Yukon Conservation Society INC. 1968

302 Hawkins St. Whitehorse, Yukon Y1A 1X6 (867)668-5678 fax: (867)668-6637 ycs@ycs.yk.ca

Yukon Conservation Society's

Reply Argument

In the Matter of the

Yukon Energy Corporation's

2012-2013 General Rate Application

December 12, 2012

Table of Contents

1. Taxpayers not ratepayers should bear costs for resource planning

YCS does not understand how YEC received $120 million of no cost contributions since 2009, and yet still face an ROE that could go into the negative next year without a rate increase. (ref. Oral Hearing opening statement).

YEC is in the business of maintaining and operating energy infrastructure. Ratepayers pay for this service.

YCS believes that research and planning that may not see an immediate revenue stream should be borne by taxpayers, not by ratepayers. These types of research would be better undertaken by the Yukon Development Corporation, or carried out by another entity under the YDC (like the Energy Solutions Centre in its former structure).

Regarding study costs for the Atlin Storage Project and other projects that will not be developed, YCS agrees with the Utilities Consumers Group when it states in its final argument:

> UCG submits that ratepayers should pay only for costs associated with facilities that actually provide service to them. Abandoning the "used and useful" rule results in intergenerational inequities because present and future customers are not necessarily the same group. In addition, consumers are forced to pay for projects that the utility never finishes. Utilities are tempted to "build and buy everything in sight" resulting in wasteful management decisions.

While YCS understands the requirement and importance of planning, YCS agrees with this assertion and as stated, recommends a different body take the lead and responsibility of research and planning activities and financing. YCS finds it disappointing that it cost the utility and by extension the ratepayer $1.6M to conclude that waste-to-energy was not viable when there were strong indications of that early on. Studies such as these being undertaken then the costs added to the rate base compound YCS's frustration that the wind study that proved a viable project on Mt Sumanik was ignored.

2. Yukon Energy's failure to recognize decades of its own Wind Energy research

YCS still asserts that, despite YEC's claims that a wind project on Mt Sumanik was not comparable to Mayo B, it was not only comparable, but preferable. A wind project on Mt Sumanik would have been a better investment as it would have diversified our energy sources, provided much needed winter capacity, and generated more electricity at a lower cost than Mayo B.

YEC's statement that it: "does not have the luxury of waiting on those loads to, with full certainty materialize before taking any action" with regards to resource planning is not entirely correct. YCS has demonstrated that there is an electrical load that YEC can depend on for planning and that is the winter heating load that is presently being covered by ratepayer's oilburning appliances. YEC's Conservation Potential Review reinforces the existence and certainty of this space heating market.

YCS asserts if Whitehorse residences had electrical back up heat in the form of Electrical Thermal Storage (ETS) units, YEC could fully utilize any winter renewable energy it can produce. Unfortunately, YEC's planning for winter renewable energy to date has been lacking due its hydro-diesel centric system, which YEC itself admits is winter-challenged, and YEC's disregard of its own favourable Wind Feasibility study from 2009.

The YEC panel's claim that a road to the top of Mount Sumanik is a technological or economic show-stopper is difficult to understand, when the Yukon has many competent local companies capable of building roads in challenging environments for less money than the three kilometre penstock required for Mayo B.

YEC has not yet made the connection between interruptible secondary sales and intermittent wind energy. YCS sees them as logically linked, and the connection is the premise on which the secondary sales program was developed. If the wind isn't blowing, you simply switch off the secondary sales. YCS is confident that a significant portion of Yukon ratepayers would invest in dual systems in their own homes if it meant they could heat their homes with clean, renewable energy.

YCS suggests that if YEC had followed through with the Sumanik study's recommendations in 2009, we would now be heating our homes with the cold wind that has been blasting the Yukon this fall.

The reality is, proven by the Conservation Potential Review, that YEC is in fact in the space heating business. How it best chooses to capitalize on that remains to be seen.

3. Comparing Wind to LNG

Pg 13 1579_YEC Final Argument.Nov 28, 212.pdf

During the IR and oral hearing processes issues were raised regarding Yukon Energy's updated 20-Year Resource Plan, particularly as regards the anticipated near term relevance of supply options such as wind and liquefied natural gas (LNG) and the potential options in future to serve new mines that may be connected to the grid. These issues will be a matter of ongoing discussion and assessment beyond the current Application. Evidence during the current proceeding, however, has shown that without major new loads connected to the grid, opportunities for major new capital intensive renewable resource options such as wind remain constrained.

Yukon Energy fails to recognize the low-risk of wind energy compared to LNG. Wind projects can be built in phases to meet growing demand. A wind turbine can be stopped when it is not needed, preventing wear and tear, or sold to recover costs.

Wind is much more abundant in the winter when electrical and heating demand is highest. Secondary sales to a heating market are interruptible which accommodates wind's intermittency.

The fuel for wind energy will not be at risk from market price pressures and fluctuations, because wind is a free fuel.

Conversely, the depressed price of LNG (that YEC's economic forecast is based on) is due to the current inability to export natural gas to overseas market. With the proposed construction in North America (and BC, in fact) of LNG plants, pipelines and ports, LNG will be sold at world prices which will drive up LNG prices from current short term estimates. This price spike could happen within 5 years. Again, YCS does not see how YEC is not facing more broad scale scrutiny in its projected cost estimates of fueling proposed LNG plants, and its assertion that LNG is the most economic near term supply option.

So, in addition to countering the greenwashing employed by the natural gas industry and by Yukon Energy Corporation itself (natural gas is only a "cleaner" fossil fuel if all upstream emissions and environmental impacts are ignored), YCS will continue to counter claims that LNG is an economic fuel source because of unrealistically optimistic and short term price forecasts.

As for the risk of industrial customers and the justification of LNG to serve these loads, it is unfortunate that Yukon Energy does not acknowledge that its existing customer base (residential, government, commercial) is lower risk and more stable than mines. A mine's lifespan is typically 5 to 10 years. When a mine shuts down prematurely, it causes big rate shocks, leaving Yukon Energy and the long-term ratepayers strangled with an unpaid bill (e.g., Faro).

Again, YCS emphasizes that if the mines need power and LNG is cheaper than new hydro or diesel, then the mines themselves should take on the risk and invest in LNG infrastructure, not the public utility. It should be neither Yukon Energy nor the ratepayers' responsibility to finance that investment because LNG locks the public utility and the territory into the consumption of fossil fuels when our goal must be to quickly transition away from them.

Yukon Energy should be focused only on managing loads and developing renewable energy to displace the use of fossil fuels wherever possible.

4. Demand Side Management

The type of DSM that YEC has been studying will result in an overall reduction in consumption of energy. While conservation is important and admirable, this approach to DSM would result in reduced energy sales for Yukon Energy, which could be perceived as counterintuitive (or "perverse economics" as the YUB stated in Board Order 2009-08). It would be difficult for the Yukon Utilities Board to support this approach to DSM because it results in the public utility spending money to make less money if the diesel savings are less than project costs. Instead, this vital conservation program would be more appropriately carried out by (an enhanced) Energy Solutions Centre (which was its original intention), and funded by taxpayer dollars, not the ratepayers.

In order to achieve the goal of reducing diesel generation costs, YEC should instead focus its DSM planning and activities on Load Management (shifting loads to eliminate the peaks and fill the valleys) to reduce diesel generation and maximize renewable energy. That is what secondary sales were designed to take advantage of.

Smart meters, price signals (time of use rates) and simple penguin devices that can be installed in homes to control hot water heaters are some examples of technologies and strategies to manage loads. Utilities in Juneau and other jurisdictions do this, and there is no reason YEC should not as well. Load Management is the type of DSM that YEC should focus on in the next iteration of the DSM plan.

5. YEC's 20 Year Resource Plan

YCS has great concerns about the YEC 20 Year Resource Plan and the lack of oversight in its development. The fact that it was not included in the original GRA dated April 2012, but brought into the process as an IR (YECL-YEC-1-18(a)) in August 2012, meant that interested parties at that late stage missed the window to register as Intervenors. At that time, it was not possible to know that the yet undisclosed and incredibly controversial and problematic Resource Plan would be part of this GRA.

YCS would like to reiterate that is vitally important that the public and the Yukon Utilities Board properly scrutinize the Resource Plan, which represents a radical departure from previous thinking. Decisions that could flow out of this plan will be costly and crucial in shaping future energy system design and policy in the Yukon.

The "obligation to serve" is not at all costs, yet it has resulted in a Resource Plan that is focused on the continued consumption of fossil fuels to the detriment of renewable energy development.

6. Gladstone

To illustrate one of several problems YCS has with the Resource Plan and for bringing in certain studies into the rate base, YCS urges the YUB to consider the $4.4M Gladstone Diversion project.

This project has been questioned by DFO, the Kluane First Nation, the Champagne Aishihik First Nations and many other Kluane residents. Reversing the flow of a river system over a continental divide (mixing water from different watersheds) and flooding critical riparian habitat in a drought prone ecosystem is not a good idea. The people of Kluane know it, but they are not being heard. This is evident because YEC labeled the Gladstone Diversion "a terrific project" during the hearing.

YEC, however, did not recognize that one and a half years ago, the Champagne and Aishihik First Nations passed a resolution to not support or endorse the project.

CAFN Resolution 2011-02 Gladstone Diversion Project reads as follows:

RESOLUTION
2011 - 02
Gladstone Diversion Project

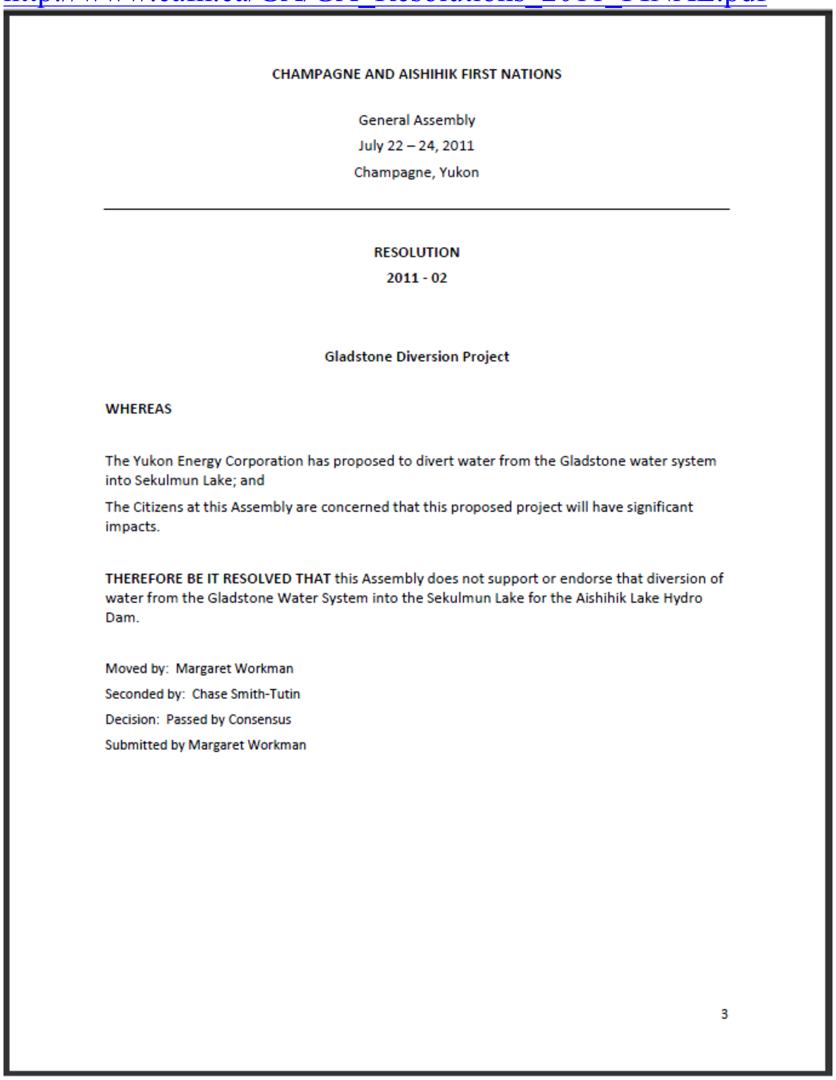
WHEREAS

The Yukon Energy Corporation has proposed to divert water from the Gladstone water system into Sekulmun Lake; and

The Citizens at this Assembly are concerned that this proposed project will have significant impacts.

THEREFORE BE IT RESOLVED THAT this Assembly does not support or endorse that diversion of water from the Gladstone Water System into the Sekulmun Lake for the Aishihik Lake Hydro Dam.

The original public document seen below can be found online at:
http://www.cafn.ca/GA/GA_Resolutions_2011_FINAL.pdf



CHAMPAGNE AND AISHIHIK FIRST NATIONS

General Assembly
July 22 – 24, 2011
Champagne, Yukon

RESOLUTION
2011 - 02

Gladstone Diversion Project

WHEREAS

The Yukon Energy Corporation has proposed to divert water from the Gladstone water system into Sekulmun Lake; and

The Citizens at this Assembly are concerned that this proposed project will have significant impacts.

THEREFORE BE IT RESOLVED THAT this Assembly does not support or endorse that diversion of water from the Gladstone Water System into the Sekulmun Lake for the Aishihik Lake Hydro Dam.

Moved by: Margaret Workman
Seconded by: Chase Smith-Tutin
Decision: Passed by Consensus
Submitted by Margaret Workman

3

Conclusion

- Taxpayers, not ratepayers, should finance planning and research activities
- YEC needs to move forward with a wind program to meet winter energy (electricity and heat) needs
- YEC, YUB and YG must explore the limitations to, and the difficulties for, the public utility resulting from the perceived obligation to serve.
- YEC should not be permitted to invest in LNG because of environmental impacts and volatile fossil fuel world prices. New industrial customers should be responsible for their own LNG infrastructure and fuel costs, and the Yukon ratepayer should not subsidize industrial growth or allow YEC to invest in fossil fuels to service high risk customers to the detriment of the development of renewable energy.
- YEC should adopt the mandate and vision to develop renewable energy to meet the needs of electrical consumers and to displace fossil fuels wherever possible.
- Rewrite YEC's 20-Year Resource Plan using this vision, because the current draft is based on simplistic industrial boom and bust load projections and the perceived obligation to serve with the conclusion that LNG is the only option.
- DSM – shift planning on efficiency and conservation to ESC and focus YEC's DSM program on Load Management to shift demand from peak times to reduce diesel consumption and maximize renewable energy.
- Gladstone – YCS urges YEC to respect the resolution of the Champagne and Aishihik First Nations (2011-02), stop promoting Gladstone as a terrific project, and meet with Yukon people to clarify how to move forward with renewable energy projects before YEC spends any more ratepayer money on the Gladstone project.