

June 21, 2012

## **Yukon Energy Corporation 2012-2013 General Rate Application (GRA)**

### **Information Requests of Yukon Energy Corporation (YEC) From the Yukon Conservation Society (YCS)**

In its GRA, Yukon Energy Corporation (YEC) shows that since 2009 it has spent considerable time and money to carry out “extensive feasibility planning studies to assess potential options for reducing diesel generation that would otherwise be required to supply future load growth.”

YEC’s General Rate Application to the Yukon Utilities Board mentions \$4.8 million spent studying Marsh Lake Storage, \$3 million for DSM, \$2.2 million for Atlin Storage, \$4.4 million for Gladstone Diversion, \$1.7 million for LNG, \$2.6 million for Geothermal, \$2.1 million for Mayo Lake Storage Enhancement and \$1.6 million for Waste-to-Energy.

Many of the Yukon Conservation Society’s information requests are regarding these options as well as renewable alternatives not mentioned – specifically, wind. YCS would like to know why YEC is investing in and pursuing these aforementioned projects and not wind, when it commissioned a feasibility study that concluded a wind project on Mt. Sumanik was promising, favourable and economic relative to base load diesel?

#### **YCS-YEC-1 – 1**

Yukon Conservation Society requests Yukon Energy Corporation (YEC) submit and present the Wind Assessment Feasibility Study Final Report dated January 2009, as released to YCS under an access to information request, to the Yukon Utilities Board and the Intervenors.

#### **YCS-YEC-1 – 2**

YCS requests YEC inform the YUB and Intervenors what follow up work has been done since the Wind Assessment Feasibility Study Final Report dated January 2009.

#### **YCS-YEC-1 – 3**

YCS would like to know whether an analysis of existing data to determine whether a wind farm on Mt. Sumanik could provide a capacity benefit to the WAF grid has been done.

**YCS-YEC-1 – 4**

YCS would like to know whether the installation of a heavy duty engineered measurement mast at least 60 metres high that can withstand the ice loading that normal wind masts cannot withstand, and that the mast be equipped with the best heated ice free wind instruments available at least four different elevations (15, 30, 45, and 60 metres for example), and that the mast be equipped with the latest ice detection and assessment instruments to assess the frequency, duration, and severity of icing events on Mt. Sumanik, has been done.

**YCS-YEC-1 – 5**

YCS would like to know whether discussions with various turbine manufacturers and third parties involved in the development and testing of blade heating systems to try to secure access to blade heating systems for a wind project on Mt. Sumanik has been done.

**YCS-YEC-1 – 6**

YCS would like to know whether various planning and assessment activities that could shorten the lead time to the installation of the project, with due respect of the costs involved, have been done.

**YCS-YEC-1 – 7**

YCS would like to know whether an investigation by YEC into the possibility of support from the Yukon Cold Climate Innovation Centre for the recommended work on Mt. Sumanik (at least the icing assessment related work) has been done.

**YCS-YEC-1 – 8**

If the answers to questions 3 to 7 are no, YCS would like to know why, considering the conclusion of the study is that a wind project on Mt. Sumanik would be economic relative to base load diesel (even with diesel prices as low as \$0.75 per litre), that the wind resources during the entire year on Mt. Sumanik match the electrical load, and that there is every reason to further pursue a wind project on Mt. Sumanik (especially due to its proximity to the predicted large load of new residential/commercial development in Whitehorse and the predominance of electrical heat).

**YCS-YEC-1 – 9**

YCS would like to know why the existing wind turbines on Haeckel Hill are not running in the winter in order to gain experience dealing with rime icing in preparation for a wind project and to develop expertise with blade heating systems.

**YCS-YEC-1 – 10**

YCS would like to know what work is ongoing with the wind turbines on Haeckel Hill?

**YCS-YEC-1 – 11**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$4.83 million spent on the Marsh Lake Winter Storage Enhancement Project.

**YCS-YEC-1 – 12**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$4.394 million spent on the Gladstone Diversion project.

**YCS-YEC-1 – 13**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$2.231 million spent on the Atlin Enhanced Storage project.

**YCS-YEC-1 – 14**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$2.1 million spent on the Mayo Lake drawdown project.

**YCS-YEC-1 – 15**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$3.746 million and \$0.735 million spent on DSM.

**YCS-YEC-1 – 16**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$1.853 million and \$0.225 million spent on Waste-To-Energy/Biomass.

**YCS-YEC-1 – 17**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the \$1.030 million and \$0.530 million spent on District Heating.

**YCS-YEC-1 – 18**

YCS would like YEC to please provide a detailed breakdown of costs by task and by consultant for expenditures over \$50,000 for the LNG project \$1.669 million.

**YCS-YEC-1 – 19**

Page 5-5 mentions another potential hydro project under consideration and feasibility – Hoole. “Other Feasibility projects undertaken to enhance the compliment of renewable generation projects in Yukon [including Marsh, Gladstone, Atlin, Hoole].”

YCS would like YEC to provide the feasibility study on the Hoole hydro project. If YEC is unwilling or feels it is unable to share this study, then please describe the project (location, generation capacity, cost, etc) in as much detail as possible.

**YCS-YEC-1 – 20**

YCS would like YEC to please provide a detailed breakdown of the costs by task and by consultant for expenditures over \$50,000 for the feasibility studies on the Hoole hydro project.

**YCS-YEC-1 – 21**

In YEC’s presentation from the YEC 2012-2013 GRA workshop on May 30, slide 43 speaks to LNG. It reads: “It is expected that this project will meet reasonable assurance before the end of 2012, and that costs to date (and ongoing costs) will be included in construction WIP as the project is developed.” In YEC’s GRA documents it speaks to money spent on LNG: “\$1.7 million for LNG (assumed transfer to fixed assets in the end of 2013 with \$1 million additional spending as fixed assets project in 2013).”

YCS would like YEC to please explain why the non-renewable LNG option is taking precedence over other alternatives, demonstrated by these stated assumptions that this project will proceed?

**YCS-YEC-1 – 22**

YCS would like YEC to please provide details of what commitments it has made, contracts it has entered into, and feasibility studies it has undertaken, regarding LNG.

**YCS-YEC-1 – 23**

YCS would like YEC to please provide and explain the criteria for the Reasonable Assurance Test for proposed projects.

**YCS-YEC-1 – 24**

YCS would like YEC to please provide the updated 2006 Resource Plan.

**YCS-YEC-1 – 25**

YCS would like YEC to please provide an update on the IPP and Net Metering policy (policies), a timeframe for when it (they) will go into effect, and anticipated demand that will be met or offset through IPP and Net Metering in the test years and beyond.

**YCS-YEC-1 – 26**

YCS commends YEC and the working group on their work to date on DSM planning. We look forward to an ambitious plan to reduce consumption and waste. Please explain how much demand YEC intends to meet through efficiency and conservation in the test years.

Thank you,

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