

Nathaniel Yee

On the following pages, I am providing three aids to questioning for the GRA hearing.

- 1) Screenshot from the current YESAB assessment of adding capacity to the Faro facility
- 2) Chronologically ordered version of NY-YEC-1-8(a) Attachment 1 – REVISED
- 3) YEC's current Air Emissions Permit

1) Screenshot from yesabregistry.ca, concerning the current YESAB assessment (2021-0115) for the Faro generating station expansion project. This information was also cited in my 13-September, 2021 reply to YEC's letter of non-response to my Motion for Further Disclosure for round 2 IRs. YESAB submitted this IR to YEC on 9-September, 2021. At the time of preparation of this aid to questioning, YEC had not responded.

The text of the IR in the screenshot is repeated below, in case the print of the screenshot is too small to be legible.

<https://yesabregistry.ca/projects/deee1f7d-fbe9-44b4-8870-225cbc20bf37/information-requests/c2d4b2c9-f4dd-47b1-b118-0f7d04bb96c3>

The screenshot shows the YESAB website interface. At the top, there is a navigation bar with links for Home, Assessment Statistics, Create Account, Log In, and Start a Proposal. The main header displays the project ID '2021-0115' and the project name 'Faro Generating Station Capacity Expansion Project' with a '+ Follow' button. Below the header, there are tabs for Details, Activity, Documents, and Comments (3). The left sidebar contains information about the proponent (Yukon Energy Corporation), project stage (Evaluation Information Request), assessment district (Watson Lake), traditional territories (Liard First Nation, Ross River Dena Council), and decision bodies (YG Environment). The main content area is titled 'Information Request 1' and contains the following text: 'The Watson Lake Designated Office has determined that supplementary information is required in order to proceed with the evaluation of your project. Depending on your response to these questions, we may require further information for clarification.' Below this, 'Question 1' is listed: 'The Project Proposal (YOR 2021-0115-0002) discusses the operational capacity of the Faro diesel generators (currently 10.6 MW, proposing an addition of 4.9 MW). During the Seeking Views and Information stage of the assessment, comments were received discussing concerns about the distinction between operational and production capacity of the Faro Generating Station. As noted in Assessable Activities, Exceptions and Executive Committee Projects Regulations under YESAA (relating to the Project under both Schedule 1, Part 4 Item 2 and Schedule 3, Part 26), the assessment of an expansion of a hydroelectric generating station, or a fossil fuel-fired electrical generating station is based on the production capacity of said generating station, and makes no mention of the operational capacity.' A sub-question 'a) Please provide a description of all equipment (current and proposed) used for the purpose of generating electricity at the Faro Generating Station and their total combined production capacity.' is listed. The 'Answer to Question 1' section shows 'Awaiting response from proponent'.

### Question 1

The Project Proposal (YOR 2021-0115-0002) discusses the operational capacity of the Faro diesel generators (currently 10.6 MW, proposing an addition of 4.9 MW). During the Seeking Views and Information stage of the assessment, comments were received discussing concerns about the distinction between operational and production capacity of the Faro Generating Station. As noted in Assessable Activities, Exceptions and Executive Committee Projects Regulations under YESAA (relating to the Project under both Schedule 1, Part 4 Item 2 and Schedule 3, Part 26), the assessment of an expansion of a hydroelectric generating station, or a fossil fuel-fired electrical generating station is based on the **production capacity** of said generating station, and makes no mention of the **operational capacity**.

a) Please provide a description of all equipment (current and proposed) used for the purpose of generating electricity at the Faro Generating Station and their total combined **production capacity**.

Answer to Question 1

Awaiting response from proponent

2) Chronologically ordered version of NY-YEC-1-8(a) Attachment 1 – REVISED

**NY-YEC-1-8(a) Attachment 1 – REVISED**

YEC was requested to provide all correspondence between YEC and the regulator concerning the Faro rental diesel generators.

After a couple of motions and a board order, the emails on the following pages were provided.

YEC provided the correspondence in what seems to be a random order, and I have put them in chronological order to give a clearer picture of the exchange.

I am not sure how YEC went about collecting these emails, as one contains a warning that it comes from an external account, and another appears in a different font and the email addresses are not linked, but this is currently accepted to be the full correspondence with the regulator, as provided by YEC.

I only re-ordered the emails chronologically, and include all emails provided, along with the first page of each of the two applications for amendment to the air emissions permit.

**From:** [Travis Ritchie](#)  
**To:** ["Elizabeth.Barker@gov.yk.ca"](mailto:Elizabeth.Barker@gov.yk.ca)  
**Subject:** Faro Generating Station  
**Date:** August 27, 2020 5:28:34 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
**Importance:** High

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Hello Elizabeth,

I was wondering if you might have some time for a phone call to discuss an amendment to our air emissions permit to authorize the temporary installation of portable back-up diesel generators at the Faro Generating Station, similar to what we have had to do that last few winters in Whitehorse. If you have time tomorrow that would be great otherwise the earliest time you have next week would be appreciated. If you would kindly let me know what might work for you that would be great. Thanks for your consideration.

Regards,

Travis



**Travis Ritchie P.Biol.**

Manager - Environment, Assessment, & Licensing

Telephone: 867-393-5350 | Mobile: 867-333-0300



Sustainable Electricity Company™



*This message may contain confidential or privileged material. Any use of this information by anyone other than the intended recipient is prohibited. If you have received this message in error, please immediately reply to the sender and delete this information from your computer.*



Please consider the environment before printing this e-mail

SM-YEC-20141008

**From:** Travis Ritchie <[Travis.Ritchie@yec.yk.ca](mailto:Travis.Ritchie@yec.yk.ca)>  
**Sent:** September 10, 2020 11:57 AM  
**To:** Elizabeth.Barker <[Elizabeth.Barker@gov.yk.ca](mailto:Elizabeth.Barker@gov.yk.ca)>  
**Subject:** AEP 60-010 Amendment Application

Hello Elizabeth,

Further to our conversation on the phone last week, please find our application and supporting documentation to amend Air Emissions Permit (No. 60-010) to approve re-installation of previously relocated generating capacity at the Faro Diesel Generating Station. As I mentioned on the phone, Yukon Energy is also requesting your consideration to connect 3 additional 1.8 MW generators to the grid at this site for short-term emergency back-up only purposes, similar to the emergency back-up provisions at the Whitehorse Rapids Generating Station that are currently contained in the air emissions permit (Part 9).

If you have any questions, comments, or concerns with the application please let me know. Thank you for your time and consideration.

Regards,

Travis



**Travis Ritchie P.Biol.**

Manager - Environment, Assessment, & Licensing  
Telephone: 867-393-5350 | Mobile: 867-333-0300



SustainableElectricityCompany™



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Please consider the environment before printing this e-mail

SM-YEC-20141008



September 10, 2020

File: 2515.03.01

Elizabeth Barker, Environmental Protection Analyst  
Department of Environment, Standards & Approvals Section  
Yukon Government  
Box 2703  
Whitehorse, Yukon Y1A 2C6

*(Via email)*

Dear Ms. Barker,

**RE: AIR EMISSIONS PERMIT NO. 60-010 – APPLICATION FOR APPROVAL TO INSTALL  
PREVIOUSLY RELOCATED AND DERATED GENERATING CAPACITY AND PERMIT AMENDMENT TO  
AUTHORIZE CONNECTION OF EMERGENCY-ONLY GENERATING CAPACITY - FARO GENERATING STATION**

Please find an application and supporting documentation regarding the above referenced permit amendment request. Pursuant to permit Part 2, Item 5, we are seeking approval to reinstall site capacity that was relocated to other generating stations in recent years, as well derated site capacity with existing units. Additionally we are seeking approval for temporary connection of additional site capacity for emergency-only back-up purposes.

Please contact me by telephone at 867.393.5350 or by email: [travis.ritchie@yec.yk.ca](mailto:travis.ritchie@yec.yk.ca) if you have any questions, comments, or concerns with this submission.

Thank you for your time and consideration in this matter.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Travis Ritchie", with a long horizontal flourish extending to the right.

Travis Ritchie, P.Biol.

Manager – Environment, Assessment, & Licensing

Attachment:  
Air Emissions Permit Application and Supporting Attachments A-C



## APPLICATION FOR RENEWAL, AMENDMENT OR CANCELLATION OF *ENVIRONMENT ACT* PERMITS

Please complete the following and ensure that all information is legibly printed or typed:

**Permittee:** \_\_\_\_\_  
(Business or individual name)

**Permit type:** \_\_\_\_\_  
(e.g. pesticide, special waste, air emissions, solid waste, land treatment facility, relocation, ODS/OH)

**Permit number:** \_\_\_\_\_  
(e.g. 4201-XX-XXX)

**Please check (✓) appropriate box:**

### Renewal

I have fully reviewed my permit and the information on my current permit is correct and complete and my business is operating as described therein.

### Amendment

I have fully reviewed my permit and the following changes or additions have occurred and should be taken into account when renewing my permit (attach additional information if necessary):

Ownership: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Site Location(s): \_\_\_\_\_

Telephone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Email: \_\_\_\_\_

Products/Activities: \_\_\_\_\_

Transport special wastes: yes:  no:

Other: \_\_\_\_\_

*Note: additional information may be required depending on the nature of the change.*

### Cancellation

I am no longer undertaking the activities authorized by the above permit. I understand that I will be contacted by enforcement officials to confirm that a permit is no longer required, at the following coordinates:

Mailing Address: \_\_\_\_\_

Site Location(s): \_\_\_\_\_

Telephone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Email: \_\_\_\_\_

Permitted Activities: \_\_\_\_\_

I, \_\_\_\_\_ [print name clearly], certify that I am an authorized representative of \_\_\_\_\_ [business name], and hereby make application for the renewal, amendment or cancellation of the above-noted permit, as indicated, and certify that the information provided on this form is correct.

Signature of applicant

Date

# of attachments

This information is being collected under the authority of s.90 of the *Environment Act*. For further information contact the Environmental Programs Branch at (867) 667-5683.

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**From:** Elizabeth.Barker@gov.yk.ca [mailto:Elizabeth.Barker@gov.yk.ca]

**Sent:** September 21, 2020 4:42 PM

**To:** Travis Ritchie

**Subject:** RE: AEP 60-010 Amendment Application

Good Afternoon Travis,

I have a question in regards to the generator capacities at Faro.

In your amendment application, you have the following capacities listed:

FD1	2.4MW
FD2	2.8MW
YM20	1.8MW
YM21	1.8MW
YM22	1.8MW
YM23	1.8MW
YM24	1.8MW
YM25	1.8MW

The 2014 YESAB Evaluation Report lists FD1 and FD7 capacities as 5.15MW and 3MW respectively.

Would you be able to confirm the capacities of FD1 and FD7? Also, I assume the capacities provided in the application are nameplate capacities; would you be able to provide me with the rated capacities for all the generators?

Thanks,

Liz

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**From:** [Travis Ritchie](#)  
**To:** ["Elizabeth.Barker@gov.yk.ca"](mailto:Elizabeth.Barker@gov.yk.ca)  
**Subject:** RE: AEP 60-010 Amendment Application  
**Date:** September 21, 2020 5:19:01 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)

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Hello Elizabeth,

Thanks for your email.

The current capacities (or current rated output) of FD1 and FD7 are as you have them in your table (2.4 MW and 2.8 MW, respectively). They have both had their outputs de-rated over the last few years from their name plate capacities of 5.15 MW and 3.2 MW, respectively. There is likely little difference between the name plate capacity and output capacity of the mobile diesels (YM20 - YM25) as they are brand new units.

Please let me know if you have any further questions or would like to review anything.

Regards,

Travis

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**From:** Elizabeth.Barker@gov.yk.ca [mailto:Elizabeth.Barker@gov.yk.ca]

**Sent:** September 23, 2020 5:03 PM

**To:** Travis Ritchie

**Subject:** AEP 60-010 Amendment

Good Afternoon Travis,

According to the Assessable Activities Regulation under YESAA, Part 4, Item 2 (b) applies to your AEP 60-010 amendment application.

**PART 4**

**Energy and Telecommunications**

Column 1	Column 2
Item	Activity
Item	Specific Exception
1	Construction, installation, operation, modification, decommissioning or abandonment of, or other activity in relation to, a power line or a telecommunications line
2	Construction, operation, modification, decommissioning or abandonment of, or other activity in relation to, <ul style="list-style-type: none"> <li>• (a) a hydroelectric generating station;</li> <li>• (b) a fossil fuel-fired electrical generating station;</li> <li>• (c) a wind-powered electrical generating station;</li> <li>• (d) a wood-fired electrical generating station; or</li> <li>• (e) a wood-fuelled heating facility for the commercial sale of heat</li> </ul>

Specifically, the Faro generating station underwent a YESAA assessment in 2014. In the assessment, FD1 and FD7 were assessed with production capacities of 5.15MW and 3MW for a total of 8.15MW.

Currently, FD1 and FD7 have been derated to 2.4MW and 2.8MW however, with the addition of YM20-22 (5.4MW) and the addition of the YM23-25(5.4MW) as emergency backup, this brings the station capacity to a total of 16MW. This is 7.85MW greater than the capacity that was previously assessed in 2014. As the modification of production capacity is greater than 50kW, this project will need to proceed through YESAB before we can issue any permit amendments.

Please let me know if you would like to discuss this further.

Have a great day,

Liz

**From:** [Travis Ritchie](#)  
**To:** ["Elizabeth.Barker@gov.yk.ca"](mailto:Elizabeth.Barker@gov.yk.ca)  
**Subject:** RE: AEP 60-010 Amendment  
**Date:** September 24, 2020 10:06:06 AM  
**Importance:** High

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Hi Elizabeth,

Thanks for your reply.

Given that the facility was assessed favourably under YESAA in both 2008 and 2011, prior to relocating units FD3 (1 MW) and FD5 (1.4 MW) and there have been no other changes to the facility since 2008, I was anticipating that either Decision Document 2008.0230 or 2011.0246 were technically still valid for the purposes of granting an approval to at least reinstall both the relocated and de-rated generating capacity at the site. Those were the only changes to the facility during its last assessment, so the activities remain the same across all assessments. I understand the need to assess the additional capacity (beyond what has been assessed historically) before it can be permitted, but I would ask for approval to reinstall the previously relocated and de-rated capacity pursuant to the 2008/2011 assessment findings and related decision documents.

If you need, I can resubmit the amendment application for reinstallation of only the previously assessed capacity, removing reference to the 3 additional units (YM23-YM25). YEC can then work on getting a YESAA assessment completed for the additional capacity, which could be permitted afterward.

Does that sound reasonable? If it's helpful to speak on the phone please let me know and I will call you at a convenient time.

Thanks again.

Regards,

Travis

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**From:** [Elizabeth.Barker@gov.yk.ca](mailto:Elizabeth.Barker@gov.yk.ca) [mailto:[Elizabeth.Barker@gov.yk.ca](mailto:Elizabeth.Barker@gov.yk.ca)]

**Sent:** September 28, 2020 12:58 PM

**To:** Travis Ritchie <[Travis.Ritchie@yec.yk.ca](mailto:Travis.Ritchie@yec.yk.ca)>

**Subject:** RE: AEP 60-010 Amendment

Hi Travis,

My apologies for the late reply, I only reviewed the 2014 Faro YESAA assessment. Let me have a quick look through the 2008 and 2011 reports and get back to you.

From our end, it will definitely be easier if you to resubmit the amendment application and exclude YM23-YM25 as you have mentioned below.

I fly out of the territory tomorrow and will be away for one week but I will get back to you once I return.

Thanks for your patience,

Liz

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**From:** Travis Ritchie

**Sent:** September 28, 2020 1:30 PM

**To:** Elizabeth.Barker

**Subject:** RE: AEP 60-010 Amendment

**\*\*\* External E-mail: Do not click on links or attachments except from trusted senders. \*\*\***  
\*\*\*\*\*

Hi Elizabeth,

Please see the revised request for approval to reinstall previously relocated and de-rated site capacity.

I have also attached the previous Faro GS project proposal supporting document listing the past site capacity, the YESAA Evaluation Report and the YG Decision Document all for easy reference.

Thank you for your time.

Regards,

Travis

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**Yukon Energy  
Corporation**  
P.O. Box 5920  
Whitehorse  
Yukon Y1A 6S7  
Ph: (867) 393-5300  
Fax: (867) 393-5322

September 28, 2020

File: 2515.03.01

Elizabeth Barker, Environmental Protection Analyst  
Department of Environment, Standards & Approvals Section  
Yukon Government  
Box 2703  
Whitehorse, Yukon Y1A 2C6

*(Via email)*

Dear Ms. Barker,

**RE: AIR EMISSIONS PERMIT NO. 60-010 – APPLICATION FOR APPROVAL TO INSTALL  
PREVIOUSLY RELOCATED AND DERATED GENERATING CAPACITY - FARO GENERATING STATION**

Please find an application and supporting documentation regarding the above referenced permit amendment request. Pursuant to permit Part 2, Item 5, we are seeking approval to reinstall site capacity that was relocated to other generating stations in recent years, as well derated site capacity with existing units.

Please contact me by telephone at 867.393.5350 or by email: [travis.ritchie@yec.yk.ca](mailto:travis.ritchie@yec.yk.ca) if you have any questions, comments, or concerns with this submission.

Thank you for your time and consideration in this matter.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Travis Ritchie".

Travis Ritchie, P.Biol.

Manager – Environment, Assessment, & Licensing

Attachment:  
Air Emissions Permit Application and Supporting Attachments A-C



# APPLICATION FOR RENEWAL, AMENDMENT OR CANCELLATION OF ENVIRONMENT ACT PERMITS

Please complete the following and ensure that all information is legibly printed or typed:

Permittee: Yukon Energy Corporation  
(Business or individual name)

Permit type: Air Emissions Permit  
(e.g. pesticide, special waste, air emissions, solid waste, land treatment facility, relocation, ODS/OH)

Permit number: 60-010  
(e.g. 4201-XX-XXX)

Please check (✓) appropriate box:

### Renewal

I have fully reviewed my permit and the information on my current permit is correct and complete and my business is operating as described therein.

### Amendment

I have fully reviewed my permit and the following changes or additions have occurred and should be taken into account when renewing my permit (attach additional information if necessary):

Ownership: Yukon Energy Corporation (no change)

Mailing Address: Box 5920

Whitehorse Yukon Y1A 6S7

Site Location(s): Faro Generating Station (XX, Faro, YT)

Telephone #: 867.393.5350 Fax #: \_\_\_\_\_

Email: travis.ritchie@yec.yk.ca

Products/Activities: Reinstall previously relocated/derated capacity (aprx. 5.65 MW)

Transport special wastes: yes:  no:

Other: See attached supporting documents.

Note: additional information may be required depending on the nature of the change.

### Cancellation

I am no longer undertaking the activities authorized by the above permit. I understand that I will be contacted by enforcement officials to confirm that a permit is no longer required, at the following coordinates:

Mailing Address: \_\_\_\_\_

Site Location(s): \_\_\_\_\_

Telephone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Email: \_\_\_\_\_

Permitted Activities: \_\_\_\_\_

I, Travis Ritchie [print name clearly], certify that I am an authorized representative of Yukon Energy Corporation [business name], and hereby make application for the renewal, amendment or cancellation of the above-noted permit, as indicated, and certify that the information provided on this form is correct.

Signature of applicant

September 28, 2020  
Date

3 (Attachments A-C)  
# of attachments

This information is being collected under the authority of s.90 of the *Environment Act*. For further information contact the Environmental Programs Branch at (867) 667-5683.

**From:** [Elizabeth.Barker@gov.yk.ca](mailto:Elizabeth.Barker@gov.yk.ca)  
**To:** [Travis Ritchie](#)  
**Subject:** RE: AEP 60-010 Amendment  
**Date:** October 13, 2020 4:05:52 PM

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Good Afternoon Travis,

We have determined that the information provided in YEC's previous Faro station YESAA assessments (2008-0230 and 2011-0246 ) is still valid for the proposed 2020 amendment of reinstalling capacity of approximately 5.65MW at the Faro generating station. YEC has authorization to reinstall previously relocated/de-rated capacity of up to 10.6MW, cumulative station capacity, without proceeding through the YESAA assessment process. As discussed, any additional capacity increase that will bring the Faro station's cumulative capacity above 10.6MW will need to proceed through the YESAA assessment process before being considered.

As this amendment doesn't change the content of your current Air Emissions Permit 60-010, we will not be issuing an amended permit and you may continue to use permit 60-010 as is .

Cheers,

Liz

Elizabeth Barker  
Environmental Protection Analyst  
Department of Environment  
Government of Yukon  
(867) 667-5456

3) YEC's current Air Emissions Permit 60-010, amended 4-Oct, 2018 – Downloaded from YEC website.

From the following YEC page:

<https://yukonenergy.ca/energy-in-yukon/projects-facilities/diesel-facilities>

and direct link to Air Emissions Permit:

[https://yukonenergy.ca/media/site\\_documents/Air Emissions Permit 60-010 Amendment 2.pdf](https://yukonenergy.ca/media/site_documents/Air_Emissions_Permit_60-010_Amendment_2.pdf)

This YEC document is the most current Air Emissions Permit, and was also part of YEC's documents submitted for the current YESAB assessment (2021-0115) for the Faro generating station expansion project.

(Air Emissions Permit begins on following page.)



Permit No: 60-010

## AIR EMISSIONS PERMIT

Issued Pursuant to  
the *Environment Act* and the *Air Emissions Regulations*

**Permittee:** Yukon Energy Corporation

**Mailing Address:** Box 5920, Whitehorse, Yukon, Y1A 6S7

**Site Locations:** Generating Plants at:  
- Dawson  
- Faro  
- Mayo  
- Whitehorse

**Authorized Representative:** Travis Ritchie  
**Phone/Fax:** (867) 393-5350 / (867) 393-5322  
**Email:** [travis.ritchie@yec.yk.ca](mailto:travis.ritchie@yec.yk.ca)

**Effective Date:** Date of Director's signature

**This permit has been amended and replaces permit #60-010 issued on December 15, 2017.**

**Expiry Date:** December 31, 2024

**Scope of Authorization:** In accordance with your application, you are authorized to operate electricity generating equipment at the above site locations (the "site(s)"), as set out in the terms and conditions of this permit.

Dated this 4th day of October, 2018

A handwritten signature in black ink, appearing to read "T. Powell".

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Director, Environmental Programs Branch  
Environment Yukon

## **PART 1: DEFINITIONS**

1. In this permit,

“Act” means the *Environment Act*, R.S.Y. 2002, c. 76, as updated from time to time;

“approved plan” means a plan that is submitted by the permittee and approved by an environmental protection analyst under this permit and includes any terms and conditions specified by the environmental protection analyst in the approval;

“area of influence” refers to that area as determined in the Permittee’s air dispersion modelling submitted to the Branch in 2011 for Whitehorse and in 2012 for Dawson City;

“associated personnel” means all employees, contractors and volunteers involved in the permitted activities;

“Branch” means the Environmental Programs Branch, Environment Yukon;

“emission factor” means the mass emission of a pollutant per unit of energy produced in either grams per kilowatt-hour (g/kWh) or kilograms per megawatt-hour (kg/MWh);

“emission rate” means the average rate in grams per second (g/s) or kilograms/hour (kg/h) at which a pollutant is emitted from a source, determined either:

- i) as estimated based on emission factors derived from published literature regarding sources of similar type and age (estimated emission rates); or
- ii) as derived from measured data obtained from manual stack testing carried out by the permittee (measured emission rates);

“environmental protection analyst” means an employee of the Branch so designated by the Minister of Environment under the Act;

“environmental protection officer” means an employee of the Government of Yukon so designated by the Minister of Environment under the Act;

“N-1 Event” is a situation where a transmission line, generating unit, or any other element within either the Whitehorse-Aishihik-Faro or Mayo-Dawson system fails, and consequently requires emergency back-up to avoid rolling black-outs in any of the communities;

“Regulations” means the *Air Emissions Regulations*, O.I.C. 1998/207;

“source” means a fuel-fired electricity generator which has a maximum nameplate capacity equal to or more than 1.0 megavolt-ampere;

“total annual emissions” means the emissions derived by multiplying emission factors or measured emission rates for each source by the previous three-year average total energy production for that source.

2. Any term not defined in this permit that is defined in the Act or the Regulations has the same meaning as in the Act or the Regulations.

## **PART 2: GENERAL**

1. No condition of this permit limits the applicability of any other law or bylaw.

2. The permittee shall ensure that all activities authorized by this permit occur on property that the permittee has the right to enter upon and use for that purpose.
3. The permittee shall ensure that all associated personnel:
  - a) have access to a copy of this permit;
  - b) are knowledgeable of the terms and conditions of this permit; and
  - c) receive the appropriate training for the purposes of carrying out the requirements of this permit.
4. The permittee shall provide notice in writing to an environmental protection analyst prior to any significant change of circumstances at the site, including without limitation:
  - a) discontinuation of any regulated activity at the site;
  - b) change of ownership of the site or any of the sources; and
  - c) change to the mailing address or phone number of the permittee.
5. The permittee shall obtain approval from an environmental protection analyst prior to:
  - a) any addition, modification, removal or replacement of any equipment or components related to the release, abatement, control or treatment of air emissions; or
  - b) any change in location of the source(s).
6. Where conflicts exist between this permit, the permit application or any plans, this permit shall prevail.
7. If an inspection reveals that the site or source(s) is in any way not in compliance with this permit, the permittee shall repair the damage or take other actions as required to bring the site or source(s) into compliance.
8. For clarity, all obligations of the permittee under this permit survive the expiry date to the extent that each is not superseded by one or more conditions in a subsequent permit.

### **PART 3: OPERATION AND MAINTENANCE**

1. The permittee is authorized to operate three liquefied natural gas generators; and five generators running exclusively on diesel fuel at the Whitehorse Station, and diesel generators at Mayo, Dawson and Faro stations. The permittee must obtain a permit amendment prior to adding any additional liquefied natural gas generators at the Whitehorse station.
2. In accordance with the manufacturer's recommendations and best management practices, the permittee shall inspect, maintain and operate the sources, any stand-alone air pollution control equipment, and testing and monitoring equipment as necessary to provide optimum control of air contaminant emissions during all operating periods.
3. Except for maintenance or test purposes, the permittee shall run the sources at each site in order of highest possible efficiency under the circumstances.

4. The permittee shall ensure that the fuel used by the source(s) conforms to the most recent Canadian federal *Sulphur in Diesel Fuel Regulations* for off-road applications.

**PART 4: RELEASE OF CONTAMINANTS**

1. The visible emissions from any source shall not exceed an opacity of 20% as measured by an environmental protection officer.
2. In the event that the opacity of emissions from any source exceeds the criterion established in Part 4.1 of this permit, the permittee shall take measures to reduce the opacity of the emissions below that criterion as directed by an environmental protection officer.
3. The permittee shall ensure that particulates collected using emission control equipment are contained so that there is no release of contaminants to the atmosphere or into an open body of water.
4. If ambient air quality monitoring data within the area of influence of the Permittee's facility indicates that one or more of Yukon's Ambient Air Quality Standards is being exceeded, and the environmental protection officer is satisfied that the Permittee's facility is the cause or a significant contributor to the prevailing ambient air quality condition, the Permittee shall undertake such mitigation measures as may be specified by the environmental protection officer to improve the ambient air quality condition.

**PART 5: MONITORING EMISSIONS**

1. If any diesel generator has exceeded 3% of its annual potential to emit in a calendar year, and, in that same calendar year, if the total operating time of all the generators at that site exceeds 3% of their total annual potential to emit, the permittee shall create a emissions management plan to be submitted to the analyst for approval.
2. The permittee shall carry out any commitments in the approved emissions management plan on a schedule that is approved by the analyst.
3. The permittee shall quantify, through monitoring or calculations based on emissions data and published emissions factors, the levels of volatile organic compounds (VOCs) released in normal operations annually from the liquefied natural gas operations at the Whitehorse station.
4. The permittee shall quantify the fugitive emissions of methane (CH<sub>4</sub>) from the point of unloading of the liquefied natural gas into the storage tank to and including any emissions from the generator not emanating from the stack at the Whitehorse station.

**PART 6: REPORTING**

1. The permittee shall submit to an environmental protection analyst a report which identifies:
  - a. the total annual operating hours for all sources at all sites;
  - b. the estimated total annual emissions of SO<sub>2</sub>, PM<sub>2.5</sub>, CO, NO<sub>2</sub>, and N<sub>2</sub>O from each source at each of the sites, including the calculation used to determine those results;
  - c. total annual emissions of volatile organic compounds (VOCs) as required in part 5.3 of this permit; and,
  - d. a summary of the fugitive CH<sub>4</sub> monitoring program including methodology, data, and total fugitive emissions as required in part 5.4 of this permit;by March 31<sup>st</sup> of each year of this permit for the previous calendar year.

**PART 7: UNAUTHORIZED EMISSIONS**

1. The permittee shall contact either an environmental protection officer or the 24-hour Yukon Spill Report Centre (**867-667-7244**) as soon as possible under the circumstances in the event of an unauthorized release or emission, such as fugitive emissions or emissions resulting from burning fuel other than that allowed for under this permit.

**PART 8: RECORDS**

1. The permittee shall keep all records required under this permit in a format acceptable to an environmental protection officer for a minimum of three years and make them available for inspection by an environmental protection officer upon request.
2. The permittee shall keep the following records:
  - a) a copy of each report and approved plans developed under this permit, and any amendments to and approvals (if applicable) of each report and plan;
  - b) summaries of all inspections carried out under this permit (including the name of the person conducting the inspection, the date of each inspection, any observations recorded during the inspection, actions taken as a result of those observations, and the date each action was taken);
  - c) notes concerning any spills, leaks or unauthorized emissions occurring at the site, including substance involved, estimated quantity, date of observation of the spill or leak, spill reports made and clean-up procedures implemented;
  - d) any and all deficiencies remedied in accordance with Part 2.7, and how and when they were remedied; and
  - e) notes concerning any instance where the most efficient source was not used in accordance with Part 3.3 and the reason for use of the less efficient source.

**PART 9: EMERGENCY BACK-UP DIESEL GENERATORS AT WHITEHORSE STATION**

1. The permittee is authorized to operate up to six emergency back-up generators, to a maximum cumulative total of 12 MW (2MW maximum capacity per unit), exclusively on diesel fuel at the Whitehorse Station only in the event that an N-1 event occurs, and

periodically for short periods to confirm operational readiness, up until March 31<sup>st</sup>, 2022, unless otherwise approved by the Branch.

2. In accordance with the manufacturer's recommendations and best management practices, the permittee shall inspect, maintain and operate the sources, any stand-alone air pollution control equipment, and testing and monitoring equipment as necessary to provide optimum control of air contaminant emissions during all operating periods.
3. Except for maintenance or test purposes, the permittee shall run the sources at each site in order of highest possible efficiency under the circumstances.
4. The permittee shall ensure that the fuel used by the source(s) conforms to the most recent Canadian federal *Sulphur in Diesel Fuel Regulations* for off-road applications.