Tyrel McLelland President, Taber and District Chamber Chairman, Taber Regional Joint Economic Development Committee tdcofc@telusplanet.net Brian Brewin Reeve, MD of Taber bbrewin@mdtaber.ab.ca

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August 4, 2015

RE: *Electrical costs spark action* by J.W. Schnarr, Southern Alberta Newspapers (Attached)

In the above cited article, comments were made regarding the costs of transmission.

Bob Wallace said the issue of deregulation has been the impact on local businesses due to the rising cost of **transmission fees...**Brewin added the issue isn't with the cost of power itself, but rather the **transmission costs** power companies charge to provide electricity to customers.

When a new electrical generation facility is approved by the Alberta Utilities Commission (AUC), then the Alberta Electrical System Operator (AESO) is required to provide transmission and these costs are passed on to all customers in Alberta.

Wind generation in Alberta has cost about \$5 billion, of which *about* \$2 billion (so far) have been paid for by customers for underused transmission dedicated to wind.

We refer to the *Review Of The Cost Status Of Major Transmission Projects In Alberta,* a 2014 report from the (Alberta Government) Transmission Facilities Cost Monitoring Committee. (Pages 61 and 62.) Available here:

http://www.ucahelps.alberta.ca/documents/ABE_TFCMC_Report_7_WEB_-_June_2014.pdf

This committee projects the costs for integrating wind-generated electricity (i.e. transmission) at **\$2.49 billion** (page 62), which is a considerable cost for a relatively small customer base.

From Review Of The Cost Status Of Major Transmission Projects In Alberta, page 61

SOUTHERN ALBERTA TRANSMISSION REINFORCEMENT (SATR); PROJECT 787 – To accommodate wind generation in southern Alberta.

THE PROJECT: The existing capacity of the transmission system in southern Alberta is insufficient to provide adequate system access for the interconnection of additional wind-powered generation. Additional substations and upgrades to existing facilities are required. The AESO has outlined the need for a 240 kV AC looped system with three stages of implementation.

The proliferation of unpredictable, low-output and intermittent wind turbines throughout southern Alberta is placing a financial burden on electrical users and yet wind electricity is a minor contributor of electricity. In addition, wind is intermittent and unpredictable and therefore must be backed up 100% by existing or new gas and coal electrical generation plants, thus duplicating generation capital costs. Expensive transmission lines have to be built to carry 100% output from wind; however, according to AESO, annual wind output is a mere 32% of designed capacity meaning that these transmission lines are only used at 32% of their theoretical capacity. Worded another way, the lines have to be overbuilt by 300%. All adding to the costs you referred to.

To show how unreliable wind generation is (and that it must be 100% backed up), below is the chart showing wind generation the week of July 23 to 29.



This week wind output was 25% of capacity, which is quite high, but the graph also shows how erratic wind output is. Two and three weeks before, output was a mere 13% of nameplate capacity. Wind output is at or near zero several times almost every week. Imagine attempting to run all parts of our society if we had to rely on wind. In winter, reliance on wind would be outright dangerous.

Our society simply cannot exist on a power supply that is so unreliable. Yet the province is promoting more ineffective and erratic wind power and you can expect costs to continue to rise.

It is an opportune time for municipalities and other stakeholders to approach the new provincial government and request:

a) An inquiry into the true costs of wind power including transmission

b) A moratorium on wind development until benefit, if any, can be established, and

c) That the government establish a realistic energy policy that takes into account conventional energy sources, renewable energy and nuclear energy.

Sincerely,

Duane Pendergast, Ph.D, P. Eng. Shaun Ward B.A., B.Ed Ron Renwick, B.Sc. (Eng) P.Eng. Clive Schaupmeyer, B.Sc., M.Sc. Laurence Hoye, B.Sc.(Hon),M.Sc. Klaus Jerico, DVM Cosmos Voutsinos, BASc, M.Eng. P.Eng.

Electrical costs spark action

J.W. Schnarr Southern Alberta Newspapers

The increasing costs of electricity due to deregulation has shocked many farmers, industrial and commercial enterprises, prompting the Taber Regional Joint Economic Development Committee to issue a request to local municipalities to consider taking a resolution to their respective municipal organizations.

During the regular meeting on July 14, council discussed a letter from Tyrel McLelland regarding the issue of electrical deregulation and the burden it has caused to local businesses. McLelland is the chair of the JEDC and the president of the Taber and District Chamber of Commerce.

"This affects many businesses in the area," McLelland indicated in a letter received July 8 by administration. McLelland further noted the issue was a main concern at JEDC business impact brunches held in September of last year and again in April of this year.

Division 5 Coun. Bob Wallace said the issue of deregulation has been the impact on local businesses due to the rising cost of transmission fees.

Reeve Brian Brewin said the issue was substantial for irrigation farmers as well.

"This is a huge issue (for them)," he said, and added he has heard from the Potato Growers of Alberta on the subject.

Brewin added the issue isn't with the cost of power itself, but rather the transmission costs power companies charge to provide electricity to customers.

"The electrical rate is actually fairly cheap," said Brewin.

"It's the transmission and all the other rates that go to it."