Princess Ohiagu

From: Princess Ohiagu
Sent: Monday, June 30, 2025 5:01 PM
To: Stuart L. Keil, P.E.
Cc: Rosa Mora-Nichols
Subject: Working Draft Permit -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center
Attachments: SOP Draft - O1333 Solar Turbines Incorporated (Significant, 36830).docx

Mr. Keil,

I have conducted a technical review of *revision* application for *Solar Turbines Incorporated, Dallas Overhaul Center*. An electronic copy of the Working Draft Permit (WDP) is attached for your review. This WDP contains the TCEQ determination of applicable requirements based on the information submitted in your application, and any updates provided.

Please review the WDP and submit to me any comments you have on the working draft permit by ***July 14, 2025***. *Any comments outside the scope of the most recent changes should be submitted as a separate project*.

Optional: *List any issues/deficiencies noted during technical review or reference an attached Unresolved Items List. Include in your deficiencies a request to the applicant regarding the acceptability of any periodic monitoring suggested by the permit reviewer, when applicable*. Please submit a written response by this deadline, even if you are not making any comments on the content of the WDP.

Please review the second portion of the "SOP Technical Review Fact Sheet" located at http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/sop_wdp_factsheet.pdf. This guidance contains important information regarding WDP review and comment procedures.

Note that a Certification by Responsible Official (Form OP-CRO1) for any uncertified application information, including application updates supporting the WDP comments, is required. After final review of the WDP, additional changes supported by application updates may require certification. I will advise you of these changes at a later date. Prior to transmittal of the Public Notice/Announcement Authorization Package, a duly signed OP-CRO1 form may be required which includes the specific dates or time-period of all submitted application documentation that was not previously certified. I will advise you of this requirement prior to sending the Public Notice/Announcement Authorization.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you for your cooperation.

Sincerely,

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Monday, June 30, 2025 11:20 AM
To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>
Subject: Re: Technical Review -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center

Princess, thanks and when do you think the technical review will be completed?

As a reminder, the project was submitted about a year ago.

Thanks.

On 6/30/2025 11:10 AM, Princess Ohiagu wrote:

> Good morning Mr. Keil,
>
> The project is still in technical review and making a summary of any deficiencies needing to be resolved.
>
> Princess Ohiagu
> Operating Permits
> Air Permits Division
> Texas Commission on Environmental Quality
> 512 239-2048
> Princess.ohiagu@tceq.texas.gov
>
> How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

---

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Friday, June 27, 2025 8:52 AM
To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>
Subject: Solar Turbines Significant Revision Application, Project 36830

Princess, can you please provide me the status of the referenced Solar Turbines' Title V project?

This application was submitted on July 3, 2024. A copy of the project record is attached.

Thanks.

Stuart L. Keil, P.E.
Keil Environmental, Inc.
413 Honeycomb Ridge
Austin, TX 78746
(512) 306-9983 phone
(512) 517-6718 cell

Princess Ohiagu

From: Princess Ohiagu
Sent: Thursday, November 14, 2024 4:06 PM
To: Gil Diekhoff
Subject: Technical Review -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center

Good afternoon,

I have been assigned to the Federal Operating Permit (FOP) revision application of Permit No. O1333 for Company Name, Site Name, Area Name. This application has been assigned Project No. 36830. Please address all correspondence pertaining to this permit application, including any updates, to me at the address below, and use both the Permit and Project reference numbers above to facilitate tracking.

In addition, I wanted to let you know that EPA has, on occasion, objected to Title V permits based on the following:
a. NSR permit and PBR monitoring sufficiency –please refer to our periodic monitoring guidance for reference of monitoring that EPA has, so far, considered sufficient.
b. Reference to confidential business information (CBI) in NSR permits and PBR submittals.
c. High level terms in the SOP Applicable Requirement Summary Table. The high level terms are sometimes used in SOPs when unit attribute forms have not yet been updated due to regulatory amendments.
d. Accuracy of PBR information provided on the supplemental table and in the permit – please refer to Forms OP-PBRSUP and OP-REQ1 Instructions.
If you have any questions or concerns on any of these items or think you need to do any additional updates, let me know and we can discuss further.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Please review the "SOP Technical Review Fact Sheet" located at http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/sop_wdp_factsheet.pdf. This guidance contains important information regarding the review process and application update procedures. Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you for your cooperation.

Sincerely,

Princess Ohiagu

Operating Permits
Air Permits Division
Texas Commission on Environmental Quality
512 239-2048
Princess.ohiagu@tceq.texas.gov


How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

Princess Ohiagu

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Thursday, July 3, 2025 3:55 PM
To: Princess Ohiagu
Cc: Rosa Mora-Nichols; Kimberli Fowler; EPA Title V Docs; Kaytlyn Collins; JASON THOMAS; Gil Diekhoff; Stuart Keil. P.E.
Subject: Re: Working Draft Permit -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center

Princess, thanks for your timely response and for the additional opportunity to review the draft permit.

Solar Turbines accepts the permit as proposed and recommends moving forward with finalizing the permit.

Thanks again for your attention to these matters and, as mentioned previously, we appreciate any help that you can provide in accelerating the permit issuance.

On 7/3/2025 11:47 AM, Princess Ohiagu wrote:

> Mr. Keil,
>
> All working draft comments have been resolved. Please see attached revised draft permit for your review and respond with any concerns by **July 9, 2025**.
>
> Since this is a follow-up review to the previously submitted and reviewed WDP, only comments concerning changes since the last WDP may be considered by TCEQ.
>
> Princess Ohiagu
> Operating Permits
> Air Permits Division
> Texas Commission on Environmental Quality
> 512 239-2048
> Princess.ohiagu@tceq.texas.gov
>
> 
> How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

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From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Tuesday, July 1, 2025 2:39 PM
To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>; Kimberli Fowler <kimberli.fowler@tceq.texas.gov>; EPA Title V Docs <R6AirPermits@EPA.gov>; Kaytlyn Collins <Kaytlyn.Collins@solarturbines.com>; JASON THOMAS <JASON.THOMAS2@solarturbines.com>; Gil

Diekhoff <Diekhoff_Gil_P@solarturbines.com>; Stuart Keil. P.E. <stuartlkeil@gmail.com>
Subject: Re: Working Draft Permit -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center

Princess, thanks for your timely help.

On 7/1/2025 2:36 PM, Princess Ohiagu wrote:

> Good afternoon,
>
> Received. I will work on addressing these comments.
>
> Thank you,
> Princess Ohiagu
> Operating Permits
> Air Permits Division
> Texas Commission on Environmental Quality
> 512 239-2048
> Princess.ohiagu@tceq.texas.gov
>
> How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

---

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Tuesday, July 1, 2025 2:35 PM
To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>; Kimberli Fowler <kimberli.fowler@tceq.texas.gov>; EPA Title V Docs <R6AirPermits@EPA.gov>; Kaytlyn Collins <Kaytlyn.Collins@solarturbines.com>; JASON THOMAS <JASON.THOMAS2@solarturbines.com>; Gil Diekhoff <Diekhoff_Gil_P@solarturbines.com>; Stuart Keil. P.E. <stuartlkeil@gmail.com>
Subject: Re: Working Draft Permit -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center

Princess, thank you for the opportunity to provide comments regarding your draft permit conditions. Solar Turbines' comments are listed as follows:

1) Special Term and Condition (STC) No. 3.C.(iii)(4) is a duplicate of STC No. 3.C.(iii)(3), and so, it can be removed.

2) STC No. 12.C identifies Final Control Plan requirements for Reasonably Available Control Technology (RACT) sources, but no sources at the DeSoto site are subject to RACT. Therefore, STC No. 12.C should be removed. STC No. 12.D identifies Final Control Plan requirements relative to Attainment Demonstration Emission Specifications and should be retained.

3) As a result of Revision No. 3 in Solar Turbines' Application Form OP-2, it was expected that a STC would be added to the permit to identify requirements for 40 CFR 68, Chemical Accident Prevention Provisions. Is there a reason was this new STC was not added?

4) The Periodic Monitoring Summary for Group ID No. GRPTC (SOP Index No. R1111HIFLO) appears to be duplicated. Therefore, one of the copies should be removed.

5) On the New Source Authorization References by Emissions Unit Table, all of the units with an NSR authorization of "20041, PSDTX1590, N196M1" should be updated to "20041, PSDTX1590M1, N196M2."

6) Please note that a Form OP-CRO1 will be provided subsequent to our permit correspondence and prior to public notice. Just let us know when all correspondence is complete.

7) Please be reminded that the Title V permit needs to include a copy of the NSR permit, which is attached as "Solar Turbines Permit 20041 022525.pdf."

Solar Turbines is very interested in finalizing this permit. Any help you can provide in accelerating its issuance would be appreciated.

Stuart L. Keil, P.E.
Keil Environmental, Inc.
413 Honeycomb Ridge
Austin, TX 78746
(512) 306-9983 phone
(512) 517-6718 cell

On 6/30/2025 5:01 PM, Princess Ohiagu wrote:

> Mr. Keil,
>
> I have conducted a technical review of *revision* application for *Solar Turbines Incorporated, Dallas Overhaul Center*. An electronic copy of the Working Draft Permit (WDP) is attached for your review. This WDP contains the TCEQ determination of applicable requirements based on the information submitted in your application, and any updates provided.
>
> Please review the WDP and submit to me any comments you have on the working draft permit by ***July 14, 2025***. *Any comments outside the scope of the most recent changes should be submitted as a separate project.*

Optional: *List any issues/deficiencies noted during technical review or reference an attached Unresolved Items List. Include in your deficiencies a request to the applicant regarding the acceptability of any periodic monitoring suggested by the permit reviewer, when applicable*. Please submit a written response by this deadline, even if you are not making any comments on the content of the WDP.

Please review the second portion of the "SOP Technical Review Fact Sheet" located at http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/sop_wdp_factsheet.pdf. This guidance contains important information regarding WDP review and comment procedures.

Note that a Certification by Responsible Official (Form OP-CRO1) for any uncertified application information, including application updates supporting the WDP comments, is required. After final review of the WDP, additional changes supported by application updates may require certification. I will advise you of these changes at a later date. Prior to transmittal of the Public Notice/Announcement Authorization Package, a duly signed OP-CRO1 form may be required which includes the specific dates or time-period of all submitted application documentation that was not previously certified. I will advise you of this requirement prior to sending the Public Notice/Announcement Authorization.

Application updates may now be submitted through Title V STEERS. Any application updates that are submitted by the RO/DAR through STEERS are certified and do not require the submittal of an original signature OP-CRO1. Application updates that are provided through email or physical mail require certification using an original signature OP-CRO1.

Please notify me when these updates have been submitted.

As required on Form OP-1, question IV.D, please remember the FOP application and all application updates must be submitted to EPA Region 6 at R6AirPermitsTX@epa.gov and to the TCEQ regional office having jurisdiction. This submittal information can be found on our website at Where to Submit FOP Applications and Permit-Related Documents.

Contact me if you have any questions regarding the guidelines, the project schedule, or any other details regarding your application or permit.

Thank you for your cooperation.

Sincerely,

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Monday, June 30, 2025 11:20 AM

To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>
Subject: Re: Technical Review -- FOP O1333/Project 36830, Solar Turbines Incorporated/Dallas Overhaul Center

Princess, thanks and when do you think the technical review will be completed?

As a reminder, the project was submitted about a year ago.

Thanks.

On 6/30/2025 11:10 AM, Princess Ohiagu wrote:

> Good morning Mr. Keil,
>
> The project is still in technical review and making a summary of any deficiencies needing to be resolved.
>
> Princess Ohiagu
> Operating Permits
> Air Permits Division
> Texas Commission on Environmental Quality
> 512 239-2048
> Princess.ohiagu@tceq.texas.gov
>
> 
> How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

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From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Friday, June 27, 2025 8:52 AM
To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>
Subject: Solar Turbines Significant Revision Application, Project 36830

Princess, can you please provide me the status of the referenced Solar Turbines' Title V project?

This application was submitted on July 3, 2024. A copy of the project record is attached.

Thanks.

Stuart L. Keil, P.E.
Keil Environmental, Inc.
413 Honeycomb Ridge
Austin, TX 78746
(512) 306-9983 phone
(512) 517-6718 cell

Princess Ohiagu

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Tuesday, July 22, 2025 1:55 PM
To: Mark Meyer
Cc: Princess Ohiagu; Kaytlyn Collins; JASON THOMAS
Subject: Re: STEERS Title V Application Submittal (Update) Solar Turbines' Permit O1333

Mark, thanks so much for your help.

On 7/22/2025 1:18 PM, Mark Meyer wrote:

> Good afternoon,
>
> At this point, I do not see any reason why the PNAP cannot be issued this week.
>
> Thank you.
>
> Mark Meyer
> Air Permits Division - Operating Permits
> Texas Commission on Environmental Quality
> 512.239.0445
> **How is our customer service?** Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey
>
> ---
>
> **From:** Stuart L. Keil, P.E. <keil@flash.net>
> **Sent:** Tuesday, July 22, 2025 11:14 AM
> **To:** Mark Meyer <Mark.Meyer@tceq.texas.gov>
> **Cc:** Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>; Kaytlyn Collins <Kaytlyn.Collins@solarturbines.com>; JASON THOMAS <JASON.THOMAS2@solarturbines.com>
> **Subject:** Re: STEERS Title V Application Submittal (Update) Solar Turbines' Permit O1333
>
> That sounds great. Thanks.
>
> On 7/22/2025 11:09 AM, Mark Meyer wrote:
>
> > Mr. Keil,
> >
> > You are welcome.
> >
> > Allow me to look into it a little more and I will get back to you later today.
> >
> > Thank you.
> >
> > Mark Meyer
> > Air Permits Division - Operating Permits
> > Texas Commission on Environmental Quality
> > 512.239.0445
> > **How is our customer service?** Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey
> >
> > ---
> >
> > **From:** Stuart L. Keil, P.E. <keil@flash.net>
> > **Sent:** Tuesday, July 22, 2025 10:55 AM
> > **To:** Mark Meyer <Mark.Meyer@tceq.texas.gov>

Cc: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>; Kaytlyn Collins <Kaytlyn.Collins@solarturbines.com>; JASON THOMAS <JASON.THOMAS2@solarturbines.com>
Subject: Re: STEERS Title V Application Submittal (Update) Solar Turbines' Permit O1333

Mark, thanks for your timely response.

Is it possible to get the PNAP issuance this week? We are running short on our schedule.

Thanks for any help that you can give us.

On 7/22/2025 10:29 AM, Mark Meyer wrote:

> Good morning,
>
> The project was submitted to me on Friday, 7/18/2025, for review and approval of the PNAP for issuance. She is due back tomorrow, so the PANP should be issued within the next week.
>
> Thank you.
>
> Mark Meyer
> Air Permits Division - Operating Permits
> Texas Commission on Environmental Quality
> 512.239.0445
> **How is our customer service?** Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey
>
> ---
>
> **From:** Stuart L. Keil, P.E. <keil@flash.net>
> **Sent:** Monday, July 21, 2025 11:51 AM
> **To:** Mark Meyer <Mark.Meyer@tceq.texas.gov>
> **Subject:** Fwd: STEERS Title V Application Submittal (Update) Solar Turbines' Permit O1333
>
> Mark, I received an automated return email from Princess about my request below. She did not mention when she would be returning to the office.
>
> Can you check to see the status of the public notice authorization for the referenced permit (Project No. 36830)? When should we expect to receive that?
>
> Thanks.
>
> -------- Forwarded Message --------
>
> **Subject:**Re: STEERS Title V Application Submittal (Update) Solar Turbines' Permit O1333
> **Date:**Mon, 21 Jul 2025 11:42:01 -0500
> **From:**Stuart L. Keil, P.E. <keil@flash.net>

To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
CC: Kaytlyn Collins <Kaytlyn.Collins@solarturbines.com>, Gil Diekhoff <Diekhoff_Gil_P@solarturbines.com>, JASON THOMAS <JASON.THOMAS2@solarturbines.com>, Stuart Keil. P.E. <stuartlkeil@gmail.com

Princess, hope you had a good weekend.

Can you give us an update about when public notification might be authorized for this project?

Thanks.

On 7/16/2025 10:18 AM, Stuart L. Keil, P.E. wrote:

> Fine. Thanks for your continued help.

> On 7/16/2025 10:14 AM, Princess Ohiagu wrote:
>
> > Good morning,
> >
> > Received, thank you.
> >
> > For future emails and communication please remove Rosa Mora-Nichols rosa.mora-nichols@tceq.texas.gov. No further action needed on her end.
> >
> > Princess Ohiagu
> > Operating Permits
> > Air Permits Division
> > Texas Commission on Environmental Quality
> > 512 239-2048
> > Princess.ohiagu@tceq.texas.gov
> >
> > 
> > How are we doing? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

From: Stuart L. Keil, P.E. <keil@flash.net>
Sent: Tuesday, July 15, 2025 9:39 AM
To: Princess Ohiagu <Princess.Ohiagu@tceq.texas.gov>
Cc: Rosa Mora-Nichols <rosa.mora-nichols@tceq.texas.gov>; Kaytlyn Collins <Kaytlyn.Collins@solarturbines.com>; Gil Diekhoff <Diekhoff_Gil_P@solarturbines.com>; JASON THOMAS <JASON.THOMAS2@solarturbines.com> ; Stuart Keil. P.E. <stuartlkeil@gmail.com>
Subject: Fwd: STEERS Title V Application Submittal (Update) Solar Turbines' Permit O1333

Princess, the email below, the attached copy of record, and the attached agency form reflect today's submittal of the Form OP-CRO1 that is needed to help finalize the public notice package for Solar Turbines' Permit No. O1333's significant revision.

We would appreciate any help that you can provide in accelerating the public notice authorization.

Thanks.

-------- Forwarded Message --------

Subject:STEERS Title V Application Submittal (Update)
Date: Tue, 15 Jul 2025 08:55:12 -0500 (CDT)
From:steers@tceq.texas.gov
To:keil@flash.net, nammari_adam_z@solarturbines.com

This confirms the submittal of your Title V Existing Application to the TCEQ.

Your application was successfully submitted and received by the TCEQ at 07/15/2025 08:55 AM.

The submitted application will now be reviewed by the program area. You will be notified by the program area reviewing your application if more information is needed and of final action (approval or denial) of the application.

The Reference number for this submittal is 800355.

The Area ID for this submittal is 1333.
The Project ID for this submittal is 36830.
The STEERS confirmation number for this submittal is 664660.
The hash code for this submittal is 88F5A2743E6C8243C40020F3B27543C204A531396DD5E26F36A826274D4A041A.

You may access the copy of record (submitted application) from the submit log which is available by selecting Submissions from the Home page of STEERS https://www3.tceq.texas.gov/steers/.

If you have any questions, please contact the Air Permits division at 512-239-1250 or by e-mail at airperm@tceq.texas.gov.

Form OP-CRO1
Certification by Responsible Official
Federal Operating Permit Program
Texas Commission on Environmental Quality

All initial issuance, revision, renewal, and reopening permit application submittals requiring certification must be addressed using this form. Updates to site operating permit (SOP) and temporary operating permit (TOP) applications, other than public notice verification materials, must be certified prior to authorization of public notice or start of public announcement. Updates to general operating permit (GOP) applications must be certified prior to receiving an authorization to operate under a GOP.

I. Identifying Information	
RN: 100219963	
CN: 600127518	
Account No.: DB-1494-I	
Permit No.: O1333	
Project No.: 36830	
Area Name: Dallas Overhaul Center	
Company Name: Solar Turbines Incorporated	
II. Certification Type *(Please mark appropriate box)*	
☒ Responsible Official Representative	☐ Duly Authorized Representative
III. Submittal Type *(Please mark appropriate box) (Only one response can be accepted per form)*	
☐ SOP/TOP Initial Permit Application	☒ Permit Revision, Renewal, or Reopening
☐ GOP Initial Permit Application	☐ Update to Permit Application
☐ Other: _____	

Form OP-CRO1
Certification by Responsible Official
Federal Operating Permit Program
Texas Commission on Environmental Quality

All initial issuance, revision, and renewal permit application submittals requiring certification must be accompanied by this form. Updates to acid rain or CSAPR (other than public notice verification materials) must be certified prior to authorization of public notice for the draft permit.

IV. Certification of Truth

This certification does not extend to information which is designated by TCEQ as information for reference only.

I, Adam Z. Nammari certify that I am the RO

(Certifier Name printed or typed) *(RO or DAR)*

and that, based on information and belief formed after reasonable inquiry, the statements and information dated during the time period or on the specific date(s) below, are true, accurate, and complete:
Note: Enter Either a Time Period or Specific Date(s) for each certification. This section must be completed. The certification is not valid without documentation date(s).

Time Period: From 07/03/2024 to 07/14/2025

(Start Date) *(End Date)*

Specific Dates: _____ _____ _____ _____

(Date 1) *(Date 2)* *(Date 3)* *(Date 4)*

_____ _____

(Date 5) *(Date 6)*

Signature: _____ Signature Date: _____ Title: _____

Title: General Manager

Texas Commission on Environmental Quality

Title V Existing

1333

Site Information (Regulated Entity)

What is the name of the permit area to be authorized?	DALLAS OVERHAUL CENTER
Does the site have a physical address?	Yes
Physical Address	
Number and Street	215 E CENTRE PARK BLVD
City	DESOTO
State	TX
ZIP	75115
County	DALLAS
Latitude (N) (##.######)	32.6275
Longitude (W) (-###.######)	96.850277
Primary SIC Code	3511
Secondary SIC Code	
Primary NAICS Code	333611
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN100219963
What is the name of the Regulated Entity (RE)?	SOLAR TURBINES DLS OVERHAUL CENTER
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	215 E CENTRE PARK BLVD
City	DESOTO
State	TX
ZIP	75115
County	DALLAS
Latitude (N) (##.######)	32.6275
Longitude (W) (-###.######)	-96.850277
Facility NAICS Code	
What is the primary business of this entity?	INDUSTRIAL CHEMICAL MANUFACTURING PLANT

Customer (Applicant) Information

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	CN600127518
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Solar Turbines Incorporated
Texas SOS Filing Number	5330206
Federal Tax ID	953621514
State Franchise Tax ID	19536215148
State Sales Tax ID	
Local Tax ID	
DUNS Number	42261099
Number of Employees	101-250
Independently Owned and Operated?	No

Responsible Official Contact

Person TCEQ should contact for questions about this application:	
Organization Name	SOLAR TURBINES INCORPORATED
Prefix	MR
First	ADAM
Middle	
Last	NAMMARI
Suffix	
Credentials	
Title	PLANT MANAGER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	215 E CENTRE PARK BLVD
Routing (such as Mail Code, Dept., or Attn:)	
City	DESOTO
State	TX
ZIP	75115
Phone (###-###-####)	9722285535
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	9722286180

E-mail	nammari_adam_z@solarturbines.com

Technical Contact

Person TCEQ should contact for questions about this application:	
Select existing TC contact or enter a new contact.	GIL DIEKHOFF(SOLAR TURBINES ...)
Organization Name	SOLAR TURBINES INCORPORATED
Prefix	MR
First	GIL
Middle	
Last	DIEKHOFF
Suffix	
Credentials	
Title	EHS MANAGER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	215 E CENTRE PARK BLVD
Routing (such as Mail Code, Dept., or Attn:)	
City	DESOTO
State	TX
ZIP	75115
Phone (###-###-####)	9722286157
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	9722286180
E-mail	diekhoff_gil_p@solarturbines.com

Title V General Information - Existing

1) Permit Type:	SOP
2) Permit Latitude Coordinate:	32 Deg 37 Min 39 Sec
3) Permit Longitude Coordinate:	96 Deg 51 Min 1 Sec
4) Is this submittal a new application or an update to an existing application?	Update
4.1. Select the permit/project number for which this update should be applied.	1333-36830
5) Does this application include Acid Rain Program or Cross-State Air Pollution Rule	No

requirements?

Title V Attachments Existing

Attach OP-1 (Site Information Summary)

Attach OP-2 (Application for Permit Revision/Renewal)

Attach OP-ACPS (Application Compliance Plan and Schedule)

Attach OP-REQ1 (Application Area-Wide Applicability Determinations and General Information)

Attach OP-REQ2 (Negative Applicable Requirement Determinations)

Attach OP-REQ3 (Applicable Requirements Summary)

Attach OP-PBRSUP (Permits by Rule Supplemental Table)

Attach OP-SUMR (Individual Unit Summary for Revisions)

Attach OP-MON (Monitoring Requirements)

Attach OP-UA (Unit Attribute) Forms

If applicable, attach OP-AR1 (Acid Rain Permit Application)

Attach OP-CRO2 (Change of Responsible Official Information)

Attach OP-DEL (Delegation of Responsible Official)

Attach Void Request Form

Attach any other necessary information needed to complete the permit.

[File Properties]

File Name	Solar Turbines Form OP-CRO1.pdf
Hash	C57B8A7E9CC81E3FE10BC8D678B935C80F11B08E5B37301EC4FB1475B8775804
MIME-Type	application/pdf

An additional space to attach any other necessary information needed to complete the permit.

Certification

I certify that I am the Responsible Official for this application and that, based on information and belief formed after reasonable inquiry, the statements and information on this form are true, accurate, and complete.

1. I am Adam Z Nammari, the owner of the STEERS account ER055736.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Title V Existing 1333.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER OPERATOR Signature: Adam Z Nammari OWNER OPERATOR

Account Number:	ER055736
Signature IP Address:	192.189.129.16
Signature Date:	2025-07-15
Signature Hash:	5AADBA0BD9C26B41BC168F36EA8B1CB39759600F80EAE252DB0039CC909FBE84
Form Hash Code at time of Signature:	88F5A2743E6C8243C40020F3B27543C204A531396DD5E26F36A826274D4A041A

Submission

Reference Number:	The application reference number is 800355
Submitted by:	The application was submitted by ER055736/ Adam Z Nammari
Submitted Timestamp:	The application was submitted on 2025-07-15 at 08:55:11 CDT
Submitted From:	The application was submitted from IP address 192.189.129.16
Confirmation Number:	The confirmation number is 664660
Steers Version:	The STEERS version is 6.92
Permit Number:	The permit number is 1333

Additional Information

Application Creator: This account was created by Stuart L Keil

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
TC1	Test Cell 1 Gas fuel firing	NO_x	106.9	-	2, 3, 9	9, 10	
		CO	84.8	-			
		VOC	46.6	-			
		PM	5.3	-			
		PM_{10}	5.3	-			
		$PM_{2.5}$	5.3	-			
		SO_2	2.0	-			
TC1	Test Cell 1 Liquid fuel firing	NO_x	181.5	-	2, 3, 9	9, 10	
		CO	88.8	-			
		VOC	20.4	-			
		PM	15.7	-			
		PM_{10}	15.7	-			
		$PM_{2.5}$	15.7	-			
		SO_2	7.5	-			
TC1	Test Cell 1 - Annual Emission Rate Gas and Liquid Fuel Firing	NO_x	-	100.2	2, 3, 9	9, 10	14
		CO	-	27.7			
		VOC	-	9.4			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		PM	-	10.7			
		PM_{10}	-	10.7			
		$PM_{2.5}$	-	10.7			
		SO_2	-	2.9			
TC2	Test Cell 2 Gas Fuel Firing	NO_x	8.7	-	2, 3, 9	9, 10	
		CO	18.4	-			
		VOC	4.7	-			
		PM	0.7	-			
		PM_{10}	0.7	-			
		$PM_{2.5}$	0.7	-			
		SO_2	0.4	-			
TC2	Test Cell 2 Liquid Fuel Firing	NO_x	13.0	-	2, 3, 9	9, 10	
		CO	37.0	-			
		VOC	4.7	-			
		PM	3.5	-			
		PM_{10}	3.5	-			
		$PM_{2.5}$	3.5	-			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		SO_2	1.5	-			
TC2	Test Cell 2 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	8.7	2, 3, 9	9, 10	14
		CO	-	9.2			
		VOC	-	0.9			
		PM	-	1.9			
		PM_{10}	-	1.9			
		$PM_{2.5}$	-	1.9			
		SO_2	-	0.8			
TC3	Test Cell 3 Gas Fuel Firing	NO_x	80.0	-	2, 3, 9	9, 10	
		CO	84.8	-			
		VOC	13.5	-			
		PM	2.5	-			
		PM_{10}	2.5	-			
		$PM_{2.5}$	2.5	-			
		SO_2	1.1	-			
TC3	Test Cell 3 Liquid Fuel Firing	NO_x	120.0	-	2, 3, 9	9, 10	
		CO	45.6	-			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		VOC	7.2	-			
		PM	15.7	-			
		PM_{10}	15.7	-			
		$PM_{2.5}$	15.7	-			
		SO_2	4.8	-			
TC3	Test Cell 3 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	35.9	2, 3, 9	9, 10	14
		CO	-	19.4			
		VOC	-	1.8			
		PM	-	10.7			
		PM_{10}	-	10.7			
		$PM_{2.5}$	-	10.7			
		SO_2	-	2.7			
TC4	Test Cell 4 Gas Fuel Firing	NO_x	106.9	-	2, 3, 9	9, 10	
		CO	84.8	-			
		VOC	46.6	-			
		PM	5.3	-			
		PM_{10}	5.3	-			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		$PM_{2.5}$	5.3	-			
		SO_2	2.0	-			
TC4	Test Cell 4 Liquid Fuel Firing	NO_x	181.5	-	2, 3, 9	9, 10	
		CO	41.3	-			
		VOC	14.3	-			
		PM	15.7	-			
		PM_{10}	15.7	-			
		$PM_{2.5}$	15.7	-			
		SO_2	7.5	-			
TC4	Test Cell 4 Gas and Liquid Fuel Firing	NO_x	-	100.2	2, 3, 9	9, 10	14
		CO	-	27.7			
		VOC	-	9.4			
		PM	-	10.7			
		PM_{10}	-	10.7			
		$PM_{2.5}$	-	10.7			
		SO_2	-	2.9			
TC5	Test Cell 5	NO_x	192.8	-	2, 3, 9	9, 10	

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
	Gas Fuel Firing	CO	30.0	-			
		VOC	8.8	-			
		PM	8.5	-			
		PM_{10}	8.5	-			
		$PM_{2.5}$	8.5	-			
		SO_2	3.8	-			
TC5	Test Cell 5 Liquid Fuel Firing	NO_x	338.8	-	2, 3, 9	9, 10	
		CO	30.0	-			
		VOC	8.8	-			
		PM	12.1	-			
		PM_{10}	12.1	-			
		$PM_{2.5}$	12.1	-			
		SO_2	14.1	-			
TC5	Test Cell 5 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	74.53	2, 3, 9	9, 10	14
		CO	-	25.48			
		VOC	-	5.81			
		PM	-	7.49			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		PM_{10}	-	7.49			
		$PM_{2.5}$	-	7.49			
		SO_2	-	4.15			
TC6	Test Cell 6 Gas Fuel Firing	NO_x	949.83	-	2, 3, 9	9, 10	
		CO	1415.08	-			
		VOC	16.17	-			
		PM	4.21	-			
		PM_{10}	4.21	-			
		$PM_{2.5}$	4.21	-			
		SO_2	3.04	-			
TC6	Test Cell 6 Liquid Fuel Firing	NO_x	409.53	-	2, 3, 9	9, 10	
		CO	417.12	-			
		VOC	31.78	-			
		PM	13.60	-			
		PM_{10}	13.60	-			
		$PM_{2.5}$	13.60	-			
		SO_2	0.35	-			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
TC6	Test Cell 6 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	39.78	2, 3, 9	9, 10	14
		CO	-	49.46			
		VOC	-	4.03			
		PM	-	9.88			
		PM_{10}	-	9.88			
		$PM_{2.5}$	-	9.88			
		SO_2	-	5.24			
TC7	Test Cell 7 Gas Fuel Firing	NO_x	1978.02	-	2, 3, 9	9, 10	
		CO	1410.31	-			
		VOC	107.07	-			
		PM	3.66	-			
		PM_{10}	3.66	-			
		$PM_{2.5}$	3.66	-			
		SO_2	4.92	-			
TC7	Test Cell 7 Liquid Fuel Firing	NO_x	989.01	-	2, 3, 9	9, 10	
		CO	1645.36	-			
		VOC	535.35	-			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		PM	8.22	-			
		PM_{10}	8.22	-			
		$PM_{2.5}$	8.22	-			
		SO_2	0.60	-			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	24.31	2, 3, 9	9, 10	14
		CO	-	99.19			
		VOC	-	10.37			
		PM	-	2.15			
		PM_{10}	-	2.15			
		$PM_{2.5}$	-	2.15			
		SO_2	-	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2025 and 2026 (5)	NO_x	-	48.31	2, 3, 9	9, 10	14
		CO	-	99.19			
		VOC	-	10.37			
		PM	-	2.15			
		PM_{10}	-	2.15			
		$PM_{2.5}$	-	2.15			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		SO_2	-	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2027 (6)	NO_x	-	73.46	2, 3, 9	9, 10	14
		CO	-	99.19			
		VOC	-	10.37			
		PM	-	2.15			
		PM_{10}	-	2.15			
		$PM_{2.5}$	-	2.15			
		SO_2	-	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2028 (7)	NO_x	-	82.15	2, 3, 9	9, 10	14
		CO	-	99.19			
		VOC	-	10.37			
		PM	-	2.15			
		PM_{10}	-	2.15			
		$PM_{2.5}$	-	2.15			
		SO_2	-	2.09			
TC7	Test Cell 7 – Annual Emission Rates (8)	NO_x	-	96.69	2, 3, 9	9, 10	14
		CO	-	99.19			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
	Gas and Liquid Fuel Firing – 2029 and thereafter	VOC	-	10.37			
		PM	-	2.15			
		PM_{10}	-	2.15			
		$PM_{2.5}$	-	2.15			
		SO_2	-	2.09			
TC6F	Test Cell No. 6 Flare	NO_x	0.90	0.01			14
		CO	4.10	0.05			
		VOC	0.12	<0.01			
		SO_2	0.19	<0.01			
TC7F	Test Cell No. 7 Flare	NO_x	0.90	0.01			14
		CO	4.10	0.05			
		VOC	0.12	<0.01			
		SO_2	0.19	<0.01			
HFF1	Hydrogen Farm Flare	NO_x	6.15	0.07			14
		CO	28.02	0.34			
		VOC	0.80	0.01			
		SO_2	1.30	0.02			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
F1	TC1, TC3-5 Process Fugitives (9)	VOC	0.6	0.3			
F2	TC2 Process Fugitives (9)	VOC	0.3	0.1			
F3	TC6 Process Fugitives (9)	VOC	0.01	0.01			
S1	Oil/Water Separator	VOC	0.1	0.3			
S2	TC6 Oil/Water Separator	VOC	0.01	0.05			
S3	TC7 Oil/Water Separator	VOC	0.01	0.05			
CT1	Cooling Tower	VOC	0.08	0.37			
		PM	0.60	2.63			
		PM_{10}	0.15	0.66			
		$PM_{2.5}$	0.01	0.03			
		Cl_2	<0.01	<0.01			
CT3	Cooling Tower	VOC	0.1	0.4			
		PM	0.60	2.63			
		PM_{10}	0.15	0.66			
		$PM_{2.5}$	0.01	0.03			
		Cl_2	<0.01	<0.01			

Major NSR Summary Table

Permit Number 20041, N196M2, and PSDTX1590M1					Issuance Date: February 25, 2025		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
CT4	TC6 Cooling Tower	VOC	0.08	0.37			
		PM	0.06	0.26			
		PM_{10}	0.02	0.09			
		$PM_{2.5}$	<0.01	<0.01			
		Cl_2	<0.01	<0.01			
CT5	TC7 Cooling Tower No. 5	VOC	0.08	0.37			
		PM	0.06	0.26			
		PM_{10}	0.02	0.07			
		$PM_{2.5}$	<0.01	<0.01			
		Cl_2	<0.01	<0.01			

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SO_2 - sulfur dioxide
Cl_2 - chlorine
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rates for EPN: TC7 are effective for calendar years 2025-2026, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits.
(6) Emission rates for EPN: TC7 are effective for calendar year 2027, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits.
(7) Emission rates for EPN: TC7 are effective for calendar year 2028, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits.

(8) Emission rates for EPN: TC7 are effective for calendar year 2029 and thereafter, following approval from TCEQ EBT for the NOx emission credits.
(9) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

From: eNotice TCEQ
To: Royce.west@senate.texas.gov; Yvonne.davis@house.texas.gov
Subject: TCEQ Notice - Permit Number O1333
Date: Thursday, July 11, 2024 4:32:31 PM
Attachments: TCEQ Notice - O1333_36830.pdf

This email is being sent to electronically transmit an official document issued by the Office of Air of the Texas Commission on Environmental Quality.

This email is being sent to you because either (a) you filed a document with the Office of the Chief Clerk that made you part of the official mailing list for the above referenced matter, or (b) notice to you is legally required. As authorized by Texas Water Code 5.128, this electronic transmittal is replacing the previous practice of hard copy distribution. Amendments to Texas Government Code 552.137 prompted a change to the agency's privacy policy regarding confidentiality of certain email addresses. The revised privacy policy can be viewed at http://www.tceq.state.tx.us/help/policies/electronic_info_policy.html.

Questions regarding this email may be submitted either by replying directly to this email or by calling Mr. Jesse Chacon, P.E. with the Air Permits Division at (512) 239-5759.

The attached document is provided in an Adobe Acrobat .pdf format. If you cannot display the attachment, you may need to visit the Adobe web site (http://get.adobe.com/reader) to download the free Adobe Acrobat Reader software.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 11, 2024

THE HONORABLE ROYCE WEST
TEXAS SENATE
PO BOX 12068
AUSTIN TX 78711-2068

Re: Accepted Federal Operating Permit Significant Revision Application
Project Number: 36830
Permit Number: O1333
Solar Turbines Incorporated
Dallas Overhaul Center
Desoto, Dallas County
Regulated Entity Number: RN100219963
Customer Reference Number: CN600127518

Dear Senator West:

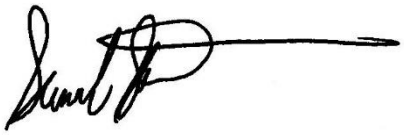
This letter notifies you that the Texas Commission on Environmental Quality has received a federal operating permit (FOP) significant revision application for a site located in your district. As part of this permitting process, the applicant is required to publish a formal newspaper public notice. The notice will inform the public of their right to make comments or request a public hearing. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.850277,32.6275&level=13.

The FOP program regulates both new and existing major sources of emissions. The goal of the program is to improve air quality in Texas through increased compliance by codifying existing applicable regulatory requirements into the FOP. The FOP provides the applicant authorization to operate the equipment at the site. The FOP identifies and codifies air emission requirements (known as applicable requirements) that apply to the emission units at the site. The FOP does not authorize construction of emission units or emissions from those units. The New Source Review (NSR) permit is the mechanism for these authorizations.

Re: Accepted Federal Operating Permit Significant Revision Application

This letter is being sent to you for information only and no action is required. If you need further information, please contact me at (512) 239-1250.

Sincerely,



Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 11, 2024

THE HONORABLE YVONNE DAVIS
TEXAS HOUSE OF REPRESENTATIVES
PO BOX 2910
AUSTIN TX 78768-2910

Re: Accepted Federal Operating Permit Significant Revision Application
Project Number: 36830
Permit Number: O1333
Solar Turbines Incorporated
Dallas Overhaul Center
Desoto, Dallas County
Regulated Entity Number: RN100219963
Customer Reference Number: CN600127518

Dear Representative Davis:

This letter notifies you that the Texas Commission on Environmental Quality has received a federal operating permit (FOP) significant revision application for a site located in your district. As part of this permitting process, the applicant is required to publish a formal newspaper public notice. The notice will inform the public of their right to make comments or request a public hearing. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.850277,32.6275&level=13.

The FOP program regulates both new and existing major sources of emissions. The goal of the program is to improve air quality in Texas through increased compliance by codifying existing applicable regulatory requirements into the FOP. The FOP provides the applicant authorization to operate the equipment at the site.

This letter is being sent to you for information only and no action is required. If you need further information, please contact me at (512) 239-1250.

Sincerely,

Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

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Sen. Royce West (D)

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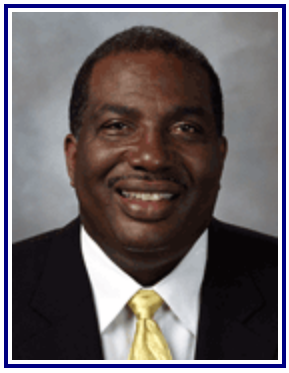
TX Senator
(Texas Senate (/online/txsenate/))

Entered Office: 01-1993
Term Ends: 01-2025
District: 23

General Information

Profession: Attorney
Home Town: Dallas
Birthdate: 09-26-1952
Spouse: Carol
Download vCard (/online/vcard/?id=16772&office=16704) (? (/online/aboutvcards/))



Add to Favorites (/online/add_favorite/?name=Sen. Royce West)

Personal Information

BA, MA-University of Texas at Arlington; JD-University of Houston

S-1993-present

Office Information

Dist. 23 - Dallas (33%), Tarrant (4%)

Committees

Transportation-VC (/online/sencom/detail.php?id=304); Education (/online/sencom/detail.php?id=300); Finance (/online/sencom/detail.php?id=301); Higher Education (/online/sencom/detail.php?id=418); Local Government (/online/sencom/detail.php?id=305); Redistricting-Special (/online/sencom/detail.php?id=532)

Contact and Phone Numbers

Capitol Office:
1E.5
Capitol Phone: (512) 463-0123
Capitol Fax: (512) 463-0299
royce.west@senate.texas.gov (mailto:royce.west@senate.texas.gov)
District Map (http://www.fyi.legis.texas.gov/fyiwebdocs/pdf/senate/dist23/m1.pdf)

Dallas District Office
5787 S. Hampton Road, Suite 385
Dallas, TX 75232
(214) 467-0123
(214) 467-0050

Staff

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GOVERNOR APPOINTMENT (HTTPS://GOV.TEXAS.GOV/NEWS/CATEGORY/APPOINTMENT) ›

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(512) 473-2447
Contact Us (/contact/)

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Rep. Yvonne Davis (D)

Last modified on: 07-06-2021 15:27:47

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TX House Representative
(Texas House of Representatives (/online/txhouse/))

Entered Office: 01-12-1993
District: 111

General Information

Profession: Small Business Owner
Home Town: Dallas
Birthdate: 02-04-1955
Download vCard (/online/vcard/?id=16883&office=16732) (? (/online/aboutvcards/))

Add to Favorites (/online/add_favorite/?name=Rep. Yvonne Davis)

Personal Information

BS-University of Houston

H-1993-present

Office Information

Dist. 111 - Dallas (7%)

Sen. West

Committees

Judiciary & Civil Jurisprudence (/online/housecom/detail.php?id=276); Transportation (/online/housecom/detail.php?id=292)

Contact and Phone Numbers

Capitol Office:
4N.9
Capitol Phone: (512) 463-0598
District Map Download (http://www.fyi.legis.state.tx.us/fyiwebdocs/PDF/house/dist111/m1.pdf)
Zip Codes Within The District (https://fyi.capitol.texas.gov/fyiwebdocs/PDF/house/dist111/r9.pdf)
yvonne.davis@house.texas.gov (mailto:yvonne.davis@house.texas.gov)

District Office:
5787 S. Hampton Road, Suite 447
Dallas, TX 75232
(214) 941-3895
(214) 941-6859

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Legislative Aide	Jesse Bernal (/online/person/?id=59454&staff=8310)	

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Austin, Texas 78701
(512) 473-2447
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(https://www.facebook.com/Texas-State-Directory-142890752404984/) (https://twitter.com/TSDPress)

From: Johnny Bowers
To: Rosa Mora-Nichols
Subject: FW: STEERS Title V Application Submittal (New Application)
Date: Monday, July 8, 2024 7:33:54 AM

Please process. Thanks!

-----Original Message-----
From: steers@tceq.texas.gov <steers@tceq.texas.gov>
Sent: Wednesday, July 3, 2024 9:22 AM
To: RFCAIR4 <RFCAIR4@tceq.texas.gov>; TVAPPS <tvapps@tceq.texas.gov>
Subject: STEERS Title V Application Submittal (New Application)

The TV-E application has been successfully submitted by ADAM NAMMARI. The submittal was received at 07/03/2024 09:22 AM.

The Reference number for this submittal is 663622

The confirmation number for this submittal is 549243.
The Area ID for this submittal is 1333.
The Project ID for this submittal is 36830.
The hash code for this submittal is
D4B6E9C75413317238AE03EB85CF5DFB6D75FA173BDCFF57C618A3DBB258B2A8.

You may access the original application submittal and the notice of final action documents from the COR Viewer which is available at https://ida.tceq.texas.gov/steersstaff/index.cfm?fuseaction=openadmin.submitlog&newsearch=yes.

If you have any questions, please contact the STEERS Help Line at 512-239-6925 or by e-mail at steers@tceq.texas.gov.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
TITLE V PERMIT O1333

SIGNIFICANT REVISION REQUEST

SOLAR TURBINES INCORPORATED
DESOTO, DALLAS COUNTY
ACCOUNT ID NO. DB-1494-I
CUSTOMER NO. 600127518
REGULATED ENTITY NO. 100219963

July 3, 2024

Prepared by:

Stuart L. Keil, P.E.
Keil Environmental, Inc.
413 Honeycomb Ridge
Austin, Texas 78746
TBPELS Registration No. F-4725

Solar Turbines Incorporated
July 2024

TABLE OF CONTENTS

Solar Turbines Incorporated
July 2024

ATTACHMENT A
EXECUTIVE SUMMARY

Solar Turbines Incorporated
July 2024

EXECUTIVE SUMMARY

Solar Turbines Incorporated's (Solar's) proposed new project is designed to facilitate the use of hydrogen fuel in Solar's largest gas turbines, a cutting-edge technology that should allow for decarbonization within the energy industry through the reduction of natural gas fuel firing. Europe and other regions are trending towards mandating hydrogen capabilities in gas turbines resulting in Solar's need to develop hydrogen technology to stay competitive in the gas turbine market. Solar plans to utilize this proposed project at the DeSoto facility to develop turbine emission efficiency on hydrogen blends. Therefore, Solar intends to modify Test Cell Nos. 6 and 7 (existing EPNs TC6 and TC7 respectively) by adding facilities that allow for hydrogen fuel testing.

Each test cell will be equipped with an enclosed flare to be used in safely routing the hydrogen from the hydrogen farm to the cells (EPNs TC6F and TC7F, respectively, or Unit ID Nos. PRE-TC6F and PRE-TC7F). The new hydrogen farm will have four storage tanks and its own safety flare (EPN HFF1, or Unit ID No. PRE-HFF1). Also, it should be noted that both cells will be equipped with new blowers to insert cooling air into the exhaust stack for safety purposes.

Hydrogen testing will occur in one test cell at a time and the worst-case hour could include emissions from the test cell, its flare and the hydrogen farm flare. Hours for hydrogen testing will be limited and random.

Testing on hydrogen blends has shown that NO_x levels will increase significantly compared to turbines running on pure natural gas. With hydrogen blends, all other pollutants (CO, VOC, PM, and SO_2) will decrease as hydrogen in the blended fuel increases. Therefore, this project estimates higher NO_x hourly emissions for both cells and higher annual emissions for Test Cell No. 7.

Although hydrogen testing will not increase CO and VOC due to development testing with hydrogen blends, the CO and VOC hourly emissions for Test Cell Nos. 6 and 7 will be increased to allow for more testing at low loads. In addition, improvements are proposed for annual CO and VOC emissions for Test Cell No. 7. Also, slight improvements are proposed for TC6's hourly emissions from liquid fuel firing for CO and VOC emissions.

Lastly, Test Cell No. 6 will undergo a significant rebuild that allows for additional configurations of turbines to be tested in the cell. The size of the turbines to be tested will not change and permitted annual emission limits will not change. As part of this rebuild, the TC6 stack will be moved a couple meters.

The project is subject to federal nonattainment review due to increased NO_x emissions and federal Prevention of Significant Deterioration (PSD) review due to increased NO_x and CO emissions.

Solar Turbines Incorporated
July 2024

ATTACHMENT B
APPLICATION FOR PERMIT REVISION/RENEWAL, FORM OP-2

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1
Texas Commission on Environmental Quality

Date: 07/03/2024	
Permit No.: O1333	
Regulated Entity No.: RN100219963	
Company Name: Solar Turbines Incorporated	
For Submissions to EPA	
Has an electronic copy of this application been submitted (or is being submitted) to EPA?	☒ YES ☐ NO
I. Application Type	
Indicate the type of application:	
☐ Renewal	
☐ Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.)	
☒ Significant Revision	
☐ Revision Requesting Prior Approval	
☐ Administrative Revision	
☐ Response to Reopening	
II. Qualification Statement	
For SOP Revisions Only	☒ YES ☐ NO
For GOP Revisions Only	☐ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1 *(continued)*
Texas Commission on Environmental Quality

III. Major Source Pollutants (Complete this section if the permit revision is due to a change at the site or change in regulations.)						
Indicate all pollutants for which the site is a major source based on the site's potential to emit: *(Check the appropriate box[es].)*						
☒ VOC	☒ NO_X	☐ SO_2	☐ PM_{10}	☐ CO	☐ Pb	☐ HAP
Other:						
IV. Reference Only Requirements *(For reference only)*						
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?					☒ YES ☐ NO ☐ N/A	
V. Delinquent Fees and Penalties						
Notice: This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.						

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 2
Texas Commission on Environmental Quality

Date: 07/03/2024
Permit No.: O1333
Regulated Entity No.: RN100219963
Company Name: Solar Turbines Incorporated

Using the table below, provide a description of the revision.

Revision No.	Revision Code	New Unit	Unit/Group ID No.	Process Applicable Form	NSR Authorization	Description of Change and Provisional Terms and Conditions
1	SIG-D	YES	PRE-TC6F, PRE-TC7F, PRE-HFF1/ GRPPRE-FLR	OP-UA15, OP-REQ3, OP-SUMR	20041, N196M2, PSDTX1590M1	Regarding the new hydrogen fuel firing project for Test Cell Nos. 6 and 7 (see NSR Project No. 375826), three new flares will be installed at the site. The appropriate forms are attached. No changes in unique attributes will occur for the test cells, Unit ID Nos. TC6 and TC7. The modification will be authorized under provisions of FCAA, Title 1.
2	SIG-D	YES	TC6, TC7, PRE-TC6F, PRE-TC7F, PRE-HFF1	Major NSR Summary Table	20041, N196M2, PSDTX1590M1	Regarding the new hydrogen fuel firing project for Test Cell Nos. 6 and 7, the currently proposed amendment creates the need to update the Major NSR Summary Table for the Title V permit. A draft copy of the table is attached. Also, the finalized federal nonattainment and PSD permit will need to be attached and the new permit issuance date should be incorporated on the Title V permit's NSR Authorization References Table.
3	SIG-D	YES	NA	OP-REQ1	20041, N196M2, PSDTX1590M1	The new hydrogen fuel firing project will cause the site to become subject to 40 CFR 68, Chemical Accident Prevention Provisions. A page from the Form OP-REQ1 is provided to indicate this rule applicability.

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Date: 07/03/2024		
Permit No.: O1333		
Regulated Entity No.: RN100219963		
Company Name: Solar Turbines Incorporated		
I.	**Significant Revision** *(Complete this section if you are submitting a significant revision application or a renewal application that includes a significant revision.)*	
A.	Is the site subject to bilingual requirements pursuant to 30 TAC § 122.322?	☒ YES ☐ NO
B.	Indicate the alternate language(s) in which public notice is required: Spanish	
C.	Will, there be a change in air pollutant emissions as a result of the significant revision?	☒ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Using the table below, indicate the air pollutant(s) that will be changing and include a brief description of the change in pollutant emissions for each pollutant:

Pollutant	Description of the Change in Pollutant Emissions
NO_x	Previously authorized emissions of 112.47 tons/yr increase by 24.26 tons/yr to an estimated 136.73 tons/yr due to new hydrogen fuel firing
CO	Previously authorized emissions of 64.08 tons/yr increase by 85.00 tons/yr to an estimated 149.08 tons/yr due to increased testing at low loads
VOC	Previously authorized emissions of 8.82 tons/yr increase by 5.59 tons/yr to an estimated 14.41 tons/yr due to increased testing at low loads
$PM/PM_{10}/PM_{2.5}$	Previously authorized emissions of 12.03 tons/yr do not increase since the use of hydrogen lessens the amount of natural gas fuel firing
SO_2	Previously authorized emissions of 7.33 tons/yr increase by 0.03 tons/yr to an estimated 7.36 tons/yr due to the small amount of sulfur in the natural gas fired in the new flares

Solar Turbines Incorporated
July 2024

ATTACHMENT C
EMISSION POINT/STATIONARY VENT/DISTILLATION OPERATION VENT/PROCESS VENT ATTRIBUTES, FORM OP-UA15, TABLE 2

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 3)
Federal Operating Permit Program
Table 2a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Emission Point ID No.	SOP/GOP Index No.	Chapter 115 Division	Combustion Exhaust	Vent Type	Total Uncontrolled VOC Weight	Combined 24-Hour VOC Weight	VOC Concentration	VOC Concentration or Emission Rate at Maximum Operating Conditions
GRPPRE-FLR	R5121-FLARES	NO	NO	REGVAPPL		100-		YES

Solar Turbines Incorporated
July 2024

ATTACHMENT D
APPLICABLE REQUIREMENTS SUMMARY, FORM OP-REQ3

Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program

Table 1a: Additions

Date: 07/03/2024	**Regulated Entity No.:** RN100219963	**Permit No.:** O1333
Company Name: Solar Turbines Incorporated	**Area Name:** Dallas Overhaul Center	

Revision No.	Unit/Group/ Process ID No.	Unit/Group /Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
1	GRPPRE-FLR	OP-UA15	R5121-FLARES	VOC	Chapter 115	§115.127(a)(2), §115.127(a)(2)(A), [G]§115.122(a)(4)

Applicable Requirements Summary
Form OP-REQ3 (Page 2)
Federal Operating Permit Program

Table 1b: Additions

Date: 07/03/2024	**Regulated Entity No.:** RN100219963	**Permit No.:** O1333
Company Name: Solar Turbines Incorporated	**Area Name:** Dallas Overhaul Center	

Revision No.	Unit/Group/ Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
1	GRPPRE-FLR	R5121-FLARES	VOC	[G]§115.125, §115.126(2)	§115.126, §115.126(2), §115.126(4)	None

Solar Turbines Incorporated
July 2024

ATTACHMENT E
INDIVIDUAL UNIT SUMMARY FOR REVISIONS, FORM OP-SUMR

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
A	1	PRE-TC6F	OP-UA15	Pre-Flare TC6F Vent		20041	N196M2, PSDTX1590M1
A	1	PRE-TC7F	OP-UA15	Pre-Flare TC7F Vent		20041	N196M2, PSDTX1590M1
A	1	PRE-HFF1	OP-UA15	Pre-Flare HFF1 Vent		20041	N196M2, PSDTX1590M1

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 2

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Revision No.	ID No.	Applicable Form	Group AI	Group ID No.
1	PRE-TC6F	OP-UA15	A	GRPPRE-FLR
1	PRE-TC7F	OP-UA15	A	GRPPRE-FLR
1	PRE-HFF1	OP-UA15	A	GRPPRE-FLR

Solar Turbines Incorporated
July 2024

ATTACHMENT F
MAJOR NSR SUMMARY TABLE

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC1	Test Cell 1 Gas fuel firing	NO_x	106.9	---	2, 3, 9	9, 10	
		CO	84.8	---			
		VOC	46.6	---			
		PM	5.3	---			
		PM_{10}	5.3	---			
		$PM_{2.5}$	5.3	---			
		SO_2	2.0	---			
TC1	Test Cell 1 Liquid fuel firing	NO_x	181.5	---	2, 3, 9	9, 10	
		CO	88.8	---			
		VOC	20.4	---			
		PM	15.7	---			
		PM_{10}	15.7	---			
		$PM_{2.5}$	15.7	---			
		SO_2	7.5	---			
TC1	Test Cell 1 - Annual Emission Rate Gas and Liquid Fuel Firing	NO_x	---	100.2	2, 3, 9	9, 10	14
		CO	---	27.7			
		VOC	---	9.4			
		PM	---	10.7			
		PM_{10}	---	10.7			
		$PM_{2.5}$	---	10.7			
		SO_2	---	2.9			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC2	Test Cell 2 Gas Fuel Firing	NO_x	8.7	---	2, 3, 9	9, 10	
		CO	18.4	---			
		VOC	4.7	---			
		PM	0.7	---			
		PM_{10}	0.7	---			
		$PM_{2.5}$	0.7	---			
		SO_2	0.4	---			
TC2	Test Cell 2 Liquid Fuel Firing	NO_x	13.0	---	2, 3, 9	9, 10	
		CO	37.0	---			
		VOC	4.7	---			
		PM	3.5	---			
		PM_{10}	3.5	---			
		$PM_{2.5}$	3.5	---			
		SO_2	1.5	---			
TC2	Test Cell 2 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	8.7	2, 3, 9	9, 10	14
		CO	---	9.2			
		VOC	---	0.9			
		PM	---	1.9			
		PM_{10}	---	1.9			
		$PM_{2.5}$	---	1.9			
		SO_2	---	0.8			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC3	Test Cell 3 Gas Fuel Firing	NO_x	80.0	---	2, 3, 9	9, 10	
		CO	84.8	---			
		VOC	13.5	---			
		PM	2.5	---			
		PM_{10}	2.5	---			
		$PM_{2.5}$	2.5	---			
		SO_2	1.1	---			
TC3	Test Cell 3 Liquid Fuel Firing	NO_x	120.0	---	2, 3, 9	9, 10	
		CO	45.6	---			
		VOC	7.2	---			
		PM	15.7	---			
		PM_{10}	15.7	---			
		$PM_{2.5}$	15.7	---			
		SO_2	4.8	---			
TC3	Test Cell 3 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	35.9	2, 3, 9	9, 10	14
		CO	---	19.4			
		VOC	---	1.8			
		PM	---	10.7			
		PM_{10}	---	10.7			
		$PM_{2.5}$	---	10.7			
		SO_2	---	2.7			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC4	Test Cell 4 Gas Fuel Firing	NO_x	106.9	---	2, 3, 9	9, 10	
		CO	84.8	---			
		VOC	46.6	---			
		PM	5.3	---			
		PM_{10}	5.3	---			
		$PM_{2.5}$	5.3	---			
		SO_2	2.0	---			
TC4	Test Cell 4 Liquid Fuel Firing	NO_x	181.5	---	2, 3, 9	9, 10	
		CO	41.3	---			
		VOC	14.3	---			
		PM	15.7	---			
		PM_{10}	15.7	---			
		$PM_{2.5}$	15.7	---			
		SO_2	7.5	---			
TC4	Test Cell 4 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	100.2	2, 3, 9	9, 10	14
		CO	---	27.7			
		VOC	---	9.4			
		PM	---	10.7			
		PM_{10}	---	10.7			
		$PM_{2.5}$	---	10.7			
		SO_2	---	2.9			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC5	Test Cell 5 Gas Fuel Firing	NO_x	192.8	---	2, 3, 9	9, 10	
		CO	30.0	---			
		VOC	8.8	---			
		PM	8.5	---			
		PM_{10}	8.5	---			
		$PM_{2.5}$	8.5	---			
		SO_2	3.8	---			
TC5	Test Cell 5 Liquid Fuel Firing	NO_x	338.8	---	2, 3, 9	9, 10	
		CO	30.0	---			
		VOC	8.8	---			
		PM	12.1	---			
		PM_{10}	12.1	---			
		$PM_{2.5}$	12.1	---			
		SO_2	14.1	---			
TC5	Test Cell 5 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	74.53	2, 3, 9	9, 10	14
		CO	---	25.48			
		VOC	---	5.81			
		PM	---	7.49			
		PM_{10}	---	7.49			
		$PM_{2.5}$	---	7.49			
		SO_2	---	4.15			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC6	Test Cell 6 Gas Fuel Firing	NO_x	949.83	---	2, 3, 9	9, 10	
		CO	1,415.08	---			
		VOC	16.17	---			
		PM	4.21	---			
		PM_{10}	4.21	---			
		$PM_{2.5}$	4.21	---			
		SO_2	3.04	---			
TC6	Test Cell 6 Liquid Fuel Firing	NO_x	409.53	---	2, 3, 9	9, 10	
		CO	417.12	---			
		VOC	31.78	---			
		PM	13.60	---			
		PM_{10}	13.60	---			
		$PM_{2.5}$	13.60	---			
		SO_2	0.35	---			
TC6	Test Cell 6 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	39.78	2, 3, 9	9, 10	14
		CO	---	49.46			
		VOC	---	4.03			
		PM	---	9.88			
		PM_{10}	---	9.88			
		$PM_{2.5}$	---	9.88			
		SO_2	---	5.24			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC7	Test Cell 7 Gas Fuel Firing	NO_x	1,978.02	---	2, 3, 9	9, 10	
		CO	1,410.31	---			
		VOC	107.07	---			
		PM	3.66	---			
		PM_{10}	3.66	---			
		$PM_{2.5}$	3.66	---			
		SO_2	4.92	---			
TC7	Test Cell 7 Liquid Fuel Firing	NO_x	989.01	---	2, 3, 9	9, 10	
		CO	1,645.36	---			
		VOC	535.35	---			
		PM	8.22	---			
		PM_{10}	8.22	---			
		$PM_{2.5}$	8.22	---			
		SO_2	0.60	---			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	48.31	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2027 (5)	NO_x	---	73.46	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2028 (6)	NO_x	---	82.15	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2029 and thereafter (7)	NO_x	---	96.69	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC6F	Test Cell No. 6 Flare	NO_x	2.38	0.03			14
		CO	3.97	0.05			
		VOC	0.12	0.001			
		SO_2	0.19	0.002			
TC7F	Test Cell No. 7 Flare	NO_x	2.38	0.03			14
		CO	3.97	0.05			
		VOC	0.12	0.001			
		SO_2	0.19	0.002			
HFF1	Hydrogen Farm Flare	NO_x	16.27	0.20			14
		CO	27.12	0.33			
		VOC	0.80	0.01			
		SO_2	1.30	0.02			
F1	TC1, TC3-5 Process Fugitives (8)	VOC	0.6	0.3			
F2	TC2 Process Fugitives (8)	VOC	0.3	0.1			
F3	TC6 Process Fugitives (8)	VOC	0.01	0.01			
S1	Oil/Water Separator	VOC	0.1	0.3			
S2	TC6 Oil/Water Separator	VOC	0.01	0.05			
S3	TC7 Oil/Water Separator	VOC	0.01	0.05			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**
CT1	Cooling Tower	VOC	0.08	0.37			
		PM	0.60	2.63			
		PM_{10}	0.15	0.66			
		$PM_{2.5}$	0.01	0.03			
		Cl_2	<0.01	<0.01			
CT3	Cooling Tower	VOC	0.1	0.4			
		PM	0.60	2.63			
		PM_{10}	0.15	0.66			
		$PM_{2.5}$	0.01	0.03			
		Cl_2	<0.01	<0.01			
CT4	TC6 Cooling Tower	VOC	0.08	0.37			
		PM	0.06	0.26			
		PM_{10}	0.02	0.09			
		$PM_{2.5}$	<0.01	<0.01			
		Cl_2	<0.01	<0.01			
CT5	TC7 Cooling Tower No. 5	VOC	0.08	0.37			
		PM	0.06	0.26			
		PM_{10}	0.02	0.07			
		$PM_{2.5}$	<0.01	<0.01			
		Cl_2	<0.01	<0.01			

Major NSR Summary Table

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SO_2 - sulfur dioxide
Cl_2 - chlorine
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rates for EPN TC7 are effective for calendar year 2027, and/or for the subsequent calendar year following approval from TCEQ EBT for the NO_x emission credits.
(6) Emission rates for EPN TC7 are effective for calendar year 2028, and/or for the subsequent calendar year following approval from TCEQ EBT for the NO_x emission credits.
(7) Emission rates for EPN TC7 are effective for calendar year 2029, and thereafter, following approval from TCEQ EBT for the NO_x emission credits.
(8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Solar Turbines Incorporated
July 2024

ATTACHMENT G
APPLICATION AREA-WIDE APPLICABILITY DETERMINATIONS AND GENERAL INFORMATION, FORM OP-REQ1, PAGE 76

Date:	07/03/2024
Permit No.:	O1333
RN No.:	RN100219963

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

Form OP-REQ1: Page 76				
IX.	**Title 40 Code of Federal Regulations Part 68 (40 CFR Part 68) - Chemical Accident Prevention Provisions**			
	A.	**Applicability**		
♦	1.	The application area contains processes subject to 40 CFR Part 68, Chemical Accident Prevention Provisions, and specified in 40 CFR § 68.10.	☒YES	☐NO
X.	**Title 40 Code of Federal Regulations Part 82 (40 CFR Part 82) - Protection of Stratospheric Ozone**			
	A.	**Subpart A - Production and Consumption Controls**		
♦	1.	The application area is located at a site that produces, transforms, destroys, imports, or exports a controlled substance or product.	☐YES	☐NO ☐N/A
	B.	**Subpart B - Servicing of Motor Vehicle Air Conditioners**		
♦	1.	Servicing, maintenance, and/or repair of fleet vehicle air conditioning systems using ozone-depleting refrigerants is conducted in the application area.	☐YES	☐NO
	C.	**Subpart C - Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances**		
♦	1.	The application area sells or distributes one or more nonessential products (which release a Class I or Class II substance) that are subject to 40 CFR Part 82, Subpart C.	☐YES	☐NO ☐N/A
	D.	**Subpart D - Federal Procurement**		
♦	1.	The application area is owned/operated by a department, agency, or instrumentality of the United States.	☐YES	☐NO ☐N/A
	E.	**Subpart E - The Labeling of Products Using Ozone Depleting Substances**		
♦	1.	The application area includes containers in which a Class I or Class II substance is stored or transported prior to the sale of the Class I or Class II substance to the ultimate consumer.	☐YES	☐NO ☐N/A
♦	2.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products containing a Class I or Class II substance.	☐YES	☐NO ☐N/A
♦	3.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products manufactured with a process that uses a Class I or Class II substance.	☐YES	☐NO ☐N/A

Solar Turbines Incorporated
July 2024

ATTACHMENT H
COPY OF THE CURRENT NSR PERMIT
NOS. 20041, N196M1 AND PSDTX1590
(to be amended)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 23, 2024

MR ADAM Z NAMMARI
GENERAL MANAGER
SOLAR TURBINES INCORPORATED
215 E CENTRE PARK BLVD
DESOTO TX 75115-2481

Re: Permit Alteration
Permit Number: 20041
Expiration Date: December 23, 2025
Solar Turbines Incorporated
Solar Turbines Dallas Overhaul Center
Desoto, Dallas County
Regulated Entity Number: RN100219963
Customer Reference Number: CN600127518
Associated Permit Numbers: N196M1 and PSDTX1590

Dear Mr. Nammari:

SOLAR TURBINES INCORPORATED has requested alteration of the conditions and Maximum Allowable Emission Rates Table (MAERT) of the above-referenced permit.

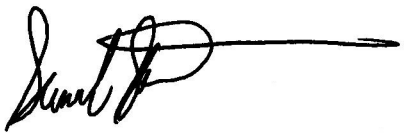
In accordance with Title 30 Texas Administrative Code §116.116(c), Permit Number 20041 is altered. Enclosed are the new general conditions, altered special conditions, and altered MAERT. Please attach these to your permit.

All preconstruction authorizations (including authorization for emissions of greenhouse gases, if applicable) should be obtained prior to start of construction.

If you need further information or have any questions, please contact Ms. Oreoluwa Adetutu at (512) 239-1251 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Re: Permit Number: 20041

Sincerely,



Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

Enclosure

cc: Air Section Manager, Region 4 - Dallas/Fort Worth
Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 366375

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Solar Turbines Incorporated
Authorizing the Construction and Operation of
Solar Turbines Dallas Overhaul Center
Located at **Desoto, Dallas County, Texas**
Latitude 32.6275 Longitude -96.850277

Permits: 20041, N196M1 and PSDTX1590
Revision Date: February 23, 2024
Expiration Date: December 23, 2025

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

[1] Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen
NSPS = New Source Performance Standards

PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Number 20041, N196M1, and PSDTX1590

Emission Standards

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates (MAERT)," and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits shall be based on a rolling 12-month year rather than the calendar year.

   If any condition or limitation of this permit or of any Texas Commission on Environmental Quality (TCEQ) regulation is more stringent than another, then the more stringent condition or limitation shall govern and be the standard by which compliance will be demonstrated.

Opacity / Visible Emissions

2. Opacity of emissions from Emission Point Nos. (EPNs): TC2 and TC3 must not exceed 20 percent; EPNs: TC1, TC4, TC6 and TC7 must not exceed 15 percent and EPN: TC5 must not exceed 10 percent averaged over a six-minute period except for those periods described in Title 30 Texas Administrative Code § 111.111(a)(1)(E). Opacity shall be determined by using the U.S. Environmental Protection Agency Method 9. **(08/21)**

3. A visual check of the test cell exhaust shall be made on each turbine immediately after startup, while idling, and at each test load. If excess visible emissions are expected to be present for more than the six minutes allowed in 30 TAC § 111.111(a)(1)(E) for the initial start-up, or if excess visible emissions occur while idling or after a test load change, the unit under test shall be shut down as soon as practicable and not restarted until the cause of the excess emissions has been corrected. **(08/21)**

Fuel Limitations

4. Fuel fired in the turbines under testing is limited to one of the following:

   A. Pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet.

   B. Distillate fuel oil containing no more than 0.05 weight percent total sulfur for EPNs: TC1 through TC5. **(12/14)**

   C. Distillate fuel oil for EPNs: TC6 and TC7 is limited to a sulfur content of 15 parts per million, wet. **(08/21)**

   D. Distillate fuel oil firing is limited as follows: **(08/21)**

      (1) Distillate fuel oil shall not be fired in EPNs TC1 through TC5 for more than a total of 16 hours per 24-hour period;

      (2) No more than two test cells among EPNs TC1 through TC5 shall fire distillate fuel oil concurrently;

      (3) Distillate fuel firing in EPN TC7 shall not occur when distillate fuel is also fired in more than two other cells among EPNs TC1 through TC6.

Operational Limitations

5. All parking lots and plant roads shall be paved and regularly cleaned to achieve maximum control of dust emissions.

6. Contaminated lubricating oil drained from the turbines shall be washed down the waste oil handling system as soon as practicable.

7. All lubricating oil and fuel oil spills shall be cleaned up immediately or washed into the waste oil handling system as soon as practicable.

8. Waste lubricating oil shall be stored in closed containers until shipped off-site by an authorized waste disposal service.

Continuous Demonstration of Compliance

9. To demonstrate compliance with Special Condition No. 1, actual emissions of nitrogen oxides, carbon monoxide, volatile organic compounds, and particulate matter from each test cell will be calculated according to the following formula: **(08/10)**

   Emissions = Nominal or Engine-Specific Emission Factor x Actual Fuel Usage during the Test

   A. Emissions must be in pounds per hour (lb/hr);

   B. The emission factor must be in pounds of pollutant per pound of fuel (lb of emissions/lb of fuel) or pounds of emissions per million British thermal units (lb of emissions/MMBtu), must be pollutant specific, considering the fuel type and emission controls, and be the nominal emission factors used to develop guaranteed emission levels provided to customers or engine-specific emission factors. These factors are to be derived from the manufacturer's emission test database or from an emissions model if the turbines have not been tested before, and these factors may be corrected for ambient conditions at the test cell; and **(08/21)**

   C. The actual fuel usage during the test will be expressed in pounds or MMBtu per hour (lb/hr or MMBtu/hr), as applicable, depending on the units used in Special Condition 9.B, above.

      Actual emissions of sulfur dioxide (SO_2) will be calculated by assuming that the fuel has the maximum sulfur content allowed under Special Condition No. 4 and that 100 percent of the sulfur in the fuel is converted to SO_2. The permit holder may base these calculations either on full load fuel consumption for the duration of the test or on the actual fuel consumption during each test.

Recordkeeping Requirements

10. In addition to the recordkeeping requirements specified in General Condition No. 7, the following records shall be maintained at the plant site on a five-year rolling retention basis and be made available at the request of personnel of the TCEQ or any air pollution control agency with jurisdiction. **(08/21)**

    A. The following data shall be recorded for each turbine test: model of turbine tested, the type of fuel fired, the duration of the test, and whether water injection was used.

B. The data required in Special Condition No. 9.A shall be recorded daily, and a summary shall be produced monthly that represents emissions from each test cell in lb/hr on a daily basis and tons emitted for the previous 12-month period. The data shall be reduced using the calculation methods specified in Special Condition No. 9.

C. The daily, monthly, and annual records required in Special Condition No. 10.A and 10.B shall be kept in a central location with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions.

D. To demonstrate compliance with Special Condition No. 4, the permit holder must keep records of fuel analyses, as obtained from the supplier on an annual basis for natural gas and on a shipment basis for liquid fuel, or must maintain a contract with the fuel supplier that guarantees compliance. **(06/02)**

E. The holder of this permit shall document the check for visible emissions in order to show compliance with Special Condition No. 3. **(01/07)**

F. Records of annual emissions from Test Cell 7 (EPN TC7) shall be maintained which demonstrate compliance with the annualized MAERT and Nonattainment New Source Review (NNSR) - Emission Reductions limitations in this permit. These records of emissions shall be calculated utilizing the methodology found in Special Condition No. 9. **(08/21)**

G. The holder of this permit shall document hazardous air pollutant emissions resulting from the operation of all sources at the site to demonstrate compliance with Special Condition No. 17. **(09/04)**

Nonattainment New Source Review (NNSR) - Emission Reductions

11. This Nonattainment New Source Review (NNSR) permit is issued/approved based on the requirement that the permit holder offset the project emission increase for facilities authorized by this permit prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H. **(08/21)**

12. This NNSR permit is issued/approved based on the use of 47.8 tpy of NO_x emission credits from TCEQ Emission Reduction Credit Certificate (ERCC) No. 2803. This ERCC provides offsets at the ratio of 1.2 to 1 for 39.8 tpy of NO_x from EPN: TC6. The NO_x emission rate is for calculation purposes only and is not an enforceable allowable emission rate. **(02/15)**

13. This NNSR permit is issued/approved based on the future requirement to obtain and provide 87.3 tpy of NO_x emission reduction credits, as specified in Special Condition No. 14, to offset the 72.69 tpy emission increase for EPN: TC7 authorized by this permit at a ratio of 1.2 to 1. The permit holder shall use the total number of tons of NO_x credits each year as outlined in the table below to offset the NOx project emission increase for the facility, as follows: **(02/24)**

Calendar Year or Later	Emissions Increase tpy	Credits to be Provided tpy
2023	9.89	11.9
2024	10.78	13.0
2025	11.67	14.0

Calendar Year or Later	Emissions Increase tpy	Credits to be Provided tpy
2026	24.31	29.2
2027	49.46	59.4
2028	58.15	69.8
2029 and thereafter	72.69	87.3

A. The permit holder shall use 14.0 tpy of NO_x ERCs from TCEQ credit certificate numbers 4013, 4014, 4015, 4016, 4017, and 4018 to offset NO_x project increase for the facility authorized by this permit at a ratio of 1.2 to 1.0 for calendar years 2023, 2024, and 2025.

B. The permit holder was approved to use 26.3 tpy of NO_X ERCs from TCEQ credit certificate numbers 4112, 4113, and 4114 to offset the NO_X project increase for the facility authorized by this permit at a ratio of 1.2 to 1.0. A total of 15.2 tpy will satisfy the NO_X project emission increase for the facility through calendar year 2026. The additional 11.1 tpy will be applied towards the Credits to be Provided value for calendar year 2027.

14. The permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number. The following options are available: **(08/21)**

A. Obtain and use NOx Emission Reduction Credits (ERCs). A completed ERC use application shall be submitted to the TCEQ EBT Program at least 90 days before the year of operation of the facilities covered by this permit. The permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number.

B. Obtain and use NOx Discrete Emission Reduction Credits (DERCs) for each year of authorized operation. The permit holder shall submit a completed DERC intent to use application form by August 1st prior to the continuing of operations each year, and the intent to use must be reviewed and approved by the TCEQ EBT Program for compliance with 30 Texas Administrative Code §101.376(f). Additionally, the permit holder shall submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify the DERCs by TCEQ DERC certificate number to cover, at a minimum, one year of operation of the permitted facilities.

(1) In accordance with 30 Texas Administrative Code §101.372(i) in areas having an ozone season of less than 12 months (as defined in 40 Code of Federal Regulations Part 58, Appendix D), NOx discrete emission credits generated outside the ozone season may not be used during the ozone season.

C. A combination of ERCs and DERCs can be used provided that the total credits satisfy the amounts specified in Special Condition No. 13 and that the appropriate EBT Program usage applications and the appropriate Air Permits Division alteration or amendment applications are submitted. **(08/21)**

Additional Permit Requirements

15. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TCEQ or the local air pollution control agency with appropriate jurisdiction.

16. The holder of this permit shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:

    A. The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.

    B. The EPNs as listed on the maximum allowable emission rates table.

17. The holder of this permit shall operate the facilities at this site such that for hazardous air pollutants (HAPs), which have been listed pursuant to § 112(b) of the Federal Clean Air Act:

    A. Emissions of any single HAP shall not exceed 10 tons per year (tpy).

    B. Emissions of all HAPs combined shall not exceed 25 tpy. **(09/04)**

Referenced Authorizations

18. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). These lists are not intended to be all inclusive and can be altered without modifications to this permit. **(08/21)**

Authorization	Source or Activity
PBR 106.472	Diesel Fuel Tank No. 2 (EPN: DFT2)

Date: February 23, 2024

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20041, N196M1, and PSDTX1590

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC1	Test Cell 1 Gas fuel firing	NO_x	106.9	-
		CO	84.8	-
		VOC	46.6	-
		PM	5.3	-
		PM_{10}	5.3	-
		$PM_{2.5}$	5.3	-
		SO_2	2.0	-
TC1	Test Cell 1 Liquid fuel firing	NO_x	181.5	-
		CO	88.8	-
		VOC	20.4	-
		PM	15.7	-
		PM_{10}	15.7	-
		$PM_{2.5}$	15.7	-
		SO_2	7.5	-
TC1	Test Cell 1 - Annual Emission Rate Gas and Liquid Fuel Firing	NO_x	-	100.2
		CO	-	27.7
		VOC	-	9.4
		PM	-	10.7
		PM_{10}	-	10.7
		$PM_{2.5}$	-	10.7
		SO_2	-	2.9

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC2	Test Cell 2 Gas Fuel Firing	NO_x	8.7	-
		CO	18.4	-
		VOC	4.7	-
		PM	0.7	-
		PM_{10}	0.7	-
		$PM_{2.5}$	0.7	-
		SO_2	0.4	-
TC2	Test Cell 2 Liquid Fuel Firing	NO_x	13.0	-
		CO	37.0	-
		VOC	4.7	-
		PM	3.5	-
		PM_{10}	3.5	-
		$PM_{2.5}$	3.5	-
		SO_2	1.5	-
TC2	Test Cell 2 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	8.7
		CO	-	9.2
		VOC	-	0.9
		PM	-	1.9
		PM_{10}	-	1.9
		$PM_{2.5}$	-	1.9
		SO_2	-	0.8

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC3	Test Cell 3 Gas Fuel Firing	NO_x	80.0	-
		CO	84.8	-
		VOC	13.5	-
		PM	2.5	-
		PM_{10}	2.5	-
		$PM_{2.5}$	2.5	-
		SO_2	1.1	-
TC3	Test Cell 3 Liquid Fuel Firing	NO_x	120.0	-
		CO	45.6	-
		VOC	7.2	-
		PM	15.7	-
		PM_{10}	15.7	-
		$PM_{2.5}$	15.7	-
		SO_2	4.8	-
TC3	Test Cell 3 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	35.9
		CO	-	19.4
		VOC	-	1.8
		PM	-	10.7
		PM_{10}	-	10.7
		$PM_{2.5}$	-	10.7
		SO_2	-	2.7

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC4	Test Cell 4 Gas Fuel Firing	NO_x	106.9	-
		CO	84.8	-
		VOC	46.6	-
		PM	5.3	-
		PM_{10}	5.3	-
		$PM_{2.5}$	5.3	-
		SO_2	2.0	-
TC4	Test Cell 4 Liquid Fuel Firing	NO_x	181.5	-
		CO	41.3	-
		VOC	14.3	-
		PM	15.7	-
		PM_{10}	15.7	-
		$PM_{2.5}$	15.7	-
		SO_2	7.5	-
TC4	Test Cell 4 Gas and Liquid Fuel Firing	NO_x	-	100.2
		CO	-	27.7
		VOC	-	9.4
		PM	-	10.7
		PM_{10}	-	10.7
		$PM_{2.5}$	-	10.7
		SO_2	-	2.9

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC5	Test Cell 5 Gas Fuel Firing	NO_x	192.8	-
		CO	30.0	-
		VOC	8.8	-
		PM	8.5	-
		PM_{10}	8.5	-
		$PM_{2.5}$	8.5	-
		SO_2	3.8	-
TC5	Test Cell 5 Liquid Fuel Firing	NO_x	338.8	-
		CO	30.0	-
		VOC	8.8	-
		PM	12.1	-
		PM_{10}	12.1	-
		$PM_{2.5}$	12.1	-
		SO_2	14.1	-
TC5	Test Cell 5 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	74.53
		CO	-	25.48
		VOC	-	5.81
		PM	-	7.49
		PM_{10}	-	7.49
		$PM_{2.5}$	-	7.49
		SO_2	-	4.15

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC6	Test Cell 6 Gas Fuel Firing	NO_x	298.43	-
		CO	26.00	-
		VOC	1.49	-
		PM	4.21	-
		PM_{10}	4.21	-
		$PM_{2.5}$	4.21	-
		SO_2	3.04	-
TC6	Test Cell 6 Liquid Fuel Firing	NO_x	409.53	-
		CO	26.29	-
		VOC	7.50	-
		PM	13.60	-
		PM_{10}	13.60	-
		$PM_{2.5}$	13.60	-
		SO_2	0.35	-
TC6	Test Cell 6 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	39.78
		CO	-	49.46
		VOC	-	4.03
		PM	-	9.88
		PM_{10}	-	9.88
		$PM_{2.5}$	-	9.88
		SO_2	-	5.24

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC7	Test Cell 7 Gas Fuel Firing	NO_x	659.34	-
		CO	469.11	-
		VOC	10.69	-
		PM	3.66	-
		PM_{10}	3.66	-
		$PM_{2.5}$	3.66	-
		SO_2	4.92	-
TC7	Test Cell 7 Liquid Fuel Firing	NO_x	989.01	-
		CO	470.11	-
		VOC	10.72	-
		PM	8.22	-
		PM_{10}	8.22	-
		$PM_{2.5}$	8.22	-
		SO_2	0.60	-
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	24.31
		CO	-	6.04
		VOC	-	0.46
		PM	-	1.53
		PM_{10}	-	1.53
		$PM_{2.5}$	-	1.53
		SO_2	-	1.88

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2027 (5)	NO_x	-	49.46
		CO	-	5.84
		VOC	-	0.46
		PM	-	1.72
		PM_{10}	-	1.72
		$PM_{2.5}$	-	1.72
		SO_2	-	1.71
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2028 (6)	NO_x	-	58.15
		CO	-	5.74
		VOC	-	0.47
		PM	-	1.72
		PM_{10}	-	1.72
		$PM_{2.5}$	-	1.72
		SO_2	-	1.67
TC7	Test Cell 7 – Annual Emission Rates (7) Gas and Liquid Fuel Firing – 2029 and thereafter	NO_x	-	72.69
		CO	-	7.17
		VOC	-	0.59
		PM	-	2.15
		PM_{10}	-	2.15
		$PM_{2.5}$	-	2.15
		SO_2	-	2.09

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
F1	TC1, TC3-5 Process Fugitives (8)	VOC	0.6	0.3
F2	TC2 Process Fugitives (8)	VOC	0.3	0.1
F3	TC6 Process Fugitives (8)	VOC	0.01	0.01
S1	Oil/Water Separator	VOC	0.1	0.3
S2	TC6 Oil/Water Separator	VOC	0.01	0.05
S3	TC7 Oil/Water Separator	VOC	0.01	0.05
CT1	Cooling Tower	VOC	0.08	0.37
		PM	0.60	2.63
		PM_{10}	0.15	0.66
		$PM_{2.5}$	0.01	0.03
		Cl_2	<0.01	<0.01
CT3	Cooling Tower	VOC	0.1	0.4
		PM	0.60	2.63
		PM_{10}	0.15	0.66
		$PM_{2.5}$	0.01	0.03
		Cl_2	<0.01	<0.01
CT4	TC6 Cooling Tower	VOC	0.08	0.37
		PM	0.06	0.26
		PM_{10}	0.02	0.09
		$PM_{2.5}$	<0.01	<0.01
		Cl_2	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
CT5	TC7 Cooling Tower No. 5	VOC	0.08	0.37
		PM	0.06	0.26
		PM_{10}	0.02	0.07
		$PM_{2.5}$	<0.01	<0.01
		Cl_2	<0.01	<0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SO_2 - sulfur dioxide
Cl_2 - chlorine
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rates for EPN: TC7 are effective for calendar year 2027, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits
(6) Emission rates for EPN: TC7 are effective for calendar year 2028, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits
(7) Emission rates for EPN: TC7 are effective for calendar year 2029 and thereafter, following approval from TCEQ EBT for the NOx emission credits.
(8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: February 23, 2024

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 3)
Federal Operating Permit Program
Table 2a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Emission Point ID No.	SOP/GOP Index No.	Chapter 115 Division	Combustion Exhaust	Vent Type	Total Uncontrolled VOC Weight	Combined 24-Hour VOC Weight	VOC Concentration	VOC Concentration or Emission Rate at Maximum Operating Conditions
GRPPRE-FLR	R5121-FLARES	NO	NO	REGVAPPL		100-		YES

Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program

Table 1a: Additions

Date: 07/03/2024	**Regulated Entity No.:** RN100219963	**Permit No.:** O1333
Company Name: Solar Turbines Incorporated	**Area Name:** Dallas Overhaul Center	

Revision No.	Unit/Group/ Process ID No.	Unit/Group /Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
1	GRPPRE-FLR	OP-UA15	R5121-FLARES	VOC	Chapter 115	§115.127(a)(2), §115.127(a)(2)(A), [G]§115.122(a)(4)

Applicable Requirements Summary
Form OP-REQ3 (Page 2)
Federal Operating Permit Program

Table 1b: Additions

Date: 07/03/2024	**Regulated Entity No.:** RN100219963	**Permit No.:** O1333
Company Name: Solar Turbines Incorporated	**Area Name:** Dallas Overhaul Center	

Revision No.	Unit/Group/ Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
1	GRPPRE-FLR	R5121-FLARES	VOC	[G]§115.125, §115.126(2)	§115.126, §115.126(2), §115.126(4)	None

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
A	1	PRE-TC6F	OP-UA15	Pre-Flare TC6F Vent		20041	N196M2, PSDTX1590M1
A	1	PRE-TC7F	OP-UA15	Pre-Flare TC7F Vent		20041	N196M2, PSDTX1590M1
A	1	PRE-HFF1	OP-UA15	Pre-Flare HFF1 Vent		20041	N196M2, PSDTX1590M1

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 2

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Revision No.	ID No.	Applicable Form	Group AI	Group ID No.
1	PRE-TC6F	OP-UA15	A	GRPPRE-FLR
1	PRE-TC7F	OP-UA15	A	GRPPRE-FLR
1	PRE-HFF1	OP-UA15	A	GRPPRE-FLR

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1
Texas Commission on Environmental Quality

Date: 07/03/2024	
Permit No.: O1333	
Regulated Entity No.: RN100219963	
Company Name: Solar Turbines Incorporated	
For Submissions to EPA	
Has an electronic copy of this application been submitted (or is being submitted) to EPA?	☒ YES ☐ NO
I. Application Type	
Indicate the type of application:	
☐ Renewal	
☐ Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.)	
☒ Significant Revision	
☐ Revision Requesting Prior Approval	
☐ Administrative Revision	
☐ Response to Reopening	
II. Qualification Statement	
For SOP Revisions Only	☒ YES ☐ NO
For GOP Revisions Only	☐ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1 *(continued)*
Texas Commission on Environmental Quality

III. Major Source Pollutants (Complete this section if the permit revision is due to a change at the site or change in regulations.)						
Indicate all pollutants for which the site is a major source based on the site's potential to emit: *(Check the appropriate box[es].)*						
☒ VOC	☒ NO_X	☐ SO_2	☐ PM_{10}	☐ CO	☐ Pb	☐ HAP
Other:						
IV. Reference Only Requirements *(For reference only)*						
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?					☒ YES ☐ NO ☐ N/A	
V. Delinquent Fees and Penalties						
Notice: This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.						

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 2
Texas Commission on Environmental Quality

Date: 07/03/2024
Permit No.: O1333
Regulated Entity No.: RN100219963
Company Name: Solar Turbines Incorporated

Using the table below, provide a description of the revision.

Revision No.	Revision Code		Unit/Group	Process	NSR Authorization	Description of Change and Provisional Terms and Conditions
		New Unit	ID No.	Applicable Form		
1	SIG-D	YES	PRE-TC6F, PRE-TC7F, PRE-HFF1/ GRPPRE-FLR	OP-UA15, OP-REQ3, OP-SUMR	20041, N196M2, PSDTX1590M1	Regarding the new hydrogen fuel firing project for Test Cell Nos. 6 and 7 (see NSR Project No. 375826), three new flares will be installed at the site. The appropriate forms are attached. No changes in unique attributes will occur for the test cells, Unit ID Nos. TC6 and TC7. The modification will be authorized under provisions of FCAA, Title 1.
2	SIG-D	YES	TC6, TC7, PRE-TC6F, PRE-TC7F, PRE-HFF1	Major NSR Summary Table	20041, N196M2, PSDTX1590M1	Regarding the new hydrogen fuel firing project for Test Cell Nos. 6 and 7, the currently proposed amendment creates the need to update the Major NSR Summary Table for the Title V permit. A draft copy of the table is attached. Also, the finalized federal nonattainment and PSD permit will need to be attached and the new permit issuance date should be incorporated on the Title V permit's NSR Authorization References Table.
3	SIG-D	YES	NA	OP-REQ1	20041, N196M2, PSDTX1590M1	The new hydrogen fuel firing project will cause the site to become subject to 40 CFR 68, Chemical Accident Prevention Provisions. A page from the Form OP-REQ1 is provided to indicate this rule applicability.

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Date: 07/03/2024		
Permit No.: O1333		
Regulated Entity No.: RN100219963		
Company Name: Solar Turbines Incorporated		
I.	**Significant Revision** *(Complete this section if you are submitting a significant revision application or a renewal application that includes a significant revision.)*	
A.	Is the site subject to bilingual requirements pursuant to 30 TAC § 122.322?	☒ YES ☐ NO
B.	Indicate the alternate language(s) in which public notice is required: Spanish	
C.	Will, there be a change in air pollutant emissions as a result of the significant revision?	☒ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Using the table below, indicate the air pollutant(s) that will be changing and include a brief description of the change in pollutant emissions for each pollutant:

Pollutant	Description of the Change in Pollutant Emissions
NO_x	Previously authorized emissions of 112.47 tons/yr increase by 24.26 tons/yr to an estimated 136.73 tons/yr due to new hydrogen fuel firing
CO	Previously authorized emissions of 64.08 tons/yr increase by 85.00 tons/yr to an estimated 149.08 tons/yr due to increased testing at low loads
VOC	Previously authorized emissions of 8.82 tons/yr increase by 5.59 tons/yr to an estimated 14.41 tons/yr due to increased testing at low loads
$PM/PM_{10}/PM_{2.5}$	Previously authorized emissions of 12.03 tons/yr do not increase since the use of hydrogen lessens the amount of natural gas fuel firing
SO_2	Previously authorized emissions of 7.33 tons/yr increase by 0.03 tons/yr to an estimated 7.36 tons/yr due to the small amount of sulfur in the natural gas fired in the new flares

Texas Commission on Environmental Quality

Title V Existing

1333

Site Information (Regulated Entity)

What is the name of the permit area to be authorized?	DALLAS OVERHAUL CENTER
Does the site have a physical address?	Yes
Physical Address	
Number and Street	215 E CENTRE PARK BLVD
City	DESOTO
State	TX
ZIP	75115
County	DALLAS
Latitude (N) (##.######)	32.6275
Longitude (W) (-###.######)	96.850277
Primary SIC Code	3511
Secondary SIC Code	
Primary NAICS Code	333611
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN100219963
What is the name of the Regulated Entity (RE)?	SOLAR TURBINES DLS OVERHAUL CENTER
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	215 E CENTRE PARK BLVD
City	DESOTO
State	TX
ZIP	75115
County	DALLAS
Latitude (N) (##.######)	32.6275
Longitude (W) (-###.######)	-96.850277
Facility NAICS Code	
What is the primary business of this entity?	INDUSTRIAL CHEMICAL MANUFACTURING PLANT

Customer (Applicant) Information

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	CN600127518
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Solar Turbines Incorporated
Texas SOS Filing Number	5330206
Federal Tax ID	953621514
State Franchise Tax ID	19536215148

State Sales Tax ID	
Local Tax ID	
DUNS Number	42261099
Number of Employees	101-250
Independently Owned and Operated?	No

Responsible Official Contact

Person TCEQ should contact for questions about this application:	
Organization Name	SOLAR TURBINES INCORPORATED
Prefix	MR
First	ADAM
Middle	
Last	NAMMARI
Suffix	
Credentials	
Title	PLANT MANAGER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	215 E CENTRE PARK BLVD
Routing (such as Mail Code, Dept., or Attn:)	
City	DESOTO
State	TX
ZIP	75115
Phone (###-###-####)	9722285535
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	9722286180
E-mail	NAMMARI_ADAM_Z@SOLARTURBINES.COM

Technical Contact

Person TCEQ should contact for questions about this application:	
Select existing TC contact or enter a new contact.	GIL DIEKHOFF(SOLAR TURBINES ...)
Organization Name	SOLAR TURBINES INCORPORATED
Prefix	MR
First	GIL
Middle	
Last	DIEKHOFF
Suffix	
Credentials	
Title	EHS MANAGER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic

Mailing Address (include Suite or Bldg. here, if applicable)	215 E CENTRE PARK BLVD
Routing (such as Mail Code, Dept., or Attn:)	
City	DESOTO
State	TX
ZIP	75115
Phone (###-###-####)	9722286157
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	9722286180
E-mail	DIEKHOFF_GIL_P@SOLARTURBINES.COM

Title V General Information - Existing

1) Permit Type:	SOP
2) Permit Latitude Coordinate:	32 Deg 37 Min 39 Sec
3) Permit Longitude Coordinate:	96 Deg 51 Min 1 Sec
4) Is this submittal a new application or an update to an existing application?	New Application
4.1. What type of permitting action are you applying for?	Significant Revision
4.1.1. Are there any permits that should be voided upon issuance of this permit application through permit conversion?	No
4.1.2. Are there any permits that should be voided upon issuance of this permit application through permit consolidation?	No
5) Does this application include Acid Rain Program or Cross-State Air Pollution Rule requirements?	No

Title V Attachments Existing

Attach OP-1 (Site Information Summary)

Attach OP-2 (Application for Permit Revision/Renewal)

[File Properties]

File Name	OP_2_op-2 062824.docx
Hash	CE4A971C139573966655D1E13CBA498739E796E213FDAB86850FA93AA1A78350
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

Attach OP-REQ1 (Application Area-Wide Applicability Determinations and General Information)

Attach OP-REQ2 (Negative Applicable Requirement Determinations)

Attach OP-REQ3 (Applicable Requirements Summary)

[File Properties]

File Name	OP_REQ3_op-req3 062924.docx
Hash	055384C89078830DF4B7CBEDD8FF30FA5DA2ABEB2EBA0F39634668125B54C4C3

MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

Attach OP-PBRSUP (Permits by Rule Supplemental Table)

Attach OP-SUMR (Individual Unit Summary for Revisions)

[File Properties]

File Name	OP_SUMR_op-sumr 062924.docx
Hash	A0B7209463B867C29EC67D1FC2CE0A76D1B04A138A76BEA0E2A617EDA9E3C77F
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

Attach OP-MON (Monitoring Requirements)

Attach OP-UA (Unit Attribute) Forms

[File Properties]

File Name	op-ua15 062924.docx
Hash	A483479D8A1731C97271A5D30F9A4D61DDD5C3F5A1FD36E4A8D1924326D47C82
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

If applicable, attach OP-AR1 (Acid Rain Permit Application)

Attach OP-CRO2 (Change of Responsible Official Information)

Attach OP-DEL (Delegation of Responsible Official)

Attach any other necessary information needed to complete the permit.

[File Properties]

File Name	Solar Turbines TC-6 and TC-7 significant revision 070324.pdf
Hash	CE2ABD513DB6FE8EDD1F32AF60986BAF04644E79B01EA05B9998A905BB7AEAD3
MIME-Type	application/pdf

An additional space to attach any other necessary information needed to complete the permit.

[File Properties]

File Name	Major NSR Summary Table 20041 062424.docx
Hash	35CEB411A7D212EB2BAFD7855C7F51CBA675284D53454003B1DD9D277EC2BCF7
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

Expedite Title V

1) Per Texas Health and Safety Code, Section 382.05155, does the applicant want to expedite the processing of this application?	No

Certification

I certify that I am the Responsible Official for this application and that, based on information and belief formed after reasonable inquiry, the statements and information on this form are true, accurate, and complete.

1. I am Adam Z Nammari, the owner of the STEERS account ER055736.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcemer of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Title V Existing 1333.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEC

OWNER OPERATOR Signature: Adam Z Nammari OWNER OPERATOR

Account Number:	ER055736
Signature IP Address:	198.180.154.30
Signature Date:	2024-07-03
Signature Hash:	2FF6706C514A69CD2EC258DC9B0D46729ED1648AF75FBC14F4D8F5C85D4790A3
Form Hash Code at time of Signature:	D4B6E9C75413317238AE03EB85CF5DFB6D75FA173BDCFF57C618A3DBB258B2A8

Submission

Reference Number:	The application reference number is 663622
Submitted by:	The application was submitted by ER055736/Adam Z Nammari
Submitted Timestamp:	The application was submitted on 2024-07-03 at 09:22:04 CDT
Submitted From:	The application was submitted from IP address 198.180.154.30
Confirmation Number:	The confirmation number is 549243
Steers Version:	The STEERS version is 6.78
Permit Number:	The permit number is 1333

Additional Information

Application Creator: This account was created by Stuart L Keil

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
TITLE V PERMIT O1333

SIGNIFICANT REVISION REQUEST

SOLAR TURBINES INCORPORATED
DESOTO, DALLAS COUNTY
ACCOUNT ID NO. DB-1494-I
CUSTOMER NO. 600127518
REGULATED ENTITY NO. 100219963

July 3, 2024

Prepared by:

Stuart L. Keil, P.E.
Keil Environmental, Inc.
413 Honeycomb Ridge
Austin, Texas 78746
TBPELS Registration No. F-4725

Solar Turbines Incorporated
July 2024

TABLE OF CONTENTS

Solar Turbines Incorporated
July 2024

ATTACHMENT A
EXECUTIVE SUMMARY

Solar Turbines Incorporated
July 2024

EXECUTIVE SUMMARY

Solar Turbines Incorporated's (Solar's) proposed new project is designed to facilitate the use of hydrogen fuel in Solar's largest gas turbines, a cutting-edge technology that should allow for decarbonization within the energy industry through the reduction of natural gas fuel firing. Europe and other regions are trending towards mandating hydrogen capabilities in gas turbines resulting in Solar's need to develop hydrogen technology to stay competitive in the gas turbine market. Solar plans to utilize this proposed project at the DeSoto facility to develop turbine emission efficiency on hydrogen blends. Therefore, Solar intends to modify Test Cell Nos. 6 and 7 (existing EPNs TC6 and TC7 respectively) by adding facilities that allow for hydrogen fuel testing.

Each test cell will be equipped with an enclosed flare to be used in safely routing the hydrogen from the hydrogen farm to the cells (EPNs TC6F and TC7F, respectively, or Unit ID Nos. PRE-TC6F and PRE-TC7F). The new hydrogen farm will have four storage tanks and its own safety flare (EPN HFF1, or Unit ID No. PRE-HFF1). Also, it should be noted that both cells will be equipped with new blowers to insert cooling air into the exhaust stack for safety purposes.

Hydrogen testing will occur in one test cell at a time and the worst-case hour could include emissions from the test cell, its flare and the hydrogen farm flare. Hours for hydrogen testing will be limited and random.

Testing on hydrogen blends has shown that NO_x levels will increase significantly compared to turbines running on pure natural gas. With hydrogen blends, all other pollutants (CO, VOC, PM, and SO_2) will decrease as hydrogen in the blended fuel increases. Therefore, this project estimates higher NO_x hourly emissions for both cells and higher annual emissions for Test Cell No. 7.

Although hydrogen testing will not increase CO and VOC due to development testing with hydrogen blends, the CO and VOC hourly emissions for Test Cell Nos. 6 and 7 will be increased to allow for more testing at low loads. In addition, improvements are proposed for annual CO and VOC emissions for Test Cell No. 7. Also, slight improvements are proposed for TC6's hourly emissions from liquid fuel firing for CO and VOC emissions.

Lastly, Test Cell No. 6 will undergo a significant rebuild that allows for additional configurations of turbines to be tested in the cell. The size of the turbines to be tested will not change and permitted annual emission limits will not change. As part of this rebuild, the TC6 stack will be moved a couple meters.

The project is subject to federal nonattainment review due to increased NO_x emissions and federal Prevention of Significant Deterioration (PSD) review due to increased NO_x and CO emissions.

Solar Turbines Incorporated
July 2024

ATTACHMENT B
APPLICATION FOR PERMIT REVISION/RENEWAL, FORM OP-2

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1
Texas Commission on Environmental Quality

Date: 07/03/2024	
Permit No.: O1333	
Regulated Entity No.: RN100219963	
Company Name: Solar Turbines Incorporated	
For Submissions to EPA	
Has an electronic copy of this application been submitted (or is being submitted) to EPA?	☒ YES ☐ NO
I. Application Type	
Indicate the type of application:	
☐ Renewal	
☐ Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.)	
☒ Significant Revision	
☐ Revision Requesting Prior Approval	
☐ Administrative Revision	
☐ Response to Reopening	
II. Qualification Statement	
For SOP Revisions Only	☒ YES ☐ NO
For GOP Revisions Only	☐ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1 *(continued)*
Texas Commission on Environmental Quality

III. Major Source Pollutants (Complete this section if the permit revision is due to a change at the site or change in regulations.)						
Indicate all pollutants for which the site is a major source based on the site's potential to emit: *(Check the appropriate box[es].)*						
☒ VOC	☒ NO_X	☐ SO_2	☐ PM_{10}	☐ CO	☐ Pb	☐ HAP
Other:						
IV. Reference Only Requirements *(For reference only)*						
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?					☒ YES ☐ NO ☐ N/A	
V. Delinquent Fees and Penalties						
Notice: This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.						

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 2
Texas Commission on Environmental Quality

Date: 07/03/2024
Permit No.: O1333
Regulated Entity No.: RN100219963
Company Name: Solar Turbines Incorporated

Using the table below, provide a description of the revision.

Revision No.	Revision Code	New Unit	Unit/Group ID No.	Process Applicable Form	NSR Authorization	Description of Change and Provisional Terms and Conditions
1	SIG-D	YES	PRE-TC6F, PRE-TC7F, PRE-HFF1/ GRPPRE-FLR	OP-UA15, OP-REQ3, OP-SUMR	20041, N196M2, PSDTX1590M1	Regarding the new hydrogen fuel firing project for Test Cell Nos. 6 and 7 (see NSR Project No. 375826), three new flares will be installed at the site. The appropriate forms are attached. No changes in unique attributes will occur for the test cells, Unit ID Nos. TC6 and TC7. The modification will be authorized under provisions of FCAA, Title 1.
2	SIG-D	YES	TC6, TC7, PRE-TC6F, PRE-TC7F, PRE-HFF1	Major NSR Summary Table	20041, N196M2, PSDTX1590M1	Regarding the new hydrogen fuel firing project for Test Cell Nos. 6 and 7, the currently proposed amendment creates the need to update the Major NSR Summary Table for the Title V permit. A draft copy of the table is attached. Also, the finalized federal nonattainment and PSD permit will need to be attached and the new permit issuance date should be incorporated on the Title V permit's NSR Authorization References Table.
3	SIG-D	YES	NA	OP-REQ1	20041, N196M2, PSDTX1590M1	The new hydrogen fuel firing project will cause the site to become subject to 40 CFR 68, Chemical Accident Prevention Provisions. A page from the Form OP-REQ1 is provided to indicate this rule applicability.

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Date: 07/03/2024		
Permit No.: O1333		
Regulated Entity No.: RN100219963		
Company Name: Solar Turbines Incorporated		
I.	**Significant Revision** *(Complete this section if you are submitting a significant revision application or a renewal application that includes a significant revision.)*	
A.	Is the site subject to bilingual requirements pursuant to 30 TAC § 122.322?	☒ YES ☐ NO
B.	Indicate the alternate language(s) in which public notice is required: Spanish	
C.	Will, there be a change in air pollutant emissions as a result of the significant revision?	☒ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Using the table below, indicate the air pollutant(s) that will be changing and include a brief description of the change in pollutant emissions for each pollutant:

Pollutant	Description of the Change in Pollutant Emissions
NO_x	Previously authorized emissions of 112.47 tons/yr increase by 24.26 tons/yr to an estimated 136.73 tons/yr due to new hydrogen fuel firing
CO	Previously authorized emissions of 64.08 tons/yr increase by 85.00 tons/yr to an estimated 149.08 tons/yr due to increased testing at low loads
VOC	Previously authorized emissions of 8.82 tons/yr increase by 5.59 tons/yr to an estimated 14.41 tons/yr due to increased testing at low loads
$PM/PM_{10}/PM_{2.5}$	Previously authorized emissions of 12.03 tons/yr do not increase since the use of hydrogen lessens the amount of natural gas fuel firing
SO_2	Previously authorized emissions of 7.33 tons/yr increase by 0.03 tons/yr to an estimated 7.36 tons/yr due to the small amount of sulfur in the natural gas fired in the new flares

Solar Turbines Incorporated
July 2024

ATTACHMENT C
EMISSION POINT/STATIONARY VENT/DISTILLATION OPERATION VENT/PROCESS VENT ATTRIBUTES, FORM OP-UA15, TABLE 2

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 3)
Federal Operating Permit Program
Table 2a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Emission Point ID No.	SOP/GOP Index No.	Chapter 115 Division	Combustion Exhaust	Vent Type	Total Uncontrolled VOC Weight	Combined 24-Hour VOC Weight	VOC Concentration	VOC Concentration or Emission Rate at Maximum Operating Conditions
GRPPRE-FLR	R5121-FLARES	NO	NO	REGVAPPL		100-		YES

Solar Turbines Incorporated
July 2024

ATTACHMENT D
APPLICABLE REQUIREMENTS SUMMARY, FORM OP-REQ3

Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program

Table 1a: Additions

Date: 07/03/2024	**Regulated Entity No.:** RN100219963	**Permit No.:** O1333
Company Name: Solar Turbines Incorporated	**Area Name:** Dallas Overhaul Center	

Revision No.	Unit/Group/ Process ID No.	Unit/Group /Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
1	GRPPRE-FLR	OP-UA15	R5121-FLARES	VOC	Chapter 115	§115.127(a)(2), §115.127(a)(2)(A), [G]§115.122(a)(4)

Applicable Requirements Summary
Form OP-REQ3 (Page 2)
Federal Operating Permit Program

Table 1b: Additions

Date: 07/03/2024	**Regulated Entity No.:** RN100219963	**Permit No.:** O1333
Company Name: Solar Turbines Incorporated	**Area Name:** Dallas Overhaul Center	

Revision No.	Unit/Group/ Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
1	GRPPRE-FLR	R5121-FLARES	VOC	[G]§115.125, §115.126(2)	§115.126, §115.126(2), §115.126(4)	None

Solar Turbines Incorporated
July 2024

ATTACHMENT E
INDIVIDUAL UNIT SUMMARY FOR REVISIONS, FORM OP-SUMR

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
A	1	PRE-TC6F	OP-UA15	Pre-Flare TC6F Vent		20041	N196M2, PSDTX1590M1
A	1	PRE-TC7F	OP-UA15	Pre-Flare TC7F Vent		20041	N196M2, PSDTX1590M1
A	1	PRE-HFF1	OP-UA15	Pre-Flare HFF1 Vent		20041	N196M2, PSDTX1590M1

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 2

Date	Permit No.	Regulated Entity No.
07/03/2024	O1333	RN100219963

Revision No.	ID No.	Applicable Form	Group AI	Group ID No.
1	PRE-TC6F	OP-UA15	A	GRPPRE-FLR
1	PRE-TC7F	OP-UA15	A	GRPPRE-FLR
1	PRE-HFF1	OP-UA15	A	GRPPRE-FLR

Solar Turbines Incorporated
July 2024

ATTACHMENT F
MAJOR NSR SUMMARY TABLE

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC1	Test Cell 1 Gas fuel firing	NO_x	106.9	---	2, 3, 9	9, 10	
		CO	84.8	---			
		VOC	46.6	---			
		PM	5.3	---			
		PM_{10}	5.3	---			
		$PM_{2.5}$	5.3	---			
		SO_2	2.0	---			
TC1	Test Cell 1 Liquid fuel firing	NO_x	181.5	---	2, 3, 9	9, 10	
		CO	88.8	---			
		VOC	20.4	---			
		PM	15.7	---			
		PM_{10}	15.7	---			
		$PM_{2.5}$	15.7	---			
		SO_2	7.5	---			
TC1	Test Cell 1 - Annual Emission Rate Gas and Liquid Fuel Firing	NO_x	---	100.2	2, 3, 9	9, 10	14
		CO	---	27.7			
		VOC	---	9.4			
		PM	---	10.7			
		PM_{10}	---	10.7			
		$PM_{2.5}$	---	10.7			
		SO_2	---	2.9			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC2	Test Cell 2 Gas Fuel Firing	NO_x	8.7	---	2, 3, 9	9, 10	
		CO	18.4	---			
		VOC	4.7	---			
		PM	0.7	---			
		PM_{10}	0.7	---			
		$PM_{2.5}$	0.7	---			
		SO_2	0.4	---			
TC2	Test Cell 2 Liquid Fuel Firing	NO_x	13.0	---	2, 3, 9	9, 10	
		CO	37.0	---			
		VOC	4.7	---			
		PM	3.5	---			
		PM_{10}	3.5	---			
		$PM_{2.5}$	3.5	---			
		SO_2	1.5	---			
TC2	Test Cell 2 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	8.7	2, 3, 9	9, 10	14
		CO	---	9.2			
		VOC	---	0.9			
		PM	---	1.9			
		PM_{10}	---	1.9			
		$PM_{2.5}$	---	1.9			
		SO_2	---	0.8			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC3	Test Cell 3 Gas Fuel Firing	NO_x	80.0	---	2, 3, 9	9, 10	
		CO	84.8	---			
		VOC	13.5	---			
		PM	2.5	---			
		PM_{10}	2.5	---			
		$PM_{2.5}$	2.5	---			
		SO_2	1.1	---			
TC3	Test Cell 3 Liquid Fuel Firing	NO_x	120.0	---	2, 3, 9	9, 10	
		CO	45.6	---			
		VOC	7.2	---			
		PM	15.7	---			
		PM_{10}	15.7	---			
		$PM_{2.5}$	15.7	---			
		SO_2	4.8	---			
TC3	Test Cell 3 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	35.9	2, 3, 9	9, 10	14
		CO	---	19.4			
		VOC	---	1.8			
		PM	---	10.7			
		PM_{10}	---	10.7			
		$PM_{2.5}$	---	10.7			
		SO_2	---	2.7			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC4	Test Cell 4 Gas Fuel Firing	NO_x	106.9	---	2, 3, 9	9, 10	
		CO	84.8	---			
		VOC	46.6	---			
		PM	5.3	---			
		PM_{10}	5.3	---			
		$PM_{2.5}$	5.3	---			
		SO_2	2.0	---			
TC4	Test Cell 4 Liquid Fuel Firing	NO_x	181.5	---	2, 3, 9	9, 10	
		CO	41.3	---			
		VOC	14.3	---			
		PM	15.7	---			
		PM_{10}	15.7	---			
		$PM_{2.5}$	15.7	---			
		SO_2	7.5	---			
TC4	Test Cell 4 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	100.2	2, 3, 9	9, 10	14
		CO	---	27.7			
		VOC	---	9.4			
		PM	---	10.7			
		PM_{10}	---	10.7			
		$PM_{2.5}$	---	10.7			
		SO_2	---	2.9			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC5	Test Cell 5 Gas Fuel Firing	NO_x	192.8	---	2, 3, 9	9, 10	
		CO	30.0	---			
		VOC	8.8	---			
		PM	8.5	---			
		PM_{10}	8.5	---			
		$PM_{2.5}$	8.5	---			
		SO_2	3.8	---			
TC5	Test Cell 5 Liquid Fuel Firing	NO_x	338.8	---	2, 3, 9	9, 10	
		CO	30.0	---			
		VOC	8.8	---			
		PM	12.1	---			
		PM_{10}	12.1	---			
		$PM_{2.5}$	12.1	---			
		SO_2	14.1	---			
TC5	Test Cell 5 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	74.53	2, 3, 9	9, 10	14
		CO	---	25.48			
		VOC	---	5.81			
		PM	---	7.49			
		PM_{10}	---	7.49			
		$PM_{2.5}$	---	7.49			
		SO_2	---	4.15			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC6	Test Cell 6 Gas Fuel Firing	NO_x	949.83	---	2, 3, 9	9, 10	
		CO	1,415.08	---			
		VOC	16.17	---			
		PM	4.21	---			
		PM_{10}	4.21	---			
		$PM_{2.5}$	4.21	---			
		SO_2	3.04	---			
TC6	Test Cell 6 Liquid Fuel Firing	NO_x	409.53	---	2, 3, 9	9, 10	
		CO	417.12	---			
		VOC	31.78	---			
		PM	13.60	---			
		PM_{10}	13.60	---			
		$PM_{2.5}$	13.60	---			
		SO_2	0.35	---			
TC6	Test Cell 6 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	39.78	2, 3, 9	9, 10	14
		CO	---	49.46			
		VOC	---	4.03			
		PM	---	9.88			
		PM_{10}	---	9.88			
		$PM_{2.5}$	---	9.88			
		SO_2	---	5.24			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC7	Test Cell 7 Gas Fuel Firing	NO_x	1,978.02	---	2, 3, 9	9, 10	
		CO	1,410.31	---			
		VOC	107.07	---			
		PM	3.66	---			
		PM_{10}	3.66	---			
		$PM_{2.5}$	3.66	---			
		SO_2	4.92	---			
TC7	Test Cell 7 Liquid Fuel Firing	NO_x	989.01	---	2, 3, 9	9, 10	
		CO	1,645.36	---			
		VOC	535.35	---			
		PM	8.22	---			
		PM_{10}	8.22	---			
		$PM_{2.5}$	8.22	---			
		SO_2	0.60	---			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	---	48.31	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2027 (5)	NO_x	---	73.46	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2028 (6)	NO_x	---	82.15	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2029 and thereafter (7)	NO_x	---	96.69	2, 3, 9	9, 10	14
		CO	---	99.19			
		VOC	---	10.37			
		PM	---	2.15			
		PM_{10}	---	2.15			
		$PM_{2.5}$	---	2.15			
		SO_2	---	2.09			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
TC6F	Test Cell No. 6 Flare	NO_x	2.38	0.03			14
		CO	3.97	0.05			
		VOC	0.12	0.001			
		SO_2	0.19	0.002			
TC7F	Test Cell No. 7 Flare	NO_x	2.38	0.03			14
		CO	3.97	0.05			
		VOC	0.12	0.001			
		SO_2	0.19	0.002			
HFF1	Hydrogen Farm Flare	NO_x	16.27	0.20			14
		CO	27.12	0.33			
		VOC	0.80	0.01			
		SO_2	1.30	0.02			
F1	TC1, TC3-5 Process Fugitives (8)	VOC	0.6	0.3			
F2	TC2 Process Fugitives (8)	VOC	0.3	0.1			
F3	TC6 Process Fugitives (8)	VOC	0.01	0.01			
S1	Oil/Water Separator	VOC	0.1	0.3			
S2	TC6 Oil/Water Separator	VOC	0.01	0.05			
S3	TC7 Oil/Water Separator	VOC	0.01	0.05			

Major NSR Summary Table

Permit Numbers: 20041 and N196M1 and PSDTX1590					Issuance Date:		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**	**Special Conditions/ Application Information**
CT1	Cooling Tower	VOC	0.08	0.37			
		PM	0.60	2.63			
		PM_{10}	0.15	0.66			
		$PM_{2.5}$	0.01	0.03			
		Cl_2	<0.01	<0.01			
CT3	Cooling Tower	VOC	0.1	0.4			
		PM	0.60	2.63			
		PM_{10}	0.15	0.66			
		$PM_{2.5}$	0.01	0.03			
		Cl_2	<0.01	<0.01			
CT4	TC6 Cooling Tower	VOC	0.08	0.37			
		PM	0.06	0.26			
		PM_{10}	0.02	0.09			
		$PM_{2.5}$	<0.01	<0.01			
		Cl_2	<0.01	<0.01			
CT5	TC7 Cooling Tower No. 5	VOC	0.08	0.37			
		PM	0.06	0.26			
		PM_{10}	0.02	0.07			
		$PM_{2.5}$	<0.01	<0.01			
		Cl_2	<0.01	<0.01			

Major NSR Summary Table

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SO_2 - sulfur dioxide
Cl_2 - chlorine
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rates for EPN TC7 are effective for calendar year 2027, and/or for the subsequent calendar year following approval from TCEQ EBT for the NO_x emission credits.
(6) Emission rates for EPN TC7 are effective for calendar year 2028, and/or for the subsequent calendar year following approval from TCEQ EBT for the NO_x emission credits.
(7) Emission rates for EPN TC7 are effective for calendar year 2029, and thereafter, following approval from TCEQ EBT for the NO_x emission credits.
(8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Solar Turbines Incorporated
July 2024

ATTACHMENT G
APPLICATION AREA-WIDE APPLICABILITY DETERMINATIONS AND GENERAL INFORMATION, FORM OP-REQ1, PAGE 76

Date:	07/03/2024
Permit No.:	O1333
RN No.:	RN100219963

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

Form OP-REQ1: Page 76				
IX.	**Title 40 Code of Federal Regulations Part 68 (40 CFR Part 68) - Chemical Accident Prevention Provisions**			
	A.	**Applicability**		
♦	1.	The application area contains processes subject to 40 CFR Part 68, Chemical Accident Prevention Provisions, and specified in 40 CFR § 68.10.	☒YES	☐NO
X.	**Title 40 Code of Federal Regulations Part 82 (40 CFR Part 82) - Protection of Stratospheric Ozone**			
	A.	**Subpart A - Production and Consumption Controls**		
♦	1.	The application area is located at a site that produces, transforms, destroys, imports, or exports a controlled substance or product.	☐YES	☐NO ☐N/A
	B.	**Subpart B - Servicing of Motor Vehicle Air Conditioners**		
♦	1.	Servicing, maintenance, and/or repair of fleet vehicle air conditioning systems using ozone-depleting refrigerants is conducted in the application area.	☐YES	☐NO
	C.	**Subpart C - Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances**		
♦	1.	The application area sells or distributes one or more nonessential products (which release a Class I or Class II substance) that are subject to 40 CFR Part 82, Subpart C.	☐YES	☐NO ☐N/A
	D.	**Subpart D - Federal Procurement**		
♦	1.	The application area is owned/operated by a department, agency, or instrumentality of the United States.	☐YES	☐NO ☐N/A
	E.	**Subpart E - The Labeling of Products Using Ozone Depleting Substances**		
♦	1.	The application area includes containers in which a Class I or Class II substance is stored or transported prior to the sale of the Class I or Class II substance to the ultimate consumer.	☐YES	☐NO ☐N/A
♦	2.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products containing a Class I or Class II substance.	☐YES	☐NO ☐N/A
♦	3.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products manufactured with a process that uses a Class I or Class II substance.	☐YES	☐NO ☐N/A

Solar Turbines Incorporated
July 2024

ATTACHMENT H
COPY OF THE CURRENT NSR PERMIT
NOS. 20041, N196M1 AND PSDTX1590
(to be amended)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 23, 2024

MR ADAM Z NAMMARI
GENERAL MANAGER
SOLAR TURBINES INCORPORATED
215 E CENTRE PARK BLVD
DESOTO TX 75115-2481

Re: Permit Alteration
Permit Number: 20041
Expiration Date: December 23, 2025
Solar Turbines Incorporated
Solar Turbines Dallas Overhaul Center
Desoto, Dallas County
Regulated Entity Number: RN100219963
Customer Reference Number: CN600127518
Associated Permit Numbers: N196M1 and PSDTX1590

Dear Mr. Nammari:

SOLAR TURBINES INCORPORATED has requested alteration of the conditions and Maximum Allowable Emission Rates Table (MAERT) of the above-referenced permit.

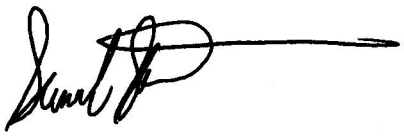
In accordance with Title 30 Texas Administrative Code §116.116(c), Permit Number 20041 is altered. Enclosed are the new general conditions, altered special conditions, and altered MAERT. Please attach these to your permit.

All preconstruction authorizations (including authorization for emissions of greenhouse gases, if applicable) should be obtained prior to start of construction.

If you need further information or have any questions, please contact Ms. Oreoluwa Adetutu at (512) 239-1251 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Re: Permit Number: 20041

Sincerely,



Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

Enclosure

cc: Air Section Manager, Region 4 - Dallas/Fort Worth
Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 366375

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Solar Turbines Incorporated
Authorizing the Construction and Operation of
Solar Turbines Dallas Overhaul Center
Located at **Desoto, Dallas County, Texas**
Latitude 32.6275 Longitude -96.850277

Permits: 20041, N196M1 and PSDTX1590
Revision Date: February 23, 2024
Expiration Date: December 23, 2025

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

[1] Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen
NSPS = New Source Performance Standards

PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Number 20041, N196M1, and PSDTX1590

Emission Standards

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates (MAERT)," and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits shall be based on a rolling 12-month year rather than the calendar year.

   If any condition or limitation of this permit or of any Texas Commission on Environmental Quality (TCEQ) regulation is more stringent than another, then the more stringent condition or limitation shall govern and be the standard by which compliance will be demonstrated.

Opacity / Visible Emissions

2. Opacity of emissions from Emission Point Nos. (EPNs): TC2 and TC3 must not exceed 20 percent; EPNs: TC1, TC4, TC6 and TC7 must not exceed 15 percent and EPN: TC5 must not exceed 10 percent averaged over a six-minute period except for those periods described in Title 30 Texas Administrative Code § 111.111(a)(1)(E). Opacity shall be determined by using the U.S. Environmental Protection Agency Method 9. **(08/21)**

3. A visual check of the test cell exhaust shall be made on each turbine immediately after startup, while idling, and at each test load. If excess visible emissions are expected to be present for more than the six minutes allowed in 30 TAC § 111.111(a)(1)(E) for the initial start-up, or if excess visible emissions occur while idling or after a test load change, the unit under test shall be shut down as soon as practicable and not restarted until the cause of the excess emissions has been corrected. **(08/21)**

Fuel Limitations

4. Fuel fired in the turbines under testing is limited to one of the following:

   A. Pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet.

   B. Distillate fuel oil containing no more than 0.05 weight percent total sulfur for EPNs: TC1 through TC5. **(12/14)**

   C. Distillate fuel oil for EPNs: TC6 and TC7 is limited to a sulfur content of 15 parts per million, wet. **(08/21)**

   D. Distillate fuel oil firing is limited as follows: **(08/21)**

      (1) Distillate fuel oil shall not be fired in EPNs TC1 through TC5 for more than a total of 16 hours per 24-hour period;

      (2) No more than two test cells among EPNs TC1 through TC5 shall fire distillate fuel oil concurrently;

      (3) Distillate fuel firing in EPN TC7 shall not occur when distillate fuel is also fired in more than two other cells among EPNs TC1 through TC6.

Operational Limitations

5. All parking lots and plant roads shall be paved and regularly cleaned to achieve maximum control of dust emissions.

6. Contaminated lubricating oil drained from the turbines shall be washed down the waste oil handling system as soon as practicable.

7. All lubricating oil and fuel oil spills shall be cleaned up immediately or washed into the waste oil handling system as soon as practicable.

8. Waste lubricating oil shall be stored in closed containers until shipped off-site by an authorized waste disposal service.

Continuous Demonstration of Compliance

9. To demonstrate compliance with Special Condition No. 1, actual emissions of nitrogen oxides, carbon monoxide, volatile organic compounds, and particulate matter from each test cell will be calculated according to the following formula: **(08/10)**

   Emissions = Nominal or Engine-Specific Emission Factor x Actual Fuel Usage during the Test

   A. Emissions must be in pounds per hour (lb/hr);

   B. The emission factor must be in pounds of pollutant per pound of fuel (lb of emissions/lb of fuel) or pounds of emissions per million British thermal units (lb of emissions/MMBtu), must be pollutant specific, considering the fuel type and emission controls, and be the nominal emission factors used to develop guaranteed emission levels provided to customers or engine-specific emission factors. These factors are to be derived from the manufacturer's emission test database or from an emissions model if the turbines have not been tested before, and these factors may be corrected for ambient conditions at the test cell; and **(08/21)**

   C. The actual fuel usage during the test will be expressed in pounds or MMBtu per hour (lb/hr or MMBtu/hr), as applicable, depending on the units used in Special Condition 9.B, above.

      Actual emissions of sulfur dioxide (SO_2) will be calculated by assuming that the fuel has the maximum sulfur content allowed under Special Condition No. 4 and that 100 percent of the sulfur in the fuel is converted to SO_2. The permit holder may base these calculations either on full load fuel consumption for the duration of the test or on the actual fuel consumption during each test.

Recordkeeping Requirements

10. In addition to the recordkeeping requirements specified in General Condition No. 7, the following records shall be maintained at the plant site on a five-year rolling retention basis and be made available at the request of personnel of the TCEQ or any air pollution control agency with jurisdiction. **(08/21)**

    A. The following data shall be recorded for each turbine test: model of turbine tested, the type of fuel fired, the duration of the test, and whether water injection was used.

B. The data required in Special Condition No. 9.A shall be recorded daily, and a summary shall be produced monthly that represents emissions from each test cell in lb/hr on a daily basis and tons emitted for the previous 12-month period. The data shall be reduced using the calculation methods specified in Special Condition No. 9.

C. The daily, monthly, and annual records required in Special Condition No. 10.A and 10.B shall be kept in a central location with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions.

D. To demonstrate compliance with Special Condition No. 4, the permit holder must keep records of fuel analyses, as obtained from the supplier on an annual basis for natural gas and on a shipment basis for liquid fuel, or must maintain a contract with the fuel supplier that guarantees compliance. **(06/02)**

E. The holder of this permit shall document the check for visible emissions in order to show compliance with Special Condition No. 3. **(01/07)**

F. Records of annual emissions from Test Cell 7 (EPN TC7) shall be maintained which demonstrate compliance with the annualized MAERT and Nonattainment New Source Review (NNSR) - Emission Reductions limitations in this permit. These records of emissions shall be calculated utilizing the methodology found in Special Condition No. 9. **(08/21)**

G. The holder of this permit shall document hazardous air pollutant emissions resulting from the operation of all sources at the site to demonstrate compliance with Special Condition No. 17. **(09/04)**

Nonattainment New Source Review (NNSR) - Emission Reductions

11. This Nonattainment New Source Review (NNSR) permit is issued/approved based on the requirement that the permit holder offset the project emission increase for facilities authorized by this permit prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H. **(08/21)**

12. This NNSR permit is issued/approved based on the use of 47.8 tpy of NO_x emission credits from TCEQ Emission Reduction Credit Certificate (ERCC) No. 2803. This ERCC provides offsets at the ratio of 1.2 to 1 for 39.8 tpy of NO_x from EPN: TC6. The NO_x emission rate is for calculation purposes only and is not an enforceable allowable emission rate. **(02/15)**

13. This NNSR permit is issued/approved based on the future requirement to obtain and provide 87.3 tpy of NO_x emission reduction credits, as specified in Special Condition No. 14, to offset the 72.69 tpy emission increase for EPN: TC7 authorized by this permit at a ratio of 1.2 to 1. The permit holder shall use the total number of tons of NO_x credits each year as outlined in the table below to offset the NOx project emission increase for the facility, as follows: **(02/24)**

Calendar Year or Later	Emissions Increase tpy	Credits to be Provided tpy
2023	9.89	11.9
2024	10.78	13.0
2025	11.67	14.0

Calendar Year or Later	Emissions Increase tpy	Credits to be Provided tpy
2026	24.31	29.2
2027	49.46	59.4
2028	58.15	69.8
2029 and thereafter	72.69	87.3

A. The permit holder shall use 14.0 tpy of NO_x ERCs from TCEQ credit certificate numbers 4013, 4014, 4015, 4016, 4017, and 4018 to offset NO_x project increase for the facility authorized by this permit at a ratio of 1.2 to 1.0 for calendar years 2023, 2024, and 2025.

B. The permit holder was approved to use 26.3 tpy of NO_X ERCs from TCEQ credit certificate numbers 4112, 4113, and 4114 to offset the NO_X project increase for the facility authorized by this permit at a ratio of 1.2 to 1.0. A total of 15.2 tpy will satisfy the NO_X project emission increase for the facility through calendar year 2026. The additional 11.1 tpy will be applied towards the Credits to be Provided value for calendar year 2027.

14. The permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number. The following options are available: **(08/21)**

A. Obtain and use NOx Emission Reduction Credits (ERCs). A completed ERC use application shall be submitted to the TCEQ EBT Program at least 90 days before the year of operation of the facilities covered by this permit. The permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number.

B. Obtain and use NOx Discrete Emission Reduction Credits (DERCs) for each year of authorized operation. The permit holder shall submit a completed DERC intent to use application form by August 1st prior to the continuing of operations each year, and the intent to use must be reviewed and approved by the TCEQ EBT Program for compliance with 30 Texas Administrative Code §101.376(f). Additionally, the permit holder shall submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify the DERCs by TCEQ DERC certificate number to cover, at a minimum, one year of operation of the permitted facilities.

(1) In accordance with 30 Texas Administrative Code §101.372(i) in areas having an ozone season of less than 12 months (as defined in 40 Code of Federal Regulations Part 58, Appendix D), NOx discrete emission credits generated outside the ozone season may not be used during the ozone season.

C. A combination of ERCs and DERCs can be used provided that the total credits satisfy the amounts specified in Special Condition No. 13 and that the appropriate EBT Program usage applications and the appropriate Air Permits Division alteration or amendment applications are submitted. **(08/21)**

Additional Permit Requirements

15. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TCEQ or the local air pollution control agency with appropriate jurisdiction.

16. The holder of this permit shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:

    A. The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.

    B. The EPNs as listed on the maximum allowable emission rates table.

17. The holder of this permit shall operate the facilities at this site such that for hazardous air pollutants (HAPs), which have been listed pursuant to § 112(b) of the Federal Clean Air Act:

    A. Emissions of any single HAP shall not exceed 10 tons per year (tpy).

    B. Emissions of all HAPs combined shall not exceed 25 tpy. **(09/04)**

Referenced Authorizations

18. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). These lists are not intended to be all inclusive and can be altered without modifications to this permit. **(08/21)**

Authorization	Source or Activity
PBR 106.472	Diesel Fuel Tank No. 2 (EPN: DFT2)

Date: February 23, 2024

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20041, N196M1, and PSDTX1590

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC1	Test Cell 1 Gas fuel firing	NO_x	106.9	-
		CO	84.8	-
		VOC	46.6	-
		PM	5.3	-
		PM_{10}	5.3	-
		$PM_{2.5}$	5.3	-
		SO_2	2.0	-
TC1	Test Cell 1 Liquid fuel firing	NO_x	181.5	-
		CO	88.8	-
		VOC	20.4	-
		PM	15.7	-
		PM_{10}	15.7	-
		$PM_{2.5}$	15.7	-
		SO_2	7.5	-
TC1	Test Cell 1 - Annual Emission Rate Gas and Liquid Fuel Firing	NO_x	-	100.2
		CO	-	27.7
		VOC	-	9.4
		PM	-	10.7
		PM_{10}	-	10.7
		$PM_{2.5}$	-	10.7
		SO_2	-	2.9

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC2	Test Cell 2 Gas Fuel Firing	NO_x	8.7	-
		CO	18.4	-
		VOC	4.7	-
		PM	0.7	-
		PM_{10}	0.7	-
		$PM_{2.5}$	0.7	-
		SO_2	0.4	-
TC2	Test Cell 2 Liquid Fuel Firing	NO_x	13.0	-
		CO	37.0	-
		VOC	4.7	-
		PM	3.5	-
		PM_{10}	3.5	-
		$PM_{2.5}$	3.5	-
		SO_2	1.5	-
TC2	Test Cell 2 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	8.7
		CO	-	9.2
		VOC	-	0.9
		PM	-	1.9
		PM_{10}	-	1.9
		$PM_{2.5}$	-	1.9
		SO_2	-	0.8

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC3	Test Cell 3 Gas Fuel Firing	NO_x	80.0	-
		CO	84.8	-
		VOC	13.5	-
		PM	2.5	-
		PM_{10}	2.5	-
		$PM_{2.5}$	2.5	-
		SO_2	1.1	-
TC3	Test Cell 3 Liquid Fuel Firing	NO_x	120.0	-
		CO	45.6	-
		VOC	7.2	-
		PM	15.7	-
		PM_{10}	15.7	-
		$PM_{2.5}$	15.7	-
		SO_2	4.8	-
TC3	Test Cell 3 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	35.9
		CO	-	19.4
		VOC	-	1.8
		PM	-	10.7
		PM_{10}	-	10.7
		$PM_{2.5}$	-	10.7
		SO_2	-	2.7

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC4	Test Cell 4 Gas Fuel Firing	NO_x	106.9	-
		CO	84.8	-
		VOC	46.6	-
		PM	5.3	-
		PM_{10}	5.3	-
		$PM_{2.5}$	5.3	-
		SO_2	2.0	-
TC4	Test Cell 4 Liquid Fuel Firing	NO_x	181.5	-
		CO	41.3	-
		VOC	14.3	-
		PM	15.7	-
		PM_{10}	15.7	-
		$PM_{2.5}$	15.7	-
		SO_2	7.5	-
TC4	Test Cell 4 Gas and Liquid Fuel Firing	NO_x	-	100.2
		CO	-	27.7
		VOC	-	9.4
		PM	-	10.7
		PM_{10}	-	10.7
		$PM_{2.5}$	-	10.7
		SO_2	-	2.9

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC5	Test Cell 5 Gas Fuel Firing	NO_x	192.8	-
		CO	30.0	-
		VOC	8.8	-
		PM	8.5	-
		PM_{10}	8.5	-
		$PM_{2.5}$	8.5	-
		SO_2	3.8	-
TC5	Test Cell 5 Liquid Fuel Firing	NO_x	338.8	-
		CO	30.0	-
		VOC	8.8	-
		PM	12.1	-
		PM_{10}	12.1	-
		$PM_{2.5}$	12.1	-
		SO_2	14.1	-
TC5	Test Cell 5 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	74.53
		CO	-	25.48
		VOC	-	5.81
		PM	-	7.49
		PM_{10}	-	7.49
		$PM_{2.5}$	-	7.49
		SO_2	-	4.15

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC6	Test Cell 6 Gas Fuel Firing	NO_x	298.43	-
		CO	26.00	-
		VOC	1.49	-
		PM	4.21	-
		PM_{10}	4.21	-
		$PM_{2.5}$	4.21	-
		SO_2	3.04	-
TC6	Test Cell 6 Liquid Fuel Firing	NO_x	409.53	-
		CO	26.29	-
		VOC	7.50	-
		PM	13.60	-
		PM_{10}	13.60	-
		$PM_{2.5}$	13.60	-
		SO_2	0.35	-
TC6	Test Cell 6 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	39.78
		CO	-	49.46
		VOC	-	4.03
		PM	-	9.88
		PM_{10}	-	9.88
		$PM_{2.5}$	-	9.88
		SO_2	-	5.24

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC7	Test Cell 7 Gas Fuel Firing	NO_x	659.34	-
		CO	469.11	-
		VOC	10.69	-
		PM	3.66	-
		PM_{10}	3.66	-
		$PM_{2.5}$	3.66	-
		SO_2	4.92	-
TC7	Test Cell 7 Liquid Fuel Firing	NO_x	989.01	-
		CO	470.11	-
		VOC	10.72	-
		PM	8.22	-
		PM_{10}	8.22	-
		$PM_{2.5}$	8.22	-
		SO_2	0.60	-
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing	NO_x	-	24.31
		CO	-	6.04
		VOC	-	0.46
		PM	-	1.53
		PM_{10}	-	1.53
		$PM_{2.5}$	-	1.53
		SO_2	-	1.88

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2027 (5)	NO_x	-	49.46
		CO	-	5.84
		VOC	-	0.46
		PM	-	1.72
		PM_{10}	-	1.72
		$PM_{2.5}$	-	1.72
		SO_2	-	1.71
TC7	Test Cell 7 – Annual Emission Rates Gas and Liquid Fuel Firing – 2028 (6)	NO_x	-	58.15
		CO	-	5.74
		VOC	-	0.47
		PM	-	1.72
		PM_{10}	-	1.72
		$PM_{2.5}$	-	1.72
		SO_2	-	1.67
TC7	Test Cell 7 – Annual Emission Rates (7) Gas and Liquid Fuel Firing – 2029 and thereafter	NO_x	-	72.69
		CO	-	7.17
		VOC	-	0.59
		PM	-	2.15
		PM_{10}	-	2.15
		$PM_{2.5}$	-	2.15
		SO_2	-	2.09

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
F1	TC1, TC3-5 Process Fugitives (8)	VOC	0.6	0.3
F2	TC2 Process Fugitives (8)	VOC	0.3	0.1
F3	TC6 Process Fugitives (8)	VOC	0.01	0.01
S1	Oil/Water Separator	VOC	0.1	0.3
S2	TC6 Oil/Water Separator	VOC	0.01	0.05
S3	TC7 Oil/Water Separator	VOC	0.01	0.05
CT1	Cooling Tower	VOC	0.08	0.37
		PM	0.60	2.63
		PM_{10}	0.15	0.66
		$PM_{2.5}$	0.01	0.03
		Cl_2	<0.01	<0.01
CT3	Cooling Tower	VOC	0.1	0.4
		PM	0.60	2.63
		PM_{10}	0.15	0.66
		$PM_{2.5}$	0.01	0.03
		Cl_2	<0.01	<0.01
CT4	TC6 Cooling Tower	VOC	0.08	0.37
		PM	0.06	0.26
		PM_{10}	0.02	0.09
		$PM_{2.5}$	<0.01	<0.01
		Cl_2	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hour	TPY (4)
CT5	TC7 Cooling Tower No. 5	VOC	0.08	0.37
		PM	0.06	0.26
		PM_{10}	0.02	0.07
		$PM_{2.5}$	<0.01	<0.01
		Cl_2	<0.01	<0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SO_2 - sulfur dioxide
Cl_2 - chlorine
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rates for EPN: TC7 are effective for calendar year 2027, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits
(6) Emission rates for EPN: TC7 are effective for calendar year 2028, and/or for the subsequent calendar year following approval from TCEQ EBT for the NOx emission credits
(7) Emission rates for EPN: TC7 are effective for calendar year 2029 and thereafter, following approval from TCEQ EBT for the NOx emission credits.
(8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: February 23, 2024