

PETITION FOR VARIANCE
BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

IV 12/14/22
RV 12/28/22

PETITIONER: Walnut Creek Energy, LLC CASE NO: 6230-1

FACILITY ID: 146536

FACILITY ADDRESS: 911 Bixby Dr
[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: City of Industry, CA, 91745

1. TYPE OF VARIANCE REQUESTED (more than one box may be checked; see Attachment A, Item 1, before selecting)

INTERIM SHORT REGULAR EMERGENCY EX PARTE EMERGENCY

2. CONTACT: Name, title, company (if different than Petitioner), address, and phone number of persons authorized to receive notices regarding this Petition (no more than two authorized persons).

Greg Wolfe

George Piantka

Principal Scientist, Yorke Engineering, LLC

Senior Director, NRG

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3. RECLAIM Permit Yes No Title V Permit Yes No

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If you require disability-related accommodations to facilitate participating in the hearing, contact the Clerk of the Board at least five (5) calendar days prior to the hearing.

[ALL DOCUMENTS FILED WITH CLERK'S OFFICE BECOME PUBLIC RECORD]

4. **GOOD CAUSE:** Explain why your petition was not filed in sufficient time to issue the required public notice. (Required only for Emergency and Interim Variances; see Attachment A, Item 4)

Walnut Creek Energy LLC (Facility ID 146536) holds an active Title V facility permit and is a RECLAIM facility for emissions of NOx and SOx.

On September 25, 2022, Unit 2 (Device D7, Application No: 636709, Permit No: G70321) at Walnut Creek Energy Park (WCEP), a GE LMS100 simple cycle gas turbine, experienced damage to the SuperCore and Power Turbine that will require repair. After investigations by Walnut Creek Energy and General Electric (GE, equipment manufacturer), it has been determined that Unit 2 will not be repaired and tested to confirm commercial availability by December 31, 2022. Therefore, Walnut Creek is seeking permit relief of Condition D29.3 for Unit 2 (device D7), which requires that testing be completed every three years, with the current testing due no later than December 31, 2022.

Walnut Creek Energy has diligently sought options with GE to expedite the turbine repairs to return to service this valuable electricity generation unit, which would enable source testing to be completed by December 31, 2022. These options have included renting identical replacement turbine parts (specifically a SuperCore and/or a Power Turbine), but as of November 14, GE has not found a path that would guarantee the repairs to the Unit 2 turbine (or renting identical parts) so that it can be returned to service and tested in 2022.

An Interim Variance is needed for immediate coverage ahead of January 1, 2023, when Unit 2 will be in violation of Condition D29.3. An Interim Variance is sought out of an abundance of caution if the Regular Variance public notification and hearing could not be completed/scheduled before December 31, 2022, in particular due to the holiday season. The variance process was not sought sooner since it was not certain until now that Unit 2 would be in violation of Condition D29.2 due to the inability to repair Unit 2 turbine or obtain/install rental parts in time to complete source testing by December 31, 2022.

5. Briefly describe the type of business and processes at your facility.

Walnut Creek Energy is a 500-megawatt natural gas-fired, simple cycle electrical generating facility, designed to quickly meet electric generation demand in California.

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). **Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.**

Equipment/Activity	Application/Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)*
GE LMS100 simple cycle gas turbine (Unit 2)	Application No: 636709 Permit No: G70321	D7	N/A

*Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

The Unit 2 gas turbine is one of five units at the facility that is dispatched according to electricity demand from the surrounding area via the California Independent System Operator (CAISO). The unit is operated to supply electrical power as required by existing contracts.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes No

If yes, how often: At least annually during scheduled outages. Date of last maintenance and/or inspection. April 2022. Specific inspection of the damage turbine by GE is ongoing. Describe the maintenance and/or inspection that was performed.

Regular maintenance and inspections are performed on the entire power generating system for all five (5) units at least annually during regularly scheduled outages that are coordinated with CAISO. Annual inspections are comprehensive and evaluate the mechanical integrity of the equipment, wearing of parts, and other ancillary equipment necessary to operate the units in compliance. The inspection performed in April 2022 (approximately 5 months prior to the event) did not identify any issue with the Unit 2 SuperCore or Power Turbine.

Following a sudden loss of power generating load on September 25, 2022, Unit 2 experienced an abrupt "trip" where the unit went offline. Walnut Creek and GE personnel accessed and removed the SuperCore (intermediate- and high-pressure portions of the overall gas turbine) to initially assess the damage. The initial expectation was that the damage would be isolated to the SuperCore. Walnut Creek owns an identical replacement SuperCore and GE has rental SuperCores of the identical model 878 as currently installed, but the initial inspection revealed more substantial damage that necessitated offsite inspection at GE locations in Bakersfield, CA and Houston, TX.

9. List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2).

Rule	Explanation
Permit Condition # D29.3 of Facility Permit 146536 (Rev. 6), applicable to Device D7 [SCAQMD rule reference: 1303(b)(2) & 1703(a)(2)]	Condition D29.3 requires that a source test be conducted at least once every three years. This required triennial source test, due 12/31/2022, cannot be conducted for Unit 2 (device D7) until the necessary repairs are completed and the unit has been cleared for operational dispatch by CAISO. Unit 2 repairs are expected to be completed in 2023.

10. Are the equipment or activities subject to this request currently under variance coverage? Yes No

Case No.	Date of Action	Final Compliance Date	Explanation

11. Are any other equipment or activities at this location currently (or within the last six months) under variance coverage? Yes No

Case No.	Date of Action	Final Compliance Date	Explanation

12. Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning this equipment or activity within the past year? Yes No

If yes, you must attach a copy of each notice.

13. Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six months? Yes No

If yes, you should be prepared to present details at the hearing.

14. Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable.

- On September 14, 2022, Walnut Creek Energy sent an email notification to the SCAQMD of the source testing schedule at the facility to satisfy permit condition D29.3 for triennial testing for SOx, VOC, and PM10. The testing for Unit 2 was scheduled for November 17, 2022.
- On September 25, 2022, the turbine blades in Unit 2 became dislodged, causing significant internal damage to the turbine. The unit was immediately shut down with no emissions exceedances.
- During the week of September 25, 2022, a preliminary damage assessment was completed by plant operations and the turbine manufacturer (GE). Damage was found in the SuperCore for which a spare SuperCore has been available for immediate replacement. The initially damage was thought to have been isolated to the SuperCore. After removal of the SuperCore, further damage was observed which included damage to the Power Turbine, which is uncommon with these turbines. Walnut Creek does not have a spare Power Turbine, but GE is looking for a spare Power Turbine.
- By the second week of October 2022, the Power Turbine was removed and driven to Houston, Texas for an assessment by GE. Due to excess backlog at GE's Houston facility, GE has not yet completed the assessment of the Power Turbine, which was initially projected to be completed by mid-November 2022.
- As of November 14, 2022, GE expects the assessment of the Power Turbine will not be completed until December 28, which forecloses any potential for timely repair of the Power Turbine ahead of the December 31, 2022 deadline to source test Unit 2. Furthermore, GE has not identified an identical replacement Power Turbine that could be timely inspected, installed and operation tested ahead of the December 31, 2022 deadline for source testing.
- Walnut Creek and GE have concluded that repair of Unit 2 SuperCore and Power Turbine that sustained damage at the end of September will not be completed until sometime in 2023 and identical replacement of the Power Turbine may or may not be available sometime in 2023. Nonetheless, repair, operation testing and subsequent source testing cannot be completed ahead of the December 31, 2022 deadline to complete Unit 2 source testing. Given the uncertainty on timing of the remedies, Walnut Creek must seek a Regular Variance. An Interim Variance is necessary due to the uncertainty on completion of the public notification process and completion of a Regular Variance in December, in particular during the holiday season.

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

- On November 8, 2022, GE confirmed that its assessment of the Power Turbine would not be completed until December 28, 2022, which foreclosed the potential for repair, installation, operation test, and source testing Unit 2 by December 31, 2022.
- On November 14, 2022, Walnut Creek and GE confirmed that an identical replacement rental Power Turbine is not available foreclosing the potential for replacement, operating test and source testing Unit 2 by December 31, 2022.
- Repair and operation testing of Unit 2 as well as follow up inspection of repaired equipment are all necessary before source testing can be scheduled, which includes scheduling the specific generation loads/test parameters with CAISO and scheduling the testing company.
- Walnut Creek Energy and GE have now concluded that timely source testing by December 31, 2022 is not possible. Walnut Creek cannot accurately estimate when Unit 2 will first become available for scheduling source testing (generation loads and testing company); hence the Regular Variance timeline (up to 1 year) is necessary.

16. List date(s) and action(s) you have taken since that time to achieve compliance.

- On October 20, Walnut Creek Energy contacted the SCAQMD seeking guidance on how to extend the timeframe for testing Unit 2 due to the extended outage for repair.
- On October 25, SCAQMD replied by email that a variance request would be needed to delay testing.
- On November 10, Yorke Engineering contacted SCAQMD on behalf of Walnut Creek Energy to inquire when a variance would need to be filed to receive a hearing before the end of 2023.
- Repairs are expected to be completed in 2023.
- Once complete, the unit will undergo operational testing to receive clearance from CAISO to return to service in 2023.
- Once Unit 2 is cleared to return to service, Walnut Creek can then work with CAISO to schedule the specific operating loads/duration and in parallel work with the testing company to schedule the test equipment. These scheduling steps can take months to execute.
- Source testing as required by permit condition D29.3 is expected to be completed by May 31, 2023 per terms of a Regular Variance, if approved. A Short Variance will not provide ample time to complete the above action to come into compliance with Condition D29.3. Walnut Creek recognizes that a Regular Variance can be granted up to 1-year or December 31, 2023. At this time, Walnut Creek believes that the return to service and completion of source testing can be accomplished by May 31, 2023.

17. What would be the harm to your business during and/or after the period of the variance if the variance were not granted?

Economic losses: \$ tens of thousands to millions due to loss availability of Unit 2 since Walnut Creek would not be able to operate the unit knowingly if out of compliance with a permit condition unless a variance was issued permitting operation until successful completion of the source testing.

Number of employees laid off (if any): N/A

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs, and/or similar impacts).

- Inability to meet the terms of a power purchase agreement necessitating the availability of Unit 2 will result in tens of thousands to millions of lost revenues, depending on the duration of the outage and the time of year when Unit 2 would not be available.
- Inability to operate Unit 2 under a variance following its repair and prior to successful completion of source testing will result in tens of thousands to millions of lost revenues.
- Potential impacts to California's grid and the public could result if CAISO cannot dispatch a repaired and compliant/source tested Unit 2, which could result in the dispatch of less efficient generation to satisfy electricity demand.

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

Unit 2 is currently undergoing inspections in preparation for repairs and will not be operational nor ready for testing before the end of 2022. Therefore, a Regular Variance is needed to allow for testing to be delayed to 2023. The unit will not resume normal operation until all the necessary repairs are completed and the unit is cleared by CAISO.

19. Estimate excess emissions, if any, on a daily basis, including, if applicable, excess opacity (the percentage of total opacity above 20% during the variance period). If the variance will result in no excess emissions, insert "N/A" here and skip to No. 20.

Pollutant	(A)	(B)	(C)
	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
N/A			

* Column A minus Column B = Column C

Excess Opacity: _____ %

20. Show calculations used to estimate quantities in No. 19, or explain why there will be no excess emissions.

Once repairs are complete on the turbine, it will operate in compliance with its emissions requirements based on existing air pollution control equipment and by firing natural gas. The repairs are not expected to affect the natural gas combustion system or the air pollution control equipment.

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

Unit 2 CEMS will operate to monitor emissions once the turbine is repaired and operational. Source testing will be scheduled as soon as practicable to come into compliance with permit condition D29.3.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? **Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.**

Unit 2 CEMS will monitor its emissions once the unit is repaired and operational.

23. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

- Turbine blades and other portions of the turbine damaged in the failure will be replaced.
- Unit 2 will undergo of operational testing to clear it for service.
- Source testing will be scheduled as soon as practicable after the unit is cleared for service. Walnut Creek anticipates source testing to be completed by May 31, 2023, to come into compliance with permit condition D29.3. Walnut Creek recognizes that a Regular Variance, if approved, can be granted up to 1 year or December 31, 2023.

24. State the date you are requesting the variance to begin: January 1, 2023; and the date by which you expect to achieve final compliance: May 31, 2023.

If the regular variance is to extend beyond one year, you must include a **Schedule of Increments of Progress**, specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress (see Attachment A, Item 24, Example #3).

List Increments of Progress here:

N/A

Signature _____

Print Name _____

Title _____

ATTACHMENT A

ITEM 1

Type of Variance Requested:

- (a) **SHORT:** If compliance with District rule(s) can be achieved in **90 days or less**, request a short variance. *(Hearing will be held approximately 21 days from date of filing--10-day posted notice required.)*
- (b) **REGULAR:** If compliance with District rule(s) will take **more than 90 days**, request a regular variance. If the variance request will extend beyond one year, you **must** include a specific detailed schedule of increments of progress [see Page 8, No. 24] under which you will achieve final compliance. *(Hearing will be held approximately 45 days from date of filing--30-day published notice required.)*
- (c) **EMERGENCY:** If non-compliance is the result of an unforeseen emergency, such as a sudden equipment breakdown, power failure, or accidental fire, you may request an emergency variance. You may request an *ex parte* emergency variance in addition to an emergency variance. **An emergency variance cannot be granted for more than 30 days.** *(Hearing will be held within 2 working days from the date of filing, whenever possible, excluding Mondays, weekends, and holidays.)* **If you request an emergency variance, you must answer No. 4 on page 1.**
- (d) **EX PARTE EMERGENCY:** If variance coverage is required on a weekend or when the Board is not in session, and you cannot wait until an emergency variance hearing can be held, you may request an *ex parte* emergency variance. An *ex parte* emergency variance will be granted or denied solely on the information contained in the petition and the District's response to the petition. Under most circumstances, an *ex parte* emergency variance will remain in effect only until a hearing can be held. **If you request an *ex parte* variance, you must answer No. 4 on page 1.**
- (e) **INTERIM:** If you require immediate relief (other than for emergencies) to cover the time until a short or regular variance hearing can be held, request an interim variance. If you request an interim variance, you must also request a short or a regular variance on the same petition. *(Hearing will be held approximately 2 working days from date of filing, whenever possible, excluding Mondays, weekends and holidays.)* **If you request an interim variance, you must answer No. 4 on page 1.**

ITEM 4

GOOD CAUSE: The Hearing Board is required to provide public notice of variance hearings, as the public has a right to attend and testify at such hearings. In order for the Hearing Board to hold an Interim, *Ex Parte* Emergency or Emergency Variance hearing without the required public notice, a petitioner must present facts which will support a determination by the Board that "good cause" exists to hear a variance without notifying the public about the variance and providing the public with an opportunity to present evidence concerning the variance.

ITEM 6

Example #1:

Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)
Tenter frame		D32	
Chrome-plating tank	M99999		
Bake oven	123456		
Create special effects (fog)	N/A	N/A	N/A

ITEM 9

a) If you are requesting relief from Rule 401 and the excess opacity during the variance period will reach or exceed 40%, you should also request relief from California Health and Safety Code Section 41701.

b) If you are requesting relief from a permit condition(s), you should also request relief from the rule requiring compliance with conditions of the permit: 202(a), (b) or (c) - Temporary Permit to Operate; 203(b) - Permit to Operate; 2004(f)(1) – RECLAIM Permit; 3002(c) – Title V Permit.

Example #2:

Rule	Explanation
404(a)	tenter frame is vented to damaged air pollution control equipment
2004 (f)(1) [Condition No. 28-2 of Facility P/O No. 099999]	source test cannot be conducted as required until new ESP is installed
1113(c)(2)	petitioner manufactures and sells clear wood finishes with VOCs in excess of 350 grams per liter
401(a) & California H&S Code Section 41701	Opacity will exceed 45%.

ITEM 24

Example #3:

Sample Schedule of Increments of Progress

- Permit application(s) will be submitted to the District by [date].
- Contracts for the purchase of emission control systems will be awarded by [date].
- On-site construction will be completed by [date].

(Petition for Variance: Revised February 22, 2011)

English	"If you require a language interpreter in order to participate in the hearing, contact the Clerk of the Board at least five (5) calendar days before your hearing at 909-396-2500 or by e-mail at clerkofboard@aqmd.gov. Specify the case name and number, hearing date, and the language for which you are requesting an interpreter."
Farsi	"اگر برای شرکت در جلسه استماع به مترجم نیاز دارید، حد اقل پنج (5) روز تقویمی قبل از جلسه استماع، با منشی هیئت توسط شماره تلفن 909-396-2500 یا بوسیله نامه الکترونیکی با نشانی clerkofboard@aqmd.gov تماس بگیرید. نام پرونده و شماره آن، تاریخ جلسه استماع و زبانی را که برای آن مترجم درخواست کرده اید، مشخص کنید"
Arabic	"إذا كنت في حاجة لمترجم من أجل المشاركة في جلسة الاستماع، اتصل بكتاب المحكمة قبل موعد جلسة الاستماع بخمسة (5) أيام على هاتف . حدد اسم ورقم القضية و تاريخ الاستماع واللغة clerkofboard@aqmd.gov 909-396-2500 أو بالبريد الإلكتروني على التي تريد في مترجم لها."
Armenian	"ԴԱՆՎՈՂՊԱՐԿՈՒՄ ԿԱՆՈՒՄԱՆ ԿՐԻՆՈՒՄ ԵՎ ԵՐԱՐՈՎԱՆՈՒՄ ԿՐԻՆՈՒՄ ՌԵՆԵՏԱՐ, ՃԱԿԱՐԱՆ ԸՆԵՐ ՌԵՎԻԶԻՏԱՐՈՒՄ, ԱՄԵՆԱՔԻՆՉ ԹԻՃՔ (5) ՕՐԱՑՄԱՅՎԱԽԻՄ ՕՐԻՑ ԱՊԱՅ ԿԱՎՈՒՄ ԿԱՆՈՒՄԱՆ ԿՐԻՆՈՒՄ ԳԱՐԽՈՂԱՐԻ ՔԵՆՈՒ, 909-396-2500 ՌԵՎԻՍՏԱՄԱՐՈՒՄ ԿՐԱՄ ԷՆԵԿՐՈՒՄ ԳՆԱՆԿՈՒՄ ՌԵՎԻՍՏԱՐՈՒՄ clerkofboard@aqmd.gov: ՆՅԵՔ ԳՐԻԽԻ ԱՄՈՒՄ և ԿԱՎՈՒՄ, ՌԵՎՈՂՊԱՐԿՈՒՄ ԲՎԱԿԱՆՈՒՄ, և ԷՔՈՒՄ, ՊԻՆ ԿԱՎՈՒՄ ԵՐԱՐՈՎԱՆՈՒՄ ԵՐ ԳԱՆՎՈՒՄ"
Vietnamese	"Nếu quý vị cần Thông Dịch Viên cho buổi điều trần, xin vui lòng điện-thoại cho Thư Ký Hội Đồng tại số 909-396-2500 trễ nhất là năm [5] ngày, không tính hai ngày Thứ Bảy và Chủ Nhật, trước buổi điều trần hoặc gửi điện thư đến clerkofboard@aqmd.gov . Nhớ ghi rõ tên và số hồ sơ, ngày điều trần, và ngôn ngữ quý vị cần có người để thông dịch."
Chinese	如果你要求翻譯來協助你參加聽證會，請在你的聽證會前至少提前五天（5個日曆日）打電話到909-396-2500或發電子郵件到 clerkofboard@aqmd.gov 與局裏的辦事人員聯絡。並且明確說明你的案子的名稱和號碼，聽證日期，以及你要求的翻譯的語種。
Japanese	公聴会（ヒアリング）に参加するために通訳が必要な場合、少なくとも5日前までに事務局（Clerk of the Board）にご連絡ください。電話でのご連絡は909-396-2500、e-メールでのご連絡は clerkofboard@aqmd.gov 。までお願いします。その際、案件名（case name）と案件番号（case number）、ヒアリングの日付、通訳が必要な言語を特定して下さい。
Korean	"만약 귀하나 귀하의 증인들이 심리에 참여하기 위해 통역사가 필요하시면, 심리일 5일 전까지 기관부서의 서기에게 909-396-2500으로 연락하시거나, clerkofboard@aqmd.gov 로 연락 하십시오. 통역이 필요하신 사건의 이름, 심리날짜, 그리고 언어를 정확하게 말씀해 주십시오."
Spanish	Si usted requiere un intérprete para poder participar en la audiencia, favor de comunicarse con el Secretario de la Junta cuando menos cinco (5) días hábiles antes de su audiencia al teléfono (909) 396-2500 ó por correo electrónico al clerkofboard@aqmd.gov . Especifique el nombre y el número de su causa, la fecha de la audiencia y el idioma del cual está solicitando el intérprete.
Tagalog	"Kung kailangan ninyo nang interpreter sa Pilipino para makasali kayo sa pagdinig sa kaso, tumawag lang po kayo sa Clerk of the Board sa numero 909-396-2500 or kung hindi mag-email kayo sa email clerkofboard@aqmd.gov . Kailangan na tumawag kayo sa loob nang limang araw (5 days) bago ang inyong hearing date at ibigay and inyong pangalan at case number, araw nang inyong pagdinig sa kaso at inyong gusto na may lenguahe na interpreter".
Thai	หากคุณต้องการสำงในการขึ้นศาล ให้ติดต่อเจ้าหน้าที่ ส่งหนังสืออย่างน้อย 5 วันก่อนวันขึ้นศาล โดยติดต่อที่เบอร์โทร 909-396-2500 หรือโดยe-mailที่ clerkofboard@aqmd.gov ให้บอกชื่อและหมายเลขของคดี พร้อมทั้งวันเวลาในการขึ้นศาล และระบุภาษาที่คุณต้องการสำง



**FACILITY PERMIT TO OPERATE
WALNUT CREEK ENERGY, LLC**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL COMBUSTION					
GAS TURBINE, UNIT NO.2, NATURAL GAS, GENERAL ELECTRIC, MODEL LMS100PA, SIMPLE CYCLE, INTERCOOLED, 891.7 MMBTU/HR AT 30 DEGREES F, WITH WATER INJECTION WITH A/N: 636709	D7	C9	NOX: MAJOR SOURCE**; SOX: PROCESS UNIT**	CO: 4 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 12-4-2015; RULE 2005, 11-5-2021]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 3-20-2009]; PM: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart KKKK, 3-20-2009]; SOX: 0.67 LBS/MMSCF (1) [RULE 2011, 5-6-2005]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A63.1, A195.1, A195.2, A195.3, A327.1, C1.1, D12.1, D29.2, D29.3, D82.1, D82.2, E57.1, E193.1, H23.1, I298.2, I298.8, K67.5
GENERATOR, 100:1 NET MW (104 GROSS MW)					

* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
 (5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



**FACILITY PERMIT TO OPERATE
WALNUT CREEK ENERGY, LLC**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The South Coast AQMD shall be notified of the date and time of the test at least 7 days prior to the test

The test shall be performed at least annually. If the results of any annual test show noncompliance then quarterly tests shall be conducted until at least 4 consecutive quarterly tests show compliance, at which time annual tests may be resumed.

The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period

The test shall be conducted to determine compliance with the Rule 1303 BACT concentration limit.

Source test results shall be submitted to the District no later than 60 days after the source test was conducted. Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis) and mass rate (lb/hr). All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute. All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D1, D7, D13, D19, D25]

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
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WALNUT CREEK ENERGY, LLC**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

SOX emissions	AQMD Laboratory Method 307-91	Not Applicable	Fuel sample
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District method 5.1	District-approved averaging time	Outlet of the SCR serving this equipment
PM2.5	District method 5.1	District-approved averaging time	Outlet of the SCR serving this equipment



FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test(s) shall be conducted at least once every three years. The SCAQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted in accordance with an SCAQMD approved test protocol. The protocol shall be submitted to the SCAQMD engineer no later than 45 days before the proposed test date and shall be approved by the SCAQMD before the test commences unless otherwise specified by the Executive Officer.

The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from 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 when this equipment is operating at loads of 100, 75, and 50 percent, with the exception of PM10 and PM2.5 testing. For PM10 and PM2.5, the test shall be conducted when this equipment is operating at a load of 100 percent. A single test may be conducted for both PM10 and PM2.5. The results of the test shall be assumed to be all PM2.5 and smaller.

For natural gas fired turbines only, for the purpose of demonstrating compliance with VOC BACT limits as determined by SCAQMD, the operator shall use Method 25.3 modified as follows:

- a) Triplicate stack gas samples extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mmHg absolute,
- b) Pressurization of the Summa canisters with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbons as carbon, and
- c) Analysis of Summa canisters per the canister analysis portion of SCAQMD Method 25.3 with a minimum detection limit of 0.3 ppmv or less and reported to two significant figures. The temperature of the Summa canisters when extracting samples for analysis shall not be below 70 degrees Fahrenheit.

The use of this alternative method for VOC compliance determination does not mean



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The operator shall comply with the terms and conditions set forth below:

that it is more accurate than unmodified SCAQMD method 25.3, nor does it mean that it may be used in lieu of SCAQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 ppmv VOC calculated as carbon for natural gas fired turbines.

The test results shall be reported with two significant digits

For the purpose of this condition, alternative test method may be allowed for each of the above pollutants upon concurrence of SCAQMD, EPA, and CARB.

Source test results shall be submitted to the District no later than 60 days after the source test was conducted. Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lb/hr), and lb/MMCF. All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute. All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D1, D7, D13, D19, D25]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters: