

Watt's Happening?

Written by Don Pettit
for Peace Energy Cooperative, Dawson Creek, BC Canada
www.peaceenergy.ca ph 250-782-3882



Peace Energy struts its stuff at Yukon Energy Conference

Yukon rocks!

Peace Energy's past president Steve Rison and myself were invited to present at the Yukon Energy Solutions (YES) conference May 27 in Whitehorse, and were happy to take full advantage of our host's fantastic hospitality!

Interested in how the coop model might work in their energy situation, they wanted to know our story: how we became western Canada's first renewable energy cooperative, how we spearheaded the development of BC's first commercial wind project, Bear Mountain Wind Park, and the how and why of our latest direction, solar power sales.

CHALLENGE: YUKON'S ISOLATED GRID

Yukon Territory is in an unusual situation: their energy grid is completely isolated from all other grids, and must service a small population of about 40,000 people spread over a vast area. Hydroelectricity provides most of their power now, but many far-flung communities are still burning expensive diesel fuel, and new mining interests are eager to power their massive operations with electricity supplied by taxpayers, doubling or tripling the present size of the Yukon grid. Where is all this new electricity going to come from?

Like most places on our planet, Yukon is rich in untapped renewables. The mountainous terrain could provide lots of wind, and the solar resource is good (roof-top solar arrays are beginning to appear) but being an isolated grid, storing that intermittent energy becomes one of their biggest challenges.

In BC, we can dump extra solar or wind energy into the vast interconnected grid that we are a part of, then



Anne Middler, energy analyst with the Yukon Conservation Society, invited past president of Peace Energy Coop Steve Rison (left) and vice-president Don Pettit to help explore, at the recent YES conference in Whitehorse, how a renewable energy cooperative might fit into the Yukon energy scene.

pull it out later when we need it, no actual physical storage needed. In Yukon, no such luck.

This can be seen as a problem or an opportunity. Many new energy storage technologies are now available, (or coming on strong) and Yukon's storage challenge may provide a model for other jurisdictions.

YES CONFERENCE

At the well-attended YES conference in Whitehorse it was clear that there was a strong, widespread interest in developing more renewables, and the distributed ownership that the cooperative model offers could be a great way to encourage and adopt more clean energy for their grid.

Steve and I were certainly impressed (read "envious") of the Yukon's grid-tie rates (what they pay for extra power from a roof-top solar array, for example): 21 cents per kilowatt hour (BC pays 10 cents) and a grant for 20 per cent of material costs to a maximum of \$5000 (BC provides no such help, other than not charging provincial sales tax on solar equipment).

Of course their higher grid-tie rates and cash grants are justifiable because their cost of making electricity there is higher than BC's, but such policies can actually make sense in any situation.

By providing a small grant for a roof-top solar

array, for instance, their grid receives significant new generating capacity for a very small investment, the owner of the system (the homeowner) paying for most of it. Their higher grid-tie rate could encourage a group of Yukon investors (the members of a new Yukon renewable energy cooperative, perhaps?) to set up a solar farm and generate clean power for the Yukon grid and a return on their investment. At 21 cents per kilowatt-hour, such ideas begin to make a lot of sense.

Building new capacity this way is far cheaper for taxpayers than building, say, another massive hydro dam or, in their case, trucking up more and more expensive and polluting fossil fuels. Just ask Germany or Ontario if generous renewable energy subsidies and grants work to create jobs and build their economies. They definitely do, and they can work in the Yukon Territory too.

Thanks again to all the wonderful people we met in Whitehorse, for their kind hospitality, and all that we learned. We came away feeling that Yukon has a remarkable opportunity to expand the cleanness and greenness of their grid with ample wind and solar resources, to create a unique grassroots ownership model for this new energy (perhaps a cooperative) and thus develop a model of sustainability that others can learn from.

Peace Energy Cooperative stands ready to help!

Quick Facts:

FOSSIL SUBSIDIES, WOW! The International Monetary Fund reports that fossil fuel subsidies cost the global economy \$5.3 trillion per year. That's more than \$10 million per minute, more than the world spends on healthcare.

SOLAR LEADS AGAIN: Over the first three months of this year, renewable sources produced 84 percent of new generating capacity in the United States. Small-scale solar added 690 megawatts, followed by wind at 647 megawatts.