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Yukon Utilities Board

In the matter of

Yukon Electrical Company Limited's
General Rate Application 2013-2015

Reply Argument of

Yukon Conservation Society

December 16, 2013

Business Case #27 Automated Meter Reading – Whitehorse and area and Business Case #30 Demand Side Management

The Yukon Conservation Society must disagree with YECL's statements about time of use rates in paragraph 101 of its Final Argument, that time of use would merely move the peaks, not reduce them. YCS suspects that because the demand/capacity charge for General Service customers is an important and attractive revenue generator for YECL, it would not benefit from efforts to even out consumption over time. Shaving the peaks and filling the valleys would lower coincidental use of electricity – on which costly demand charges are based and calculated.

While there may be some incidences that YECL described when managing the load would result in the peak simply moving to a later hour (in extreme temperatures, for example), YCS is confident that because we are on a mixed hydro-diesel system, there would, in fact, be reductions in diesel peaking by managing the load.

Several DSM stakeholders and interveners have suggested time of use rates would be a valuable tool with which to do this. We hope that the Yukon Utilities Board recommends to both utilities, as well as to the Yukon Government, that an open-minded investigation into load management approaches that take advantage of a rate structure be part of continued DSM planning.

Time of use rates would not only minimize fossil fuel consumption and maximize renewable energy use, but also would provide ratepayers with the power and flexibility to take charge of their consumption patterns and ultimately their electricity costs.

YCS is somewhat heartened to see restated in paragraph 103 that YECL's AMR communications system is compatible with the addition of a Load Control Transponder (LCT). This technology could be employed by customers who want to "opt in" to allow utilities some control over the biggest loads: space heating and water heating. Although we feel that price incentives and customer-controlled timers would be more effective.

Business Case #6 Watson Lake Bi-Fuel Project

In paragraph 105, YECL reiterates that bi-fuel generation (natural gas and diesel) would have "an environmental benefit to the community of Watson Lake" in the form of some emissions reductions. YCS would like to reiterate that some emissions, namely carbon monoxide, volatile organic compounds and unburned hydrocarbons – including the extremely potent greenhouse gas methane – are anticipated to increase. As YECL notes, there are health effects associated with the diesel emissions that are predicted to decrease. However, there are also health effects associated with the emissions that are predicted to increase from bi-fuel generation.

As improved air quality is a purported driver and benefit of this project to the community, YCS would like YECL to be required to prove this claim.

YCS recommends that the Yukon Utilities Board not approve the Watson Lake Bi-Fuel Project for environmental and economic reasons described in our Final Argument.

However, if the project does proceed, YCS recommends that the YUB require YECL to undertake ambitious air emissions monitoring (actual sampling, not modeling) during Phase 1 of the Watson Lake Bi-Fuel Project. Analysis of these results and approvals by regulators and affected stakeholders should be a prerequisite for moving forward with Phase 2. Therefore, if the YUB approves the Watson Lake Bi-Fuel Project (a pilot project), it should only be for Phase 1 with conditions on expanding to Phase 2.

YCS was hopeful to hear that YECL, in partnership with Liard First Nation and the Town of Watson Lake, has secured federal money to study the potential for a hydro project in Kaska Territory. If a location were to be found in the vicinity of Watson Lake, and a design that respected ecological limits were to be developed, YCS is of the opinion that the community's desires for improved air quality from reducing, even eliminating, fossil fuel combustion would finally be realized. A great example of an environmentally sound hydro project is the Taku River Tlingit First Nation's Pine Creek Hydro project that displaced 100 per cent of Atlin's diesel generation.

With sufficient attention and will, a hydro project serving community needs could be accomplished within the anticipated payback period for the Watson Lake Bi-Fuel Project. We feel that low-impact hydro would be a far better investment than the proposed introduction of an alternative fossil fuel that would only improve some emissions while making others worse, would exacerbate climate instability and environmental destruction from natural gas extraction, processing, liquefaction, transportation and combustion, and would lock us to the rising commodity prices of finite fossil fuels.

With regard to the thermal backup requirement, YCS is of the opinion that, as backup is rarely used and diesel is more stable in storage, the existing diesel (with technologies to improve air emissions resulting from operation) would be a better backup system when Watson Lake eventually meets all of its needs with renewable energy.

Thank you.

Respectfully submitted,

Anne Middler
YCS Energy Coordinator
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