BEFORE THE HEARING BOARD OF THE VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT STATE OF CALIFORNIA

In the matter of the application of:

EF Oxnard LLC 550 Diaz Avenue Oxnard, CA 93030

For a variance from:

Rule 29.C, Conditions on Permits – Violation of Condition 6

APCD Permit to Operate Number 00214

Hearing Board Case No. 895

ORDER GRANTING INTERIM VARIANCE

Granted: August 29, 2024

Effective to: November 27, 2024

On August 20, 2024, PETITIONER EF OXNARD LLC (EF Oxnard), filed with this Hearing Board petitions for Interim and Regular Variances pursuant to California Health and Safety Code Section 42350(a). The petitioner requested that the Hearing Board grant an interim variance from Air Pollution Control District (hereinafter "APCD" or the "District") Rule 29.C, Conditions on Permits – Violation of Permit to Operate (PTO) Number 00214, Condition 6, ammonia emission limit.

Petitioner is requesting authorization to continue operating the facility using an existing permitted turbine and Selective Catalytic Reactor (SCR) and emission control devices: 449.6 MMBTU/hr GE LM-6000 PC SPRINT Turbine, Serial No. 191-668, natural gas fired, 48 MW generator, equipped with HRSG; STIG (steam injection for NOx control); Haldor Topsoe SCR system w/aqueous ammonia for NOx control; Emerachem oxidation catalyst for ROC and CO control; and Continuous Emission Monitoring system (CEM), with excess ammonia emissions, until a regular variance hearing can be held on or before November 27, 2024. Notice of the application and hearing for interim variances is not required to be published in the newspaper. However, a regular variance hearing must be held within 90 days of the interim hearing date. Reasonable notice was given to the Hearing Board Members, Petitioner, and APCD.

On August 29, 2024, a hearing on the petition for interim variance was held. The Ventura County Air Pollution Control District (District) was represented by Mr. Keith Macias, Compliance Manager. The Petitioner was represented by Mr. David Nelson, Plant Manager, EF Oxnard. All persons, including the public, were given the opportunity to give testimony or make comments.

The Hearing Board heard testimony on the "good cause" issue set forth in Section 42351(b) of the California Health and Safety Code. Section 42351(b) states in part: "An interim variance may be granted for good causes stated in the order granting such a variance."

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

EQUIPMENT AND LOCATION

- 1. The facility is located in an industrial area of Oxnard in Ventura County, California.
- 2. The subject equipment consists of an existing permitted turbine and Selective Catalytic Reactor (SCR) and emission control devices that include 449.6 MMBTU/hr GE LM-6000 PC SPRINT Turbine- Serial No. 191-668, natural gas fired, 48 MW generator, equipped with HRSG; STIG (steam injection for NOx control); Haldor Topsoe SCR system w/aqueous ammonia for NOx control; Emerachem oxidation catalyst for ROC and CO control; and CEM.

BACKGROUND

EF Oxnard operates an energy producing facility in an industrial area of Oxnard. The Petitioner is in the business of providing energy to the electric grid when needed. The facility converted to a peaking facility in 2020 and only operates when California Independent System Operator (CAISO) determines if power from EF Oxnard is more efficient or if CAISO requires the facility for stabilization of the electric grid. The gas turbine combusts natural gas to generate electrical power to provide safe and efficient power to the California electrical grid. The exhaust of the gas turbine is passed through a heat recovery steam generator to create steam and cool the exhaust. A Carbon Monoxide (CO) catalyst and SCR are in the exhaust path to reduce CO, Reactive Organic Compounds (ROC), and oxides of nitrogen (NOX) emissions. Steam from the Heat Recovery Steam Generator (HRSG is used) to supply NOX reduction steam to the gas turbine. Ammonia is injected into the exhaust upstream of the SCR to convert NOX into nitrogen and water.

On June 11, 2024, annual source testing was conducted, the ammonia concentration and mass emission results were greater than the permitted limit (PTO number 00214). EF

Oxnard is complying with all other emission limits including annual ammonia emissions limits.

The SCR interblock gaps seals were temporarily repaired the week of 6/17. A subsequent emission test on 6/28 indicated little to no improvement. The SCR catalyst was cleaned the week of 7/23. Third-party consultants have sampled the catalyst for life-remaining, waiting on final report. EF Oxnard is in the process of scheduling a restack of SCR catalyst to repair the seals and deep clean the catalyst.

On July 23, 2024, Petitioner reported a breakdown to the District due to the emission test exceedance for ammonia. Some repairs to the SCR have been made, however, the cause of the ammonia slip emissions are still under investigation and remediation.

On July 24, 2024, a Notice of Violation (NOV), NOV 24776, was issued to EF Oxnard for violation of APCD Rule 29.C by operating the GE LM6000 Turbine that exceeded the permitted ammonia (NH3) emission standard of 5.0 ppm @ 15% O2 contained in Title V Permit to Operate No. 00214 Section No. 6, Attachment STRMLN214-NOX, CO, NH3-rev191 Condition No. 1.d.

The issue cannot be resolved without operating data and experience to help identify the cause. The facility is limiting excess emissions by limiting troubleshooting operations. Some repairs have been made to limit ammonia slip, EF Oxnard has scheduled an additional emissions test on August 27, 2024, to determine if repairs have helped and the next course of remedial actions.

The ammonia slip is not sampled continuously with the continuous emission monitoring system thus requires an air testing firm. As a result, any maintenance performed requires scheduling a testing firm with varying availability of the testers. Once the sample is pulled, the results may take up to 2 weeks to be analyzed.

On July 31, 2024, EF Oxnard, filed with this Hearing Board a petition for issuance of an Emergency Variance. EF Oxnard requested that the Hearing Board grant an emergency variance from Air Pollution Control District, Rule 29.C, PTO Number 00214 (PTO No. 214), Condition 6, ammonia emission limits. The Emergency Variance was granted and went into effect for 30 days.

Curtailing EF Oxnard operations would take a critical resource of the California Independent System Operator (CAISO) controlled grid. While there are currently hourly emission limit issues, EF Oxnard is still an efficient and low emissions resource and curtailing its operation is likely to result in less efficient or higher emission resources operating in its place. Additionally, not being able to operate would hamper the ability to troubleshoot the issue and resolve the root cause of the excess emissions. The inability to

operate would result in contractual penalties of approximately \$20,000 per day. With a net income of approximately \$1,800,000 annually, non-operation would result in severe financial hardship.

Closing the facility would result in severe financial hardship to EF Oxnard and loss of business revenue by other business used by EF Oxnard, including loss of employees and tax revenue generated in the Oxnard area. In addition, loss of an efficient power source that is needed to support efficient energy use in the California electrical grid.

In order to come into compliance with the ammonia emission limits the Petitioner will take action by repairing and testing the SCR system to determine if further repair or replacement of the SCR catalyst is needed. Petitioner estimates this will take about 2 to 3 months if the SCR catalyst needs to be repaired, and up to a year if the SCR catalyst needs to be replaced. In the meantime, EF Oxnard only operates when CAISO determines if power from EF Oxnard is more efficient or if CAISO requires the facility for stabilization of the electric grid.

Petitioner requests an interim variance to allow continued operation when called upon and to allow the repairs to the SCR system to bring the facility back into compliance with District Rules and Permit Conditions.

RULE REQUIREMENTS AND VIOLATIONS

The operations at the facility are subject to California statutes and District Rules and Regulations. The following District Rule and Permit Condition is applicable to this Interim Variance:

- 1. District Rule 29.C.2 Violations of Permit Conditions Any violation of the conditions of an Authority to Construct or a Permit to Operate issued pursuant to these Rules shall constitute a violation of these Rules. Any such violation is subject to the penalties provided for in Part 4 of Division 26 of the California Health and Safety Code.
- 2. PTO No. 214, Condition No. 6 states Gas Turbine Emission Limitations: "Ammonia (NH₃) emissions shall not exceed 5.0 ppmvd, referenced at fifteen (15) percent oxygen." Compliance with the emission concentration limits shall be demonstrated by annual source testing.
- 3. Annual source testing resulted in violation of the ammonia emission limits in Permit Condition No. 6. If EF Oxnard continues to operate the Oxnard facility, ammonia emissions will slip through the SCR catalyst and these emissions must be controlled.

GOOD CAUSE

On July 23, 2024, EF Oxnard determined that the breakdown to the SCR emissions control system will cause the Petitioner to exceed the ammonia limit at the EF Oxnard facility. The SCR emission test failure that resulted in exceedance was unexpected and out of their control and considered a breakdown condition.

The condition is the result of an equipment breakdown. EF Oxnard reported the breakdown event on July 23, 2024, and the petitioner was not able to repair the breakdown event within 24 hours. Therefore this unexpected breakdown event meets the requirements to support "good cause" and constitutes a breakdown as defined in Rule 32. All efforts will be made to repair the SCR system as expeditiously as possible and to ensure any excess emissions are reduced to the maximum extent feasible.

Ammonia is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), the emission of 12.16 PPM is well below California Occupational Safety and Health Administration (Cal-OSHA) Permissible Exposure Limit (PEL) of 25 PPM 8-hour time weighted average, the Short-Term Exposure Limit (STEL) of 35 PPM 15-minute exposure and the Immediately Dangerous to Life and Health (IDLH) of 300 PPM.

The continued operation of the gas turbine and SCR emission reduction system at the EF Oxnard facility during the variance is not likely to create an acute threat or hazard to public health or safety.

An interim variance is required for EF Oxnard maintain its existing operations in CASIO system to ensure that EF Oxnard may meet its financial obligations, remain in business, and provide efficient energy to the electrical grid. If EF Oxnard is not granted an interim variance, it will cause approximately \$20,000 in daily economic loss for EF Oxnard and its peak energy will not be available to the California energy grid. The overall cost of shutdown would result in a severe economic hardship and loss of net income of approximately \$1.8 million annually for EF Oxnard.

EF Oxnard will continue to repair the SCR system and quantify any excess emissions. EF Oxnard will submit weekly progress reports to the District. EF Oxnard provides a critical resource on a constrained section of the electric grid. The portion of the grid west of Moorpark dead-ends in the Santa Barbara area. If there is excessive loading in the area or other there are other generator outages in this section, there is an increased possibility of brownouts or blackouts. EF Oxnard Peaker plant facility provides an efficient energy source to keep electric rates lower, especially during the critical summer season.

The EF Oxnard Peaker plant facility is located in an industrial area of Oxnard in Ventura County, however there are some residences also located in the area. The closest residence to the EF Oxnard included in this variance has been reported to be 0.1 miles away, the closest school is 0.6 miles away, and the closest daycare facility is 0.5 miles away. A nuisance as specified in Rule 51 is not expected to occur during a Peaker plant event. Continued operation is not likely to create an immediate threat or hazard to public health or safety.

FINDINGS OF FACT

The Hearing Board found that there was good cause to grant an interim variance because pursuant to Health and Safety Code Section 42352, and District Rule 123, "Findings, Variance or Abatement Order," the following findings have been made:

- 1. The petitioner is, or will be, in violation of Health and Safety Code Section 41701 or District Rule 29.C.
- 2. The violation is due to conditions beyond the reasonable control of the petitioner.
- 3. Requiring immediate compliance would result in either an arbitrary or unreasonable taking of property or the practical closing of a lawful business.
- 4. The closing or taking would be without a corresponding benefit in reducing air contaminants.
- 5. Petitioner has given consideration to curtailing operations in lieu of obtaining a variance.
- 6. Petitioner will reduce excess emissions to the maximum extent feasible during the variance period.
- 7. Petitioner will monitor or otherwise quantify emission levels from the equipment during the variance period, if requested to do so by the District, and report these emission levels to the District pursuant to a schedule established by the District.
- 8. A nuisance as specified in Rule 51 is not expected to occur.
- 9. Continued operation is not likely to create an immediate threat or hazard to public health or safety.

Further evidence shall be provided by the petitioner regarding items 2 through 9 at the noticed Regular Variance Hearing that will be scheduled on or before November 27, 2024.

CONCLUSIONS AND ORDER

NOW, THEREFORE, the HEARING BOARD FINDS AND CONCLUDES THAT GOOD CAUSE HAS BEEN SHOWN AND ORDERS that EF Oxnard is granted an Interim Variance from Rule 29, Conditions on Permits, Section C, Violation of Permit Condition 6 for its permitted turbine and SCR emission control device at the EF Oxnard Peaker Plant. This order will remain in effect until the Hearing Board holds a regular variance hearing and either grants or denies the matter in Petition Number 896, or until compliance is demonstrated, whichever is sooner. A regular variance hearing will be scheduled on or before November 27, 2024. This variance is subject to the following conditions:

THE PETITIONER SHALL:

A. <u>Increments of Progress</u>

- 1. Provide documentation demonstrating that contractor(s) have been retained to complete repairs to the pipeline.
- 2. Provide an estimated timeline of events required to complete the SCR repairs.
- 3. Provide weekly reports to the District submitted each Friday until compliance is achieved or November 27, 2024, whichever comes first. Reports shall include: progress of the SCR system repair and an updated estimate of when the repairs will be complete. The first report is due by Friday, September 6, 2024.
- 4. Continue monitoring the ammonia emissions via CEM if an operating event occurs.
- 5. Curtail ammonia emissions to the maximum extent feasible. Include these details in the weekly reports.
- 6. Demonstrate compliance or attend a regular variance hearing on or before November 27, 2024.

B. Reporting Requirements

- 1. EF Oxnard will monitor ammonia emissions during the variance and report this data to the District by November 27, 2024. Excess emissions and excess emission fees will be based on the data submitted in this report.
- 2. All submittals and notifications to the District pursuant to this Variance Order shall be made to Mr. Keith A. Macias, Ventura County Air Pollution Control District, 4567 Telephone Road, 2nd Floor, Ventura, CA 93003.

C. General

- 1. Except as provided in this order, compliance with this Order shall not relieve Petitioner from liability under the District's Rules for any violation, thereof, and shall not preclude the District from pursuing remedies in accordance with the Health and Safety Code in the event of any violation.
- 2. The failure to abide by any condition of this decision and Order shall subject EF Oxnard to penalties set forth in Health and Safety Code Section 42402.
- 3. Each day during which a violation occurs is a separate offense.
- 4. Petitioner shall retain the obligation to comply with all other local, state and federal regulations not specifically referenced in this Variance Order.
- 5. Petitioner shall pay the Hearing Board fees specified in District Rule 41.

Victor Kamhi

Dr. Lewis Kanter, M.D.

Kathleen Paulson, P.E.

Michael D. Stubblefield

Valarie Grossman, Esq.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

VALARIE GROSSMAN, HEARING BOARD CHAIR

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DATE