

Name: Gwen Johansson

Organization: District of Hudson's Hope

Date: October 11, 2017

October 11, 2017

Patrick Wruck
Commission Secretary
BC Utilities Commission

Dear Mr Wruck:

Please accept the attached information pieces to accompany the Hudson's Hope submission, delivered on September 30 in Hudson's Hope:

- 1) Fast Facts: Hudson's Hope Community Solar Initiative 2017. This is a description of the Hudson's Hope solar initiative, together with a number of photos of municipal buildings with solar panels installed. It also provides a basic description of how the BC Hydro grid-tie and net metering system works.
- 2) Richard Chateauvert, "Electricity production: Couillard sees a new era," (English translation), La Presse, 18 September, 2017. The article describes the Quebec Prime Minister's opinion regarding the future of electricity generation, namely that small distributed generation facilities from residences, small businesses, feeding into the grid and drawing from the grid as needed, backed up by Quebec's hydro facilities.

The article was referred to in the oral submission made to the Panel on September 30.

As summarized in the oral submission, municipal, residential and small business grid-tie programs can significantly reduce electricity demand in British Columbia. BC Hydro is a crown corporation, the purpose of which is to serve the electrical needs of British Columbians. By simply reducing demand on the Hydro system, this program is an effective way to serve all British Columbians.

Yours truly,

Gwen Johansson, Mayor

Fast Facts



Community Solar Initiative 2017



"When completed, this will be the largest municipal solar array in BC. We are proud to be a leader in electricity self-generation, and appreciate the BC Hydro net-metering initiative that helps us achieve it. We anticipate reduction in the District electricity costs to be in the neighborhood of \$70,000 per year. Over 30 years, that amounts to savings of more than \$2 million. That's calculated using present rates and future rate increases will enhance that savings considerably."

Gwen Johansson, Mayor
District of Hudson's Hope



BACKGROUND:

2016

- The District of Hudson's Hope began implementation of a community solar initiative with the goal to offset electricity costs to the District and take a lead role in sustainable energy solutions by installing photovoltaic (PV) systems on community buildings.
- The District received \$1.35 million from the Strategic Priorities Fund / Federal Gas Tax Fund through the Union of BC Municipalities. Urban Systems (Fort St. John) was contracted to oversee the project.
- Peace Energy Renewable Energy Cooperative (Dawson Creek) was contracted to perform a "Community Scan" to determine which buildings or other locations would produce the best financial return with solar energy.

2017

- Peace Energy Co-op / Moch Electric Ltd. Joint Venture was selected through a competitive RFP process to provide structural and electrical engineering, supply, install and commission the PV arrays.
- Crews are on-site in Hudson's Hope installing the PV arrays through this summer and fall. Completion is expected at the end of 2017.

TECH SPECS:

- Roof-mounted grid-tied solar arrays will be mounted on six municipal buildings.
- One ground mounted grid-tied array will be installed at the sewage treatment lagoons.
- Total installed capacity of all the arrays combined will be approximately 500 kW.
- This will be the largest municipal solar project in British Columbia.
- "Grid-tied" means solar generated electricity is fed into the grid when it is not needed, accumulating a credit with BC Hydro. That credit will be withdrawn later when the buildings need power, such as at night or in the winter.
- These high-efficiency polycrystalline Solar panels come with a ten-year materials and workmanship warranty, and a 25-year energy production warranty.
- Solar panels are expected to run with little or no maintenance for 30 years and probably much longer.
- Solar panels turn sunlight directly into electricity. They are silent, have no moving parts and produce no pollution.



The Bullhead Mountain Curling Club building has a 72 kW solar array, which will provide 100% of its electrical needs.

- Roof-top solar arrays will be flush mounted parallel to roof surfaces to provide maximum energy at minimum cost. Flush mounting produces minimum load stress. All buildings have been assessed by a structural engineer.
- SolarEdge™ voltage optimizers and inverters will be used to ensure maximum efficiency from every panel. SolarEdge™ optimizers have a 25-year warranty, and their inverters come with an extendable 12-year warranty. SolarEdge™ technology also provides remote internet monitoring of every panel in real time and records historical output data. This allows the District to monitor how much power they are producing, how much money they are saving and whether arrays are operating correctly.
- Students from Hudson's Hope High School have been hired on the solar installation teams. Other solar education and training opportunities will be offered in Hudson's Hope during construction. District personnel will be trained to monitor, operate and maintain the solar energy systems.



The District Office has a 53 kW solar array, which will provide about 80% of its electrical needs.



The Arena has a 132 kW solar array, which will provide about 52% of its electrical needs.



The new Public Works Shop now has a 92 kW solar array, which will provide about 90% of its electrical needs.



The Visitor Information Centre has an 10.1 kW solar array which will provide about 50% of its electrical needs.



122 kW of ground mounted solar will be installed at the Sewage Treatment Lagoons.



Published on 18 September 2017 at 15:08 | Updated on September 18, 2017 at 15:08

Electricity production: Couillard sees a new era



Prime Minister Philippe Couillard said Monday morning in New York that the era of construction of large hydroelectric dams is over.
Photo Graham Hughes, Archives The Canadian Press

Richard Châteauvert

The Canadian Press
NEW YORK

Prime Minister Philippe Couillard said Monday morning in New York that the era of construction of large hydroelectric dams is over.

Participating in a panel discussion at the Climate Week NYC, he said that it is not the big dams that will take us over the next 20 to 25 years.

"What we are going to observe now, what we are beginning to observe, is a true revolution centered on decent prices at the level of the consumer, the homeowner, in interaction with the electricity network in a transactional way. Intelligent power grids, more renewable energy and more storage," he said.

At a press conference, Mr. Couillard said decentralization of electricity production to homeowners would enable them to be their own electricity generators and negotiate directly with utilities such as Hydro-Québec. This revolution,

based on smart grids, "will enable us to generate enormous energy efficiencies and also capabilities to act on other planes".

The Prime Minister indicated that this revolution, which is already well underway in Vermont, took longer to come to Quebec, "because we have rates so low that there were no real incentives for people to go in that direction. But as the cost of these energies diminishes remarkably, especially in solar energy - and you know that Hydro-Québec wants to go in the direction of solar power - I think that the great revolution to which we in Quebec are going to participate, it's that one before all. "

Mr. Couillard gave the example of a homeowner who installs a solar power source and a storage system in his home and can sell any surplus electricity to the public grid. "That's the transactional aspect I'm talking about. It's not science fiction. It already exists in Vermont. It already exists in European countries. "

The shadow of the US climate chiefs, Donald Trump, was hovering this year on Climate Week NYC. Nevertheless, round table participants with Mr. Couillard, three US state governors and a company president, were optimistic. Governor of California Jerry Brown said his state's legislature has extended its carbon market to 2030, with Quebec, supported by nine Republicans.

Mr. Couillard said that to succeed in the environment, political leaders must achieve two goals: "to remain credible and coherent and to destroy the argument that acting on the planet is bad for the economy".

Washington State Governor Jay Inslee said the fastest growing sector in the United States is clean energy. "President Trump, with all his *tweeps* , can not stop any of our states from going forward," he said.

Partager 108

Tweeter

G+

© La Presse, Itée. All rights reserved.