

In the Matter of

**YUKON ENERGY CORPORATION (“YEC”)
PROPOSED WHITEHORSE DIESEL TO
LIQUEFIED NATURAL GAS CONVERSION PROJECT**

**ARGUMENT OF
THE CITY OF WHITEHORSE**

APRIL 1, 2014

Table of Contents

INTRODUCTION..... 1

ARGUMENT..... 2

Impact on Visual Aesthetics along Robert Service Way 2

Location of Distribution Lines 3

Access Roads..... 4

Disruption of Active Transportation and Leisure Path connecting Robert Service Way with Miles Canyon Road..... 5

Surface Water Drainage Pond..... 6

Fire Suppression Services..... 7

Use of Excess Gas 7

Use of Odorant..... 8

CONCLUSION 9

INTRODUCTION

1. The City of Whitehorse (“CW”) submits this argument with respect to YEC’s application (the “Application”) to the Minister of Justice (the “Minister”) for an energy project certificate and an energy operation certificate for the proposed Whitehorse Diesel – Liquid Natural Gas Conversion Project (the “LNG Project”).
2. The LNG Project has been designated by OIC 2013/200 as a “regulated project” under Part 3 of the *Public Utilities Act*, RSY 2002, c 186 (the “*PU Act*”). Pursuant to correspondence dated December 20, 2013¹, the Minister directed the Yukon Utilities Board (“YUB” or “Board”) to review the LNG Project and to provide the Minister with recommendations outlined in the terms of reference attached to that correspondence (the “Terms of Reference”²).
3. The Terms of Reference provide, *inter alia*, that:
 - The general purpose of the review and hearing is to obtain the YUB’s report and recommendations on the potential benefits, costs, risks and customer impacts that influence whether the LNG Project should proceed as proposed by YEC, and any terms and conditions which the YUB considers should apply (Section 1);
 - The YUB shall provide a recommendation on whether the YEC should be granted an energy project certificate and an energy operation certificate for the LNG Project and any applicable terms and conditions (Section 5); and
 - The YUB may make any other recommendations or provide any other information that it considers advisable in the circumstances (Section 6)³.
4. CW was granted intervenor status in these proceedings in Board Order 2014-02⁴.
5. By way of correspondence dated March 24, 2014, the Board granted CW’s request to submit written argument in these proceedings as opposed to appearing at the oral hearing established by the Board⁵.

¹ Exhibit A-1

² Exhibit A-2

³ *Ibid*

⁴ Exhibit A-8

⁵ Exhibit A-19

ARGUMENT

6. CW does not object to an energy project certificate and an energy operation certificate being issued for the LNG Project, subject to various concerns of CW being addressed. CW discusses these concerns below and submits that any recommendation issued by the Board should include the imposition of certain conditions that satisfactorily address CW’s concerns.
7. CW maintains its position that YEC’s focus should be on development of new alternative, renewable energy generation that does not result in carbon emissions or the same amount of carbon emissions as thermal generation alternatives. While CW does not object to this Application, it wishes to state its expectation that additional LNG facilities will not be developed to the detriment or exclusion of more environmentally sound alternatives. Moreover, CW does not want LNG to be used as anything but backup or emergency generation. As such, CW may not necessarily support additional LNG projects in the future.

Impact on Visual Aesthetics along Robert Service Way

8. In response to CW-YEC-1-1(a)⁶, YEC advised that:

To mitigate visual quality effects, a fence and vapour barrier will be installed that will partially screen the view of the facility and equipment from Robert Service Way and Miles Canyon Road. A vegetation buffer approximately 6 metres in width along Robert Service Way and 3 metres in width on the access road will be maintained along the perimeter of the Expanded Site Area. Landscaping will be undertaken at the end of the construction phase and will comply with relevant City of Whitehorse zoning bylaws.

9. CW expects that this issue will be addressed in further detail once YEC submits a development permit application, which shall include a landscape plan pursuant to Section

⁶ Exhibit C2-3

5.5.4 of CW’s Zoning Bylaw. CW notes that the landscaping requirements associated with development abutting Robert Service Way are doubled pursuant to Section 5.5.2.5 of CW’s Zoning Bylaw.

10. CW requests that the Board include a condition in the recommendation issued to the Minister that YEC shall include in its report to the Minister pursuant to Section 43(1) of the *PU Act* evidence that it has satisfactorily complied with all landscaping requirements imposed by CW pursuant to its Zoning Bylaw and any other applicable bylaws or policies. If YEC has not complied with all landscaping requirements upon the completion of construction, the Minister should delay the issuance of an energy operation certificate until YEC has complied.

Location of Distribution Lines

11. In response to CW-YEC-1-1(b)⁷, YEC advised that:

Yukon Energy is aware of the City’s concerns regarding overhead power supply/distribution lines connecting the substation to the proposed site and the City’s desire for an underground line solution. It is noted that underground distribution lines are more costly than overhead lines, and Yukon Energy will ultimately need to balance the concerns raised by the City and cost considerations in final design.

12. CW is concerned that, despite its awareness of CW opposing any overhead distribution lines associated with the LNG Project, YEC did not include an underground option (including an assessment of the costs of such an option) in its Application. CW is also concerned with the reference to “final design” in the above-noted response and submits that YEC’s final design should be before the Board in this Application.
13. Section 12.5.6(a) of CW’s Zoning Bylaw provides that, with respect to development in a Public Utilities Zone:

Design, siting, landscaping, screening, and buffering shall make best efforts to minimize and compensate for any objectionable aspects or

⁷ *ibid*

potential incompatibility with development in abutting zones.

14. CW notes that the Yukon Environmental and Socio-economic Assessment Board (the “YESAB”) recommended in its Draft Screening Report that the LNG Project proceed subject to various conditions including that:

The Proponent shall install underground power distribution lines connecting the existing substation to the proposed new substation.⁸

15. In its Opening Statement⁹, YEC stated:

Except for the recommendation to install underground power distribution lines (which YEC will discuss and seek to have revised), Yukon Energy’s current plans accommodate all of the YESAB DSR recommended terms without any discernible adjustment to design or costs.

16. CW requests that this Board include as a condition to its recommendation that YEC must investigate an underground option for the siting of the distribution lines associated with the LNG Project and must provide the results of such an investigation to CW. CW also requests that the condition require YEC to further consult with CW regarding the siting of the distribution lines to conclude whether an underground option is feasible and in the public interest. Absent such a condition, CW requests that the Board recommend to the Minister that no energy project certificate or energy operation certificate be issued and that YEC be directed to investigate the underground option and resubmit the Application with the results of such an investigation (including the costs of this option) for the Minister’s and the Board’s consideration.

Access Roads

17. CW is concerned about the proposed access roads and the traffic on the same. In

⁸ Executive Committee Draft Screening Report and Recommendation, Whitehorse Diesel – Natural Gas Conversion Project, Section 12, Condition 8, page 77.

⁹ Exhibit B-14

particular, CW was concerned about gravel being carried by traffic from the access roads onto Robert Service Way. In response to CW-YEC-1-1(c)¹⁰, YEC stated that:

The access road around the LNG storage facility will be paved around the intersection of the existing roads to the new access roads up to a couple of meters inside YEC access gates to reduce gravel migration to paved roadways.

18. CW notes that the requirements in the Zoning Bylaw (s. 7.2.1) provides, *inter alia*, that:

Every off-street parking, loading and unloading space, and access to it provided or required, including areas contained within publicly owned road right-of-way, shall be hard-surfaced when the adjacent public street or lane is hard-surfaced.

19. CW expects that the issues surrounding access roads and traffic, including the paving of any access roads, can be addressed through YEC’s coordination with the City Engineer (as required pursuant to Section 7.1 of the Zoning Bylaw) and in YEC being required to comply with the City’s Zoning Bylaw. However, CW requests that the Board include in its recommendation issued a condition that YEC must comply with all applicable municipal bylaws.

Disruption of Active Transportation and Leisure Path connecting Robert Service Way with Miles Canyon Road

20. CW is concerned about the impact of the LNG Project on the path connecting Robert Service Way with Miles Canyon Road. In response to CW-YEC-1-1(e)¹¹, YEC stated:

The YESAB Project Proposal (Section 7.4.2.1) notes that within the Project Construction Footprint, approximately 0.5 km of the 15 km Yukon River Loop trail will be affected by the Project during the construction phase. However, effects of the Project after mitigation measures outlined in the YESAB Project Proposal are expected to be small and limited to the

¹⁰ Exhibit C2-3

¹¹ *Ibid*

immediate Project Construction Footprint in extent. Further, the Loop trail will be fully functional once construction is completed.

Construction areas will also be delineated with fencing and signage to ensure that during construction any continued recreational uses in the vicinity will occur in a manner that will maintain the safety of the public and the construction staff. All access to the Project Construction Footprint will be via existing transportation routes (Robert Service Way and Miles Canyon Road) and will not disrupt the recreational uses in the surrounding area. Similarly, transport of the LNG to the facility during operations will use existing transportation routes (Alaska Highway and Robert Service Way) and will not disrupt recreational uses in the area.

21. CW is satisfied with YEC’s response and simply wants to ensure that access is maintained while ensuring that the LNG Project does not adversely impact users’ safety.

Surface Water Drainage Pond

22. CW is also concerned about the disruption to a storm water retention pond that will be disrupted by the LNG Project. In response to CW-YEC-1-1(f)¹², YEC advised that:

The final location and design of the storm water retention pond will be determined in collaboration with the City and applicable regulators as a part of the detailed design to ensure it will be able to handle run off from the Project site and from Robert Service Way. It is anticipated that the drainage pond will be accessible by City crews for maintenance.

23. CW is satisfied that the issues of the storm water retention pond can be satisfactorily addressed in a collaborative fashion between CW and YEC including, but not limited to, through any applicable development agreement and regulatory approvals. CW does not believe it is necessary for this issue to be addressed in any recommendation issued by the Board.

¹² *Ibid*

Fire Suppression Services

24. YEC proposes extending an underground pipe system between the existing Whitehorse Thermal Generating Station (“WTGS”) and the facilities on the expanded site for, amongst other things, water supply to the expanded area for fire suppression.¹³ It is CW’s position that further consultation and approval will be required from CW’s Fire Prevention Officer and the Yukon Fire Marshall’s office. In response to CW-YEC-1-1(g)¹⁴, YEC stated:

The design of the site will meet CSA standards and setbacks as well as requirements set out under the Yukon Gas Facilities Regulations. A number of fire suppression systems are integrated into the plant design including fire suppression extinguishers, fireproofing of critical structures located in process areas, designated restricted areas and management controls to minimize potential ignition sources in areas where flammable gas may be present.

Yukon Energy is continuing to consult with the Fire Marshall’s Office and City of Whitehorse Fire Department as appropriate, including working towards development and implementation of an emergency firefighting training program.

25. CW requests that the Board include a condition in its recommendation issued that YEC shall continue to consult and shall work collaboratively with the Fire Marshall’s Office and CW’s Fire Department in developing and implementing fire suppression measures at the LNG Project site including ensuring appropriate emergency access and the development and implementation of an emergency firefighting training program.

Use of Excess Gas

26. CW was concerned about YEC’s planned use of “boil off” liquid natural gas (“LNG”)

¹³ Application, page 6, Exhibit A-4

¹⁴ Exhibit C2-3

27. that results from heating up the LNG as it turns from liquid to gas. In response to YUB-YEC-1-35(a)¹⁵, YEC stated:

YEC intends to use all boil off gas internally for its own heating requirements and natural gas generation. All standby generators must be started once a month to ensure their availability. The detailed design of the LNG storage system allows the boil off gas to be used for heating and power generation.

28. The City supports YEC’s stated intended use of boil off gas. The City requests that the Board include a condition in its recommendation issued that YEC shall, wherever possible, be required to use boil off gas for heating and power generation as stated in response to YUB-YEC-1-35 and that YEC shall use all reasonable efforts to avoid the need to flare excess gas or exhaust into the environment. Additionally, YEC must not only monitor emissions associated with the LNG Project, but should be required to take all reasonable steps to minimize emissions and air pollution caused by the LNG Project.

Use of Odorant

29. In response to CW-YEC-1-2(b)¹⁶, YEC advised that “vapourized LNG that is piped as gas to the Whitehorse diesel plant will be odorized due to the length of the gas piping underground and in the diesel plant.”
30. In a further request (CW-YEC-1-2(c)¹⁷), CW asked YEC to “fully explain the potential impact of odorant on the citizens of Whitehorse. In the response, please fully discuss the transportation, storage, disposal and use of odorant, as well as the impacts of odorant leaks or spills.” In response, YEC stated:

The odorant that will be used is called mercaptan. It is used as it can be detected (smelled) by people at very small concentration levels. The mercaptan will be delivered by a “wick” injection system which utilizes

¹⁵ *Ibid*

¹⁶ *Ibid*

¹⁷ *Ibid*

the pressure drop across a hand valve in the main line to extract mercaptan from a drum storing the liquid.

Details regarding the transportation, storage, and disposal requirements can be found in the MSDS provided as Attachment 1 to this response.

YEC attached a copy of the material safety data sheet to the response.

31. CW’s concern that it sought YEC to address in the response was the impact of any odorant, or the possible impact of any odorant, on the citizens of CW. It is unclear based on the response what impact the use of odorant might have, for example, if it were unintentionally released into the atmosphere (if a storage or transportation container were pierced for example). CW therefore requests that the Board include a specific condition in its recommendation issued that YEC should be directed to comply with all industry best practices associated with the handling, storage, transportation and disposal of all odorant and odorant containers.

CONCLUSION

32. The City requests that the Board include the following conditions in its recommendation submitted to the Minister (should the Board be recommending that the LNG Project be approved):
 - a. YEC shall include in its report to the Minister pursuant to Section 43(1) of the *PU Act* evidence that it has satisfactorily complied with all landscaping requirements imposed by CW pursuant to its Zoning Bylaw and any other applicable bylaws or policies. If YEC has not complied with all landscaping requirements upon the completion of construction, the Minister should delay the issuance of an energy operation certificate until YEC has complied;
 - b. YEC must investigate an underground option for the siting of the distribution lines associated with the LNG Project and must provide the results of such an investigation to CW. YEC shall further consult with CW regarding the siting of the distribution lines to conclude whether an underground option is feasible and in

the public interest. Absent such a condition, CW requests that the Board recommend to the Minister that no energy project certificate or energy operation certificate be issued and that YEC be directed to investigate the underground option and resubmit the Application with the results of such an investigation (including the costs of this option) for the Minister’s and the Board’s consideration;

- c. YEC must comply with the requirements of all applicable municipal bylaws;
- d. YEC shall continue to consult and shall work collaboratively with the Fire Marshall’s Office and CW’s Fire Department in developing and implementing fire suppression measures at the LNG Project site including the development and implementation of an emergency firefighting training program;
- e. YEC shall, wherever possible, be required to use boil off gas for heating and power generation as stated in response to YUB-YEC-1-35 and that YEC shall use all reasonable efforts to avoid the need to flare excess gas or exhaust into the environment. Additionally, YEC must not only monitor emissions associated with the LNG Project, but should be required to take all reasonable steps to minimize emissions and air pollution caused by the LNG Project; and
- f. YEC should be directed to comply with all industry best practices associated with the handling, storage, transportation and disposal of all odorant and odorant containers.

All of which is respectfully submitted this 1st day of April, 2014.

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