NorthernLights
Transmission

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Mr. Mark Walker
Director of Public Affairs
Northwest Power & Conservation Council
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Dear Sir:

At NorthernLights, we appreciate the work done by the Northwest Power and Conservation Council in preparing the Fifth Pacific Northwest Electric Power and Conservation Plan ("the Plan"). The Plan addresses long term energy issues pragmatically, comprehensively and well.

However, we are concerned that, while the plan correctly emphasizes conservation and cogeneration prospects, it does not adequately address transmission issues, nor does it extend its recommendations to adequately recognize the window of opportunity for cogeneration prospects associated with Alberta's oil sands developments.

To recap the situation with regards to Alberta's oil sands:

- The full cogeneration potential of the developments that are expected to be in place by 2010 is 3,500 MW in excess of local needs.

- It is likely that the full 3,500 MW will not be developed due to lack of access to electricity markets.

- The fuel for the cogeneration systems will be natural gas or synthetic gas depending on the evolution of natural gas prices. Synthetic gas is comprised primarily of hydrogen and carbon monoxide and is produced from the heavy oil with processes that are proven and commercially viable. This eliminates the potential for price volatility associated with natural gas.

Conceptual work is proceeding on these projects but, without the active engagement of agencies in the US Pacific Northwest like the Council, designs for the oil sands processes may be set without provision for the full complement of cogeneration that could benefit the whole region.

Recognizing this, the Council could help ensure that important benefits are achieved by recommending that Load Service Entities include, in their integrated resource plans, consideration of oil sands cogeneration options.

The Council's Action Plan addresses oil sands cogeneration at a high level in an informed and helpful way. *(ACTION GEN-12: Bonneville and other regional transmission providers should support efforts to refine the design and cost estimates for a transmission intertie from the oil sands region to the Northwest.)* The Council could point out that a Canada – Pacific Northwest – California study is currently underway with results expected by June 2005 and recommend that Load Serving Entities and Transmission Companies keep up to date on the findings.

It appears to us that the levelized costs of generation set out in Table 5-1 do not recognize the accelerated depreciation (30% per year, declining balance) provided to efficient generation systems in Canada. This is a key factor in the financial viability of Canadian cogeneration systems. If the NWPCC's analytical framework does not provide for this feature, it would be helpful to have a note to the table saying that it has been excluded. (Our calculations show energy from NorthernLights as the lowest cost fossil fuelled source in the US Pacific Northwest.)

Our calculations show a bigger differential between the busbar costs of Alberta cogeneration systems and combined cycle units located in the US Pacific Northwest than appears in Figure 7-15 of the draft. Might the "Gas GT Cogen" and the "Gas CC" values be transposed in Figure 7-15?

Since Ft McMurray cogen is a real, proven and economic development option for the US Pacific Northwest, should it not appear in the "Resource Supply Forecast" set out in Table ES-2?

In our view, the draft deals comprehensively with conservation, fuel supply and generating plant issues. Some key transmission facility and administrative issues are not addressed at this time. Stakeholders in the US Pacific Northwest and the Council will have to address these before the next development plan. NorthernLights brings the prospect of increasing the capacity of transmission paths that are constrained currently and this should be recognized. In any event, generating plant costs that appear in the Council's tables must include the costs of expanding the transmission grid to deliver the output to load centers.

We have read the appropriate sections of the Council's draft with intense interest. In energy terms, oil and natural gas exports from western Canada to the United States amount to double the electricity consumption in the Western Electricity Coordinating Council. Electricity from Ft McMurray, co-produced with oil for US needs, would strengthen and diversify the region's energy supply portfolio.

I look forward to discussions with you in future on this and other matters.

Very best regards,

Brad Thomson
President
NorthernLights Transmission
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