**TESTIMONY OF JOHAN VAN'T HOF BEFORE THE UNITED STATES SENATE COMMITTEE ON FINANCE**
**THURSDAY MARCH 29, 2007**

**"Tax Policy Can Help Build Green Highways"**

Chairman Baucus and Members of the Committee,

I am Johan van't Hof, CEO of Tonbridge Power Inc., a publicly traded transmission development company that intends within the next several months to begin construction on a 210-mile 240 kV merchant power line between Lethbridge Alberta and Great Falls Montana.

Senator Baucus, I am especially pleased to be testifying before you because of your well-deserved reputation in Montana, in Canada, and internationally for promoting innovative and actionable solutions to tough problems. That is as good a description of the Montana Alberta Transmission Link - "MATL" - as I can imagine.

I also commend the State of Montana and Governor Schweitzer for a can-do approach to supporting good projects. I am pleased to report that, if you have a solid idea and the ability to execute, Montana is "open for business" and is a great partner to the private sector. After having developed energy infrastructure projects around the globe it is a pleasure to work in under the Big Sky.

MATL is unique:

- It is an international transmission line connecting a state and province that are otherwise unconnected.
- It is a merchant line that will provide a valuable complement to traditional utility lines.

- It is the enabling infrastructure that will allow renewable and increasingly essential energy to flow from Montana where it is generated to serve native Montana load, and meet demand in other areas.

The Senate Finance Committee is uniquely positioned to identify and adopt policies that make clean and renewable energy supplies feasible, as well as the policies that allow construction of the "transmission highway" on which "green energy" (and all other supply-side resources) depends. I note that as we speak the Governor Schweitzer and the Montana Legislature are considering highly complementary state policies.

**GREEN HIGHWAYS**

Our goal is to take MATL from initiation to completion in two years. This is nearly unprecedented for a transmission project, but is absolutely critical given North America's projected need for supply and transmission infrastructure. After its 2008 in-service date the MATL line will be able to transmit 300 MW either into or out of Montana. It will thus make a solid contribution to enhancing cross-border trade in energy and to providing additional sources of stability to our respective grids. Importantly, it also serves as a critical collection system for 600 MW in new wind farm projects in Montana. In fact *all of the generators which currently have capacity contracts with MATL are new wind projects*. It is not an overstatement to say that MATL is a "Green Highway."

As we have tackled the numerous issues associated with this project we have learned some lessons that are extremely germane to the issue facing us today: *How can transmission be developed optimally and congruently with the timelines for generation development, so that essential and environmentally friendly supply can be developed and reach customers?*

Almost every observer of the power sector today would concur that new transmission development has badly lagged the growth in generation, the growth in load and the need for transfers of energy between regional markets. We are like a continent of 2-lane roads with too few interstate highways. Many of the highways we do have fail to connect with one another. The lack of adequate investment in transmission has led to inefficient generation

investment decisions, regional power prices that are often too high, and reduced reliability – particularly at times of peak demand.

The United States Department of Energy has been sufficiently worried that it authorized a study of transmission congestion, which identified areas where wind generation would require new transmission investment.[1] Montana and the Northwest are one of five areas of critical congestion. North American Electric Reliability Council (NAERC) recently released an important study of the reliability of North America's power systems. Capacity margins are forecast to decline, while the need for new transmission will grow, including the need for transmission to support diverse supply sources.[2] In sum, congestion will only get worse and action is required to support investment in new transmission.

Transmission investment has lagged in part because linear projects are harder to permit and build than single-site facilities. (Here again, we have been very pleased by the approach taken by the Montana Department of Environmental Quality.) In addition, there are important challenges with factoring in positive externalities of transmission investment and coordinating transmission planning and investment among numerous parties. An important contributing factor has been the lack of commercial incentives in the sector. This is potentially true, although in somewhat different ways, both for utility-sponsored transmission and for merchant projects such as MATL. Few competitive generators today contemplate an investment that requires a decade to develop, yet timelines like that are now considered standard when it comes to developing the transmission projects which enable new generators. Were MATL on a ten year plan, my investors would wish me well and take their capital somewhere other a transmission project on the High Plains of North America. Their expectation is two years.

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[1] National Electric Transmission Study (August 8, 2006). The report identifies "Critical Congestion Areas" of most concern, "Congestion Areas of Concern," and "Conditional Congestion Areas." Conditional Congestion Areas include those where congestion could become acute if large amounts of new generation are built without associated transmission capacity, specifically including wind in Montana and other northern states.

[2] 2006 Long-Term Reliability Assessment: The Reliability of the Bulk Power System in North America (October 2006). The study concludes that the system "requires additional investment to address reliability issues and economic impacts" (p. 7); that "(w)ithout expanded transmission system investment, grid congestion will increase, making it more difficult for available supply to meet demands and to allow full utilization of capacity/demand diversity" (pp. 7-8); and that the "adequacy of electric supplies depends, in part, on the adequacy of fuel supply and delivery systems, not just the installed capacity of generators" (p.9).

I note that the need for investment is so great that there is plenty of room for both utility and merchant projects. It's not either/or, it's both/and. For example, we have a very positive relationship with NorthWestern Energy in Montana. We need to interconnect with them. In turn, we believe we will help NorthWestern solve problems with the generation and load on its system. The efforts are highly complementary.

## LESSONS LEARNED AND POSSIBLE ACTIONS

Our views, and they continue to evolve as we learn more, are that this Committee might usefully consider acting to address three issues:

1. *The value of stimulating all kinds of transmission investments, particularly for renewable electricity projects;*

2. *Incentives for landowners to enhance the value of making rights-of-way available; and*

3. *The need for commercial solutions to the problems associated with integrating renewable generation into utility operating areas.*

Please allow me to speak to these three issues in order:

### Stimulating Transmission Investment

***The Problem:***

As the demand for renewable energy, most notably wind and small run-of-river hydro grows, it becomes increasingly evident that the existing transmission grid was never built to connect wind and watersheds with markets. To effect the 'greening' of power will require not only many new environmentally-appropriate generation projects but also a significant new wave of transmission development. In addition, an alternative to building some of the generation that will otherwise be required is to interconnect more in order to share back-up capacity between systems.

***Necessary Action:***

I believe that the tax incentives granted to renewable energy projects should be extended also, on a *pro-rata* basis, to the investment in the transmission systems the renewable energy projects require.

**Providing "Win-Win" Right-of-Way Incentives to Landowners**

***The Problem:***

Transmission developments are often blocked or delayed by opposition to new rights-of-way. Unless right-of-way can be assured, transmission lines simply won't be built. Relying on condemnation, while effective, ultimately pits landowners against project developers. We believe it is important to seek ways for land owners to share in the benefits of transmission rather than perceive themselves as the victim. This can only happen if we develop concrete ways of sharing the value of these lines.

***Necessary Action:***

MATL works hard to address the concerns of as many landowners as possible. We pay landowners for the right-of-way on a per-pole basis. Thus, we have pledged to make annual pole rental payments that reflect the impact on land values and agricultural practices. We suggest that these payments should be made tax free to landowners and that their property taxes should be reduced to partially compensate them for the hindrances a line imposes. The new property taxes that new transmission lines will pay will more than make up the difference.

**Integrating Renewable Generation on a Commercial Basis**

***The Problem:***

Renewable energy generation and wind energy in particular suffers from uncontrollable variability. The wind doesn't always blow when demand rises and this causes considerable difficulty for those responsible for matching load and generation. There are several possible solutions.

In many jurisdictions the system operator buys ancillary services or additional generation to fill the gaps and smoothes the cost of that purchase over all users of the grid. I'll call this the "socialized solution." This may become more problematic as wind becomes a greater proportion of the supply on a system.

In Montana the system operator is asking new wind generators to firm their own wind generation profile, either by providing their own 'firming' capacity or by contracting for it. I'll call this the "privatized solution"

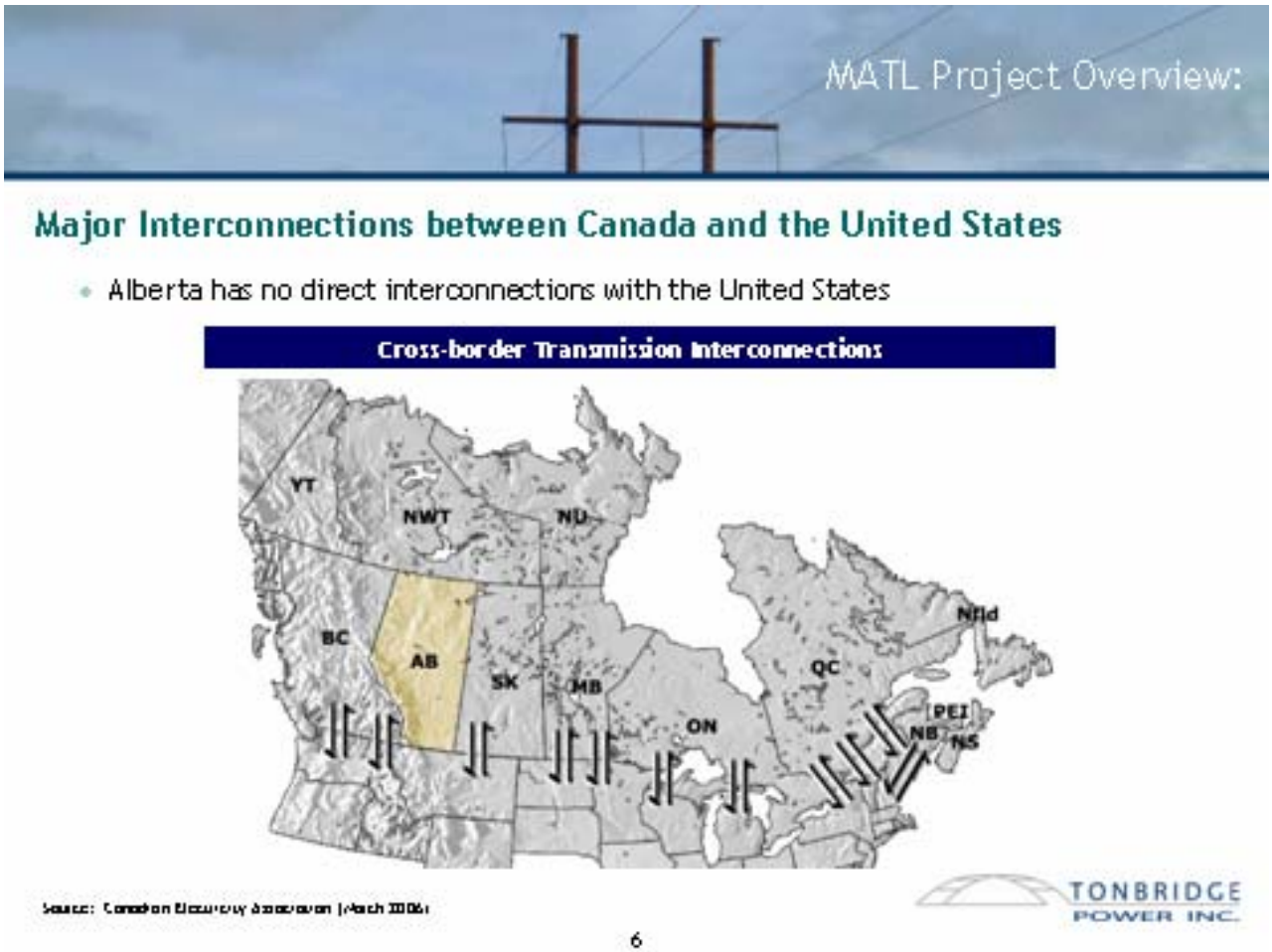
***Necessary Action:***

Neither the socialized nor the privatized solution is optimal in our view. It would be greatly preferable if all electricity generators and loads shared in the responsibility for matching their planned use of the grid with their real-time use. When imbalances or electric volatility occurs – as they inevitably will – both generators and loads should be encouraged to adjust their use of the grid through the development of spot markets for imbalances and ancillary services.

Only thus will the most efficient use of energy arise. Efficiency lies behind our need for renewables. We should not lose sight of that on the way to building a more renewable-based electricity sector.

Mr. Chairman, I hope that MATL will be a contributor to Montana's "Big Sky Country" for years to come. I thank you for your leadership, and look forward to the Committee's questions.

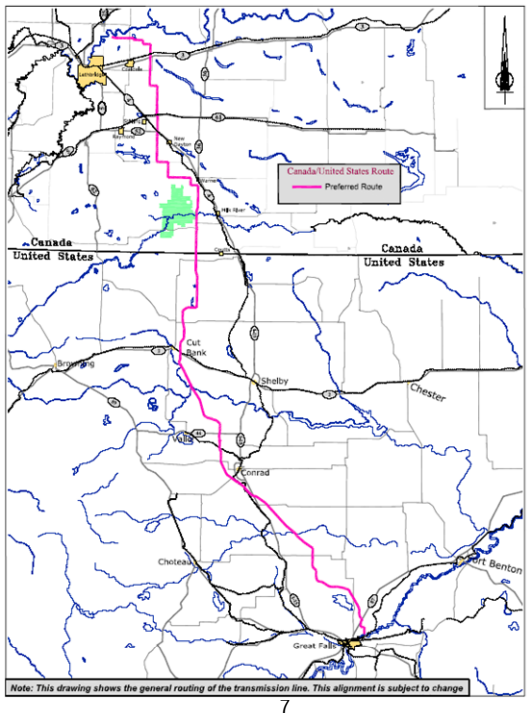
**No Connections Between Alberta and Montana**



## Proposed MATL Route


### Proposed Route

**Distance: 337 Kilometers**

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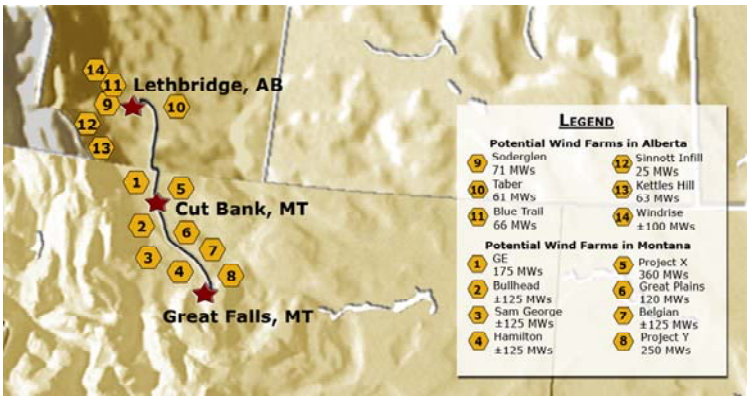
## Proposed Wind Farms near MATL Line


### New generators: Potential Wind Farms Near the Line




**3,000 MWs of new wind generation stranded with no transmission**

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