

Presentation to the Clean Environment Commission
Public Hearings On Bipole III Transmission Line Project

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Good evening panel members, ladies and gentlemen.

My name is Albert Myska and I live in Winnipeg. I am a member of the Association of Professional Engineers and Geologists of Manitoba and a graduate from the University of Manitoba in civil engineering. With I. D. Engineering and Teshmont Consultants I worked on the design of civil engineering aspects of the Bipoles I and II transmission lines and converter stations. I was Resident Engineer for Phase 2 of the Radisson Converter Station at Gillam in 1972-73. In 1974-75 I worked on the preliminary design and cost estimates of the Gull Island to St. Johns transmission line in Newfoundland and Labrador, a line that is still being studied. Through to 1990 I worked periodically on various HVDC transmission line and converter studies. Also, I want to note my more than 30 years on the design and project management of projects on First Nations Reserves in northern Manitoba. My work has been all over northern and rural Manitoba. This is my personal presentation.

There have been concerns expressed on the narrow mandate of these hearings and I add my voice to the concerns. It is useless to detail impacts of one stipulated concept and route and exclude demonstrably better routes and alternatives. What matter is it if there are 400 bird species along the west side route when the important flyways could be avoided if the optimum east side route were selected. Or when there is the alternative of locating the southern converter station west of Winnipeg for enormous social, environmental, reliability, and economic benefit. Or when natural gas fed steam generation could provide the needed reliability and eliminate building Bipole III altogether. I will elaborate on these points.

With regard to the mandate, the Terms of Reference state, under 'Mandate of the Hearings'. The Commission shall....provide a report recommending:

- Whether an Environmental Act licence should be issued to Manitoba Hydro for the Bipole III Project.

I submit that the Commission should recommend that an Environment Act licence should not be issued to Manitoba Hydro for Bipole III as applied for. Alternatives to provide improvements in reliability and future capacity for transmitting power from northern Manitoba should be scrutinized and the best alternative should be selected before recommending a licence.

On November 1, 2012 Mr. Will Tishinski outlined the history of the Bipole III planning and the unsound reasons given by the Manitoba Government for ordering Manitoba Hydro to avoid the route on the east side of the province. I want to add the First Nation aspect. Prior to 2004 Manitoba Hydro conducted initial information meetings with First Nations along Manitoba Hydro's selected east side route but

refused to discuss First Nation participation or compensation. Simultaneously, the East Side Planning Initiative was underway and undertook to speak for the First Nations. The First Nations never ever said they were opposed to or would not accept the east side route, but instead stated that they should participate and benefit, even acquire ownership as has been done for the Wuskwatim Generating Station and negotiated for the Keeyask Generating Station. The Manitoba Government mistakenly or intentionally took this to be opposition and said the First Nations would be too hard to deal with. This was the fallacious initial reason the Government ordered Manitoba Hydro to avoid the east side route, even against Manitoba Hydro's better judgement. Even today the majority of the east side First Nations want to negotiate the east side route because of the potential benefits. A survey I made last year indicated that of the 16 First Nations on the east side, 11 want the east side route. Only four, those participating in the application for World Heritage Site designation have swung to the World Heritage application and they are divided internally. An official of one First Nation said they do not see any benefits accruing from the potential flyovers or the canoeists that already visit the boreal forest area.

On the other hand, you have seen that there is resistance from west side First Nations such as Pine Creek and others. Cross Lake has not yet signed the more than 30 year old Northern Flood Agreement negotiated after Bipoles I and II. There are others like Nisichawayasihk Cree Nation at Nelson House and Tataskweyak Cree Nation on Split Lake who have negotiated equity ownership in the generating stations Manitoba Hydro must deal with. I do not purport to speak for the First Nations but it is obvious the Government was misguided when they ordered Manitoba Hydro to avoid the east side route because of First Nation issues.

There is no rational basis or explanation for the Government order to avoid the east side route. It is wrong by any standard - environmental, economic, technical, or social.

Manitoba Hydro was not permitted to or chose not to provide east side route data in their EIS, an unacceptable deficiency. They had spent many years studying the east side route and no doubt they have the data.

The following significant comparisons between the west and east side routes can be made.

	West Side Route	East Side Route
Total Length	1364 km	980 km
Reliability	Less reliable due to extra length, southern half in most tornado and ice storm prone area in Manitoba	
Additional power loss	40 MW. More power than is produced by one of Manitoba Hydro's Wind Farms	
Technical	Incompatible with Bipoles I and II	Length and line losses similar to Bipoles I and II so converters are interchangeable, gives options and reliability
Length in Boreal Forest	884 km (North end to vicinity of Winnipegosis)	900 (North End to vicinity of Lac du Bonnet)

Length in Mixed Forest/Lesser Ag. Land	200 km (Winnipegosis to vicinity of Gladstone)	30 km (Lac du Bonnet to Beausejour)
Length in Prime Agricultural Land	280 km (Gladstone to Riel)	50 km (Beausejour to Riel)
First Nation Traditional Lands	15	16
Birds	Traverses important flyways	East of main migration routes
Caribou	Several herds	Several herds
Cost	Additional \$1,000,000,000 in construction cost, line losses, and reduced reliability costs	

It can be seen the environmental impacts in the boreal forest are about equal or higher for the west side route.

The west side route provides less reliability and higher line losses of clean power, a very serious environmental loss.

The west side route has a severe negative immitigable impact on Manitoba's prime agricultural land.

The west side route is enormously more costly.

It is apparent the west side route is wrong and Manitoba consumers will pay dearly in their monthly power bills, in negative environmental impact, and in power outages due to the lesser reliability.

With regard to the west side route I want to elaborate on a significant design improvement introduced by Mr. Will Tishinski in his presentation November 1, 2012 - the southern terminus and converter station should be located west of Winnipeg, near Oak Bluff. Attached is a copy of the south end of Manitoba Hydro's Preliminary Preferred Route map. An alternate location for the southern terminus is in the vicinity of McGregor or north of Portage la Prairie. This location has significant advantages:

1. It shortens Bipole III by about 250 kilometres with commensurate decrease in cost of at least \$250,000,000 at average line costs.
2. It provides the desirable separation from Bipoles I and II particularly with regard to Dorsey.
3. Technically, it may restore compatibility with Bipoles I and II, thereby increasing reliability and decreasing costs.
4. The portion of the route through prime agricultural land is eliminated, with enormous environmental, social and economic benefit. This section of Bipole III has the most serious negative impacts and the unacceptable impacts cannot be mitigated.

5. It eliminates the portion of the line that is affected by the most frequent and serious tornadoes and ice storms in the province. Examples are the tornado near Elie two years ago which had the highest winds of any tornado in Canada, and the serious ice storm that brought down power lines south west of Winnipeg more than a dozen years ago for up to a week.

6. It could be connected to existing high voltage lines and substations which feed power west from Dorsey. These existing lines could be reversed to send power towards Winnipeg and the transmission lines to the USA.

Should the Commission recommend the issuance of a licence for the west side Bipole III, as provided in their mandate, the Commission should propose the south terminus of the line and converter station be located west of Winnipeg to mitigate serious potential environmental and socio-economic effects, increase reliability, and reduce costs.

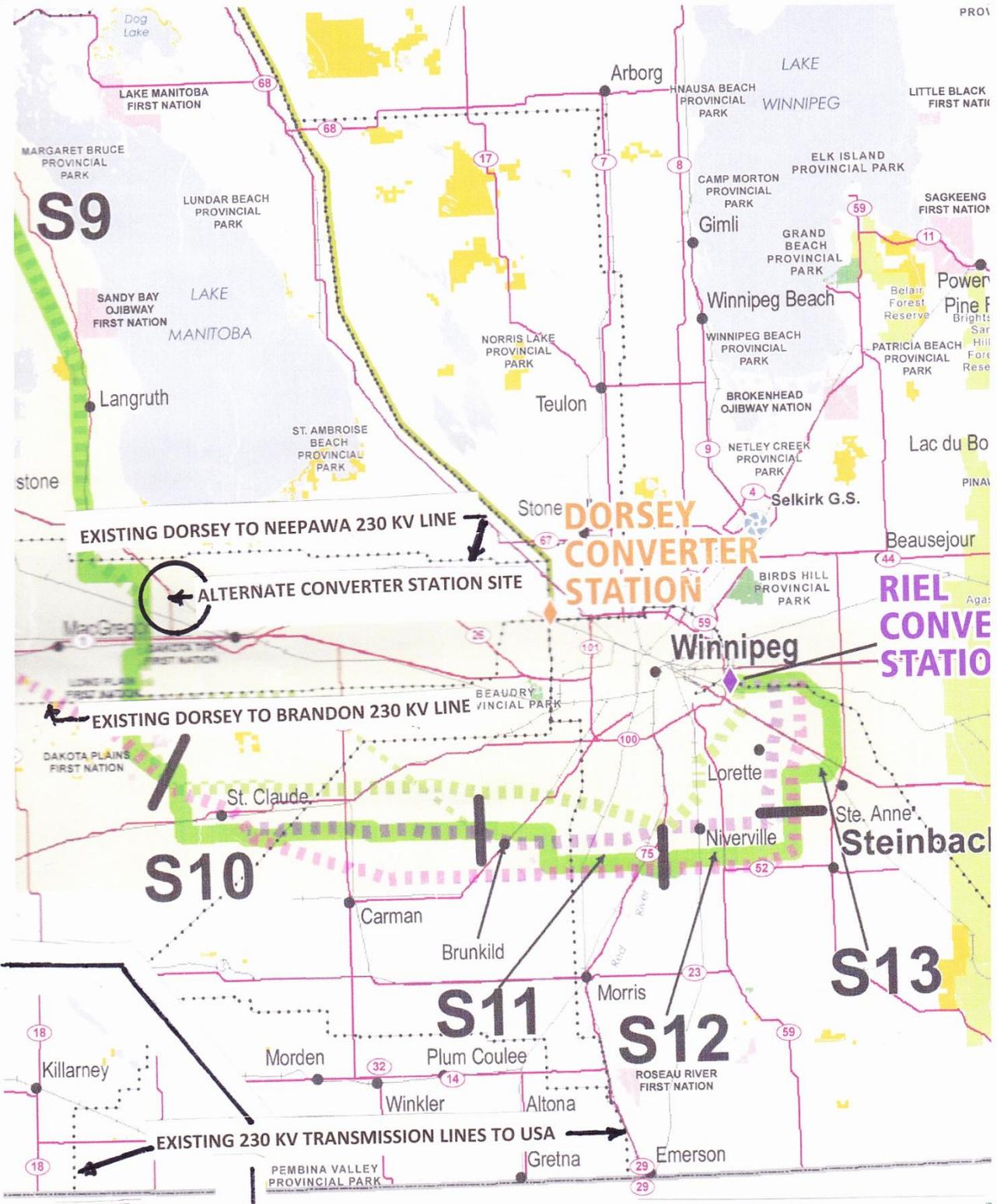
The recent Public Utility Board Hearings heard evidence on an alternative to the construction of Bipole III – gas fired generation similar to Manitoba Hydro’s Selkirk Generating Station to provide power during outages of Bipoles I and II. This alternative provides the needed reliability at a much lower cost and with less negative environmental impact.

Natural gas has become abundant in the USA. Low price gas is providing competition to imported electrical power to the extent that Manitoba Hydro export revenue has declined and Manitoba Hydro has been unable to make significant new power sales to the US presently or in the foreseeable future. There is no need for additional capacity such as would be provided by Bipole III.

Natural gas generation can be built at a fraction of the cost of Bipole III. The plant would only operate during emergencies and to keep it in standby condition. Consumption and carbon emissions from this clean burning fuel would be minimal. The environmental impact of the plant is miniscule compared to Bipole III.

In closing, I urge the Commission recommend that an Environment Act licence not be issued to Manitoba Hydro for Bipole III as applied for.

I could elaborate on any of the above in writing.



INSERT

ALTERNATIVE SOUTHERN TERMINUS
AND CONVERTER STATION SITE
A. MYSKA Nov. 8, 2012