

2. Parts of the evidence and exhibits intended to be referred to in argument;

a) The Board's acknowledgement of parts of my argument concerning unauthorized capacity and amounts of unauthorized capacity.

From Board Order 2024-05 Appendix A, PDF p.30-31, marked as p.24-25 of 92 in the Appendix:

129. Mr. Yee provided extensive argument regarding permitted capacity for YEC's diesel units at the Faro, Mayo and Whitehorse locations. Mr. Yee discussed his, YEC's, and the Yukon Department of Environment's positions and referenced certain sections of the Environment Act. Mr. Yee made the following recommendation on this matter:

YEC's need for capacity does not exempt it from it from regulation, and should not be accepted by the Board as rationale for including unauthorized capacity in costs. Similarly, YEC's stated commitment to contravening the terms of it's permits is also not acceptable as rationale for including unauthorized capacity in costs. As previously noted, a rates hearing is not the appropriate forum for YEC to be arguing for capacity that has not been authorized by Environment Yukon.

130. On the issue of unauthorized capacities, Mr. Yee concluded that YEC was using 21.8 MW (5.1 MW Faro, 2.3 MW Mayo, 14.4 MW Whitehorse) of unauthorized capacity to meet its N-1 requirement. The recommendation from Mr. Yee is that any costs related to capacity that exceeds permitted limits should be disallowed.

b) Questioning Board's authority concerning differences in permitted capacities vs capacities used in the GRA hearing.

From my Written Argument submitted in the proceeding, March 22, 2024 PDF p. 5.

21. Should the Board choose to consider YEC's argument to exceed existing permit limits established between YEC and Environment Yukon, there are of course a number of issues to consider. As described above, this first includes the Board's authority to accept and allow capacities greater than those accepted by Environment Yukon.

22. For example, If YEC had wanted the Board to consider Mayo rental diesel to be a 7.2 MW project, why was it presented to YESAB and Environment Yukon as a 4.9 MW project? The 4.9 MW permit was issued 82 days after the GRA was submitted, so YEC has chosen to ask for different capacities from two different regulators simultaneously. YEC did not present the 7.2 MW capacity to Environment Yukon, nor was the idea of exceeding permits presented to YESAB, Environment Yukon or the First Nation of Na-Cho Nyäk Dun. Allowing costs for capacity that has not been assessed and permitted undermines the authority Environment Yukon and YESAB.

c) Respecting established capacity limits, YESAA Section 49 and the Regulatory Reminder.

From my Written Argument submitted in the proceeding, March 22, 2024 PDF p. 7-8.

38. While I would expect that the Board will simply respect the permit limits established between YEC and the Department of Environment, a decision to allow costs for unassessed and unpermitted capacity would have to consider various sections of the Environment Act as outlined above. YEC has suggested Section 113 to the Board, relating to release of contaminants, but has not mentioned the more relevant section 172 which discusses contravention of a permit, or as YEC calls it, "exceeding its permitted operating capacity under its current air emissions permits."¹⁴
39. Recommendation: That the Board accept only the capacity limits that YEC has established with Environment Yukon, and not allow costs for any capacity that has not been properly assessed and permitted. It is not appropriate for YEC to ask for capacity that contravenes permit terms to be included in costs and not prudent for YEC to contravene permits. Accepting capacity numbers greater than those assessed by YESAB and permitted by Environment Yukon would usurp the roles of Environment Yukon and YESAB, undermine the authority of Environment Yukon, and violate the terms of YESAA.
40. YEC is likely to claim in reply argument as they did in rebuttal evidence and in the hearing that arguments and disputes concerning permits and capacities are not relevant to the GRA proceeding.¹⁵ I agree that if YEC wants higher capacity numbers, they should take this up with Environment Yukon rather than with the YUB, and that the capacity limits on the permits that YEC submitted in this proceeding¹⁶ should be respected by the Board.
41. YEC will also likely claim that this issue was settled in the 2021 GRA, with the Board's hesitant approval of YEC's interpretation of Section 49 in that proceeding, which of course did not take into account the Regulatory Reminder issued to YEC by Environment Yukon in July of 2023. This is a big change since the 2021 GRA.
42. In light of the Regulatory Reminder which states that "*The regulator is unable to provide authorization to operate above the assessed capacity in the event of an emergency situation*",¹⁷ the Board's previous acceptance of YEC's interpretation of Section 49 as authorizing capacity without an assessment in response to an emergency is not valid in the current proceeding.
43. While in the 2021 GRA the Board did find that "N-1 emergency conditions described by YEC appear on their face to be consistent with Subsection 49(1)" of YESAA,¹⁸ the Department of Environment has now made it clear that regardless of Section 49, assessment is required to authorize operation, even in response to an emergency.
44. YEC acknowledges the significance of the Regulatory Reminder in expressing their disagreement with Environment Yukon's interpretation of the Environment Act and then pivoting towards contravention of permit terms and section 113 of the Environment Act.¹⁹

d) YEC's arguments concerning unpermitted capacity.

From Board Order 2024-05 Appendix A, PDF p. 29-30 marked p.23-24 of 92 in the Appendix:

123. In its reply argument, regarding Mr. Yee's submissions on unpermitted capacity, YEC stated that:

... if there is any conflict between any specific provisions of the Environment Act and YEC's overarching statutory duty under the section 106 of PUA to provide service to customers, YEC's duty under section 106 of the PUA must, as a practical matter, be interpreted as taking precedence over the provisions of the Environment Act – at least during an emergency event that engages the exemption from assessment under section 49 of YESAA.
124. YEC later added that the Board does not need to decide such interpretive questions regarding the relationship between the PUA and the Environment Act for a GRA proceeding.
125. YEC did not dispute Mr. Yee's assertion of 2.3 MW of unpermitted diesel capacity at Mayo secondary thermal plant, or the assertion of 5.1 MW of unpermitted diesel capacity at Faro. YEC disagreed with Mr. Yee's assertions for Whitehorse and stated "... the correct figure for the amount of diesel rental capacity in excess of YEC's permitted capacity that is needed to close the N-1 capacity gap and that YEC is seeking to include in revenue requirements in Whitehorse is 10.55 MW..." making the total unpermitted diesel rental capacity included in YEC's revenue requirement to be 17.95 MW.
126. YEC stated there is nothing new about the fact that there is a difference between YEC's permitted diesel capacity for normal operations and the additional diesel capacity that YEC needs to rent to meet N-1 dependable capacity requirements. Under section 49 of YESAA, the practical option to prevent harm to public welfare, health, and safety during an emergency, and to meet YEC's statutory obligation under section 106 of the PUA to provide service to customers, is to exceed its permitted operating capacity when and if it becomes necessary to do so. Under those conditions, YEC is required to report such incidents to Environment Yukon.

e) The Board's finding on granting costs to YEC for unauthorized capacity.

From Board Order 2024-05 Appendix A, PDF p.32-33, marked as p26-27 of 92 in the Appendix:

137. Mr. Yee has provided substantial comment on permitted capacity and whether ratepayers should pay for costs related to unpermitted capacity. Mr. Yee also commented on YEC's elasticity when determining the capacity rating of several of its thermal units. These submissions do not provide evidence the Board is able to use to determine the revenue requirement for YEC to provide safe and reliable electric service at rates that are in the public interest. It is incumbent upon YEC to ensure it has all required regulatory approvals, processes, and assets in place to provide that safe and reliable service. Regarding the capacity issues raised, YEC is directed, in its future applications, to provide a strong industry based and accepted approach on what the manufacturers accept as criteria and evidence for uprating thermal generation units. This can be based on documented industry standards.
138. In this proceeding, YEC has proven that a capacity shortfall exists on the YIS unless additional capacity is added. The Board accepts that in the short term, the only solution is rental diesel units. Therefore, the Board approves the rental costs for diesel units that YEC has applied for in this application.

f) The Regulatory Reminder from Yukon Department of Environment to YEC.

From Hearing Exhibit 8, p. 31, and part of YESAB 2023-0090 Mayo Secondary Thermal Generation Project. Reminder issued July 20, 2023.

Regulatory Reminders:

The regulator is unable to provide authorization to operate above the assessed capacity in the event of an emergency situation. The *Environment Act* and *Air Emissions Regulations* do not contain processes for managing emergency situations from a proponent or regulator perspective.

g) YEC confirms that air emissions permits are within the regulatory purview of agencies other than the YUB.

From YEC's Reply Argument, April 2, 2024 PDF p. 22

At a high level, however, it still appears that most, if not all, of NY's Final Argument simply seeks to restate the same arguments that NY raised previously in the Intervenor Evidence he filed on January 11, 2024,⁷⁵ to the extent those arguments are concerned with the inclusion of unpermitted diesel rental capacity in YEC's approved rate base, and purportedly related issues regarding the interpretation and application of the regulatory schemes established under the *Yukon Environmental and Socio-economic Assessment Act* ("**YESAA**") and the *Environment Act* (including the provisions of YEC's air emissions permits issued under that Act) that are within the regulatory purview of agencies other than the YUB (i.e., YESAB and Environment Yukon).

h) YEC's assurance to the First Nation of Na-Cho Nyäk Dun of 4.9 MW capacity limit for Mayo rental diesel.

From YEC's Response to Public Comments YESAB Project Assessment 2023.0090 p.2-3, August 28, 2023, three days before the GRA was submitted. This YEC document was referenced in Exhibit 8 on PDF p. 18 and also provided in the hearing in my Aids to Cross-Examination and read into the transcript. Transcript-2024_March_5_-_Day_2_Vol_2_ p. 256-258, 14h56 to 14h59.

YEC's response document repeated the comment from the First Nation of Na-Cho Nyäk Dun, and then provided YEC's response:

Topic – Generation Capacity Clarity

Through response to an information request, it is understood that while the total generation capacity of the generators to be installed will be well over 5MW, they will never be run to exceed 4.9MW. FNNND expects this output limitation to be binding through regulatory requirements. The context of thorough energy planning within a timeframe is necessary here to ensure we do not approach a situation where more than 4.9MW is required from this backup system without effects having been assessed and regulated at that scale beforehand.

Yukon Energy Response:

Yukon Energy fully expects that the requested maximum operating capacity of 4.9 MW will be prescribed and enforceable under the Air Emissions Permit that is issued for the project.

i) YEC's IR Response in the GRA proceeding stating 7.2 MW capacity limit for Mayo rental diesel.

From Hearing Exhibit 2 p. 80. Box was hyperlinked to the YIS Generation Inventory in the IR response, and that will also be provided below as item n).

As provided in response to NY-YEC-1-2 Attachment 1, the dependable capacity forecast for the 2024/25 winter in Mayo from rental diesels is 7.2 MW [four units, excluding one spare unit] to close the N-1 dependable capacity shortfall.

j) YEC states the correct amount of unpermitted diesel for revenue requirements in Mayo and Faro.

From YEC's Reply Argument April 2, 2024 PDF p. 23.

Subject to the evidence before the Board that one of the key advantages of diesel rental units is their ability to be moved from one location to another,⁸³ YEC does not dispute NY's revised assertion (for the purposes of this GRA) that the correct amount of unpermitted diesel capacity that YEC is seeking to include in its revenue requirements at the Mayo Secondary Thermal plant is 2.3 MW,⁸⁴ or his assertion that the amount of unpermitted diesel capacity in Faro is 5.1 MW.

k) The Board Chair states that YUB has no jurisdiction concerning permit limits.
Hearing Transcript-2024_March_5_-_Day_2_Vol_2_p. 261-262 15h04.

10	THE CHAIR:	The permitted limit for -- of 4.9	15:04
11		is the business of another tribunal in terms of -- you	
12		know --	
13	MR. YEE:	Okay.	
14	THE CHAIR:	-- it's within that tribunal's	
15		regulatory authority. We have no jurisdiction around	
16		that.	
17	MR. YEE:	Right. I guess what I was	
18		wondering is -- is your jurisdiction is in -- if this	
19		can be added to rate base. And so you're saying that	
20		you're just -- the Board is equally fine with something	15:05
21		being permitted or something not being permitted. Is	
22		that -- is that correct?	
23	THE CHAIR:	I'm not going to get into a debate	
24		with you at this time, Mr. Yee. If you want to make	
25		submissions in that regard in your final written	
1		submissions, go ahead, and we will -- we will consider	
2		it.	

l) Amount of Unpermitted Capacity in Mayo Whitehorse and Faro.

From my Written Argument in the proceeding, March 22, 2024 PDF p. 10-12.

55. However, there have also been updates to the others, with new information provided by YEC, so the new totals are provided here, followed by full explanations in following paragraphs.

21.8 MW of unauthorized capacity counted towards N-1 requirements and included in costs, including:

- 2.3 MW of unauthorized capacity in Mayo. 7.2 MW GRA capacity, 4.9 MW permit.
- 14.4 MW of unauthorized capacity in Whitehorse, using the most recent amended permit that YEC has provided in this proceeding.
- 5.1 MW of unauthorized capacity in Faro or elsewhere.

56. In Mayo, YEC presented a 4.9 MW total capacity to YESAB, the Department of Environment and the First Nation of Na-Cho Nyäk Dun. The permit that YEC provided in response to a Board IR reflects the 4.9 MW limit,²⁶ and the Decision Document did not accept emergency conditions as a valid reason to exceed this capacity:

- Maximum operating (production) capacity of 4.9 MW during peak demand (winter) and during N-1 emergencies.²⁷

57. In the GRA it initially appeared to me that that all five rental diesels (9 MW) were being counted towards capacity totals, given the YEC had indicated that the capacity from 5 rentals was needed, and 5 were being installed in Mayo.²⁸ However, in their rebuttal evidence, YEC calls this a 7.2 MW project, with 4 of the 5 installed generators used to produce this capacity.

58. Their commitment to contravene the terms of their permit reads as follows: *"For the purposes of this GRA Application, YEC is only claiming a dependable capacity of 7.2 MW from the Mayo plant, from 4 diesel rental units. Accordingly, the correct amount of unpermitted diesel assumed in this GRA proceeding for dependable capacity at Mayo is 2.3 MW."*²⁹ Unpermitted dependable capacity seems to be a concept unique to this GRA, and there is no precedent for its acceptance. However, I do accept that YEC is planning to contravene their permit terms by 2.3 MW.

59. For Whitehorse, I had initially considered that 12 MW of capacity was not authorized, as the provision temporarily authorizing 12 MW for the rentals expired in 2022. However, I had not previously seen the amended permit that was issued in May of 2022 and presented in this proceeding. In light of information from the permit that YEC submitted on January 18 in response to a Board Order, the correct number is 14.4 MW of unauthorized capacity in Whitehorse.

60. It is notable that previous iterations of the permit were ambiguous, listing a number number of generators and not a MW capacity limit. YEC had argued in 2021 that the unwritten MW total was significant, while I had argued that the explicitly stated number of generators was significant. As it turns out, we were both right, given that in adding the MW total to the permit document, Environment Yukon also kept the number of generators, and added both to the first page of the permit, where this information had previously been buried in Part 3 of the permit.
61. From the first page of the permit: (highlighting added)
*Scope of Authorization: In accordance with your application, you are authorized to operate electricity generating equipment at the above site location (the "site"), up to a site capacity of 16.15MW from five diesel generators and 13.13MW three LNG generators as set out in the terms and conditions of this permit.*³⁰
62. Then in Part 3 Item 1, Environment Yukon adds "The permittee must obtain a permit amendment prior to installing any additional generators at the site."³¹ The number of generators is significant, as a different number of generators could significantly change environmental and socio-economic impacts. Diesel capacity in Whitehorse has not been assessed since 2011, and if YEC had wished to change this configuration on their permit or request another amendment, they have had plenty of time to do so.
63. Anyway, in the GRA, Whitehorse diesel capacity is 26.7 MW³² However, the maximum output permitted without contravention of the permit which specifies a 5 generator limit is 12.3 MW.³³ The difference is 14.4 MW of unassessed, unpermitted and unauthorized capacity that YEC would like included in costs.
64. In Faro, YEC had initially indicated in the GRA that along with diesel replacement, they would increase capacity by 5.1 MW using Section 49 of YESAA to avoid an assessment. They had not validated this idea with Environment Yukon, and in their opening statement now indicate that they now plan to move two of the seven rentals out of Faro – as they had indicated previously to the Department of Environment. YEC has not yet decided where these generators will go.³⁴ Regardless of location, a permit or permit amendment will still be needed. Removing two rentals (3.6 MW) and permitting them elsewhere would reduce Faro unpermitted to 1.5 MW. But for now, the 5.1 MW is still unpermitted wherever some of it might end up, and is therefore counted as such.
65. It is notable that 21.8 MW of 36 MW of rental diesel has not been assessed or permitted. This is 12 of the 20 rentals which have not been authorized by the Department of Environment. While only 8 rental units have been authorized, the Board will be approving an additional 12 units should these costs be granted to YEC.
66. Recommendation: Costs for any capacity that exceeds permitted limits or contravenes permit terms should be disallowed, using the figures provided above, with 21.8 MW being the equivalent of 12 rental units.

m) YEC's Choice to have projects not match assessments and permits,
from my Written Argument PDF p.8-9

Capacity Needs, Permitting Choices and Practical Options.

45. Faced with the reality that their interpretation of Section 49 of YESAA is not supported by Environment Yukon, YEC claims in their rebuttal evidence that *"the only practical option currently available to YEC to prevent immediate harm to public welfare, health or safety during an emergency event is to exceed its permitted operating capacity if and when it becomes necessary to do so and to report that exceedance to Environment Yukon, as YEC has very clearly explained in the materials filed in this proceeding."*²⁰
46. This statement is problematic on a number of levels. Claiming that exceeding permitted capacity is "the only practical option" ignores what is typically understood to be the only option, which is having valid permits that accurately reflect the project. With 82 days of overlap between the submission of the GRA and the issuing of the 4.9 MW permit for Mayo in November of 2023, there was plenty of time to do it right. It is clear that YEC planned all along to present different capacities to different regulators.²¹ The same is true in Whitehorse, where the amendment authorizing the rentals expired in March of 2022. There is no mention of the rentals or associated capacity to be found on the amended permit that YEC has provided for reference, and YEC has certainly had time to apply for a new permit amendment.²²
47. Why do YEC's permits not match their activities as presented in this hearing, and why has YEC not made any effort to correct this issue? The ongoing contravention of terms of a permit is not "the only practical option currently available" and it is certainly not prudent.
48. Assessment and permitting are integral to the undertaking and operation of all projects, and failure to complete these steps is a failure to implement the projects correctly, thereby failing to ensure safe and reliable power for Yukon. YEC could have done the permitting correctly in the first place, or could be making the effort to correct the issues now. Claiming that exceeding permit limits and the ongoing contravention of the terms of permits is "the only practical option currently available" ignores the idea of doing the job correctly, and is not sustainable or prudent.
49. While YEC has demonstrated a need for this capacity which is required to meet N-1 criteria, this need does not exempt YEC from relevant regulation or give reason for YEC to claim higher capacities in this hearing than have been presented to other regulators. YEC does need this capacity, and YEC also needs to have this capacity authorized for use by the public before it can be included in costs. YEC showing the Board that the capacity is useful does not change the requirements that must be met before this capacity is authorized for operation by Environment Yukon. Including unauthorized capacity in costs again undermines Environment Yukon's authority. YEC needs the capacity, and YEC needs assessments and permits to assure that it is safe and reliable. YEC needs to do the job right.
50. As to YEC having "very clearly explained" the plan to contravene permits in materials filed in this proceeding, it is notable that the current explanation involving section 113 of the Environment Act is not exactly clear in terms of its applicability or consequences as was explored above, and it was not mentioned until after my evidence submission so there has been little opportunity to question it. And no matter how or when it is explained, it is still a contravention of permit terms.
51. Recommendation: YEC's need for capacity does not exempt it from it from regulation, and should not be accepted by the Board as rationale for including unauthorized capacity in costs. Similarly, YEC's stated commitment to contravening the terms of its permits²³ is also not acceptable as rationale for including unauthorized capacity in costs. As previously noted, a rates hearing is not the appropriate forum for YEC to be arguing for capacity that has not been authorized by Environment Yukon.

n) YIS Generation Inventory.

From Exhibit 4, PDF p. 4-5.

YEC 2023/24 GRA
NY-YEC-1-2 REVISED Attachment 1

Dependable Capacity based on YEC's 2023/24 GRA Assumptions

Location	Retirement Year	Original Unit #	Prime Mover Type	Dispatchable	Name Plate Capacity (kW)	2023/24 F	2024/25 F
						Dependable Capacity (kW)	Dependable Capacity (kW)
Aishihik							
Hydro	2050	AH1	hydro	Yes	15,600	15,000	15,000
	2050	AH2	hydro	Yes	15,600	15,000	15,000
	2050	AH3	hydro	Yes	7,000	7,000	7,000
						38,200	37,000
Faro							
Diesel	2050	FD7	diesel	Yes	3,000	3,000	3,000
	2064	New Diesel	diesel	Yes	5,000		5,000
						8,000	3,000
Dawson							
Diesel	2050	DD1	diesel	Yes	800	850	850
	2024	DD2	diesel	Yes	1,000	1,000	0
	2050	DD3	diesel	Yes	1,030	1,030	1,030
	2050	DD4	diesel	Yes	1,440	1,440	1,440
	2024	DD5	diesel	Yes	1,500	1,500	0
	2050	YM1	diesel	Yes	1,440	1,200	1,200
						7,210	7,020
Mayo							
Diesel	2050	MD1	diesel	Yes	1,000	1,000	1,000
	2050	MD2	diesel	Yes	1,000	1,000	1,000
	2050	MD3	diesel	Yes	1,000	950	950
						3,000	2,950
Hydro							
Hydro	2050	MH1	hydro	Yes	2,550	1,500	1,500
	2050	MH2	hydro	Yes	2,550		
	2050	MBH1	hydro	Yes	5,310	2,500	2,500
	2050	MBH2	hydro	Yes	5,310	2,500	2,500
						15,720	6,500
Whitehorse							
Hydro	2050	WH1	hydro	Yes	5,800	3,500	3,500
	2050	WH2	hydro	Yes	5,800	4,138	4,138
	2050	WH3	hydro	Yes	8,400		
	2050	WH4	hydro	Yes	21,327	20,000	20,000
						41,327	27,638
Natural Gas							
Natural Gas	2055	WG1	Natural Gas	Yes	4,400	4,200	4,200
	2055	WG2	Natural Gas	Yes	4,400	4,200	4,200
	2055	WG3	Natural Gas	Yes	4,400	4,200	4,200
						13,200	12,600
Diesel							
Diesel	2050	WD4	diesel	Yes	2,500	2,500	2,500
	2050	WD5	diesel	Yes	2,500	2,500	2,500
	2050	WD6	diesel	Yes	2,500	2,500	2,500
	2050	WD7	diesel	Yes	3,300	3,000	3,000
						10,800	10,500

YIS Generation Inventory p.2, showing YEC Diesel Rentals.

YEC 2023/24 GRA
NY-YEC-1-2 REVISED Attachment 1

Location	Retirement Year	Original Unit #	Prime Mover Type	Dispatchable	Name Plate Capacity (kW)	Dependable Capacity (kW)	Dependable Capacity (kW)
----------	-----------------	-----------------	------------------	--------------	--------------------------	--------------------------	--------------------------

YEC Diesel Rentals [excluding spares]

Whitehorse			diesel	Yes	16,200	16,200	16,200
Faro			diesel	Yes	12,600	12,600	12,600
Mayo			diesel	Yes	7,200	7,200	7,200
					36,000	36,000	36,000
Spares			diesel	Yes	3,600	3,600	3,600

AEY Diesel

	CD1	diesel	Yes	1,600	1,200	1,200
	TD1	diesel	Yes	1,500	1,200	1,200
	RD1	diesel	Yes	1,000	750	750
	HD1	diesel	Yes	1,750	1,500	1,500
	Pelly G1	diesel	Yes	275	200	200
	Pelly G2	diesel	Yes	600	400	400
	Pelly G3	diesel	Yes	300	200	200
	Stewart G1	diesel	Yes	150	100	100
				7,175	5,550	5,550

YEC [including rental without spares]	Hydro	95,247	71,138	71,138
	Natural Gas	13,200	12,600	12,600
	Diesel	65,010	59,470	61,970
	Total	173,457	143,208	145,708

AEY Diesel	7,175	5,550	5,550
------------	-------	-------	-------

Yukon Grid	Hydro	95,247	71,138	71,138
	Natural Gas	13,200	12,600	12,600
	Diesel	72,185	65,020	67,520
	Total	180,632	148,758	151,258

N-1 Dependable Capacity [including rental without spares]	Hydro		34,138	34,138
	Natural Gas		12,600	12,600
	Diesel		63,520	66,020
	Total		110,258	112,758

DSM		100	500
Total		110,358	113,258

o) First page of Whitehorse Air Emissions Permit.
From Exhibit 5, YUB Revised IRs, PDF p. 79.

Yukon Energy Corporation
2023/24 General Rate Application
YUB-YEC-1-35 REVISED Attachment 6



Permit No: 60-010-04

AIR EMISSIONS PERMIT

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

Permittee: Yukon Energy Corporation

Mailing Address: Box 5920, Whitehorse, YT Y1A 6S7

Site Location: #2 Miles Canyon Rd, Box 5920, Whitehorse, YT Y1A 6S7

GPS: 60.698441, -135.045368

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

Effective Date: Date of Director's signature

This permit has been amended and replaces permit #60-010 issued on October 4, 2018.

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 location (the "site"), **up to a site capacity of 16.15MW from five diesel generators and 13.13MW three LNG generators** as set out in the terms and conditions of this permit.

Dated this 11th day of May, 2022

A handwritten signature in black ink, appearing to read "D. Bable", written over a horizontal line.

Director, Environmental Protection & Assessment
Environment Yukon

p) First page of Mayo Air Emissions Permit
From Exhibit 5, YUB Revised IRs, PDF p. 84.

Yukon Energy Corporation
2023/24 General Rate Application
YUB-YEC-1-35 REVISED Attachment 7



Permit No: 60-010-05

AIR EMISSIONS PERMIT

Issued Pursuant to the Environment Act and
the Air Emissions Regulations

Permittee:	Yukon Energy Corporation
Mailing Address:	Box 5920, Whitehorse, YT, Y1A 6S7
Site Location:	193 Wareham Dam Road Lot 91, Group 1004, Quad105M/12
GPS:	63.653104, -135.905856
Authorized Representative:	Travis Ritchie
Phone:	(867) 393-5350
Email:	travis.ritchie@yec.yk.ca
Effective Date:	Date of Director's signature
Expiry Date:	December 31, 2026
Scope of Authorization:	In accordance with your application, you are authorized to operate electricity generating equipment at the above site location (the "site"), to a maximum production capacity of 4.9MW as set out in the terms and conditions of this permit.

Dated this 21st day of November, 2023

A handwritten signature in black ink, appearing to read "B. Cable", is written over a horizontal line.

Bryna Cable
Director, Environmental Protection and Assessment Branch
Department of Environment, Government of Yukon

q) First page of Faro Air Emissions Permit
From Exhibit 5, YUB Revised IRs, PDF p. 63.

Yukon Energy Corporation
2023/24 General Rate Application
YUB-YEC-1-35 REVISED Attachment 3



Permit No: 60-010-01

AIR EMISSIONS PERMIT

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

Permittee: Yukon Energy Corporation
Mailing Address: Box 5920, Whitehorse, YT Y1A 6S7
Site Location: 413 Campbell Street, Faro, YT Y0B 1K0
GPS: 62.233462, -133.361147
Authorized Representative: Travis Ritchie
Phone/Fax: (867) 393-5350 / (867) 393-5322
Email: travis.ritchie@yec.yk.ca
Effective Date: Date of Director's signature

This permit has been amended and replaces permit #60-010 issued on October 4, 2018.

Expiry Date: December 31, 2031

Scope of Authorization: In accordance with your application, you are authorized to operate electricity generating equipment at the above site location (the "site"), **to a site capacity of 15.5MW** as set out in the terms and conditions of this permit.

Dated this 11th day of May, 2022

A handwritten signature in black ink, appearing to read "D. Bable", written over a horizontal line.

Director, Environmental Protection and Assessment
Environment Yukon

r) Permit provision for Whitehorse temporary rental diesel expired March 31, 2022 Exhibit 8, PDF p. 36-37. This provision temporarily allowing additional capacity appeared on the permit issued 4th Oct, 2018 and was removed when the permit was amended 11th May, 2022.

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 31st, 2022, unless otherwise approved by the Branch.

s) Per-unit costs of rental diesel, used to determine costs of unpermitted capacity charged to customers. From Exhibit 1, YEC's GRA, PDF p. 65.

Diesel rental cost is forecast in the 2023/2024 GRA revenue requirement to increase to \$5.004 million in 2023 and to \$6.761 million in 2024 as compared to approved 2021 costs of \$3.492 million.³ Forecast mobile diesel costs are based on negotiated contracts with the vendor and reflect both the increased number of rental units (which have increased from 15 to 20 units as of winter 2023/24) as well as the increase in rental unit costs (average cost per rental unit has increased from \$0.233 million/unit as approved in 2021 to \$0.338 million/unit in 2024). Overall, approximately \$2.1 million of the \$3.3 million rental cost increase in 2024 compared to 2021 approved is due to price increases and approximately \$1.2 million is due to the need for additional rental units.⁴