

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Victoria WLE, L.P.

AUTHORIZING THE OPERATION OF  
Victoria Power Station  
Electric Services

LOCATED AT  
Victoria County, Texas  
Latitude 28° 47' 18" Longitude 97° 0' 36"  
Regulated Entity Number: RN100214980

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No:   O35   Issuance Date: \_\_\_\_\_

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For the Commission

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## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
  - E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(1)(E)
  - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
  - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
    - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
    - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions

outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
  - (4) Compliance Certification:
    - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
    - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but

no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

#### **Additional Monitoring Requirements**

6. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

7. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction

Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

- A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
8. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
9. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
10. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
- A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
  - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
  - C. Requirements of the Electric Generating Unit Standard Permit for facilities located in the East Texas region based on the information contained in the registration application.

### **Compliance Requirements**

11. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from

monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

12. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

### **Permit Location**

13. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### **Permit Shield (30 TAC § 122.148)**

14. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit

shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

### **Acid Rain Permit Requirements**

15. For units VIC7 and VIC10 (identified in the Certificate of Representation as units 9 and 10), located at the affected source identified by ORIS/Facility code 3443, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
  - A. General Requirements
    - (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
    - (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
    - (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
    - (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
    - (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO<sub>2</sub> and NO<sub>x</sub> under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO<sub>2</sub> emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO<sub>2</sub>.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO<sub>2</sub> for the previous calendar year.
- (iii) Each ton of SO<sub>2</sub> emitted in excess of the acid rain emissions limitations for SO<sub>2</sub> shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO<sub>2</sub> emissions requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
  - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.

- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO<sub>2</sub> in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO<sub>x</sub> Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO<sub>x</sub> under 40 CFR Part 76.

E. Excess emissions requirements for SO<sub>2</sub> and NO<sub>x</sub>.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
  - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
  - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
  - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be

retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

- (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
  - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

#### G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.

- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
  - (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
  - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
  - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
  - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
  - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO<sub>2</sub> allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

## **Acid Rain Unit Exemptions**

16. As reference only information, the following units VIC3, VIC4, VIC5, and VIC6 (identified as units 5, 6, 7, and 8 in the EPA Retired Unit Exemption form) have received acid rain unit exemptions and are not incorporated into the Acid Rain Permit.

## **Clean Air Interstate Rule Permit Requirements**

17. For units VIC7 and VIC10 (identified in the Certificate of Representation as units 9 and 10), located at the site identified by ORIS/Facility code 3443, the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

### **A. General Requirements**

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

### **B. Monitoring and Reporting Requirements**

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.

- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO<sub>x</sub> source with the CAIR NO<sub>x</sub> emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO<sub>2</sub> source with the CAIR SO<sub>2</sub> emissions limitation.

C. NO<sub>x</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO<sub>x</sub> unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (iv) CAIR NO<sub>x</sub> allowances shall be held in, deducted from or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

- (vi) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in this CAIR permit.

D. NO<sub>x</sub> excess emissions requirement

- (i) If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, the owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO<sub>2</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO<sub>2</sub> unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (iv) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.

- (v) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in this CAIR permit.

F. SO<sub>2</sub> excess emissions requirements

- (i) If a CAIR SO<sub>2</sub> source emits sulfur dioxides during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, the owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
  - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO<sub>x</sub> designated representative for the source and each CAIR NO<sub>x</sub> unit and the CAIR SO<sub>2</sub> designated representative for the source and each CAIR SO<sub>2</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such

documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.

- (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or relied upon for compliance determinations.
  - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program.
- (ii) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.
- H. The CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.

- L. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source or CAIR NO<sub>x</sub> unit or a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

### **Clean Air Interstate Rule Unit Exemptions**

- 18. As reference only information, the following units VIC3, VIC4, VIC5, and VIC6 (identified as units 5, 6, 7, and 8 in the EPA Retired Unit Exemption form) have received CAIR unit exemptions and are not incorporated into the CAIR Permit.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

### **Applicable Requirements Summary**

**Unit Summary ..... 25**

**Applicable Requirements Summary ..... 27**

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
COOLTOW5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	REG1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EMGEN5	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
EMGEN6	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
EMGEN7B	SRIC ENGINES	N/A	60III-1	40 CFR Part 60, Subpart III	No changing attributes.
EMGEN7B	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
OWS1	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5132-01	30 TAC Chapter 115, Water Separation	No changing attributes.
VIC10	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	REG1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
VIC10	STATIONARY TURBINES	N/A	60KKKK-02	40 CFR Part 60, Subpart KKKK	No changing attributes.
VIC7	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	REG1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
VIC7	STATIONARY	N/A	60KKKK-01	40 CFR Part 60, Subpart	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TURBINES			KKKK	
VIC-LOAD	LOADING/UNLOADING OPERATIONS	N/A	R5212-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
COOLTOW5	EP	REG1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EMGEN5	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
EMGEN6	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
EMGEN7B	EU	60III-1	CO	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than	None	None	[G]§ 60.4214(d)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
EMGEN7B	EU	6oIII-1	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO <sub>x</sub> emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
EMGEN7B	EU	6oIII-1	PM (OPACITY)	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during	None	None	[G]§ 60.4214(d)

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3) and §1039.105(b)(1)-(3).			
EMGEN7B	EU	60III-1	PM	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
EMGEN7B	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such	None	None	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						engines under this part.			
OWS1	EU	R5132-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(b)(3)	Any separator which separates materials having a true vapor pressure < 1.5 psia (10.3 kPa) obtained from any equipment is exempt from §115.132(b).	[G]§ 115.135(b) § 115.136(b)(1) § 115.136(b)(3) § 115.136(b)(4)	§ 115.136(b)(1) § 115.136(b)(3) § 115.136(b)(4)	None
VIC10	EP	REG1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
VIC10	EU	60KKKK-02	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 15 ppm at 15 percent O <sub>2</sub> .	§ 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
VIC10	EU	60KKKK-02	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel	§ 60.4365 § 60.4365(b) § 60.4415(a)	§ 60.4365(b)	§ 60.4375(a)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4415(a)(1) § 60.4415(a)(1)(ii)		
VIC7	EP	REG1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
VIC7	EU	60KKKK-01	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) [G]§ 60.4345	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 54 ng/J of useful output (0.43 lb/MWh).	§ 60.4333(b)(1) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(f)(2) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
VIC7	EU	60KKKK-01	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(b)	§ 60.4375(a)
VIC-LOAD	EU	R5212-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

**Additional Monitoring Requirements**

**Periodic Monitoring Summary..... 34**

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: COOLTOW5	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: REG1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions or opacity greater than 15%	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.</p> <p>If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: VIC10	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: REG1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions or opacity reading greater than 15 %	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.</p> <p>If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: VIC7	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: REG1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions or opacity reading greater than 15%	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.</p> <p>If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

**Permit Shield**

**Permit Shield .....38**

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
DEGR1	N/A	30 TAC Chapter 115, Degreasing Processes	Remote reservoir cold solvent cleaner which uses solvent with TVP < 0.6 psia at 100°F, drain area < 16 square inches, and waste solvent properly disposed of in enclosed containers.
EMGEN5	N/A	30 TAC Chapter 115, Vent Gas Controls	Not being used as a control device
EMGEN5	N/A	40 CFR Part 60, Subpart IIII	Not constructed, modified, or reconstructed after July 11, 2005
EMGEN6	N/A	30 TAC Chapter 115, Vent Gas Controls	Not being used as a control device
EMGEN6	N/A	40 CFR Part 60, Subpart IIII	Not constructed, modified, or reconstructed after July 11, 2005
TKEMGEN5	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons
TKEMGEN5	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m3 (19,812 gallons)
TKEMGEN6	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons
TKEMGEN6	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m3 (19,812 gallons)
TKEMGEN7	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons
TKEMGEN7	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m3 (19,812 gallons)

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
TKUNIT5	N/A	30 TAC Chapter 115, Storage of VOCs	TVP < 1.0 psia at actual storage conditions
TKUNIT5	N/A	40 CFR Part 60, Subpart K	Storage capacity less than 40,000 gallons.
TKUNIT5	N/A	40 CFR Part 60, Subpart Ka	Storage capacity less than 40,000 gallons.
TKUNIT5	N/A	40 CFR Part 60, Subpart Kb	Commenced construction/modification/reconstruction prior to July 23, 1984
TKUNT4CL	N/A	30 TAC Chapter 115, Storage of VOCs	TVP < 1.0 psia at actual storage conditions
TKUNT4CL	N/A	40 CFR Part 60, Subpart K	Storage capacity less than 40,000 gallons.
TKUNT4CL	N/A	40 CFR Part 60, Subpart Ka	Storage capacity less than 40,000 gallons.
TKUNT4CL	N/A	40 CFR Part 60, Subpart Kb	Commenced construction/modification/reconstruction prior to July 23, 1984
TKUNT4DTY	N/A	30 TAC Chapter 115, Storage of VOCs	TVP < 1.0 psia at actual storage conditions
TKUN4DTY	N/A	40 CFR Part 60, Subpart K	Storage capacity less than 40,000 gallons.
TKUNT4DTY	N/A	40 CFR Part 60, Subpart Ka	Storage capacity less than 40,000 gallons.
TKUNT4DTY	N/A	40 CFR Part 60, Subpart Kb	Commenced construction/modification/reconstruction prior to July 23, 1984
USED OIL	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity less than 1,000 gallons

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
USED OIL	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 m <sup>3</sup> (19,812 gallons)
VIC10	N/A	30 TAC Chapter 117, Subchapter E, Division 1	Combined Cycle Unit placed into service after December 31, 1995
VIC7	N/A	30 TAC Chapter 117, Subchapter E, Division 1	Turbine placed into service after 12/31/1995.

**New Source Review Authorization References**

**New Source Review Authorization References ..... 42**

**New Source Review Authorization References by Emission Unit..... 43**

## New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: PSDTX1348	Issuance Date: 02/18/2015
PSD Permit No.: PSD-TX-1348-GHG	Issuance Date: 10/08/2014
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 108258	Issuance Date: 02/18/2015
Authorization No.: 80878	Issuance Date: 12/05/2011
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
COOLTOW5	COOLING TOWER 5	108258, PSDTX1348
DEGR1	DEGREASER	106.454/11/01/2001
EMGEN5	EMERGENCY GENERATOR 5	106.511/09/04/2000
EMGEN6	EMERGENCY GENERATOR 6	106.511/09/04/2000
EMGEN7B	EMERGENCY GENERATOR 7B	106.511/09/04/2000
OWS1	OIL/WATER SEPARATOR	106.532/09/04/2000
TKEMGEN5	DIESEL TANK	106.472/09/04/2000
TKEMGEN6	DIESEL TANK	106.472/09/04/2000
TKEMGEN7	DIESEL TANK	106.472/09/04/2000
TKUNIT5	UNIT 5 TURBINE OIL TANK	106.472/09/04/2000
TKUNT4CL	UNIT 4 CLEAN OIL TANK	106.472/09/04/2000
TKUNT4DTY	UNIT 4 DIRTY OIL TANK	106.472/09/04/2000
USED OIL	USED OIL TANK	106.472/09/04/2000
VIC10	UNIT 10 COMBINED CYCLE UNIT	108258, PSDTX1348, PSD-TX-1348-GHG
VIC10	UNIT 10 COMBINED CYCLE UNIT STACK	108258, PSDTX1348, PSD-TX-1348-GHG
VIC7	UNIT 7 COMBINED CYCLE UNIT	80878
VIC7	UNIT 7 COMBINED CYCLE UNIT STACK	80878
VIC-LOAD	SITE WIDE UNLOADING	106.472/09/04/2000

**Appendix A**

**Acronym List ..... 45**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	.....	actual cubic feet per minute
AMOC	.....	alternate means of control
ARP	.....	Acid Rain Program
ASTM	.....	American Society of Testing and Materials
B/PA	.....	Beaumont/Port Arthur (nonattainment area)
CAM	.....	Compliance Assurance Monitoring
CD	.....	control device
COMS	.....	continuous opacity monitoring system
CVS	.....	closed-vent system
D/FW	.....	Dallas/Fort Worth (nonattainment area)
DR	.....	Designated Representative
ELP	.....	El Paso (nonattainment area)
EP	.....	emission point
EPA	.....	U.S. Environmental Protection Agency
EU	.....	emission unit
FCAA Amendments	.....	Federal Clean Air Act Amendments
FOP	.....	federal operating permit
GF	.....	grandfathered
gr/100 scf	.....	grains per 100 standard cubic feet
HAP	.....	hazardous air pollutant
H/G/B	.....	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S	.....	hydrogen sulfide
ID No.	.....	identification number
lb/hr	.....	pound(s) per hour
MMBtu/hr	.....	Million British thermal units per hour
MRRT	.....	monitoring, recordkeeping, reporting, and testing
NA	.....	nonattainment
N/A	.....	not applicable
NADB	.....	National Allowance Data Base
NO <sub>x</sub>	.....	nitrogen oxides
NSPS	.....	New Source Performance Standard (40 CFR Part 60)
NSR	.....	New Source Review
ORIS	.....	Office of Regulatory Information Systems
Pb	.....	lead
PBR	.....	Permit By Rule
PM	.....	particulate matter
ppmv	.....	parts per million by volume
PSD	.....	prevention of significant deterioration
RO	.....	Responsible Official
SO <sub>2</sub>	.....	sulfur dioxide
TCEQ	.....	Texas Commission on Environmental Quality
TSP	.....	total suspended particulate
TVP	.....	true vapor pressure
U.S.C.	.....	United States Code
VOC	.....	volatile organic compound

**Appendix B**

**Major NSR Summary Table..... 47**

## Major NSR Summary Table

Permit Number: 108258 and PSDTX1348

Issuance Date: 2/18/2015

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)	Spec. Cond.	Spec. Cond.	Spec. Cond.
VIC10	Unit 10 Combined Cycle (GE 7FA) or equivalent	NO <sub>x</sub>	30.8	149.3	3,12, 13, 14, 15	3, 13, 14, 15, 21, 22	3, 13, 14, 23
		NO <sub>x</sub> (startup/shutdown)	301.5				
		CO	21.4	358.0	12, 13, 14, 15	13, 14, 15, 21, 22	13, 14, 23
		CO (startup/shutdown)	1909.5				
		SO <sub>2</sub>	33.5	12.6	3, 8, 12, 13, 15	3, 13, 15, 21, 22	3, 13, 23
		VOC	12.3	39.0	12, 13, 15	13, 15, 21, 22	13, 23
		VOC (startup/shutdown)	349.5				
		PM	22.9	57.7	6, 12, 13, 15	6, 13, 15, 21, 22	13, 23
		PM <sub>10</sub>	22.9	57.7			
		PM <sub>2.5</sub>	22.9	57.7			
		H <sub>2</sub> SO <sub>4</sub>	5.2	2.0	15	15	23
		NH <sub>3</sub>	22.8	85.0	12, 13, 15, 16	13, 15, 21	13, 23
		NH <sub>3</sub> (startup/shutdown)	34.0				
HCHO	0.6	2.0	3, 15	3, 15	3, 23		
VIC10-LOV	Lube Oil Vent	PM	0.003	0.01			
		PM <sub>10</sub>	0.003	0.01			
		PM <sub>2.5</sub>	0.003	0.01			
COOLTOW5	Cooling Tower (5)	PM	5.28	20.25	18	7, 18, 22	18
		PM <sub>10</sub>	1.51	6.54			

Permit Number: 108258 and PSDTX1348			Issuance Date: 2/18/2015				
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)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM <sub>2.5</sub>	<0.01	0.04			
VIC10-FUG-NGAS (6)	Unit 10 Natural Gas Fugitive Emissions	VOC	0.1	0.4			
VIC10-FUG-SCR (6)	Unit 10 SCR Piping Fugitive Emissions	NH <sub>3</sub>	0.1	0.1	10	22	

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>

PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including

PM<sub>2.5</sub>

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

NH<sub>3</sub> - ammonia

HCOH - formaldehyde

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Compliance with the emission rates for the cooling tower shall be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of VIC10 gas turbine.

(6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

## Major PSD-GHG Summary Table

Permit Number: PSD-TX-1348-GHG Issuance Date: 10/08/2014							
Emission Point No.	Source Name	Air Contaminant Name	Emission Rates(1)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			TPY	TPY CO <sub>2</sub> e (2),(3)			
VIC10	Unit 10 Combined Cycle (GE 7FA) or equivalent (4)	CO <sub>2</sub>	1,070,879.0	1,072,053	IV.A.1, IV.A.2, IV.A.3 V.A VII.A, VII.D, VII.E, VII.F, VII.G, VII.H	IV.A.3, IV.A.4 V.B, V.C, V.G	V.C VII.B, VII.C, VII.D
		CH <sub>4</sub>	23				
		N <sub>2</sub> O	2				
VIC10-FUG-NGAS	Unit 10 Natural Gas Fugitive Emissions	CH <sub>4</sub>	No Emission Limit Established(5)	No Emission Limit Established(5)	IV.B.1	IV.B.4 V.B, V.C, V.G	V.C
VIC10-INS-SF6	Sf6 Insulated Electrical Equipment	SF6	No Emission Limit Established(6)	No Emission Limit Established(6)	IV.B.3	IV.B.4 V.B, V.C, V.G	V.C
Totals (7)		CO <sub>2</sub>	1,070,879	1,072,498			
		CH <sub>4</sub>	41				
		N <sub>2</sub> O	2				
		SF6	0.000056				

1. Compliance with the annual emission limits (tons per year) is based on a 12-month rolling average.
2. The TPY emission limits specified in this table are not to be exceeded for this facility and include emissions from the facility during all operations and include MSS activities. This total is rounded off for estimation purposes to two significant figures.
3. Global Warming Potentials (GWP): CO<sub>2</sub> = 1, CH<sub>4</sub> = 25, N<sub>2</sub>O = 298, SF<sub>6</sub> = 22,800
4. Includes emissions during all operational modes, including purging venting associated with the CT and DB shutdown and maintenance events. CH<sub>4</sub> is vented via an automatic double block and bleed at the CTG during each shutdown event. Additionally, CH<sub>4</sub> is vented from the duct burner system each time the ducts are shutdown. Annual emissions for these activities are included in the annual CO<sub>2</sub>e limit for VIC10.
5. Fugitive process emissions from EPN VIC10-FUG-NGAS are estimated to be 17.8 TPY CH<sub>4</sub>, and 445 TPY CO<sub>2</sub>e. Fugitive process emission totals are for information only and do not constitute an

emission limit. The emission limit will be a design/work practice standard as specified in the permit.

6. SF<sub>6</sub> emissions from EPA VIC10-INS-SF6 are estimated to be 0.000056 tpy SF<sub>6</sub> and 1.28 tpy CO<sub>2</sub>e. Fugitive process emission totals are for information only and do not constitute an emission limit. The emission limit will be a design/work practice standard as specified in the permit.
7. Totals are given for informational purposes only and do not constitute emission limits.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
AIR QUALITY PERMIT



A Permit Is Hereby Issued To  
**Victoria WLE, L.P.**  
Authorizing the Construction and Operation of  
**Victoria Power Station**  
Located at **Victoria, Victoria County, Texas**  
Latitude 28° 47' 14" Longitude 97° 0' 36"

Permits: 108258 and PSDTX1348

Revision Date : February 18, 2015

Expiration Date: December 1, 2024

For the Commission

- 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 116.116 (30 TAC 116.116)]
- 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(a), (b) and (c)]
- 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)]
- 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)(iii)]
- 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; comply with any additional recordkeeping requirements specified in special conditions attached to 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)]
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 for upsets and maintenance 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, regulations, 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 a condition of "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.

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### Emission Rates and Permit Representations

1. This permit authorizes only those sources of emissions listed in the attached tables entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT) and those sources are limited to the emission limits and other conditions specified on the attached MAERT. Planned startup and shutdown emissions from Emission Point Number (EPN) VIC10 have been evaluated and are authorized by this permit.
2. Emission limits are based on representations in the permit application dated February 14, 2013 as subsequently updated.

### Federal Applicability

3. The sources identified in this condition are subject to and shall comply with applicable requirements of Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Standards of Performance for New Stationary Sources (NSPS) as follows:

Source	Emission Point Number (EPN)	Subpart	Standards of Performance for:
Combustion Turbine and Duct Burner	VIC10	KKKK	Stationary Gas Turbines
		A	General Conditions

The sources identified in this condition are subject to and shall comply with applicable requirements of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (NESHAPS) as follows:

Source	Emission Point Number (EPN)	Subpart	Standards of Performance for:
Combustion Turbine and Duct Burner	VIC10	YYYY	Stationary Gas Turbines
		A	General Conditions

### Operating Limitations, Performance Standards, and Fuel Specifications

4. This permit authorizes one natural gas-fired combustion turbine (GT), identified as EPN VIC10, to operate in combined cycle with a heat recovery steam generator (HRSG) and a steam turbine. The GT shaft drives an electric generator and the HRSG supplies steam to a steam turbine which drives an additional electric generator. The GT may employ evaporative cooling for power enhancement. The

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HRSG is equipped with natural gas-fired duct burners which are rated at and limited to a maximum heat input of 483 million British thermal units per hour (MMBtu/hr), based on the high heating value of the fuel.

- A. This permit authorizes the construction and operation of one General Electric Model GE 7FA.04 CT or equivalent unit. If a different vendor is selected, TCEQ will be notified prior to the start of construction. The selected unit will meet the emission rate limits outlined in the MAERT and will comply with all Special Conditions of this permit.
  - B. The GT is authorized to operate in normal operation, at any load and ambient condition that will comply with the emission concentration limitations in Special Condition No. 5A and the normal operation emission rates in the MAERT.
5. A. The concentration of emissions from the GT/HRSG with duct burner while operating in normal operation, as defined in Special Condition No. 4B, shall not exceed the following limits expressed in parts per million by volume dry (ppmvd), at 15% oxygen (O<sub>2</sub>).

**Concentration Limits for GTs/HRSGs in Normal Operation**

Pollutant	Concentration (ppmvd)	Averaging time
Nitrogen oxides (NO <sub>x</sub> )	2.0	24-hour rolling average <sup>1</sup>
Ammonia (NH <sub>3</sub> )	7.0	
Carbon monoxide (CO)	4.0	3-hour rolling average
Volatile organic compounds (VOC) <sup>2</sup>	4.0	3-hour average

<sup>1</sup>The 24-hour compliance averaging time for NH<sub>3</sub> applies if a continuous monitoring method is selected under Special Condition No. 16A. A 1-hour average applies if periodic testing is selected under Special Condition No. 16B.

<sup>2</sup>Defined as total hydrocarbons minus methane and ethane, calculated as methane.

- B. The concentration limits in 5A of this Special Condition do not apply to the GT/HRSG while the unit is starting up or shutting down described in Special Condition No. 20A and 20B.
  - C. The emissions from the GT/HRSG with duct burner while operating during startup and shutdown, as described in Special Condition Nos. 20A and 20B, shall not exceed the pound-per-hour emission limits for startup/shutdown operations specified in the MAERT.
6. Except during MSS activities, the opacity shall not exceed five percent averaged over a six-minute period from the stack. During MSS activities, the opacity shall

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not exceed 15 percent. Compliance shall be demonstrated by observations performed and recorded quarterly. If the opacity exceeds 5 percent during normal operations or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. Each determination shall be made by first observing for visible emissions while the emission source is in operation. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point. If visible emissions are observed from the emission point, then the opacity shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition.

7. The following requirements apply to the cooling tower (EPN COOLTW5):
  - A. The maximum water conductivity in the cooling water shall not exceed 8,000 microsiemens per centimeter ( $\mu\text{S}/\text{cm}$ ). If a continuous monitoring system (such as a process conductivity monitor) is used to measure TDS, this limit may be applied on a rolling 24-hour basis.
  - B. Drift from the cooling towers will be minimized by using drift eliminators that will reduce drift to 0.001 percent of the circulating water. The drift eliminators and other cooling tower mechanical controls must be operated and maintained in good working order, consistent with manufacturers' requirements for proper operation. Maintenance and repairs of the system shall be documented when they occur.

The cooling tower will be subject to the requirements established in 7.A and 7.B upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine. During the interim, the cooling tower will continue to operate as authorized by Texas Administrative Code (TAC) §106.371. **(02/15)**

8. Fuel usage of the permitted facilities is subject to the following.
  - A. The GT and duct burner must use natural gas containing no more than 5.0 grain (gr) total sulfur on an hourly basis and 0.5 gr on an annual basis of total sulfur per 100 dry standard cubic feet.
  - B. Firing of any other fuel will require authorization from the TCEQ Air Permits Division.
  - C. Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in the GT and duct burner or shall

allow an air pollution control agency representative to obtain a sample for analysis.

9. The aqueous  $\text{NH}_3$  storage and delivery system is subject to the following requirements.
  - A. The permit holder shall maintain loss prevention and protection measures for the storage system. The storage tank area must be marked and protected so as to protect the area from accidents that could cause a rupture.
  - B. Stored aqueous  $\text{NH}_3$  must have a concentration of less than 20%  $\text{NH}_3$  by weight.
  - C. All operating practices and procedures relating to the handling and storage of  $\text{NH}_3$  shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.
10. Audio, visual, and olfactory (AVO) checks for  $\text{NH}_3$  leaks within the operating area shall be made once a day. Following the detection of a leak, plant personnel shall take one or more of the following actions as soon as practicable:
  - A. locate and isolate the leak, if necessary;
  - B. commence repair or replacement of the leaking component; and
  - C. use a leak collection/containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

### **Initial Determination of Compliance**

11. Sampling ports and platforms shall be incorporated into the design of the exhaust stack identified as EPN VIC10 according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
12. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPN VIC10 and to determine initial compliance with all emission limits established for the GT. Unless otherwise specified in this Special Condition No. 12, the sampling and testing shall be conducted in accordance with the methods and procedures specified in Special Condition No. 13. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at the holder's expense. The TCEQ

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Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

- A. Air contaminants and diluents from the turbine to be sampled and analyzed include (but are not limited to) NO<sub>x</sub>, CO, VOC, sulfur dioxide (SO<sub>2</sub>), NH<sub>3</sub>, PM<sub>10</sub>, opacity, and O<sub>2</sub>.
  - B. The turbine shall be tested with the duct burner at maximum firing rate while the turbine is operating as close to 100% of full load as possible.
  - C. Fuel sampling using the methods and procedures of 40 CFR §60.4415(a) may be conducted in lieu of stack sampling for SO<sub>2</sub>. If fuel sampling is used, compliance with SO<sub>2</sub> limits shall be based on 100% conversion of the sulfur in the fuel to SO<sub>2</sub>.
  - D. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Air Permits Division in Austin.
  - E. Sampling as required by this condition shall occur within 60 days after achieving the maximum fuel firing rate at which the turbine and duct burner will be operated, but no later than 180 days after initial startup of the unit. Additional sampling shall occur as may be required by the TCEQ or EPA.
13. A. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual, and EPA Test Methods in 40 CFR Part 60, Appendix A, 40 CFR 51, Appendix M, and EPA Conditional Test Methods as follows:
- (1) Appendix A, Test Methods 1 through 4, as appropriate, for exhaust flow, diluent, and moisture concentration;
  - (2) Appendix A, Test Method 6, 6a, 6c or 8 for the concentration of SO<sub>2</sub>;
  - (3) Appendix A, Test Methods 7E or 20, or equivalent methods for the concentrations of NO<sub>x</sub> and O<sub>2</sub>.
  - (4) Appendix A, Test Method 9 for opacity (consisting of 30 six-minute readings as provided in 40 CFR §60.11[b]);
  - (5) Appendix A, Test Method 10 for the concentration of CO;
  - (6) Appendix A, Test Method 19 for applicable calculation methods;

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- (7) Appendix A, Test Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as methane);
  - (8) EPA Conditional Test Method 27 (CTM-027) for NH<sub>3</sub>.
  - (9) Appendix M, Test Methods 201A and 202, or Appendix A, Test Method 5, modified to include back half condensibles, for the concentration of particulate matter less than 10 microns in diameter (PM<sub>10</sub>);
  - (10) Any variations from those procedures must be approved by the Executive Director of the TCEQ or his designated representative prior to sampling.
- B. The TCEQ Regional Office shall be given notice as soon as testing is scheduled but not less than 30 days prior to sampling to schedule a pretest meeting.
- (1) The notice shall include:
    - (a) Date for pretest meeting.
    - (b) Date sampling will occur.
    - (c) Name of firm conducting sampling.
    - (d) Type of sampling equipment to be used.
    - (e) Method or procedure to be used in sampling, including methods to demonstrate compliance with emission standards found in 40 CFR Part 60, Subpart KKKK.
    - (f) Procedure used to determine turbine loads during and after the sampling period.
  - (2) The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.
  - (3) Prior to the pretest meeting, a written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.
- C. Copies of the final sampling report shall be forwarded to the TCEQ and EPA within 60 days after sampling is completed. Sampling reports shall comply with Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
- One copy to the EPA Region 6 Office, Dallas.  
One copy to the TCEQ Corpus Christi Regional Office.

One copy to the TCEQ Austin Office.

### **Continuous Determination of Compliance**

14. The holder of this permit shall install, calibrate, maintain, and operate a continuous emissions monitoring systems (CEMS) to measure and record the concentrations of NO<sub>x</sub>, CO, and diluent (O<sub>2</sub> or carbon dioxide [CO<sub>2</sub>]) from the GT/HRSG exhaust stack, EPN VIC10.
  - A. The NO<sub>x</sub> and diluent CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendices A and B. The requirements of 40 CFR Part 75, Appendices A and B are deemed an acceptable alternative to the performance specifications and quality assurance requirements of 40 CFR Part 60.
  - B. The CO CEMs shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 60, Appendix B, Performance Specification No. 4. The CEMS shall meet the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, except that cylinder gas audits (CGA) conducted in all four quarters may be used in lieu of the annual relative accuracy test audit. Quarterly CGAs shall be conducted at least 60 days apart. A CGA is not required in any quarter in which the GT operates less than 168 hours. Relative accuracy exceedances (as specified in 40 CFR 60, Appendix F), CGA exceedances of ±15% accuracy, and any CO CEMS downtime shall be reported to the TCEQ Regional Director in the semiannual report described in Special Condition 27, and necessary corrective action shall be taken. Supplemental stack sampling may be required at the discretion of the TCEQ Regional Director.
  - C. The CEMS shall undergo a calibration error test daily when the unit is operating at normal, stable conditions (“on-line”), as required by 40 CFR Part 75. Daily calibrations may also be performed while the unit is not operating (i.e., “off-line”). Corrective action will be taken when the unit fails to meet the Data Validation requirements of 40 CFR Part 75, Appendix B, Section 2.14.
  - D. For full operating hours, the monitoring data must be reduced to hourly average values at least once every day, using a minimum of four, and normally 60, approximately equally-spaced data points from each one-hour period. For hours in which calibration checks, zero and span adjustments, system breakdowns, or repairs occur, at least two valid data points separated by a

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minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) will be sufficient to quality-assure the hour.

- E. The valid hourly average data from the CEMS shall be used to determine compliance with the concentration limits of Special Condition No. 5A and in conjunction with the hourly average natural gas fuel consumption data required by Special Condition No. 15, the hourly emission rate limits of the MAERT. Pounds per hour data from the GT/HRSG stack must be summed monthly to tons per year and used to determine compliance with the annual emission limits of the MAERT.
15. The holder of this permit shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the average hourly natural gas consumption of the GT/HRSG with duct burner combination. The fuel flow meter shall be accurate to  $\pm 2.0$  percent of the units' maximum flow. The permit holder shall comply with the applicable initial certification and ongoing quality assurance requirements of 40 CFR Part 75, Appendix D for the GT/duct burner combination.
  16. The holder of this permit shall continuously monitor or periodically measure  $\text{NH}_3$  emissions from EPN VIC10 when the respective selective catalytic reduction (SCR) system is in operation. The emission measurements shall be used to demonstrate compliance with the  $\text{NH}_3$  limits of Special Condition No. 5A and the MAERT. Use of one of the following methods [A(1), A(2), A(3), B, or C] is required.
    - A. Continuously monitor or continuously calculate  $\text{NH}_3$ . Install, calibrate, maintain, and operate a CEMS to measure and record  $\text{NH}_3$  directly or calculate  $\text{NH}_3$  through the use of a secondary  $\text{NO}_x$  measurement. The continuously measured or continuously calculated  $\text{NH}_3$  concentrations shall be corrected in accordance with Special Condition No. 5A. Monitor downtime shall not exceed 5 percent of the time that the GT was operated over the previous 12-month rolling period. Downtime consists of activities involving calibration, unanticipated power failure, unanticipated equipment malfunction, unplanned maintenance and planned maintenance. The continuous options are as follows.
      - (1) Use a CEMS to directly measure and record the concentration of  $\text{NH}_3$ . If there are no applicable  $\text{NH}_3$  CEMS performance specifications in 40 CFR Part 60, contact the TCEQ Air Permits Division in Austin for requirements to be met.
      - (2) Use a second  $\text{NO}_x$  CEMS probe located between the duct burner and the SCR unit, upstream of the stack  $\text{NO}_x$  CEMS. In association with the SCR efficiency and  $\text{NH}_3$  injection rate, calculate the  $\text{NH}_3$  emissions. This

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condition shall not be construed to set a minimum NO<sub>x</sub> reduction efficiency on the SCR unit.

- (3) Use a dual stream system of NO<sub>x</sub> CEMS at the exit of the SCR. Route one of the exhaust streams, in an unconverted state, to one NO<sub>x</sub> CEMS and route the other exhaust stream through a NH<sub>3</sub> converter to convert NH<sub>3</sub> to NO<sub>x</sub> and then to the second NO<sub>x</sub> CEMS. The NH<sub>3</sub> emission concentration is the difference between the converted and unconverted NO<sub>x</sub> CEMS readings.
  - B. Any other method used for measuring NH<sub>3</sub> slip shall require prior approval from the TCEQ Corpus Christi Regional Office.
17. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after it was first detected by any employee at the facility unless written permission is obtained from the TCEQ Corpus Christi Regional Office which allows for a longer repair or replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
18. The holder of this permit shall demonstrate compliance with the TDS concentration limit in Special Condition No. 7A and the hourly and annual PM emission limits for the cooling tower in the MAERT as indicated in 18.A through 18.E. These requirements will be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine. During the interim, the cooling tower will continue to operate as authorized by 30 TAC §106.371. **(02/15)**
  - A. Use a conductivity meter to measure and record the conductivity of the cooling water at a fixed monitoring point in the recirculation loop of the cooling tower at least weekly.
  - B. Calculate TDS using a conductivity-to-TDS conversion factor. The conversion factor shall be established and maintained as follows.
    - (1) Use a conservative default conversion factor of 0.67 parts per million by weight (ppmw) per μS/cm initially until a site-specific measured value is determined.
    - (2) Measure conductivity and TDS in the cooling water in each of the three calendar months following the start of commercial operation of the turbine. Sample and analyze in accordance with “Standard Methods for the Examination of Water and Wastewater,” Method 2510 for conductivity, and Method 2540 for TDS. Calculate the average

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conversion factor and the standard deviation based on the three values. Summarize the results in a report and submit a copy of the report within 30 days after completion of the sampling to the TCEQ Corpus Christi Regional Office.

- (3) After establishing the initial measured conductivity-to-TDS conversion factor, continue measuring conductivity and TDS at least quarterly, using the methods in (2) above to quality assure and maintain or update the conversion factor.
- C. If monitoring indicates an exceedance of the TDS limit of Special Condition No. 7A, conduct an evaluation, take corrective action, and document the results within 24 hours.
- D. Maintain records of the date, time and location of the monitoring, the conductivity, and the TDS, identifying whether the TDS is calculated from the conductivity or directly measured.
- E. Assure ongoing compliance with the cooling tower drift rate specified in Special Condition No. 7B by annual inspection of the cooling tower modules, and repair as necessary, to maintain drift eliminator structural integrity and minimize bypassing of flow around drift eliminators.

### **Maintenance, Startup, and Shutdown (MSS)**

19. Within 60 days of the start of operation, the permit holder shall submit a permit by rule registration request to the TCEQ to authorize planned maintenance activities.
20. Emissions during GT startup and shutdown activities will be minimized by limiting the duration of operation in planned MSS modes as follows:
  - A. Planned startup of the GT is initiated when the Data Acquisition and Handling System (DAHS) detects a flame signal (or equivalent signal) and ends when the permissives for the emission control system are met (i.e., steady state emissions compliance is achieved). A startup for the combustion turbine is limited to 10 hours (cold startup) per event. At the conclusion of the startup, the permit holder shall comply with the emission concentration limitations in Special Condition No. 5A and the normal operation emission rates in the MAERT. Startups are defined as:
    - i. Cold Startup: is a startup after an extended GT shutdown of greater than 64 hours. A planned cold startup event shall not exceed 10 hours.
    - ii. Warm Startup: is a startup after a GT shutdown of 16 to 64 hours. A planned warm startup event shall not exceed 4 hours.

- iii. Hot Startup: is a startup after a GT shutdown of less than 16 hours. A planned hot startup event shall not exceed 2.5 hours.
- B. A planned shutdown of the GT begins when the load drops to the point at which steady state emissions compliance can no longer be assured and ends when a flame-off signal is detected. A planned shutdown for the GT is limited to 60 minutes per event.

### **Recordkeeping Requirements**

- 21. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
  - A. A copy of this permit.
  - B. The permit application dated February 2013 and subsequent representations submitted to the TCEQ.
  - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 14 to demonstrate initial compliance.
  - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
- 22. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
  - A. Records necessary to demonstrate compliance with the applicable of 40 CFR Part 60, Subpart KKKK.
  - B. Records necessary to demonstrate compliance with the applicable of 40 CFR Part 63, Subpart YYYY.
  - C. For pollutants that are monitored by CEMS, hourly records of GT/HRSG emissions and operation to demonstrate compliance with the applicable performance standards of NSPS Subpart KKKK, the concentration limits of Special Condition No. 5, and the hourly and annual emission rates listed in the MAERT, as follows.

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- i. Continuous emission monitoring data for NO<sub>x</sub>, CO, diluent gases, O<sub>2</sub> or CO<sub>2</sub>, and if applicable, NH<sub>3</sub>. Data retention at intervals less than one hour is not required. Records should identify the times when emissions data have been excluded from the calculation of average emission rates because of MSS or malfunction along with the justification for excluding data. Records should also identify factors used in calculations that are used to demonstrate compliance with emission limits and performance standards.
  - ii. Hourly average GT/HRSG with duct burner combined fuel flow, as specified in Special Condition No. 15, to calculate emissions in lbs/hr.
- D. Records of opacity observations to demonstrate compliance with Special Condition No. 6.
  - E. Fuel purchase records, copies of gas supply contracts, test results, or other information to demonstrate compliance with fuel sulfur limits of Special Condition No. 8.
  - F. Records of AVO checks for ammonia leaks and maintenance performed to any piping and valves in aqueous NH<sub>3</sub> service to show compliance with Special Condition No. 10. In addition, written records of any accidental releases, spills, or venting of NH<sub>3</sub> and the corrective action taken.
  - G. Files of all CEMS quality assurance measures, calibration checks, adjustments and maintenance performed on these systems to demonstrate compliance with Special Condition Nos. 14, 16A, and 17.
  - H. Records of cooling tower TDS monitoring as required by Special Condition No. 18A-D and annual inspections of drift eliminators as required by Special Condition No. 18E. These requirements will be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine. During the interim, the unit will continue to operate as authorized by 30 TAC §106.371. **(02/15)**
  - I. Records of dates and times of GT startup and shutdown to demonstrate compliance with Special Condition No. 20.

## Reporting

23. The holder of this permit shall submit to the TCEQ Corpus Christi Regional Office semiannual reports using formats described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit.

Date: February 18, 2015

Emission Sources - Maximum Allowable Emission Rates

Permit Number 108258 and PSDTX1348

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	
			lbs/hour	TPY (4)
VIC10	Unit 10 Combined Cycle (GE 7FA) or equivalent	NO <sub>x</sub>	30.8	149.3
		NO <sub>x</sub> (startup/shutdown)	301.5	
		CO	21.4	358.0
		CO (startup/shutdown)	1909.5	
		SO <sub>2</sub>	33.5	12.6
		VOC	12.3	39.0
		VOC (startup/shutdown)	349.5	
		PM	22.9	57.7
		PM <sub>10</sub>	22.9	57.7
		PM <sub>2.5</sub>	22.9	57.7
		H <sub>2</sub> SO <sub>4</sub>	5.2	2.0
		NH <sub>3</sub>	22.8	85.0
		NH <sub>3</sub> (startup/shutdown)	34.0	
		HCOH	0.6	2.0
VIC10-LOV	Lube Oil Vent	PM	0.003	0.01
		PM <sub>10</sub>	0.003	0.01
		PM <sub>2.5</sub>	0.003	0.01
COOLTOW5	Cooling Tower (5)	PM	5.28	20.25
		PM <sub>10</sub>	1.51	6.54
		PM <sub>2.5</sub>	<0.01	0.04

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
VIC10-FUG-NGAS (6)	Unit 10 Natural Gas Fugitive Emissions	VOC	0.1	0.4
VIC10-FUG-SCR (6)	Unit 10 SCR Piping Fugitive Emissions	NH <sub>3</sub>	0.1	0.1

- (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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide  
 NH<sub>3</sub> - ammonia  
 HCOH - formaldehyde  
 H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Compliance with the emissions rates for the cooling tower shall be effective upon completion of the cooling tower upgrade associated to the plant expansion project and commercial operation of EPN VIC10 gas turbine.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: February 18, 2015

**PREVENTION OF SIGNIFICANT DETERIORATION PERMIT  
FOR GREENHOUSE GAS EMISSIONS  
ISSUED PURSUANT TO THE REQUIREMENTS AT 40 CFR § 52.21**

**U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6**

**PSD PERMIT NUMBER:** PSD-TX-1348-GHG  
**PERMITTEE:** Victoria WLE, L.P.  
**FACILITY NAME:** Victoria Power Station  
**MAILING ADDRESS:** 919 Milam Street, Suite 2300  
Houston, TX 77002  
**FACILITY LOCATION:** 1205 South Bottom Street  
Victoria, TX 77901

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, Part C (42 U.S.C. § 7470, *et. Seq.*), and the Code of Federal Regulations (CFR) Title 40, Section 52.21, and the Federal Implementation Plan at 40 CFR § 52.2305 (effective May 1, 2011 and published at 76 FR 25178), the U.S. Environmental Protection Agency, Region 6 is issuing a *Prevention of Significant Deterioration* (PSD) permit to Victoria WLE, L.P. for Greenhouse Gas (GHG) emissions. The Permit authorizes a major modification that adds natural gas combined cycle generating capacity to the existing Victoria Power Station (VPS) plant.

VPS is authorized to expand its existing natural gas fired combined cycle electric generating facility as described herein. In accordance with the permit application (and plans submitted with the permit application), the federal PSD regulations at 40 CFR § 52.21, and other terms and conditions set forth in this PSD permit in conjunction with the corresponding Texas Commission on Environmental Quality (TCEQ) PSD permit No. PSD-TX-1348. Failure to comply with any condition or term set forth in this PSD Permit may result in enforcement action pursuant to Section 113 of the Clean Air Act (CAA). This PSD Permit does not relieve VPS of the responsibility to comply with any other applicable provisions of the CAA (including applicable implementing regulations in 40 CFR Parts 51, 52, 60, 61, 72 through 75, and 98) or other federal and state requirements (including the state PSD program that remains under approval at 40 CFR § 52.2303).

In accordance with 40 CFR §124.15(b), this PSD Permit becomes effective 30 days after the service of notice of this final decision unless review is requested on the permit pursuant to 40 CFR §124.19.

  
Wren Stenger, Director  
Multimedia Planning and Permitting Division

10/8/14  
Date

**Victoria WLE, L.P. (PSD-TX-1348-GHG)  
Prevention of Significant Deterioration Permit  
For Greenhouse Gas Emissions  
Permit Conditions**

**PROJECT DESCRIPTION**

Pursuant to the provisions of this permit, Victoria WLE, L.P. (Victoria) will carry out a major modification at the existing Victoria Power Station (VPS) located in Victoria, Victoria County, Texas. The existing VPS is a natural gas-fired combined cycle base load power generating station that currently operates in a 1 by 1 by 1 (1 x 1 x 1) configuration (one combustion turbine, one HRSG and one steam turbine) with a gas turbine (M501F), heat recovery steam generator (HRSG) equipped with duct burners and a steam generator (General Electric D5). The project would add a new gas turbine (GE.7FA.04 or equivalent) and HRSG equipped with duct burners. After these additions, the facility will be able to operate in a natural gas-fired combined cycle-generating unit in a 2 by 2 by 1 (2 x 2 x 1) configuration (two combustion turbines, two HRSG and one steam turbine) that utilizes the existing non-modified M501F combustion turbine and HRSG and the existing non-modified steam turbine. The VPS plant is authorized to operate in a 1 x 1 x 1 combined cycle-configuration with the new gas turbine and new HRSG, and it retains ability to operate in its original 1 x 1 x 1 combined cycle-configuration without an assigned GHG BACT limit. VPS operations covered by the permit will consist of the following sources of GHG emissions;

- Natural Gas-Fired Combined Cycle Combustion Turbine (GE.7FA.04 or equivalent). The combustion turbine is equipped with a heat recovery steam generator (HRSG) and duct burners, dry low NOx (DLN) combustion system, and selective catalytic reduction (SCR), and oxidation catalyst;
- Process Fugitives; and,
- Electrical equipment insulated with sulfur hexafluoride (SF<sub>6</sub>).

**EQUIPMENT LIST**

The following devices are subject to this GHG PSD permit:

FIN	EPN	Description
VIC10	VIC10	Natural Gas-Fired Combined Cycle Combustion Turbine (GE.7FA.04 or equivalent). The combustion turbine is equipped with heat recovery steam generator (HRSG) and duct burners, dry low NOx (DLN) combustion system, and selective catalytic reduction (SCR), and oxidation catalyst.

VIC10-FUG-NGAS	VIC10-FUG-NGAS	Process Fugitives
VIC10-INS-SF6	VIC10-INS-SF6	SF <sub>6</sub> Insulated Electrical Equipment (i.e., circuit breakers) not to exceed 23 lbs

**I. GENERAL PERMIT CONDITION**

**A. PERMIT EXPIRATION**

As provided in 40 CFR §52.21(r), this PSD Permit shall become invalid if construction:

1. is not commenced (as defined in 40 CFR §52.21(b)(9)) within 18 months after the approval takes effect; or
2. is discontinued for a period of 18 months or more; or
3. is not completed within a reasonable time.

Pursuant to 40 CFR §52.21(r), EPA may extend the 18-month period upon a written satisfactory showing that an extension is justified.

**B. PERMIT NOTIFICATION REQUIREMENTS**

Permittee shall notify EPA Region 6 in writing or by electronic mail of the:

1. date construction is commenced, postmarked within 30 days of such date;
2. actual date of initial startup, as defined in 40 CFR §60.2, postmarked within 15 days of such date; and
3. date upon which initial performance tests will commence, in accordance with the provisions of Section V, postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the performance test protocol required pursuant to Condition V.B.

**C. FACILITY OPERATION**

At all times, including periods of startup, shutdown, and maintenance, Permittee shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA, which may include, but is not limited to, monitoring results, review of operating maintenance procedures and inspection of the facility.

#### **D. MALFUNCTION REPORTING**

1. Permittee shall notify EPA by mail within 48 hours following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in GHG emissions above the allowable emission limits stated in Sections II and III of this permit.
2. Within 10 days of the restoration of normal operations after any failure described in I.D.1., Permittee shall provide a written supplement to the initial notification that includes a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section II and III, and the methods utilized to mitigate emissions and restore normal operations.
3. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or any law or regulation such malfunction may cause.

#### **E. RIGHT OF ENTRY**

EPA authorized representatives, upon the presentation of credentials, shall be permitted:

1. to enter the premises where the facility is located or where any records are required to be kept under the terms and conditions of this PSD Permit;
2. during normal business hours, to have access to and to copy any records required to be kept under the terms and conditions of this PSD Permit;
3. to inspect any equipment, operation, or method subject to requirements in this PSD Permit; and,
4. to sample materials and emissions from the source(s).

#### **F. TRANSFER OF OWNERSHIP**

In the event of any changes in control or ownership of the facilities to be constructed, this PSD Permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD Permit and its conditions by letter; a copy of the letter shall be forwarded to EPA Region 6 within thirty days of the letter signature.

#### **G. SEVERABILITY**

The provisions of this PSD Permit are severable, and, if any provision of the PSD Permit is held invalid, the remainder of this PSD Permit shall not be affected.

## H. ADHERENCE TO APPLICATION AND COMPLIANCE WITH OTHER ENVIRONMENTAL LAWS

Permittee shall construct this project in compliance with this PSD Permit, the application on which this permit is based, the TCEQ PSD Permit PSD-TX-1348 and all other applicable federal, state, and local air quality regulations. This PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act.

## II. ACRONYMS AND ABBREVIATIONS

AVO	Auditory, Visual, and Olfactory
BACT	Best Available Control Technology
CAA	Clean Air Act
CC	Carbon Content
CCS	Carbon Capture and Sequestration
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CT	Combustion Turbine
EF	Emission Factor
EPN	Emission Point Number
FIN	Facility Identification Number
FR	Federal Register
GCV	Gross Calorific Value
GHG	Greenhouse Gas
GWP	Global Warming Potential
HHV	High Heating Value
lb	Pound
LDAR	Leak Detection and Repair
MMBtu	Million British Thermal Units
MSS	Maintenance, Start-up and Shutdown
N <sub>2</sub> O	Nitrous Oxides
NSPS	New Source Performance Standards
O <sub>2</sub>	Oxygen
PSD	Prevention of Significant Deterioration
QA/QC	Quality Assurance and/or Quality Control
RATA	Relative Accuracy Test Audit
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TOC	Total Organic Carbon
TPY	Tons per Year

USC  
VOC

United States Code  
Volatile Organic Compound

### III. Annual Emission Limits

Annual emissions, in tons per year (TPY) on a 12-month, rolling total, shall not exceed the following:

Table 1. Annual Emission Limits<sup>1</sup>

FIN	EPN	Description	GHG Mass Basis		TPY CO <sub>2</sub> e <sup>2,3</sup>	BACT Requirements
				TPY		
VIC10	VIC10	Natural Gas-Fired Combined Cycle Combustion Turbine (GE.7FA.04) <sup>4</sup>	CO <sub>2</sub>	1,070,879.0	1,072,053	940 lb CO <sub>2</sub> /MWh (gross) on a 12-month rolling average. Start-up and Shutdown emissions limited to 1,000 hours per year. MSS emissions are limited to 108 tons CO <sub>2</sub> /hr. See Special Conditions IV.A.1. and Table 2.
			CH <sub>4</sub>	23		
			N <sub>2</sub> O	2		
VIC10-FUG-NGAS	VIC10-FUG-NGAS	Process Fugitives	CH <sub>4</sub>	No Emission Limit Established <sup>5</sup>	No Emission Limit Established <sup>5</sup>	
VIC10-INS-SF6	VIC10-INS-SF6	SF <sub>6</sub> Insulated Electrical Equipment	SF <sub>6</sub>	No Emission Limit Established <sup>6</sup>	No Emission Limit Established <sup>6</sup>	
Totals <sup>7</sup>			CO <sub>2</sub>	1,070,879	1,072,498	
			CH <sub>4</sub>	41		
			N <sub>2</sub> O	2		
			SF <sub>6</sub>	0.000056		

1. Compliance with the annual emission limits (tons per year) is based on a 12-month rolling average.
2. The TPY emission limits specified in this table are not to be exceeded for this facility and include emissions from the facility during all operations and include MSS activities. This total is rounded off for estimation purposes to two significant figures.
3. Global Warming Potentials (GWP): CO<sub>2</sub> = 1, CH<sub>4</sub> = 25, N<sub>2</sub>O = 298, SF<sub>6</sub> = 22,800
4. Includes emissions during all operational modes, including purging venting associated with the CT and DB shutdown and maintenance events. CH<sub>4</sub> is vented via an automatic double block and bleed at the CTG during each shutdown event. Additionally, CH<sub>4</sub> is vented from the duct burner system each time the ducts are shutdown. Annual emissions for these activities are included in the annual CO<sub>2</sub>e limit for VIC10.
5. Fugitive process emissions from EPN VIC10-FUG-NGAS are estimated to be 17.8 TPY CH<sub>4</sub>, and 445 TPY CO<sub>2</sub>e. Fugitive process emission totals are for information only and do not constitute an emission limit. The emission limit will be a design/work practice standard as specified in the permit.
6. SF<sub>6</sub> emissions from EPA VIC10-INS-SF6 are estimated to be 0.000056 tpy SF<sub>6</sub> and 1.28 tpy CO<sub>2</sub>e. Fugitive process emission totals are for information only and do not constitute an emission limit. The emission limit will be a design/work practice standard as specified in the permit.
7. Totals are given for informational purposes only and do not constitute emission limits.

#### IV. SPECIAL PERMIT CONDITIONS

##### A. Requirements for Combustion Turbine Generator and Heat Recovery Steam Generator (EPN: VIC10)

##### 1. BACT Emission Limits for EPN: VIC10

Table 2. BACT Emission Limits for EPN: VIC10

Combustion Turbine Model	Combustion Turbine Annual Firing Rate <sup>1</sup> (MMBtu/hr) (HHV)	Duct Burners Annual Firing Rate <sup>1</sup> (MMBtu/hr) (HHV)	Output Based Emission Limit, gross basis <sup>2</sup> (lb CO <sub>2</sub> /MWh)	MSS Emission Limit <sup>2,3</sup> (tons CO <sub>2</sub> /hr)
GE.7FA.04 or equivalent	1,816	483	940	108

<sup>1</sup> Limits are based on a 12-month rolling average.

<sup>2</sup> This limit applies with and without duct burner firing during normal operation

<sup>3</sup> Limit is based on a 12-month rolling total.

- a. For facility operations in a 1 x 1 x 1 plant configuration operation, compliance with the output based emission limit shall be determined by the following method. The CO<sub>2</sub> mass emission values shall be calculated over each operational hour of the compliance period and summed. The summed hourly CO<sub>2</sub> mass emission values shall be divided by the summed hourly total gross electrical output. Compliance shall be demonstrated on a 12-month rolling average.
- b. For facility operations in a 2 x 2 x 1 plant configuration operation, compliance with the output based emission limit shall be determined as follows:
  - i. The hourly gross electric output from the existing non-modified steam turbine shall be apportioned based on either the measured steam load or measured heat input. A plan to demonstrate the apportionment of the gross electric output shall be submitted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days of the date of initial startup of the combustion turbine generator.
  - ii. The CO<sub>2</sub> mass emission values shall be calculated over each operational hour of the compliance period and summed. The summed hourly CO<sub>2</sub> mass emission values shall be divided by the combined sum of the total gross electrical output from the steam turbine (as determined by the corresponding apportionment calculations represented in the plan) and the total gross electrical load from the combustion turbine generator. The resulting quotient is added to the sum of quotients of the previous 11 operating months and divided by 12 to determine compliance with the 12-month rolling average.
- c. Upon initial demonstration that the combustion turbine complies with the emission limit via emission tests, the Permittee shall not exceed the combustion turbine and duct burner annual firing rate, MMBtu/hr (HHV) from Table 2 on a 12-month rolling average. To

determine the limit, the Permittee shall calculate the average hourly heat input rate over the applicable compliance period consistent with equation F-20 and procedure provided in 40 CFR Part 75, Appendix F § 5.5.2 and the GCV of the fuel combusted for the corresponding compliance period. Add the quotient to the sum of the quotients of the previous 11 operating months and divide by 12 to determine the 12-month rolling average.

- d. The Permittee shall not discharge or cause the discharge of emissions into the atmosphere in excess of the limits in tons of CO<sub>2</sub>e on a 12-month rolling total as listed in Table 1.
- e. The duct burners are limited to 4,375 hours of operation per year.
- f. Startup and Shutdown events are limited to 1,000 hours per year and shall comply with the MSS BACT emission limit of 108 tons CO<sub>2</sub> per hour on a 12-month rolling total basis.

## 2. Emissions Monitoring for EPN: VIC10

- a. Upon initial demonstration that the combustion turbine complies with the emissions limit via emission tests, the Permittee shall not exceed the CO<sub>2</sub>e annual emission limit from Table 1 during normal operation. To determine the amount of CO<sub>2</sub>e, the Permittee shall calculate the amount of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O in short tons per month based on the equation G-4 of 40 CFR Part 75, Appendix G and 40 CFR Part 98, Appendix C, and the monthly hours of operation on a 12-month rolling total. The Permittee shall also use the default CH<sub>4</sub> and N<sub>2</sub>O emission factors contained in Table C-2 of 40 CFR Part 98 and the measured actual hourly heat input (HHV) to determine compliance with the CH<sub>4</sub> and N<sub>2</sub>O emission limits. The short tons per month values are multiplied by the respective Global Warming Potentials (GWP) contained in the Greenhouse Gas Regulations, 40 CFR Part 98, Subpart A, Table A-1 to calculate the amount of CO<sub>2</sub>e emitted in short TPY. The resulting CO<sub>2</sub>e value is added to the previous 11 months to determine the 12 month rolling total of CO<sub>2</sub>e emissions.
- b. As an alternative, the Permittee may install and operate a volumetric stack gas flow monitor and associated data acquisition and handling system in accordance with the CO<sub>2</sub> CEMS system provided in 40 CFR 75.10(a)(3) and (a)(5). If a CO<sub>2</sub> CEMS system is utilized, the hourly CO<sub>2</sub> emission value shall be measured by installing and operating a volumetric stack gas flow monitor or calculating the volumetric stack gas flow by the procedures of 40 CFR 75, Appendix D and associated data acquisition and handling system in accordance with the CO<sub>2</sub> CEMS system provided in 40 CFR § 75.10.
- c. In accordance with 40 CFR Part 75, Appendix D and 40 CFR Part 60, the Permittee shall ensure that all required fuel flow meters are installed, a periodic schedule for GCV fuel sampling is initiated and all certification tests are completed on or before the earlier of 90 unit operating days or 180 calendar days after the date the unit commences commercial operation (as defined in 40 CFR § 72.2).
- d. The Permittee shall ensure compliance with the specifications and test procedures for fuel flow meter and/or CO<sub>2</sub> emission monitoring system at stationary sources, 40 CFR Part 75 and 40 CFR Part 60.
- e. The Permittee shall meet the appropriate quality assurance requirements specified in 40 CFR Part 75, Appendixes D and F and 40 CFR Part 60 for the fuel flow meter and/or CO<sub>2</sub> emission monitoring system.

### 3. Work Practice and Operational Requirements for EPN: VIC10

- a. The combined cycle combustion turbine and duct burners are limited to burning only natural gas. The gross calorific value of the fuel shall be determined monthly by the procedures contained in 40 CFR Part 75, Appendix F, § 5.5.2, and records shall be maintained of the monthly fuel gross calorific value for a period of five years. Upon request, the Permittee shall provide a sample and/or analysis of the fuel fired in the combustion turbine and/or duct burners or shall allow a sample to be taken by EPA for analysis.
- b. The flow rate of the fuel combusted in the combustion turbine and duct burners shall be measured and recorded using an in-line flow meter and automatically record the data with a data acquisition and handling system. The steam load and/or heat input to the steam turbine shall also be measured and recorded.
- c. The Permittee shall measure and record the energy output of the apportioned steam turbine and combustion turbine (MWh, gross) on an hourly basis.
- d. On or before the date of initial performance test required by 40 CFR § 60.8, and thereafter, the Permittee shall install, and continuously operate, and maintain the HRSGs equipped with a SCR and oxidation catalyst so emissions are at or below the emissions limits specified in this permit.
- e. The Permittee shall perform an annual compliance test, at or above 90% of maximum load operations and conducted under such conditions to ensure representative performance of the affected facility. The conditions of the performance tests shall be recorded and made available for review upon request.
- f. On or after initial performance testing, the Permittee shall use BACT practices and designs represented in the permit application.

### 4. Requirements during Startup and Shutdown for EPN: VIC10

- a. Permittee shall minimize emissions during startup and shutdown activities by operating and maintaining the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility.
- b. Emissions during startup and shutdown activities shall be minimized by limiting the duration of operation in startup and shutdown mode as follows:
  - i. A startup of EPN: VIC10 is initiated when the Data Acquisition and Handling System (DAHS) detects a flame signal (or equivalent signal) and ends when the permissives for the emission control system are met (i.e., steady state emissions compliance is achieved). A startup for the combustion turbine is limited to 10 hours (cold startup) per event.
  - ii. A shutdown of EPN: VIC10 begins when the load drops to the point at which steady state emissions compliance can no longer be assured and ends when a flame-off signal is detected. A shutdown for the combustion turbine is limited to 60 minutes per event.
  - iii. Start-up and Shutdown events are limited to 1,000 hours per year.
- c. Permittee must record the time, date, fuel heat input (HHV) in mmBtu/hr and duration of each startup and shutdown event in order to calculate the total CO<sub>2</sub>e emissions. The records must include hourly CO<sub>2</sub> emission levels as measured by the

fuel flow meter (or CO<sub>2</sub> CEMS with volumetric stack gas flowrate) and the calculations based on the actual heat input for the CO<sub>2</sub>, CO<sub>2</sub>e, N<sub>2</sub>O, and CH<sub>4</sub> emissions during each startup and shutdown event based on the equations represented in the permit application. These records must be kept for five (5) years following the date of such event.

- d. During startup and shutdown, emissions from EPN: VIC10 shall comply with all provisions of BACT emission limitations in Special Condition IV.A.1.

#### **B. Requirements for Fugitive Emissions EPNs: VIC10-FUG-NGAS and VIC10-INS-SF6**

1. The Permittee shall implement an auditory/visual/olfactory (AVO) method for detecting leaking from natural gas piping components, and make observations on a daily basis.
2. For emission unit FUG-SF6, SF<sub>6</sub> emissions shall be calculated annually (calendar year) in accordance with the mass balance approach provided in equation DD-1 of the Mandatory Greenhouse Gas Reporting rules for Electrical Transmission and Distribution Equipment Use, 40 CFR Part 98, Subpart DD. Permittee shall not exceed insulated circuit breaker SF<sub>6</sub> capacity of 23 lbs.
3. Permittee shall equip the circuit breakers with a low pressure alarm and a low pressure lockout. The SF<sub>6</sub> leak detection system shall be able to detect leaks.
4. Permittee shall maintain a file of all records, data measurements, reports and documents related to the fugitive emission sources including, but not limited to, the following: all records or reports pertaining to maintenance performed, all records relating to compliance with the Monitoring and Quality Assurance and Quality Control (QA/QC) procedures outlined in 40 CFR § 98.304.

#### **V. RECORDKEEPING AND REPORTING**

- A. In order to demonstrate compliance with the GHG emission limits in Table 1, the Permittee will monitor the following parameters and summarize the data on a calendar month basis.
  1. Operating hours for all air emission sources;
  2. The natural gas fuel usage for all combustion sources, using continuous fuel flow monitors (a group of equipment can utilize a common fuel flow meter, as long as actual fuel usage is allocated to the individual equipment based upon actual operating hours and maximum firing rate); and
  3. Annual fuel sampling for natural gas.
- B. Permittee shall maintain a file of all records, data, measurements, reports, and documents related to the operation of the facility, including, but not limited to, the following: all records or reports pertaining to significant maintenance performed on any system or device at the plant; duration of startup, shutdown; the initial startup period for the emission units; pollution control units; malfunctions; all records relating to performance tests, calibrations, checks, and monitoring of combustion equipment; duration of an inoperative monitoring device and emission units with the required corresponding emission data; and all other information required by this permit recorded in a permanent form suitable for inspection. The file must be retained for not less than five years following the date of such measurements, maintenance, reports, and/or records.

C. Permittee shall maintain records and submit a written report of all excess emissions to EPA semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator or authorized representative, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The report is due on the 30th day following the end of each semi-annual period and shall include the following:

1. Time intervals, data and magnitude of the excess emissions, the nature and cause (if known), corrective actions taken and preventive measures adopted;
2. Applicable time and date of each period during which the monitoring equipment was inoperative (monitoring down-time);
3. A statement in the report of a negative declaration; that is; a statement when no excess emissions occurred or when the monitoring equipment has not been inoperative, repaired or adjusted;
4. Any failure to conduct any required source testing, monitoring, or other compliance activities; and
5. Any violation of limitations on operation.

D. Excess emissions shall be defined as any period in which the facility emissions exceed a maximum emission limit set forth in this permit, or a malfunction occurs causing an emissions exceedance.

E. Excess emissions indicated by GHG emission performance testing or compliance monitoring shall be considered violations of the applicable emission limit for the purpose of this permit.

F. Instruments and monitoring systems required by this PSD permit shall have a 95% on-stream time on an annual basis.

G. All records required by this PSD Permit shall be retained for not less than 5 years following the date of such measurements, maintenance, and reporting.

H. Continuously means individual measurement no less frequent than once every 15 minutes. Electronic data may be reduced to hourly averages for recordkeeping purposes.

## VI. SHAKEDOWN PERIODS

The combustion turbine emission limits and requirements in Conditions III and IV.A.1 shall not apply during combustion shakedown periods. Shakedown is defined as the period beginning with initial startup and ending no later than initial performance testing, during which the Permittee conducts operational and contractual testing and tuning to ensure the safe, efficient and reliable operation of the plant. The shakedown period shall not exceed the time period for performance testing as specified in 40 CFR § 60.8. The requirements of special condition I.C.

## VII. PERFORMANCE TESTING

- A. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days of the date of initial startup of the combustion turbine generators, the Permittee shall perform an initial emission test for CO<sub>2</sub> and use emission factors from 40 CFR Part 98. The Permittee shall ensure that GHG emissions from the Combustion Turbine Generator and heat recovery steam generator in to the atmosphere do not exceed the limits in lbs CO<sub>2</sub>/MWh (gross) from Table 2 during the test. To determine this BACT emission limit, Permittee shall calculate the limit based on the measured hourly energy output (MWh (gross)), the CTG is operating at, or above 90% of its design capacity with duct burner firing and the results shall be corrected to ISO conditions (59°F, 14.7 psia, and 67% humidity). Sampling shall be conducted in accordance with 40 CFR § 60.8 and EPA Method 3a or 3b for the concentration of CO<sub>2</sub>.
1. Multiply the CO<sub>2</sub> hourly average emission rate determined under maximum operating test conditions by 8,760 hours for the combustion turbines and 4,375 hours for the duct burners.
  2. If the above calculated CO<sub>2</sub> emission total does not exceed the tons per year (TPY) specified in Table 1, no compliance strategy needs to be developed. If the above calculated CO<sub>2</sub> emission total exceeds the tons per year (TPY) specified in Table 1, the facility shall:
    - a. Document the potential to exceed in the test report; and
    - b. Explain within the report how the facility will assure compliance with the CO<sub>2</sub> emission limit listed in Table 1.
- B. No later than 180 days after initial start-up, or restart after modification of the facility, performance test(s) must be conducted and a written report of the performance testing results furnished to the EPA with 60 days after the testing is completed. During subsequent operations, stack sampling shall be performed within 120 days if current production rates exceed the production rate during stack testing by 10 percent or greater, additional sampling may be required by TCEQ or EPA.
- C. Permittee shall submit a performance test protocol to EPA no later than 30 days prior to the test to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted in accordance with the submitted protocol, and any changes required by EPA. The owner or operator must provide the EPA at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the EPA the opportunity to have an observer present and/or to attend a pre-test meeting. If there is a delay in the original test date, the facility must provide at least 7 days prior notice of the rescheduled date of the performance test.
- D. Performance tests must be conducted at or above 90% of maximum load operations for the atmospheric conditions which exist during testing. The duct burners shall be tested at their maximum firing rate within the mechanical limits of the equipment for the atmospheric conditions which exists during the performance test while the turbine is operating as close to base load as possible. The tested turbine load shall be identified in the sampling report. The permit holder shall present in the performance test protocol the manner in which stack

sampling will be executed in order to demonstrate compliance with the emission limits contained in Section II.

- E. Air emissions from the HRSG exhaust stack shall be tested while firing at the minimum normal operating load (minimum normal load above 50 percent). The normal operating range consistent with emission limits is to be determined during stack testing. Air emissions that will be sampled and analyzed while at the minimum load include (but are not limited to) CO<sub>2</sub> to characterize the emissions at this load.
- F. Performance tests must be conducted under such conditions to ensure representative performance of the affected facility. The owner or operator must make available to EPA such records as may be necessary to determine the conditions of the performance tests.
- G. The owner or operator shall provide, or cause to be provided, performance testing facilities as follows:
  - 1. Sampling ports adequate for test methods applicable to this facility,
  - 2. Safe sampling platform(s),
  - 3. Safe access to sampling platform(s), and
  - 4. Utilities for sampling and testing equipment.
- H. Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply.

#### VIII. AGENCY NOTIFICATIONS

Permittee shall submit GHG permit applications, permit amendments, and other applicable permit information to:

Multimedia Planning and Permitting Division  
EPA Region 6  
1445 Ross Avenue (6 PD-R)  
Dallas, TX 75202  
Email: Group R6AirPermits@EPA.gov

Permittee shall submit a copy of all compliance and enforcement correspondence as required by this Approval to Construct to:

Compliance Assurance and Enforcement Division  
EPA Region 6  
1445 Ross Avenue (6EN)  
Dallas, TX 75202