

Date Submitted: May 16, 2018

Proceeding name: Nelson Hydro 2018 Rate Application

Are you currently registered as an intervener or interested party: Yes, Interested Party

Name (first and last): Max Yanke

City: Nelson

Province: British Columbia

Email: [REDACTED]

Phone number: [REDACTED]

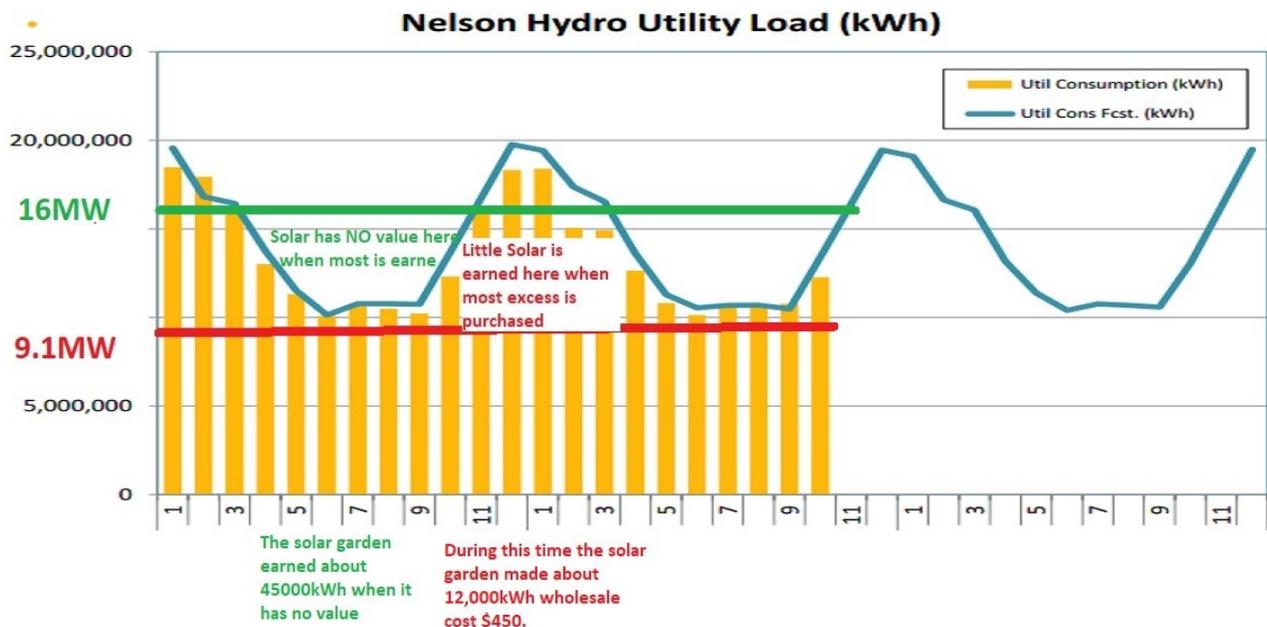
Comment:

Submitting my response to Nelson Hydro's IR#2

As the only city in western Canada with its own hydropower generation and distribution why would this city put solar panels at the dam?

The following images should help anyone understand solar panels have no benefit here.

Utility Load Forecast



The above is Nelson Hydro's graph, I added the 16MW, 9MW lines and text.

Nelson hydro can make full 16MW if water is available, typically April through September.

Their water licence only allows 9.1MW generation if water is not available, typically October through March. When most if not all annual excess power is purchased from Fortis.

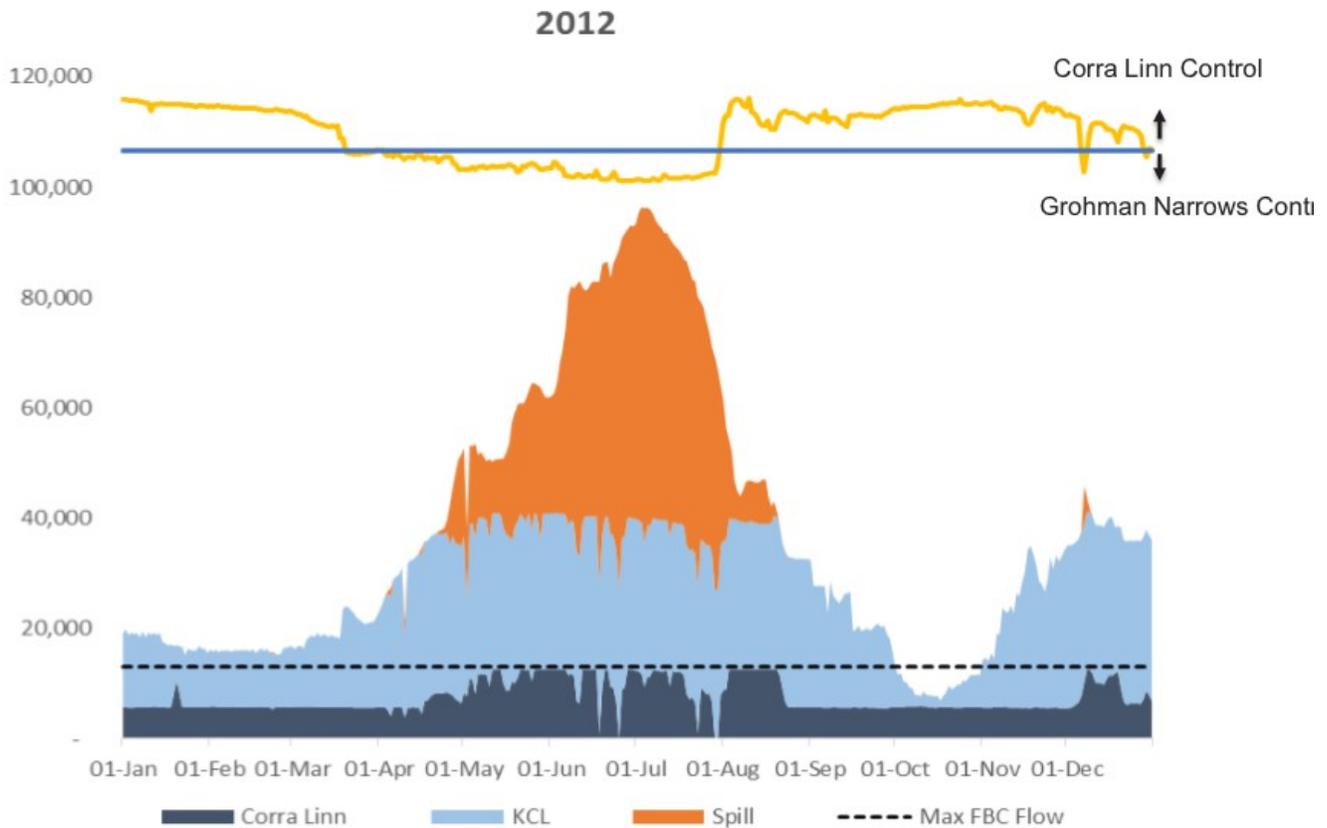
The solar garden from October through March made about 12,000kWh, this could be purchased from Fortis for \$400 and sold for a huge profit.

From April through September the solar garden will make about 50,000kWh.

This is when Nelson can make full nameplate 16MW power. Every hydro reservoir in the Pacific Northwest is full and overflowing, we don't need solar power, nobody needs it at this time. The manager of hydro says solar power is a credit against excess power purchase. That 49,000kWh would be a credit of \$1960. At a cost of \$20,000?

The city says the solar garden cost \$330,000, business case that's \$20,000 annually for 25 years.

Kootenay River Flow and Control



The above image reinforces the fact we don't need solar power from April through September, the orange is excess water, we can't even use all the water at that time, why add solar?

The manager of Nelson hydro brought city council a business case showing the community solar garden had a 25 year payback, the industry standard life expectancy of a solar project.

The consultant was able to make a business case, did he make mistakes?

Or [MAKE THE SHOE FIT?](#)

The city would loan money at 3.5% for either 5 or 10 year terms to anyone buying a solar panel, to be paid back on their hydro bill.

We are a month away from one year of solar garden operation its looking like it will earn about 61,000kWh for the year. Paid at full retail thats about \$6100 divided between 248 panels or about \$25 per panel.

Anyone who borrowed on a 5 year amortization schedule will have paid \$403.92 by now to receive \$25.

How is that possible?

\$500 @3.5% over 5 years \$18.19/mo. Over 10 years \$9.14/mo.

\$500 non refundable Dec. 2015 until balance of \$600 paid at start up June 2017.

First return June 2018. You can do the math.

Did anyone borrowing to buy a panel think or know they would be paying \$300 to \$400 to get \$25?

Do they know the solar garden increases the cities carbon footprint, nothing is cleaner or greener than waterpower.

They had to sell 75% or 150 of 200 panels by Dec 2015 for the project to move forward.

They sold 147, which somewhere along the line became the 200?

The engineer claimed 200 panels would make 61,000kWh/yr. Exaggerating years of known local data by about 25%. Suddenly 48 more panels parachuted into the project, it was now 248 panels, 25% more? Data now shows its on target to probably make 61,000kWh. It went from heavily promoted selling 147 panels to now 248 panels? Did they all get sold?

COMMENTS REGARDING NELSON HYDRO IR # 2

24.4 BCUC STATES

-Please explain if there are any other expenses related to the Solar Garden recorded in other areas of the budget. If Yes, explain.

NH REPLY – **No**, *there are no more expenses recorded in other categories relating to the Solar Garden directly. Only expenses for ongoing maintenance as required.*

What is the definition of maintenance, there have been lots of expenses lately. As follows.

The Nelson Community Solar garden has on line data at [Public website for the Community Solar Garden](#) Several costs have arisen recently.

Sometime ago the solar garden experienced copper theft attempted solar panel theft and wires cut.

Security cameras were installed on April 21st, they have never worked.

Since the cameras were installed solar panels were stolen on three separate occasions.



The above gives those not familiar with this area the distances and travel time from the city to the remote solar garden site near the Nelson hydro electric plant. Round trip time about one hour.

The security cameras have never worked since installed, after the theft apparently a motion detect camera was installed that alerted the city police, one hour round trip plus investigating time.

My information is the city police stopped responding after unknown numbers of trip(s) because flying insects were tripping the motion detect alert.

Then security guards were hired, the security cameras still don't work.

Locals who alert me to any activity on site tell me there have been numerous instances of Nelson hydro vehicles. Several sightings of a bucket truck raising and lowering someone to the security camera(s). Also a pickup with the bucket truck, other times just a pickup with more than one person.



Dust control has been applied on this small area in the past to minimize dust on the solar panels not seen behind the trees. Is this cost attributed to the solar garden? Solar panels have been cleaned.



What is the cost to plow the access road to the solar site? Is this attributed to the solar garden?

Publicly they are [promising a return on investment in 12 to 15 years.](#)

Would the BC Securities Commission have anything to say about what has happened here?

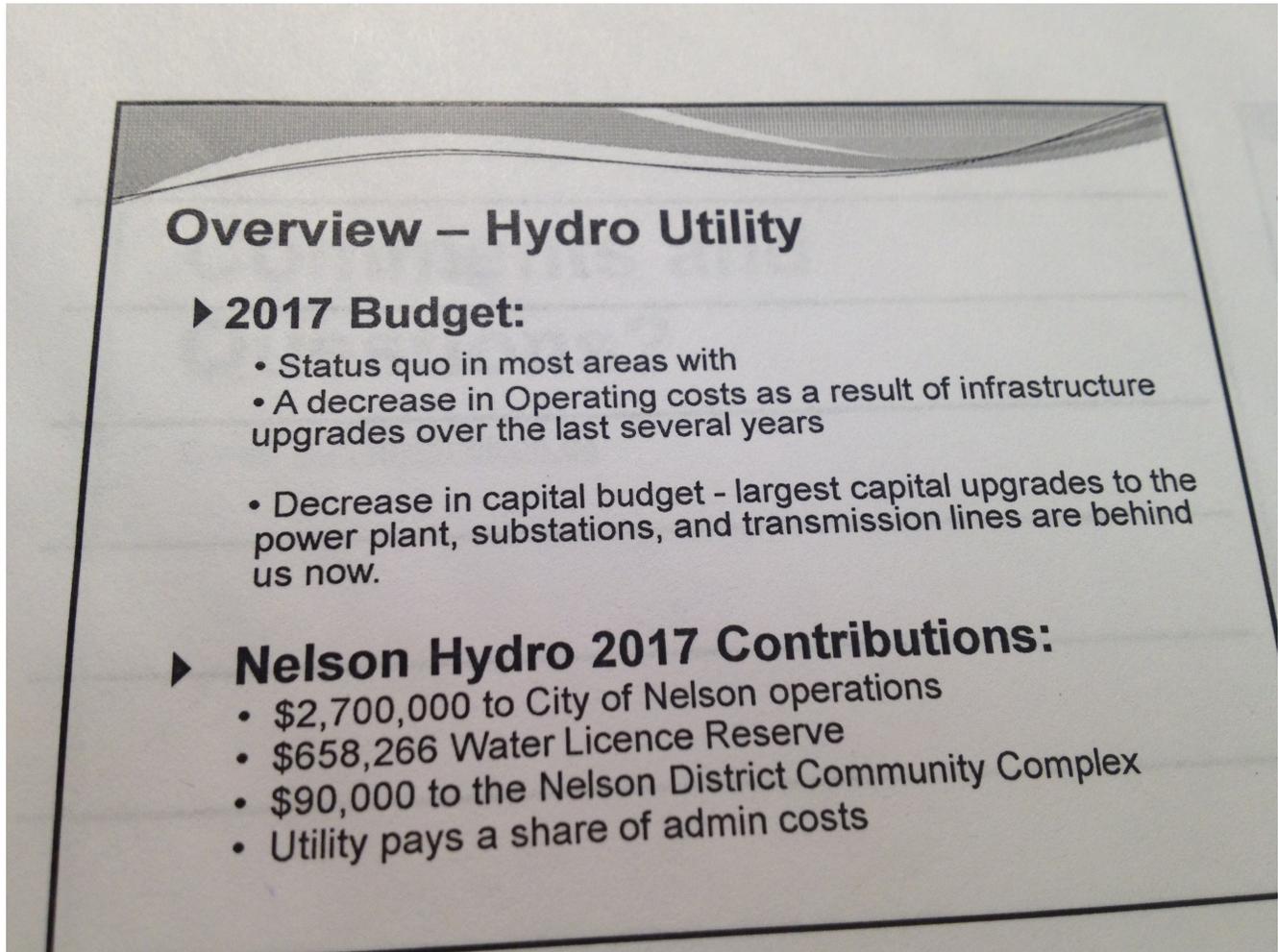
This looks like a public investment offering to me.

The cities solar garden contractor/consultant is now a Nelson hydro management employee. On the local radio she stated the solar power would reach parity in 7 years and ROI in 10 or 12 years.

I have asked the manager of Nelson hydro for those calculations with no reply.

Regarding IR Response Part 29.0 Water Licence Reserves

Nelson hydro certainly attributes the \$658,266 WLR payment from them to the city. The image below is from a public meeting handout and was on their slide show.



29.0 Nelson hydro states the water licence comes with an obligation to be beneficial, make power.

Yet states if that incurs a loss why would anyone do that?

Did anyone ask that question regarding the solar garden? It was known to be a loss, why would anyone do that?

Comments regarding Nelson Hydro Employees in the Appendix

They show Manager one remuneration as \$171,282 for 2016. If this is the Nelson hydro manager the cities own [SOFI page 32 of 34](#) shows \$181,891 plus expenses of \$8,237. The highest paid person in the city.

If this is the hydro manager and the information is incorrect, how can one be sure any other information is correct?

The EcoSave Manager shown as \$10,862, is only because they became a Nelson hydro manager at the end of the year. Previously it was all contract work. The contract in [2012 paid \\$73,349](#). Similar amounts for other years.

I always thought this person was a city employee, had a desk, computer, laptop, city cellphone and number, city email address, all the office support etc., There was another contractor/consultant “city corporate greenhouse gas consultant” reporting to the hydro manager with similar circumstances paid \$85,000 last contract year. What other contractors have these facilities city supplied? When I asked for both contracts I was told GHG contract wasn't being renewed. The other contractor became a hydro manager.

The city [organizational chart](#) shows one admin staff 50/50 hydro/city.

I showed page 27 (Nelson hydro partial employees) from IR#2 to a retired Nelson city manager.

He retired before computers, he told me in his time two employees did all the billing for sewer, water and hydro as well as other work. He had no idea what a customer service reps was.

His words after looking the page over, “this is B@#\$%%”

The city population has remained close to 10,000 for decades.

Nelson has 4 fulltime IT techs. 1.32 Fulltime equivalents working for Nelson hydro. I would like to see that justified.

MY FINAL COMMENTS

Dealing with the city has been anything but open, transparent and easy.

At first they were answering my questions, this soon stopped. Everything requires an FOI.

If I don't ask the proper questions, I am told they don't have that information.

For example, my first FOI I asked for the study case for the community solar garden, someone told me that was available. They are to reply within 30 days, its always around the 29th day.

In the above case I had to ask for the Consulting Engineers Report for the Community Solar Garden. By the time you get anything two months or more go by.

I made two request to appear before council both denied by the CAO.

I met with the manager of Nelson hydro when I first heard of the solar garden, presenting years of known local solar data showing solar was a waste of money and resources. He told me it was irrelevant, and he was an engineer.

Later I was emailing this data to mayor, council, hydro manager, his consultant the solar contractor and Corporate GHG consultant showing it would add to the city carbon footprint.

The hydro manager said I was wasting his and his staffs time and would block my emails.

I have no confidence in this hydro or cities management.