>Federally Mandated Operating Permits</i>	)	
4703 – <i>Stationary Gas Turbines</i>	)	
	)	
<b>District Permit Numbers:</b>	)	<b>Granted on:</b> February 11, 2015
S-1135-0-3 & -224-27	)	
	)	<b>Effective from:</b> April 1, 2015
<b>EPA Airs Number:</b>	)	
06-029-S1135	)	<b>Effective to:</b> June 30, 2015

On January 23, 2015, Midway Sunset Cogeneration Company (MSCC) filed with the Southern Region Hearing Board a petition for a short variance. An interim variance was not required. MSCC requested that the Hearing Board grant a short variance from San Joaquin Valley Unified Air Pollution Control District (District) Rules 2010, 2070, 2201, 2520, and 4703.

On February 11, 2015, a hearing on the petition for short variance was held. Mr. Doug McCormick and Mr. Ray Smith represented MSCC, while Mr. Chris Kalashian, Air Quality Specialist II represented the District. All persons, including the public, were given the opportunity to give testimony or make comment.

The Hearing Board declared the hearing closed after receiving testimony and took the matter under submission for the decision. The Hearing Board made the following findings of fact.

**LOCATION AND EQUIPMENT**

1. MSCC is a combined heat and power facility located at 3466 West Crocker Springs Road, Fellows, CA, 93224.
2. The subject equipment consists of three 78.2 MW combustion turbine generators with dry low NO<sub>x</sub> combustors, selective catalytic reduction (SCR) systems, and unfired heat recovery steam generators. The subject of the variance is turbine Unit A.
3. The operation of the subject equipment is authorized by duly issued District permits.

## BACKGROUND

Aera Energy LLC partially owns MSCC, which is a combined heat and power facility supplying steam to adjacent oil fields for enhanced oil recovery and generating power for the California electrical grid as well as Aera's operations. They have three turbines that operate full time at the facility.

The subject of this variance request is Unit A. Unit A is in the process of installing the Dry Low NO<sub>x</sub> 1+ Turndown Enhance combustion system (DLN 1+) technology from General Electric (GE), the manufacturer of the turbines. The combustion system includes new combustion hardware in the turbine, a new emission sample probe in the exhaust duct, a new electrically operated gas valve, new sensors, and revised software for the Mark VI control system. This new technology will allow the turbine to meet the current emissions standards without the need for SCR. SCR works by injecting ammonia into the exhaust stream to reduce NO<sub>x</sub> emissions. However, not all the ammonia reacts and some is sent out of the stack and is referred to as "ammonia slip." Eliminating ammonia would prevent ammonia slip and would also not require MSCC to transport and store it at their location. Depending on the type of ammonia that is used, urea, aqueous, or anhydrous; ammonia can be classified as a hazardous material and pose safety concerns. Another value in not using SCR is that the catalysts are classified as hazardous material when they have reached the end of their useful life. GE is proposing a six day commissioning period to allow for testing and tuning of the new combustors.

## RULE REQUIREMENTS

1. The equipment subject to this variance is regulated by the following District Rules:
  - A. 2010 – *Permits Required*
  - B. 2070 – *Standards for Granting Applications*
  - C. 2201 – *New and Modified Stationary Source*
  - D. 2520 – *Federally Mandated Operating Permits*
  - E. 4703 – *Stationary Gas Turbines*
2. District Rules 2010, 2070 and 2520 require that the subject equipment be operated in compliance with all conditions of the applicable permits. District Rules 2201 and 4703 require that the subject equipment operate within established emissions limits.

## FINDINGS OF FACT

Pursuant to California Health & Safety Code § 42352, the following findings have been made:

1. ***That the petitioner for a variance is, or will be, in violation of Section 41701 or of any rule, regulation, or order of the District.***

The Hearing Board finds that the operation of Unit A with excess NO<sub>x</sub> emissions will result in a violation of applicable requirements of District rules 2010, 2070, 2201, 2520, and 4703, in addition to the applicable conditions of the subject permits.

2. ***That, due to conditions beyond the reasonable control of the petitioner, requiring compliance would result in either (1) an arbitrary or unreasonable taking of property, or (2) the practical closing and elimination of a lawful business.***

The Hearing Board finds that the commissioning of the modified combustion system is required by GE to ensure that it is properly installed and tuned for optimal operation. Failure to follow GE's tuning and commissioning procedures would be a failure to define the safe operational emission boundary for the system, may result in unsafe operations, damage to the turbine, failure to meet the emission guarantees, and loss of contract. In order to enjoy the new technology and its corresponding benefits, MSCC must commission it. District rules and regulations do not allow a commissioning period. Requiring compliance would not allow MSCC to operate Unit A in the future. That would be an unreasonable taking of property.

3. ***That the closing or taking would be without a corresponding benefit in reducing air contaminants.***

The Hearing Board finds that a closing or taking would be without a corresponding benefit in reducing air contaminants because a closing or taking would result in a disruption of contractual obligations to provide electrical power to both Aera and PG&E. MSCC would suffer a revenue loss of \$9,500 per hour and the parent company, Aera, would lose \$65,000 per hour approximate. In addition, the surrounding oil fields would lose electrical power and an incalculable amount of air contaminants would be released when the electrically powered vapor control systems go down. A closing or taking would also prevent this new state of the art combustion technology from coming online. This combustion system will ultimately eliminate emissions of ammonia, which will be a benefit in reducing air contaminants.

4. ***That the applicant for the variance has given consideration to curtailing operations of the source in lieu of obtaining a variance.***

The Hearing Board finds that MSCC has given consideration to curtailing operations and will curtail operations by shutting down one of the three turbines. However, the testing that is proposed requires Unit A to be operating.

5. ***During the period the variance is in effect, that the applicant will reduce excess emissions to the maximum extent feasible.***

The Hearing Board finds that MSCC will shut down one of the three turbines during the variance period. Unit A will be shut down intermittently between various testing cycles. These shutdowns will reduce excess emissions.

6. ***During the period the variance is in effect, that the applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the District and report these emissions levels to the District pursuant to a schedule established by the District.***

The Hearing Board finds that MSCC will continue to operate their continuous emissions monitoring system (CEMS) throughout the variance period to monitor emissions. This data is constantly reported to the District through an electronic data polling system. In addition, MSCC will quantify the amount of excess emissions, using actual data from the CEMS in conjunction with fuel usage records, and will report those to the District at the conclusion of the variance.

#### **GENERAL COMMENTS**

The Hearing Board also finds that a nuisance as defined in District Rule 4102 is not expected to occur as a result of this variance. Nor would continued operations likely create an immediate threat or hazard to public health or safety.

It should be noted that the US Environmental Protection Agency (EPA), which monitors major sources, might not recognize this variance. MSCC should be aware that the EPA could take enforcement action on this matter if it deems such action is appropriate.

#### **CONCLUSIONS AND ORDER**

NOW, THEREFORE, the SOUTHERN REGION HEARING BOARD ORDERS that a short variance be granted to MSCC, subject to the following conditions:

1. The variance shall be effective for a non-consecutive six-day period to occur sometime between April 1, 2015, and June 30, 2015, inclusive, or until MSCC has commissioned turbine Unit B, whichever occurs first.
2. Variance relief shall only be granted from the requirements of District Rules 2010, 2070, 2201, 2520, and 4703 in addition to the conditions of the following permits:
  - A. Condition 5 of S-1135-0-3, and
  - B. Conditions 29, 30, 46, 70, and 80 of S-1135-224-27.
3. The variance shall allow excess NO<sub>x</sub> emissions from Unit A while MSCC commissions the new DLN 1+ Turndown Enhance combustion system.
4. Excess NO<sub>x</sub> emissions shall not exceed 412 pounds over the variance period.
5. Other than NO<sub>x</sub>, there shall not be any other excess emissions over the variance period.

A Federal Title V deviation report shall be submitted to the District within 10 days each time a Federal Title V permit condition is violated. It should be noted that multiple deviation reports may need to be submitted during this variance period.

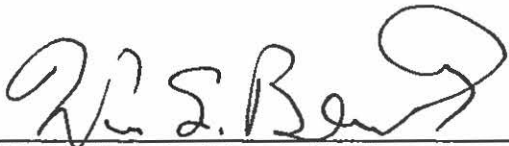
7. Should the facility experience operational conditions likely to cause a public nuisance, MSCC shall cease the operations causing the problems and take all necessary actions to abate the problem immediately.
8. By July 15, 2015, or no later than 15 calendar days after completing the commissioning, whichever occurs first, MSCC shall submit to the District a summary report. If the report due date should fall on a date the District is closed, it shall be due the next day the District is open. The report shall include the following:
  - A. A detailed summary of all work and activities conducted during the variance period;
  - B. The date(s), time(s), and total duration that Unit A was undergoing commissioning;
  - C. A revised calculation of the excess emissions during the variance period; and
  - D. The required certification of truth, accuracy, and completeness, signed by the designated responsible official of the partnership, as required by Sections 9.13.1 and 10.0 of District Rule 2520 – Federally Mandated Operating Permits.
9. All notifications and reports shall be submitted to the attention of:

Mr. Dave Baldwin, Supervising AQI  
SJVUAPCD Compliance Department  
34946 Flyover Court  
Bakersfield, CA 93308  
Telephone # (661) 392-5522  
Email: [dave.baldwin@valleyair.org](mailto:dave.baldwin@valleyair.org)
10. Failure to comply with any condition of this variance may render it null and void.

**MOTION:** Haddock **SECOND:** Padilla

**Ayes:** Bland, Stovall, Haddock, Padilla, Dunn  
**Noes:** None  
**Abstained:** None  
**Recused:** None  
**Absent:** None

**THE FOREGOING DECISION IS APPROVED:**

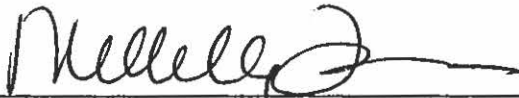


Mr. William L. Bland, Chair  
Hearing Board – Southern Region  
San Joaquin Valley Unified APCD

3/11/15

Date

**ATTEST:**



Ms. Michelle Franco, Deputy Clerk to the Boards

3/11/15

Date