update on Yukon Energy's Whitehorse Thermal Permitting Project

In the winter of 2022, we began sharing information and gathering feedback about renewing our air emissions permit in Whitehorse. This project involves re-permitting the total production capacity of our Whitehorse facility: roughly 13 megawatts from LNG generators and 29 megawatts from diesel generators, including 12 megawatts of emergency-only diesel.

> While over 90% of our electricity, on average, comes from renewable sources, our diesel and LNG generators ensure reliable service during winter peaks, emergencies and when renewable resources are not available. It is crucial we have the necessary authorizations to continue operating these generators.

project update

In May 2024, we submitted our proposal to the Yukon Environmental and Socio-economic Board (YESAB) to renew our air emissions permit. Originally, the project was to go through a Yukon Environmental and Socio-economic Assessment Act (YESAA) Executive Committee Screening. However, since we are not looking to change the existing operations at our Whitehorse facility, the YESAB Executive Committee has determined that this project should proceed through a Designated Office Evaluation.

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what we heard

1. Noise

Concern: Some residents near the facility were worried about noise from diesel generators and questioned previous noise impact assessments.

Response: We hired WSP Canada Inc. to conduct a new noise impact assessment, which considered how we use our thermal units during typical operations versus in emergency situations. Results showed noise levels were below permissible sound levels in most locations except in a spot closest to our power plant (200 m away) during the night. In response, we are exploring noise reduction like large silencers or acoustic louvers for the older diesel generators and plan to implement a solution by 2026.

2. Air quality

Concern: Some residents were concerned about emissions and their impacts on health and the environment.

Response: An air quality assessment was undertaken by WSP Canada Inc. The assessment evaluated two different scenarios, both of which present the air quality impacts based on the facility's maximum operating conditions under the worst-case meteorological conditions (i.e., conditions that do not occur often).

Here is what we learned:

- Levels of sulphur dioxide and carbon monoxide are well below standard levels
- Fine, coarse and suspended particulates are higher in the immediate area of the power plant but nowhere else
- Levels of nitrogen dioxide are already elevated in the area

A Human Health Risk Assessment indicated no significant health risks. More details are available in our project proposal.

3. Use of LNG and diesel

Concern: Some residents preferred renewable energy projects over reliance on diesel or LNG.

Response: We are planning and researching the right mix of resources to meet demand and lower emissions. However, thermal resources are essential for reliability during winter peaks and emergencies.

get involved

Review our proposal and provide feedback through the YESAA evaluation process at yesabregistry.ca, Project Assessment Number 2024-0103.

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For more information, visit **yukonenergy.ca/thermalpermit**.