BEFORE THE HEARING BOARD OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In the Matter of WALNUT CREEK ENERGY LLC, [Facility I.D. No. 146536] Section 42350 of the California Health and Safety Code	**Case No. 6230-2** **[PROPOSED] ORDER GRANTING A REGULAR VARIANCE** Hearing Date: May 21, 2024

FINDINGS AND DECISION OF THE HEARING BOARD

This petition for a regular variance was heard on the Hearing Board's Consent Calendar on **May 21, 2024,** in accordance with the provisions of California Health and Safety Code Section 40826 and District Rule 510. The following members of the Hearing Board were present: Cynthia Verdugo-Peralta, Chair; Robert Pearman, Vice Chair; Jerry P. Abraham, MD MPH CMQ; Micah Ali; and Mohan Balagopalan. Petitioner, Walnut Creek Energy, LLC (hereinafter "Walnut Creek" or "Petitioner"), represented by Gregory Wolffe, Yorke Engineering, did not appear. Respondent, Executive Officer, represented by Nicholas Dwyer, Senior Deputy District Counsel, did not appear. The public was given the opportunity to testify. The parties filed with the Hearing Board a Stipulation to Place Matter on Consent Calendar, the Declaration of George Piantka, the Declaration of Chris Perri, and the [Proposed] Findings and Decision of the Hearing Board. The Declaration of George Piantka was received as evidence from Petitioner and the Declaration of Chris Perri was received as evidence from Respondent. The Proposed Findings and Decision of the Hearing Board was received as an exhibit, and the case was submitted. The Hearing Board finds and decides as follows:

Nature of Business and Location of Facility

The Walnut Creek Energy Park facility is located at 911 Bixby Dr, City of Industry, California, is a nominally rated 500-megawatt natural gas-fired, simple-cycle electricity generation facility consisting of five General Electric LMS100 combustion turbine generators and associated equipment.

Equipment and Permit to Construct/Operate

The equipment subject to this petition are the five GE LMS100 simple cycle gas turbines Units 1-5 (Device Nos. D1, D7, D13, D19, D25). The equipment are operated pursuant to Facility Permit to Operate (P/O) No. 146536.

SUMMARY

Petitioner will be in violation of District Rules 2005, 2004(f)(1), 202(b), and 3002(c) and intends to achieve compliance by permitting an increased nitrogen oxides (NOx) start-up limit in Permit Condition A195.7. This regular variance is to provide relief from NOx start-up limits during the period from when the condition becomes effective to the date that the permitted increase is granted from the South Coast AQMD.

FINDINGS OF FACT

Following are the facts and conclusions supporting the findings set forth in Health and Safety Code section 42352 necessary to grant the variance. The Executive Officer did not oppose the granting of the variance.

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

1. Petitioner will be in violation of District Rules 2005, 2004(f)(1), 202(b), and 3002(c), which requires compliance with permit conditions, as petitioner will be out of compliance with Permit Conditions A195.7 until the NOx start-up limit can be modified.

b(1). Non-compliance with District Rule(s) is due to conditions beyond the reasonable control of the petitioner.

1. Petitioner cannot meet new Permit Condition A195.7 in the Permit to Construct and Temporary Permit to Operate (PTC/TPTO) received on January 31, 2024, that apply to Units 1-5 (Device Nos. D1, D7, D13, D19, D25). Permit Conditions A195.7 include, for the first time, new NOx mass emission limits for start-up and shutdown operations that take effect 90 days after the completion of recommissioning for each unit following replacement of the selective catalytic reduction (SCR) catalyst. Mass emission start-up limit for NOx, as stated in A195.7, do not represent a rule compliance requirement or Best Available Control Technology (BACT) standard. Rule 429.2 (d)(7) states: "An owner or operator of an electric generating unit shall take all reasonable and prudent steps to minimize emissions during startup and shutdown." The South Coast AQMD regularly imposes start-up limits in permits, and limits were added to the Title V permit in the January 31, 2024 PTC/TPTO to enforce NOx emission estimates for start-up operations assumed by the South Coast AQMD engineering staff during initial facility permitting and used for emission calculation purposes.

Following the start-up of Unit 2 following the installation of replacement Selective Catalytic Reduction (SCR) catalyst per the January 31 PTC/TPTO, Petitioner determined that the NOx start-up mass emission limit identified in A195.7 could not be achieved after recommissioning. The units become subject to the new NOx startup limit 90 days after recommissioning. Therefore, it is beyond Petitioner's reasonable control to comply with District rules and permit conditions.

b(2). 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.

1. Denial of the variance would render the five (5) simple cycle gas turbines (Device Nos. D1, D7, D13, D19, D25) at Walnut Creek inoperable until a permit revision was issued with an increased NOx start-up limit. Not granting this petition could cause significant, unreasonable, and unavoidable harm to Petitioner in that Petitioner would be unable to operate the units for commercial use and result in significant lost revenues.

c. The closing or taking would be without a corresponding benefit in reducing air contaminants.

1. Walnut Creek recently permitted the five units with a NOx BACT limit of 2.3 ppm during normal operations, which makes these units among the lowest emitting electrical generating equipment in California and in the country. Not granting this petition may require higher emitting units to operate in place of Walnut Creek which could have adverse air quality impacts and affect the availability and reliability and of power to California's electricity grid.

d. The applicant for the variance has given consideration to curtailing operations of the source in lieu of obtaining a variance.

1. The Petitioner considered curtailment of the permitted natural gas fuel limit, however that will result in unreasonable harm to the business. The permitted natural gas limit allows the Walnut Creek units to be available as peak electrical generation units that are critical to meet the demand on California's electrical grid. That demand is highest in the summer and early fall months due to ambient air temperatures and wildfires that can cause Public Safety Power Shutoff events in some areas that increase the need for power generation elsewhere to meet gird demands. California's electrical grid is about to transition into that summer peak demand period. Because the proposed variance relief will extend through these peak demand periods, curtailment of the daily natural gas limit cannot be considered throughout the term of the variance period. As a low-emitting peak power generating facility, Walnut Creek needs to be available for two starts per day and normal operations per day up to the fuel limit, in particular during the peak generating periods for grid reliability.

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

1. Excess emissions will be mitigated through compliance with existing natural gas throughput usage limits, and compliance with all other Title V mass emission limits. Walnut Creek Energy is subject to a permitted natural gas fuel usage limit of no more than 20.7 MM cubic feet per day per turbine. Walnut Creek will comply with this limit throughout the variance period, and

not exceed any existing permitted mass emission limit, other than the NOx start-up limit for which relief is requested. The daily natural gas usage limit developed during recent permitting actions to enforce potential to emit emissions under new source review based on operating 24 hours per day at maximum turbine load (i.e., 100% fuel heat input rate). By committing to operate below the daily natural gas fuel limit, Walnut Creek will ensure that actual emissions will remain less than permitted levels for all pollutants, including NOx.

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

1. Petitioner will monitor NOx emissions during the variance period using a certified continuous emission monitoring system (CEMS) for gas turbine Units 1-5.

CONCLUSION AND ORDER

THEREFORE, good cause appearing, the Hearing Board orders as follows:

A. Petitioner is granted a variance from South Coast AQMD Rules 2005, 2004(f)(1), 202(b), and 3002(c) {Conditions A195.7 of Title V Facility P/O No. 146536 for the Gas Turbines Units 1-5 (Device Nos. D1, D7, D13, D19, D25)} for the period commencing July 16, 2024, (the day in which the first unit exceeds the 90 days following recommissioning) and continuing for up to one year or whenever the permit modification is granted, whichever comes first.

B. The variance granted herein is subject to the following conditions:

1. This variance shall only apply to the requirement in condition A195.7 which limits the NOx emissions during start up to 7.0 lbs. During the variance period, this limit shall not apply.

2. Petitioner shall provide South Coast AQMD by email to Air Quality Engineer Chris Perri (cperri@aqmd.gov) and Air Quality Inspector Jennifer Wang (jwang@aqmd.gov) within 10 calendar days of the end of each month, the following information for each unit start up for the preceding month during the variance period:

A. Cumulative minute by minute mass emissions of NOx for the 60 minutes after the beginning of the start-up.

B. Minute by minute NOx concentrations, exhaust temperature readings, water injection rate, ammonia flow rate, turbine output, and turbine fuel use during the 60 minutes after the beginning of the start-up.

4. Petitioner shall provide South Coast AQMD by email to Air Quality Engineer Chris Perri (cperri@aqmd.gov) and Air Quality Inspector Jennifer Wang (jwang@aqmd.gov) within 30 calendar days after the granting of this variance, the following information for each turbine's start up in calendar year 2021.

A. The number of start-ups per unit.

B. Cumulative minute by minute mass emissions of NOx and CO for the 60 minutes after the beginning of the start-up.

C. Minute by minute NOx and CO concentrations, exhaust temperature readings, water injection rate, ammonia flow rate, turbine output, and turbine fuel use during the 60 minutes after the beginning of the start-up.

5. Petitioner shall submit applications with expedited fees, to request a modification of the permit pertaining to NOx start up limit within 45 calendar days after the granting of this variance.

6. The Petitioner shall notify the Clerk of the Board in writing when final compliance is achieved.

7. Petitioner will verify NOx excess emissions that are above 7.0 lbs per start per unit, using CEMS data, and pay the initial fee on August 31, 2024, and subsequently every 3 months thereafter, pursuant to Rule 303.

FOR THE BOARD:_____

DATED:_____