

To: Yukon Utilities Board
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This will probably not be the kind of presentation that the YUB normally receives. I do not represent any organization or group. I am simply a residential user of electrical power; albeit one that uses more than 1000 kilowatt hours of energy for seven or eight months of the year. My comments will be non-technical in nature due to the fact that I have no expertise in the field of electrical energy production. In fact, I am still not able to interpret satisfactorily the electrical bill I receive each month.

The reason I am making this submission is to voice my objection to the proposed reallocation of rates within the residential group of electrical users. My objection is based on the logic and fairness of the proposal; in essence, I believe that the proposal lacks logic and is inherently unfair.

My understanding of the proposal is that residential users of electricity will be divided into three groups based on how much energy they use. First Block customers would comprise those who use less than 1,000 kilowatt hours a month. According to newspaper reports (Yukon News 3/19, 2010), 70% of customers fall within this block or group, although what is actually meant by this is somewhat unclear. Is this block made up of customers that never go above the 1000 kW.h in any month of the year? I would think that most consumers would be able to keep below the 1000 kW.h mark during the summer season. Whatever the case it was suggested in at least one newspaper report that the bills of this group will fall by 12 percent (Yukon News 3/19, 2010), although I have a difficulty seeing how the figures given on page 1 of the Schedule of Determinants on Proposed Rates support this contention. Second Block customers would be made up of those who use between 1,000 kilowatt hours and 2500 kW.h per month. Third Block customers would consist of those who used above 2500 kW.h per month. Second and third Block customers will find that their bills will go up as they will be penalized for using more than 1000 kW.h per month. It is suggested that the extra money made by instituting this penalty would be used to pay for the cost of diesel.

In an article entitled, "It's time to play with power rates," written by James Munson and published by the Yukon News on Friday, March 19, 2010 there are several comments made by Yukon Energy Corporation president David Morrison. When asked by Mr. Munson if the proposed reallocation of rates would be "unfair to people who shifted to electrical heat because it was green, Mr. Morrison said it benefits more people than it hurts." He went on to say that "If the average consumption is 850 kilowatt hours a month, what's wrong with those people getting a benefit? And what's wrong with people paying the cost of diesel they make us use?"

Mr. Morrison simply dismisses those people who may have adopted electrical heat because they felt it was an environmentally responsible decision, or continued its use for the same reason, or simply have little option in their choice of heat. In light of the fact that diesel use in Yukon has been declining since 1996,¹ and that Yukon Energy's own website (as of 6/2/10) declares that "we are meeting all our customers' needs using environmentally friendly hydro and wind power . . ." and that generators are only used "as emergency back up," it is little wonder that people have taken to installing electrical heat. It would seem to me that Yukon Energy has only itself to blame for people adopting electrical heat. If the company felt that this was the wrong direction for people to go then why did it not make this abundantly clear to residential users?

Mr. Morrison also seems to imply in the article that because I use more than 1000 kilowatt hours of electricity for seven or eight months a year, that it is my fault that the diesel generators are fired up from time to time to meet the energy needs of Yukoners. Is this really true? What evidence is there to support this contention? There are commercial, industrial and government users of electrical energy as well. Could one not say that these users are making diesel use necessary from time to time?

As well, the seventy percent of customers who use less than 1000 kilowatt hours a month could also be part of the problem. These customers actually drew 80% of the total energy used by residential customers in 2009.² Perhaps if these customers adopted a more efficient use of electrical energy, the need to use diesel might well be reduced. It is illogical, and unfair to force a small group of individuals that use only 20% of the power used by residential customers to pay for the sins of all.

In addition, we now have one industrial user that used 29,023,000 kilowatt hours of energy in 2009, which is over 2,000,000 more kilowatts than residential-non government Block 2 and 3 customers used during the same year.³ Is Yukon Energy trying to divert attention away from this fact by blaming a small proportion of residential users for the increase use of diesel energy?

It is interesting to note that Sherwood Copper Corporation stated in 2007 that its power purchase agreement with Yukon Energy Corporation would allow "Yukon Energy [to] gain infrastructure and a substantial stream of revenue by utilizing hydroelectric capacity that is **surplus** to current customers' needs. [In addition, a company spokesperson went on to say that] in structuring this PPA, we have provided substantive guarantees to ensure that other ratepayers are not impacted, while committing to pay our fair share for the cost of power."⁴

¹ Energy Strategy for Yukon, Energy Mines & Resources (January 2009, p. 15)

² YEC & YECL 2009 Phase 11 Application Schedule of Determinants on Proposed Rates p. 1

³ YEC & YECL 2009 Phase 11 Application Schedule of Determinants on Proposed Rates p. 5

⁴ NationTalk Powered by You! Sherwood Reports Signing of Power Purchase Agreement for Minto 2007/2/12 p. 1 . . . www.nationtalk.ca

It is my understanding that electrical rates did fall as a result of the Minto mine coming on line. However, I believe that the Government of Yukon funded part of the cost of construction required to bring the Minto operation on line. Therefore, I helped to subsidize the operation through my taxes. One could well argue that the consumption of energy by this operation is forcing Yukon Energy to use diesel power, as the mine is now using most of the surplus power available in 2007. If this is the case then ratepayers are certainly being impacted both financially and environmentally, and if the “Block” system is introduced then some of us will be facing even greater costs. To blame so-called high users of residential power for this situation seems rather unfair. (One of the reasons I supported this PPA agreement was that it would result in a significant reduction in the use of fossil fuels by the mine. However, if it simply means we are burning more diesel in Whitehorse then perhaps the benefits are not as great as originally thought.)

The point that I am trying to make is that we are **ALL** responsible for making Yukon Energy use diesel at certain times of the year. If all of us did more to increase our efficient use of electrical energy then our respective bills would drop, and there might well be less use of diesel. It seems to me that it is as illogical and unfair to blame increased diesel use on one group of residential customers as it would be to blame industrial, commercial, or government users of electrical power.

There are many reasons why some people might use more than 1000 kilowatt hours of electricity per month. Perhaps they have a larger than average home to heat. Perhaps their family is larger than average. Perhaps there are older people in the home that require warmer temperature settings. The reporter in the news article I mentioned previously brought up the fact that some people heat with electric baseboards or forced air electric furnaces, and that some of these people actually converted from other forms of heating because they thought it was more environmentally friendly. It may well be that a Second or Third Block consumer is actually making more efficient use of electrical energy than someone in the First Block category.

How could this be? It would seem logical that those of us who use more than 1000 kW.h of energy a month would be trying to do everything possible to cut down on the use of power. This is due to the fact that our costs rise significantly during those months that we go above the 1000 kW.h level. For example, my home has been subjected to an energy audit and steps were taken to increase efficiency based on that audit. We have also done a number of the usual things that most people do to cut down energy use: efficient shower heads, shorter showers, more efficient lighting, turning off the water heater when gone for three or more days, having a Penguin 11 installed on our water heater which helps to reduce electricity use during peak times of the day, using an outside clothes line for summer use, using a set-back thermometer for our electric furnace, turning off our power bars on such things as stereos, computers, and television, and using a separate fridge and freezer which is apparently more efficient. There is certainly more incentive for those of us who use higher amounts of energy to decrease our use. The incentive may not be as

great for those who consistently use under the 1000 kW.h per month mark, particularly if the proposed “Block” system is introduced.

To try and make what I have said a little clearer I would like to give the following example. If I use 600 litres of fuel to run my car over the course of a year, and my neighbour uses 650 litres to fuel their vehicle over the same period of time, one might conclude that I am a more efficient user of energy. Well, this may or may not be true. Perhaps the other person transports more people with their vehicle; perhaps their vehicle is more modern and pollutes less; perhaps it gets better gas mileage. (My vehicle would not be allowed to operate in B.C. under the present emission standards of that province.) So, one cannot assume that people who use less energy are automatically more efficient users of that energy.⁵

If one’s major source of heat is forced air electric or baseboard then it is more than likely that during the cold months of the year he/she will use over a 1000 kilowatt hours of electrical energy. However, when that person turns on the heat on **MOST** occasions he/she will not be polluting the environment. However, **every time** a person heating with propane, wood, or oil turns on their heat, pollution will occur regardless of the efficiency of their heating system.

The federal government subsidizes the oil and gas industry to the tune of some 2 billion dollars a year. It appears that Mr. Morrison is proposing an additional subsidy via the new rate application. In other words, he is telling us to install oil furnaces if you want to decrease the possibility of using above 1000 kW.h a month, and to use a heavily subsidized system that pollutes the environment every time it is used. Those of us who make more use of a generally less polluting energy source will once again be forced to financially support those who do not.

Now I don’t know whether I am doing more for the environment by using a forced air electric system rather than an efficient oil furnace, but I expect Yukon Energy should be able to determine this. I am certainly willing (and fortunately able) to pay a little more in order to reduce my environmental impact, but it seems that Yukon Energy just wants me to change my heating system to one that is always going to negatively impact the environment.

Mr. Morrison implies that this proposed new rate structure for residential users will encourage conservation. It may well do so, but perhaps not as much as he would wish. As stated in the previously mentioned news article, 70% of residential customers already use less than 1000 kilowatt hours of electricity per month. Since they will suffer no additional penalty by using up to the limit of 1000 kW.h, there may not be sufficient incentive to reduce their energy consumption. As already mentioned, residential users who are at present using more than 1000 kilowatts per month are probably doing all they

⁵ Comment: Can you imagine the reaction you would get if people were slapped with an additional levy if they used more than a certain amount of gas a year? There would be a revolution. Yet, it seems this is what is being suggested with regard to electrical use under the proposed “Block” system.

can to reduce consumption, so it would seem somewhat unlikely that there will be any major reduction in electrical use within this group.

According to the information given by YEC and YECL in their 2009 Phase 11 Application (Schedule of Determinants on Proposed Rates), if the “Block” system had been in place in 2009, non-government residential users in the Block 1 group would have used some 110,750,140 kW.h of electrical energy. Block 2 and 3 groups combined would have used some 26,887,486 kW.h of electrical energy. Block 1 users may use less than 1000 kW.h of electrical energy per month, but as a whole they use 80% of non-government residential power.⁶

The proposed reallocation of rates may actually encourage Block 1 users to use more power. For example, if a customer uses an average of 850 kW.h of electricity per month, he/she may not be too worried about adding an extra string of lights during the Christmas season, as this additional use may not take the customer above the 1000 kW.h level. The customer may be willing to pay a little more to allow for a greater enjoyment of the Christmas season as long as he can stay below the proposed penalty level of use. It should be noted that the present rate structure has already caused my household to eliminate one string of lights at Christmas. (I hope I am not forced to contemplate the elimination of all Christmas lights, including those on the Christmas tree, over the course of the holiday season.)

It is interesting to note that a 5% reduction in energy use by Block 2 and 3 customers (a result that would seem to be rather unlikely) would result in a cut of approximately 1.35 million kW.h of electrical energy use, whereas a 5% reduction in use by Block 1 customers would result in a reduction of approximately 5.5 million kW.h. Logic would tell me where I would concentrate my “energy” in trying to get people to reduce their electrical consumption.

Initially, I felt that the following proposal might be better. Calculate the average yearly consumption of electricity in a home over a three or (even better) a five year period. If a household goes over that average amount it would be penalized. If the household uses less then the household would be rewarded. Every five years a new average would be taken, and the process would begin again. Thus, everyone would have an incentive to cut their consumption, and everyone would be fairly treated. (Obviously there would have to be some other method worked out for new homes.)

Unfortunately, I have been told that such a system may not be cost effective and, as a result, would not be adopted. However, I believe such a system would do more to reduce energy consumption and the use of diesel, than the proposed “Block” system. In addition, there seems to be little indication in the proposal as to how cost effective the so-called “Block” system would actually be.

⁶ Please note that the percentages seem to hold even if residential government users are added to the mix.

If it is true that the system that I propose would not “work,” then my only suggestion would be that all residential users pay the same rate regardless of how much electricity they use. Whatever system is adopted has to be fair to all residential consumers. It would seem to me that it is important to get everyone involved in electrical energy conservation. In my view the proposed “Block” system is both unfair and illogical, and will do little to promote energy conservation.

Thank you for the opportunity to make this submission.

Keith Lay

Additional Notes:

The use of heat tape for frost protection devices needs to be reviewed. The city tells us when to turn on our frost protection devices in the fall and when to turn them off in the spring. Heat tape systems are on twenty-four hours a day during that time period. Apparently, having such systems on timers is not acceptable as should any lines freeze the home owner would be liable. Surely there must be a better way of dealing with this problem that would result in a reduction in the amount of electrical energy used.

Our electrical bills should compare the actual amount of energy used this year with the actual amount used during the same time period of the previous year. The graph system of comparison is not very effective. This might cause people to reflect on the reasons for the differences in use (if significant) and help them become more efficient energy users.