

IR Number	IR Question	YEC Response	Motion	YEC Response to Motion
UCG-YEC-1-13	b) Please provide studies, surveys, etc. that YEC has undertaken in the last decade to get a better understanding on affordability issues related to electricity costs and how YEC has addressed the findings of these studies and surveys.	In 2016, an Electricity Values Survey was conducted by the Yukon Bureau of Statistics on behalf of Yukon Energy. The survey was completed as part of Yukon Energy's 2016 Resource Plan. The objective of the survey was to generate information on Yukon residents' perspectives on factors that needed to be considered in planning for Yukon's future electricity needs....	YEC responds with some references to surveys. UCG motions that these surveys be provided as evidence and placed on the record of this proceeding.	A copy of the referenced Electricity Values Survey from the 2016 Resource Plan is provided as an attachment to the cover letter.
UCG-YEC-1-6, UCG-YEC-1-29, UCG-YEC-1-17, UCG-YEC-1-19, UCG-YEC-1-31			Provide the live spreadsheets associated with the attachments to UCG 6 and 29, and with the tables provided within the responses to UCG 17, 19 and 31.	The MS Excel versions of the tables are provided as attachments to the cover letter. Please note that YEC revised Table 3.13 to remove the first row from the version of the table that was previously included in Attachment 1 to YEC's response to UCG-YEC-1-29, as the figures in that row were intended to show year-end (rather than mid-year) figures for 2017 and 2018 for net plant in service, and they do not form part of the calculation of the other figures in the table. YEC also added a footnote to Table 3.13 to clarify that the mid-year regulatory deferral is included with other deferred costs under plant-in service for 2021, consistent with Tab 7 schedules.

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General request	General request	General request	<p>UCG would like to request an easy consolidated format for the YEC application and all IR responses, like what was provided in the AEY procedure. This allows a much easier flow to the hearing process as well as making it easier for all to access quick information. If this is available, please notify all interveners.</p>	<p>YEC provided the GRA application and supporting tabs as one consolidated file. YEC also provided all the IR responses as one consolidated file. Both files are available on YUB website. Exhibit numbers associated with these files will be done by the YUB prior to the hearing, which we believe the UCG is looking for.</p> <p>YEC is not aware of any outstanding requirement related to this general request.</p>
NY-YEC-1-2(a) and (b)	<p>(a) Please provide an updated and complete YIS Generation Inventory that includes the rentals (and spares) for 2023-24. Format should be the same as “Appendix A: Existing Resources Technical Attributes” on p. 71 of the 10-Year Renewable Electricity Plan from 2020.</p> <p>(b) Please provide the same table updated for 2024-25.</p>	<p>Please see NY-YEC-1-2 Attachment 1 prepared based on 2023/24 GRA assumptions, including new diesel replacements and diesel rentals.</p>	<p>The generation inventory was provided, but I need confirmation that the data is correct.</p> <p>Issue: The dependable capacities have increased for all YEC diesels. This seems to be an error or oversight as there was no mention of uprating all of the installed diesels in the GRA. Please provide a table with corrected dependable capacities or confirmation and documentation supporting that all YEC diesel has been uprated since 2021.</p> <p>Dawson is provided as an example. Surprised that DD2 and DD5 are uprated before being retired? If running as new, why retire?</p>	<p>The information was provided based on the IR question that requested the updated list of YIS generation inventory. The dependable capacities for the diesel units provided in the response are the latest information based on review by Operations.</p>

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NY-YEC-1-4	<p>Please provide the stacking order for thermal generation – two separate lists: a) for 2023-24 b) for 2024-25</p>	<p>The generation stacking order changes based on available information at the time of generation, including demand, available resources, system stability requirements, etc.</p> <p>The following shows the approximate stacking order of thermal units. The stacking order for the 2024/25 winter will be revisited closer to the winter of 2024/25 based on available resources, system stability and condition of thermal units. [the table is large and omitted from this document]</p> <p>The stacking order is subject to (a) total thermal operation at each site not exceeding air emissions permit under normal operation conditions and (b) where feasible, maintain each rental operational hours under 500 hrs/28 days allowance as per contract. It is also important to note that the thermal units are only run when it is required if the other resource options are not adequate to meet the demand on the system.</p>	<p>Stacking order table provided in response to this IR is incomplete. Please indicate relevant capacity limits for each in the Notes column.</p>	<p>The IR question did not request capacity limits for the stacking order. Information on capacity for diesel and LNG units is also provided separately in other IR responses, e.g., see response to NY-YEC-1-2.</p> <p>As indicated in the response, the stacking order will be continuously revisited by YEC based on the availability of resources, system stability and condition of thermal units. In addition to this, it is also important to note that the revenue requirements in the Application are set based on LTA thermal generation and that stacking order does not impact the LTA thermal volumes.</p> <p>Accordingly, YEC submits no further response is required to this IR.</p>

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NY-YEC-1-9	<p>a) Please provide an updated table of “Number of Diesel Rentals”, which was originally provided by YEC with NY-YEC-1-2 REVISED on pdf p.3 from the Atlin/THELP EPA. Please update to reflect delays in Atlin and Moon Lake and other projects, and note when these projects are expected to be completed. Also please start the table in 2017 or when YEC first rented diesels, as it is useful to be able to chart the growth of the rental diesel fleet.</p>	<p>Please see the response to YUB-YEC-1-1.</p>	<p>The response to YUB-YEC-1-1 gives more complete information, but stops after 2028/29, claiming that “YEC is not able to provide useful forecasts on this matter beyond winter 2028/29.” The only change seems to be that Moon Lake has been removed and Atlin in question, and this would not affect forecasting. We seem to be tracking columns A and B now. Please extend Table 1 in YUB-YEC-1-1 out to 2041/42 as was done in the THELP/Atlin hearing as shown below.</p>	<p>As indicated in response to YUB-YEC-1-1 (a)-(c), YEC is not able today to provide useful forecasts on this matter beyond winter 2028/29.</p> <p>This situation will continue for at least the balance of the next 10 year period until the Electricity Supply Plan work referenced in response to YUB-YEC-1-1 is completed; useful information for the longer-term period also may be delayed until the Resource Plan work referenced in response to YUB-YEC-1-1 is completed.</p>

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NY-YEC-1-12(a)	<p>a) What is the current permitted diesel generation capacity limit for the WGS? Undertaking #29 from the 2021 GRA (PDF p251 of Undertakings Final) indicates YEC considers this to be 14MW. Looking at capacities from the most recent assessment of WD3 thru WD7 (YESAB 2011-0241 p.9) the last assessed capacity of the 5 generators mentioned adds up to a total permitted capacity of 13.75 MW, which YEC is then rounding up to 14 MW. Is this correct?</p>	<p>(a) Assessed (YESAA Project Assessment 2013.0115) and permitted Whitehorse diesel generating under normal operating conditions is 16.15 MW.</p> <p>[Response to “a” includes additional text not relevant to the motion, and which was not noted in the motion.]</p>	<p>This number (16.15 MW) does not appear to be correct, as 2013.0115 was an assessment of the LNG project and was not concerned with existing diesel other than what was being removed. It also does not match YEC’s statements and undertaking in the 2021 GRA, and does not match the permitted capacity that YEC provided to Hemmera for the noise report provided in NY-YEC-1-13(f) Attachment 1. Given that YEC has never previously claimed a permitted capacity as high as 16.15 MW, relevant documentation including page numbers should be provided to support this new capacity claim. If claiming that the diesel assessment is somewhere in the LNG assessment 2013.0115, please show where.</p>	<p>YEC’s air emissions permit authorizes it to operate five generators running exclusively on diesel fuel at the WRGS. This refers to the five of the original seven permanent diesel generating units that were in service at the time the permit was issued (i.e. WD units 3 through 7).</p> <p>The 16.15 MW figure correctly references the total capacity threshold for those five units, based on the following generating production capacities at the time the permit was issued [2011-0241 YESAA project proposal supporting document Table 3]:</p> <ul style="list-style-type: none"> • WD3 – 5.15 MW • WD4 – 2.5 MW • WD5 – 2.5 MW • WD6 – 2.7 MW • WD7 – 3.3 MW <p>Each GRA generally discusses current dependable capacity of units, which for older units is typically lower than nameplate or generating capacities. It is prudent to maintain an allowance in the regulatory authorization for the nameplate capacity of the units in a facility so as to be able to replace any lost capacity through a basic Regulatory approval that does not require a new YESAA Decision Document or assessment under YESAA.</p> <p>YESAA Project Assessment 2013-0115 was referenced in this IR response only to highlight that it was the latest thermal assessment and did not require a new YESAB Assessment for the Whitehorse diesel units.</p>

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NY-YEC-1-12(d)	d) In March of 2023, Yukon Energy held public meetings concerning the renewal of their thermal permit which expires in 2024 and indicated that a YESAB assessment would be starting in Fall of 2023. Is this still on schedule? Will YEC be asking for capacity other than the 14MW currently permitted?	(d) The Project Description for the YESAA assessment required to renew the authorizations for some of the activities associated with thermal generation at WRGS was submitted in early November 2023. Yukon Energy is requesting renewal of the previously authorized normal production capacity (13.2 MW of natural gas and 16.15 MW of diesel) with a restoration of the previous allowance for an additional 12MW diesel capacity for emergency use. Other activities, such as those associated with the handling and storage of natural gas, are authorized until 2054 and do not require assessment and authorization renewal at this time.	The assessment could not be found in yesabregistry.ca. Has it been submitted as claimed? Please provide the project number.	The process with YESAB has been initiated. YESAB is currently reviewing documentation related to the project, but has not yet commenced the assessment. The assessment is expected to commence in early 2024. No project number has yet been assigned by YESAB.

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NY-YEC-1-13	<p>c) What are the generating efficiencies of the installed diesels compared to the rentals? Please provide a comparison of fuel consumption at 9.55 MW using the installed/permanent generators vs fuel consumption of the rentals to produce the same output? Fuel usage per MWh would also be useful.</p> <p>d) Please provide a comparison of NO2 and other pollutants at similar capacities – Installed vs rental units.</p>	<p>(c) Summary of Pre-Tier and Tier 2 Fuel Efficiency [table is omitted] (d) Summary of WRGS Generator Emission Factors (g/kwh) [table is omitted]</p>	<p>Tables were provided, but without any reference to data sources. Please provide the full reports that include this data, or at least links to the full reports. Without context the data is not meaningful.</p>	<p>YEC fully responded to the question as asked. The NY motion is requesting further information which was not requested in the original IR question. The information provided in the IR response is calculated from Yukon Energy's submissions under the National Pollutant Release Inventory Program. The reports are publicly available.</p> <p>YEC noticed that there was an error in response to (c). Please see the following revised average fuel efficiency numbers:</p> <ul style="list-style-type: none"> • Average Pre-Tier Engines (WD4-7) at 617 L/MWh • Average Tier 2 Engines (Rental Units) at 268 L/MWh

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NY-YEC-1-14(a)	a) Please provide all plans, layouts, specifications, studies (noise, emissions, etc) and all other documentation relating to the modifications (2023 and 2024) to the FGS. This would also include plans, requirements and instructions given to contractors and subcontractors. Also please provide a list of contractors and subcontractors and RFPs.	<p>(a) YEC is installing two Tier 4 engines of 2.5MW each. The layout of the site is as follows [the layout is omitted].</p> <p>Contractors and subcontractors include:</p> <ul style="list-style-type: none"> • General Contractor (general construction, supervision, mechanical install, civil construction) – Wildstone Construction Group; • Major Equipment Supplier and Commissioning Agent – Finning; • Electrical Subcontractor – Westpark; • Tank and mechanical material supplier – Keller; • Formwork and reinforcing steel subcontractor – A&T; • Concrete supplier – General Enterprises; • Concrete finishing subcontractor – JLB; • Containment subcontractor – Albarrie; • Fencing subcontractor – Olson Fencing. 	<p>Issue1: The provided layout is too small, to be readable and when enlarged, too blurry. Please provide a higher resolution version of the layout. Also, please provide the 2023 and 2024 layouts, which are different. This one being too small, I am not sure which year it represents – or if both layouts are somehow shown.</p> <p>Issue2: Please provide model code and specifications of the 2.5 MW generators as requested.</p> <p>Issue3: Please provide sound and emissions / dispersion reports if available, otherwise indicate that none have been done.</p> <p>Issue4: I had also requested plans, requirements and instructions provided to contractors and subcontractors – and none have been provided.</p>	<p>The additional detailed information requested by NY goes far beyond what YEC can reasonably be expected to provide for the current GRA, and will not be of assistance to the YUB in its review of YEC's 2023 and 2024 revenue requirements.</p>

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NY-YEC-1-14(b)	b) Please provide all correspondence between YEC and the Department of Environment concerning the 2023 and 2024 modifications to the FGS.	The 2023 email thread between T. Ritchie (YEC) and Elizabeth Barker (Yukon Government) regarding the FGS is included as NY-YEC-1-14(b) Attachment 1. The 2023 email thread between T. Ritchie (YEC) and Emily Sessford (Yukon Government) is included as NY-YEC-1-14(b) Attachment 2.	<p>Issue 1: Missing document: On pdf p.65, The email dated May 31, 2023 concerns an attachment 20230510-Inspection-report-es.pdf, however this document is not included. The document is also the subject of the email on pdf p. 67. Please include this document and any further correspondence.</p> <p>Issue 2: At the top of pdf p. 66, a “approved Complaint Management System for the FGS” is mentioned. Please provide any documentation and correspondence associated with the “approved Complaint Management System”.</p> <p>Issue 3: Construction has started, and pads for FD8 & FD9 have been poured. Has YEC informed the Regulator, as required according to the emails provided? Please provide any documentation.</p> <p>Issue 4: In the email chain provided, YEC has not informed the Regulator of the 2024-25 20.6 MW configuration described in the GRA. Please provide documentation of YEC informing the Regulator of this configuration.</p>	<p>Issues 1 and 2: These are matters between YEC and a separate regulator (Environment Yukon). These questions may be directed to Environment Yukon, but they are not relevant to the current YUB revenue requirement review.</p> <p>Issue 3: Approval will be sought as required prior to regulated activity being commenced (i.e., before emissions are produced). YEC is installing cleaner and quieter units, and therefore does not anticipate any approval issues.</p> <p>Issue 4: The regulator has been informed as required regarding the 15.5 MW installation that is permitted. NY is confusing the air emission permit for normal operations with the total available capacity for emergency purposes. As reviewed with the Board in the 2021 GRA, permitting constrains normal operation but does not constrain YEC’s ability to have additional diesel generating capacity available for use if needed in emergency conditions. Please see response to NY-YEC-1-12(a) for additional details on this matter.</p>

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NY-YEC-1-15(b)	<p>b) Please provide the sound modelling report for the modifications to the Faro facility. This report was referenced by YEC in the January of 2023 meeting in Faro. I requested it from YEC on February 7 and was informed by YEC that “The full report is not yet available. The results of the sound modelling were shared ahead of the full report so they could be presented at the January meeting in Faro.” I requested the full report again in June and August, and still nothing. Is the full report finally available?</p>	<p>(b) The referenced sound modelling is being developed and used on an iterative basis to support preliminary and final engineering design of potential sound mitigation devices. This design work is still in progress. As such, a final report has not yet been completed. In the meantime, a summary memo has been prepared to support the response to this information request and is attached as NY-YEC-1-15(b) Attachment 1.</p>	<p>The GRA has two different configurations for Faro, one for 2023-24 and a different one for 2024-25. The summary memo prepared in response to the IR does not address the 2024-25 configuration providing 20.6 MW dependable capacity, as described in the GRA – though it does address configurations that YEC has not proposed. At a minimum, the “summary memo” should address the two scenarios described in the GRA. Please provide an updated “summary memo” with relevant information.</p>	<p>The summary memo provides requested current information on scenarios approximating the 15.5 MW permitted capacity at Faro for normal diesel operations. The memo addresses change in noise emissions expected with different diesel unit configurations under permitted normal operations.</p> <p>Noise permitting assessments have not examined potential additional diesel operation under emergency conditions. Such potential emergency operation in winter 2024/25 up to 20.6 MW has therefore not been considered in the noise assessments. (See response to motion regarding NY-YEC-21-14(b) for review of differences between normal permitted versus emergency diesel generation.)</p>
NY-YEC-1-15(e)	<p>e) Please provide a comparison of the efficiencies of the proposed diesel replacement generators and the rentals at 5MW output. Fuel usage at 5MW, Fuel usage per MWh, and NO2 and other emissions compared.</p>	<p>e) Please see response to NY-YEC-1-13(f) and NY-YEC-1-13(d).</p>	<p>NY-YEC-1-13 addresses Whitehorse. The Faro installed diesels are not addressed in the Whitehorse answers. Please answer the question with data relevant to Faro as requested and provide sources of data.</p>	<p>Whitehorse and Faro units have the same configurations [i.e., FD7 and WD7, rentals at both locations are the same, and the proposed FD8/9 and WD8/9 are the same units]. Therefore, the information provided in responses to NY-YEC-1-13 fully address what was requested.</p>