

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A-500-1716089792

Version: 1.0

Issue Date: June 9, 2022

Pursuant to section 20.3 of the Environmental Protection Act, Revised Statutes of Ontario (R.S.O.) 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

PORTLANDS ENERGY CENTRE L.P.

1415 JOSHUAS CREEK DRIVE
OAKVILLE ONTARIO
L6H 7G4

For the following site:

7143 Loyalist Parkway , RR #1, Township of Greater Napanee, LOYALIST, ONTARIO, CANADA,
K0H 1G0

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) 3842-9N6GZD, issued on November 14, 2014.

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

One (1) natural gas fired combined cycle electricity generation facility having a power rating of 970 megawatts (nominal output), consisting of the following major components:

- one (1) dew point heater rated at 11.1 gigajoules per hour, firing 392 cubic metres per hour of natural gas, and discharging to the air at a maximum volumetric flow rate of 3.39 cubic metres per second through a stack having an exit diameter of 0.46 metre and extending 4.6 metres above grade;
- two (2) combustion turbine generators, each rated at 271 megawatts (nominal output), and firing natural gas at a nominal rate of 82,545 cubic metres per hour or approximately 3,119 gigajoules per hour high heating value per turbine;
- two (2) heat recovery steam generators, each equipped with a selective catalytic reduction system and a low NOx duct burner firing natural gas at a rate of 23,236 cubic metres per hour or approximately 878 gigajoules per hour high heating value, and each discharging to the air through a stack having an exit diameter of 6.4 metres and extending 61 metres above grade and equipped with a Continuous Emission Monitoring System (CEM System);
- one (1) steam turbine generator rated at 457 megawatts (nominal output);
- one (1) parallel path wet-dry cooling tower having a maximum circulating water flow rate of 60,216 cubic metres per hour, and consisting of fourteen cells, each cell discharging to the air at a maximum volumetric flow rate of 723.1 cubic metres per second through a stack having an exit diameter of 10 metres and extending 24.7 metres above grade;
- one (1) natural gas fired auxiliary boiler equipped with low NOx burners, having a nominal heat input of 101.6 gigajoules per hour high heating value, discharging to the air at a maximum volumetric flow rate of 40.9 cubic metres per second through a stack having an exit diameter of 1.7 metres and extending 40 metres above grade;
- one (1) ultra low sulphur diesel fired emergency generator rated at 1.5 megawatts, discharging to the air at a maximum volumetric flow rate of 5.7 cubic metres per second through a stack having an exit diameter of 0.36 metre and extending

4.6 metres above grade and 1.0 metre above the roof;

- one (1) 227.5 kilowatt emergency diesel fire pump discharging to the air at a maximum volumetric flow rate of 0.7 cubic metres per second through a stack having an exit diameter of 0.15 metre and extending 4.6 metres above grade;
- natural gas fired comfort heating sources having a combined maximum heat input of 8.2 gigajoules per hour;
- three (3) oil-filled Generator Step-up electrical transformers;
- two (2) oil-filled auxiliary electrical transformers;
- three (3) electric compressors used to boost natural gas pressure;
- three (3) gas compressor aftercoolers;
- three (3) gas compressor lube oil coolers;
- one (1) gas regulating area;
- louvres and fans for general building ventilation as described in the Acoustic Assessment Report;

All in accordance with the Environmental Compliance Approval application signed by Paul Bronowicki, Director Operations and dated January 26, 2022, the Emission Summary and Dispersion Modelling Report prepared by Independent Environmental Consultants, signed by Kim Theobald, and dated January 18, 2022, the Acoustic Assessment Report prepared by Independent Environmental Consultants, signed by Nick Shinbin, and dated January 2022, and all other supporting information and documentation submitted in support of the application.

DEFINITIONS

For the purpose of this environmental compliance approval, the following definitions apply:

1. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility. "Acoustic Assessment Report" also means the report prepared by Independent Environmental Consultants, dated January 2022 and signed by Nick Shinbin .
2. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233.
3. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the performance limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233.
4. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility.
5. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
6. "CEM System" means the continuous emission monitoring and recording devices to continuously monitor and record the concentrations of Nitrogen Oxides, carbon monoxide and oxygen at the Combustion Turbine Facility exhaust stack, that shall be designed, installed and operated following the recommendations of Report EPS 1/PG/7.
7. "Combustion Turbine Facility" means the combustion turbine generators, heat recovery steam generators, duct burners, and steam turbine generator as described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.
8. "Company" means PORTLANDS ENERGY CENTRE L.P. operating as Atura Power that is responsible for the construction or

operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;

9. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister Pursuant to section 5 of the EPA.
10. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
11. "Emergency Plan for Fogging Events" means a document of a set of documents which describe actions to be taken when visible emissions from the cooling tower impact off-site visibility.
12. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19.
13. "Equipment" means the Combustion Turbine Facility, CEM Systems, selective catalytic reduction system, dew point heater, auxiliary boiler, cooling tower, emergency generator, comfort heating sources, transformers, compressors, coolers, gas regulating area, louvers, fans and other equipment described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval.
14. "Facility" means the entire operation located on the property where the Equipment is located;
15. "Fuel Flow Rate" means flow rate of the fuel, expressed in cubic metres per second at standard temperature and pressure, or kilograms per second.
16. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report or the design/implementation of Noise Control Measures for the Facility and/or Equipment. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment.
17. "Lower Heating Value" means the energy released during combustion of the fuel, excluding the latent heat content of the water vapour component of the products of combustion, expressed in megajoules per cubic metre at standard temperature and pressure, or megajoules per kilogram.
18. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
19. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;
20. "Nitrogen Oxides" means oxides of nitrogen, including nitric oxide (NO) and nitrogen dioxide (NO₂).
21. "Noise Control Measures" means measures to reduce the noise emission from the Facility including, but not limited to silencers, acoustic louvers, enclosures, absorptive treatment, plenums and barriers, as outlined in the Acoustic Assessment Report.
22. "Power Output" means the electricity and shaft power production of the combustion turbine, expressed in megawatts.
23. "Publication NPC-103" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, as amended.
24. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995, as amended.
25. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning, Publication NPC-300", August 2013, as amended.
26. "*Report EPS 1/PG/7*" means the document titled "Protocols and Performance Specifications for Continuous Monitoring of Gaseous Emissions from Thermal Power Generation - Report EPS 1/PG/7" published by Environment Canada in December 2005, as modified;
27. "Thermal Efficiency" means the thermal efficiency of the Combustion Turbine Facility calculated according to the formula described in Schedule 3 of this Approval.

TERMS AND CONDITIONS

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

1. OPERATION AND MAINTENANCE

1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
 - a. prepare, not later than three (3) months after the date of this Approval, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
 - i. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - ii. emergency procedures, including spill clean-up procedures;
 - iii. procedures for any record keeping activities relating to operation and maintenance of the Equipment; and
 - iv. all appropriate measures to minimize noise and odorous emissions from all potential sources;
 - b. implement the recommendations of the Manual.

2. RECORD RETENTION

1. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Approval, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
 - a. all records on the maintenance, repair and inspection of the Equipment;
 - b. all records on the calibration and maintenance of the CEMS systems;
 - c. all records produced by the CEMS systems;
 - d. all records and summaries produced from the Thermal Efficiency testing; and
 - e. all records of any environmental complaints, including:
 - i. a description, time and date of each incident to which the complaint relates;
 - ii. wind direction at the time of the incident to which the complaint relates; and
 - iii. a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

3. NOTIFICATION OF COMPLAINTS

1. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
 - a. a description of the nature of the complaint; and
 - b. the time and date of the incident to which the complaint relates.

4. PERFORMANCE LIMITS

1. The Company shall ensure that the Facility is designed and operated to comply, at all times, with the following performance requirements:

- a. The concentrations of Nitrogen Oxides and carbon monoxide in the undiluted gas emitted from the Combustion Turbine Facility are not greater than the limits specified in Schedule 1 attached to this Approval.
- b. The Thermal Efficiency of the Combustion Turbine Facility is not less than the efficiency specified in Schedule 1 attached to this Approval.

5. NOISE

1. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.

6. MONITORING

1. The Company shall monitor the emissions and operation of the Facility as follows:
 - a. The Company shall maintain operational the CEM System to continuously monitor and record the concentrations of Nitrogen Oxides, carbon monoxide and oxygen in the undiluted gases leaving the Combustion Turbine Facility. The locations and specifications of the CEM System are outlined in Schedule 2 attached to this Approval.
 - b. The Company shall perform a test once every two (2) calendar years, to determine the Thermal Efficiency of the Combustion Turbine Facility. The Company shall:
 - i. determine the parameters described in Schedule 3 attached to this Approval during the Thermal Efficiency testing;
 - ii. calculate the Thermal Efficiency of the Facility according to the formula described in Schedule 3 attached to this Approval; and
 - iii. prepare a summary of the results of the Thermal Efficiency no later than two (2) months after completing the test. The summary shall indicate the Thermal Efficiency of the Equipment and also include all parameters described in Schedule 3 attached to this Approval.
 - c. If the measured Thermal Efficiency is less than the anticipated Thermal Efficiency specified in Schedule 1 of the Approval (with a tolerance of 0.05 multiplied by the anticipated Thermal Efficiency), the Company shall notify the Ministry so that the emission limits specified in Schedule 1 attached to this Approval can be revised accordingly.

7. ACOUSTIC AUDIT

1. The Company shall carry out Acoustic Audit measurements on the actual noise emissions due to the operation of the Facility. The Company:
 - a. shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103;
 - b. shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director, not later than twelve (12) months after the date of this Approval.
2. The Director:
 - a. may not accept the results of the Acoustic Audit if the requirements of Publication NPC-233 were not followed;
 - b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

8. EMERGENCY PLAN FOR FOGGING EVENTS

1. The Company shall develop in consultation with the District Manager, an Emergency Plan for Fogging Events that outlines actions to be taken when visible emissions from the cooling tower impact off-site visibility.
2. The Company shall submit the Emergency Plan for Fogging Events to the District Manager not later than

three months after the date of this Approval or as otherwise indicated by the District Manager.

3. Upon acceptance of the Emergency Plan for Fogging Events by the District Manager, the Company shall immediately implement the Emergency Plan for Fogging Events.
4. The Company shall update the Emergency Plan for Fogging Events as necessary or at the direction of the District Manager.

REASONS

The reasons for the imposition of these terms and conditions are as follows:

1. Condition No. 1 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.
2. Condition No. 2 is included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the Regulations and this Approval can be verified.
3. Condition No. 3 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
4. Condition Nos. 4, 5 and 8 are included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.
5. Condition No. 6 is included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval can be verified.
6. Condition No. 7 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

APPEAL PROVISIONS

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal, within 15 days after the service of this notice, require a hearing by the Tribunal. You must also provide notice to, the Minister of the Environment, Conservation and Parks in accordance with Section 47 of the *Environmental Bill of Rights, 1993* who will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

- I. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- II. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- I. The name of the appellant;
- II. The address of the appellant;
- III. The environmental compliance approval number;
- IV. The date of the environmental compliance approval;
- V. The name of the Director, and;
- VI. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

| | | | | |
|--|-----|--|-----|---|
| Registrar* Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5 OLT.Registrar@ontario.ca | and | The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3 | and | The Director appointed for the purposes of Part II.1 of the <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5 |
|--|-----|--|-----|---|

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca**

This instrument is subject to Section 38 of the *Environmental Bill of Rights, 1993*, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at ero.ontario.ca, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

Dated at Toronto this 9th day of June, 2022



Nancy Orpana

Director

appointed for the purposes of Part II.1 of the Environmental Protection Act

c: Kim Theobald, Independent Environmental Consultants

Nicholas Shinbin, Independent Environmental Consultants

Paul Bronowicki, PORTLANDS ENERGY CENTRE L.P.

Trevor Dagilis, District Manager, MECP

The following schedules are a part of this environmental compliance approval:

SCHEDULE 1

Emission Limits

| | PARAMETERS | SPECIFICATION |
|----|--------------------|--------------------------|
| 1. | Nitrogen Oxides | 48 ppmv ^{1,2} |
| 2. | Carbon Monoxide | 60.0 ppmv ^{1,2} |
| 3. | Thermal Efficiency | 58 percent ² |

1. Demonstration of compliance with the limits of NOx and carbon monoxide is based on the "arithmetic averaging" of the emissions recorded in their respective CEM System under "normal operation" of the Combustion Turbine Facility.
"Normal operation" means the full-load operation of the Combustion Turbine Facility as defined by the manufacturer.
"Arithmetic averaging" means arithmetic averaging of the emissions recorded by the CEM System in the entire normal operation cycle, when the normal operation cycle lasted for less than 24 hours, or arithmetic averaging of the emissions recorded by the CEM System in the normal operation cycle based on a 24-hour rolling average basis, when the normal operation cycle lasted more than 24 hours.
2. "ppmv" means parts per million by volume at Reference Conditions (ambient temperature at 15 degrees Celsius, 60 percent relative humidity and 101.3 kiloPascals barometric pressure) on a dry volume basis normalized to 15 percent oxygen.
3. The calculated Thermal Efficiency shall be converted to Reference Conditions.

SCHEDULE 2

CEM System Requirements

PARAMETER: OXYGEN

INSTALLATION:

The continuous oxygen monitor shall be installed at an accessible location where the measurements are representative of the actual concentrations of oxygen in the undiluted gases leaving the Combustion Turbine Facility and shall meet the following installation specifications:

| | | |
|----|------------------------|---------------------------|
| 1. | Range (percentage) | 0 - 20 or 0 - 25 |
| 2. | Calibration Gas Ports: | close to the sample ports |

PERFORMANCE:

The continuous oxygen monitor shall meet the following minimum performance specifications for the following parameters:

| | | |
|----|---|---|
| 1. | Span Value (percentage): | 80 to 100 percent of full scale |
| 2. | Relative Accuracy: | the greater of less than or equal to 10 percent of the mean value of the reference method test data or 0.5 percent O ₂ average absolute difference |
| 3. | Calibration Drift/Error (24-hour): | 0.5 percent O ₂ |
| 4. | System Bias: | the greater of 5 percent of full scale or 0.5 percent O ₂ average absolute difference |
| 5. | Procedure for Zero and Span Calibration check: | all system components checked |
| 6. | Zero Calibration Drift (24-hour): | less than or equal to 0.5 percent O ₂ |
| 7. | Span Calibration Drift (24-hour): | less than or equal to 0.5 percent O ₂ |
| 8. | Response Time (90 percent response to a step change): | less than or equal to 200 seconds for 90% change |
| 9. | Operational Test Period: | at least 168 hours without corrective maintenance |

CALIBRATION:

Daily calibration drift checks on the monitor shall be performed and recorded when the Combustion Turbine Facility is operating and in accordance with the requirements of *Report EPS 1/PG/7*.

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time when the Combustion Turbine Facility is operating.

PARAMETER: CARBON MONOXIDE

INSTALLATION:

The continuous carbon monoxide monitor shall be installed at an accessible location where the measurements are representative of the actual concentration of carbon monoxide in the undiluted gases leaving the Combustion Turbine Facility and shall meet the following installation specifications:

| | | |
|----|------------------------|---------------------------|
| 1. | Range (ppmv) | 0 - 100 |
| 2. | Calibration Gas Ports: | close to the sample point |

PERFORMANCE:

The continuous carbon monoxide monitor shall meet the following minimum performance specifications for the following parameters:

| | |
|--|--|
| 1. Span Value (percentage): | 80 to 100 percent of full scale |
| 2. Relative Accuracy: | the greater of less than or equal to 10 percent of the mean value of the reference method test data or 8 ppm average absolute difference |
| 3. Calibration Drift/Error (24-hour): | less than or equal to 2 percent of the actual concentration |
| 4. System Bias: | the greater of 5 percent of full scale or 5 ppm average absolute difference |
| 5. Procedure for Zero and Span Calibration check: | all system components checked |
| 6. Zero Calibration Drift (24-hour): | the greater of less than or equal to 5 percent of full scale value |
| 7. Span Calibration Drift (24-hour): | the greater of less than or equal to 5 percent of full scale value |
| 8. Response Time (90 percent response to a step change): | less than or equal to 200 seconds |
| 9. Operational Test Period: | at least 168 hours without corrective maintenance |

CALIBRATION:

Daily calibration drift checks on the monitor shall be performed and recorded when the Combustion Turbine Facility is operating and in accordance with the requirements of *Report EPS 1/PG/7*.

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time when the Combustion Turbine Facility is operating.

PARAMETER: NITROGEN OXIDES

INSTALLATION:

The continuous nitrogen oxides monitor shall be installed at an accessible location where the measurements are representative of the actual concentration of nitrogen oxides in the undiluted gases leaving the Combustion Turbine Facility and shall meet the following installation specifications:

| | |
|---------------------------|---------------------------|
| 1. Range (ppmv) | 0 - 100 |
| 2. Calibration Gas Ports: | close to the sample point |

PERFORMANCE:

The continuous nitrogen oxides monitor shall meet the following minimum performance specifications for the following parameters:

| | |
|---------------------------------------|--|
| 1. Span Value (percentage): | 80 to 100 percent of full scale |
| 2. Relative Accuracy: | the greater of less than or equal to 10 percent of the mean value of the reference method test data or 8 ppm average absolute difference |
| 3. Calibration Drift/Error (24-hour): | less than or equal to 2 percent of the actual concentration |
| 4. System Bias: | the greater of 5 percent of full scale or 5 ppm average absolute difference |
| 5. Procedure for Zero and Span | all system components checked |

| | | |
|----|---|--|
| | Calibration check: | |
| 6. | Zero Calibration Drift (24-hour): | the greater of less than or equal to 5 percent of full scale value |
| 7. | Span Calibration Drift (24-hour): | the greater of less than or equal to 5 percent of full scale value |
| 8. | Response Time (90 percent response to a step change): | less than or equal to 200 seconds |
| 9. | Operational Test Period: | at least 168 hours without corrective maintenance |

CALIBRATION:

Daily calibration drift checks on the monitor shall be performed and recorded when the Combustion Turbine Facility is operating and in accordance with the requirements of *Report EPS 1/PG/7*.

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time when the Combustion Turbine Facility is operating.

SCHEDULE 3

Thermal Efficiency Testing Procedures - Parameters to be tested/measured:

1. Power Output
2. Fuel Flow Rate
3. Lower Heating Value
4. a) Ambient air temperature (expressed in degrees of Celsius), b) Barometric pressure (expressed in kilopascal), and c) Relative humidity (expressed in percent)
5. Date, time and duration of test

Formula:

$$\text{Thermal Efficiency} = \frac{\text{Power Output} \times 100\%}{\text{Fuel Flow Rate} \times \text{Lower Heating Value}}$$

Note:

Thermal Efficiency testing should be conducted at maximum rating or at the maximum load achievable at the time of testing and shall employ an averaging time of not less than three hours.