



The Hydro Bipole 3 Options

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Disclaimers

- Information presented is personal opinion based on publicly available information. Does not necessarily reflect the views of my employer or any boards I serve on.
- The responsibility for the decision taken is political (through the Manitoba Hydro board).

Primary Concerns

- 1. Significant Additional Capital.**
- 2. Wasted Power / Line Losses.**
- 3. Reliability and Security.**
- 4. Environmental Concerns.**
- 5. Affected Communities.**

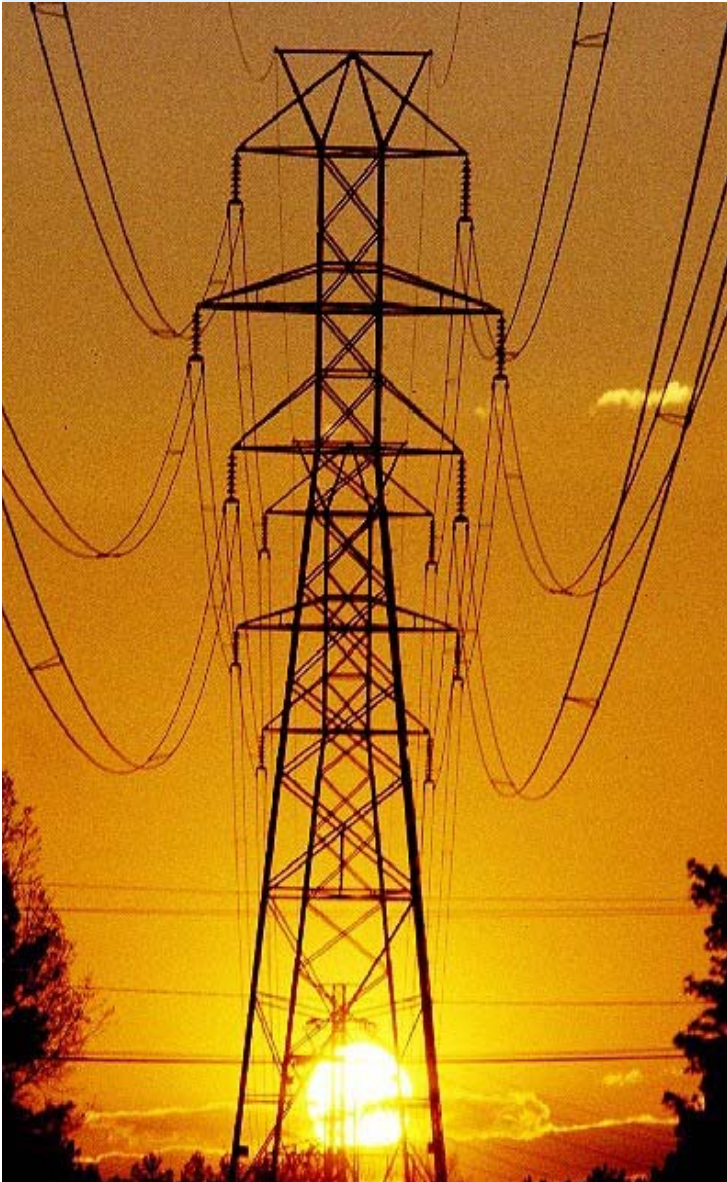
1. Significant Additional Capital

- **Estimated \$410¹ million more for additional:**

- **Line construction**
- **No conversion cost**
- **Added carbon footprint**

¹Bob Brennan, MB Hydro CEO, April 18, Brandon Sun

2. Wasted Power / Line Losses



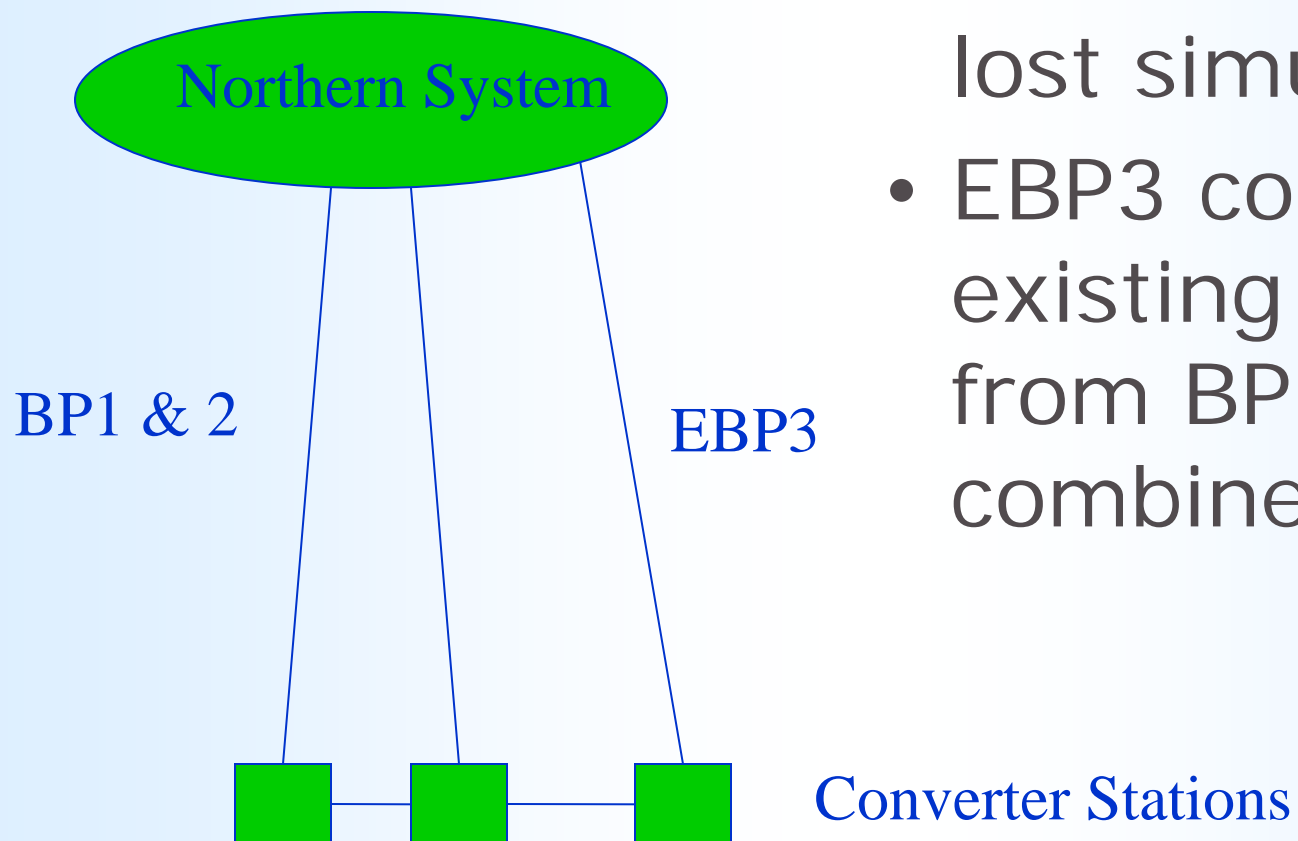
- 455 km longer line
- Creates extra line loss
- 40 megawatts lost¹
- Est. \$200 million¹
- Significant costs

¹ Minister Greg Selinger, Minister of Finance

3. Reliability and Security



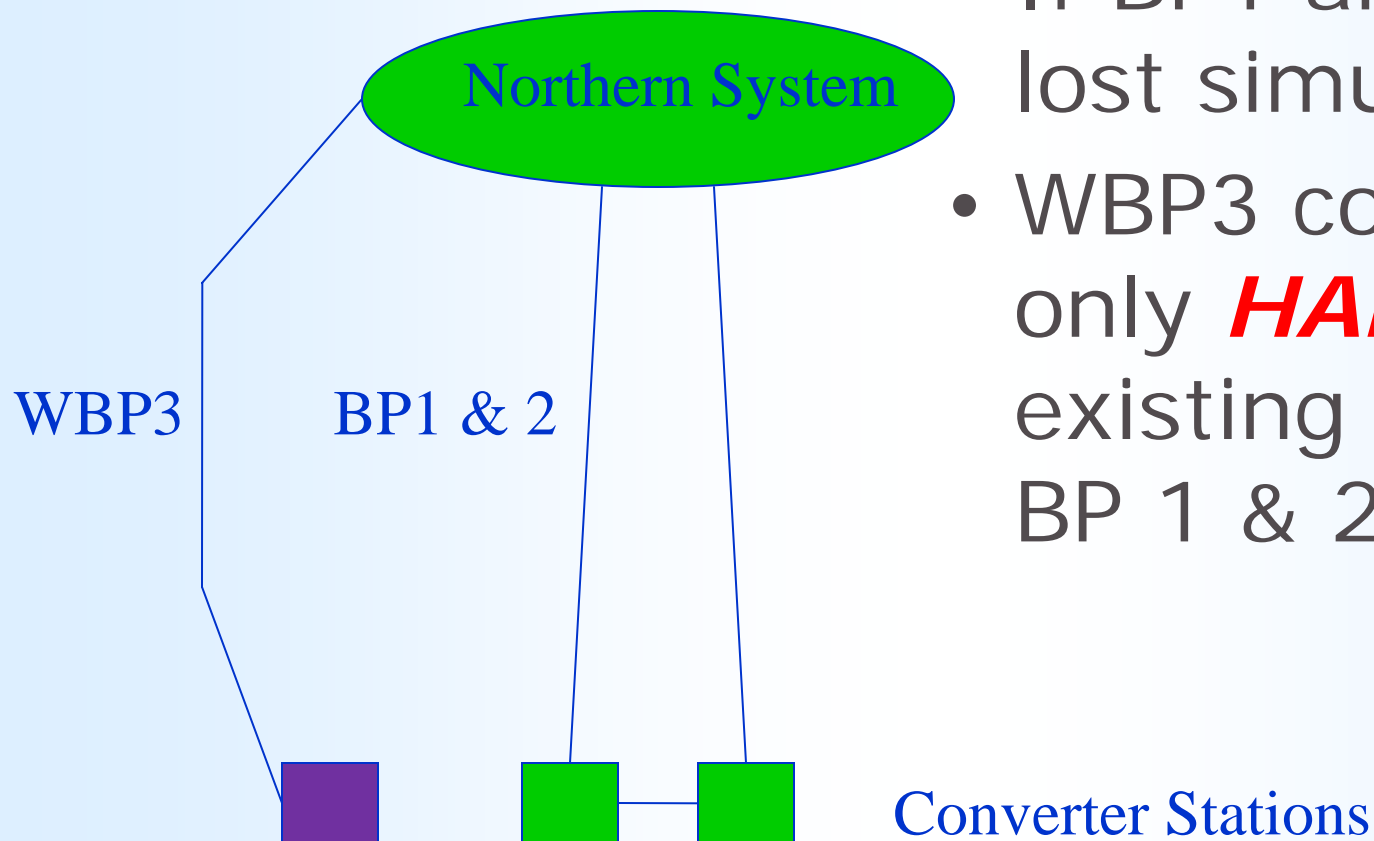
Reliability and Security



- If BP1 and 2 were lost simultaneously.
- EBP3 could carry existing total load from BP 1 & 2 combined¹.

¹CMC Consultants report to Hydro

Reliability and Security



- If BP1 and 2 were lost simultaneously.
- WBP3 could carry only **HALF** the existing load from BP 1 & 2 combined¹.

¹CMC Consultants report to Hydro

4. Environmental Concerns

- West side line traverses as much or more boreal designated regions.
- Requires more materials (e.g. steel) for additional line and towers.
- Lost opportunity to displace:
 - 350,000 tonnes of GHG emissions
 - 40 megawatts of non-renewable energy

UNESCO Facts

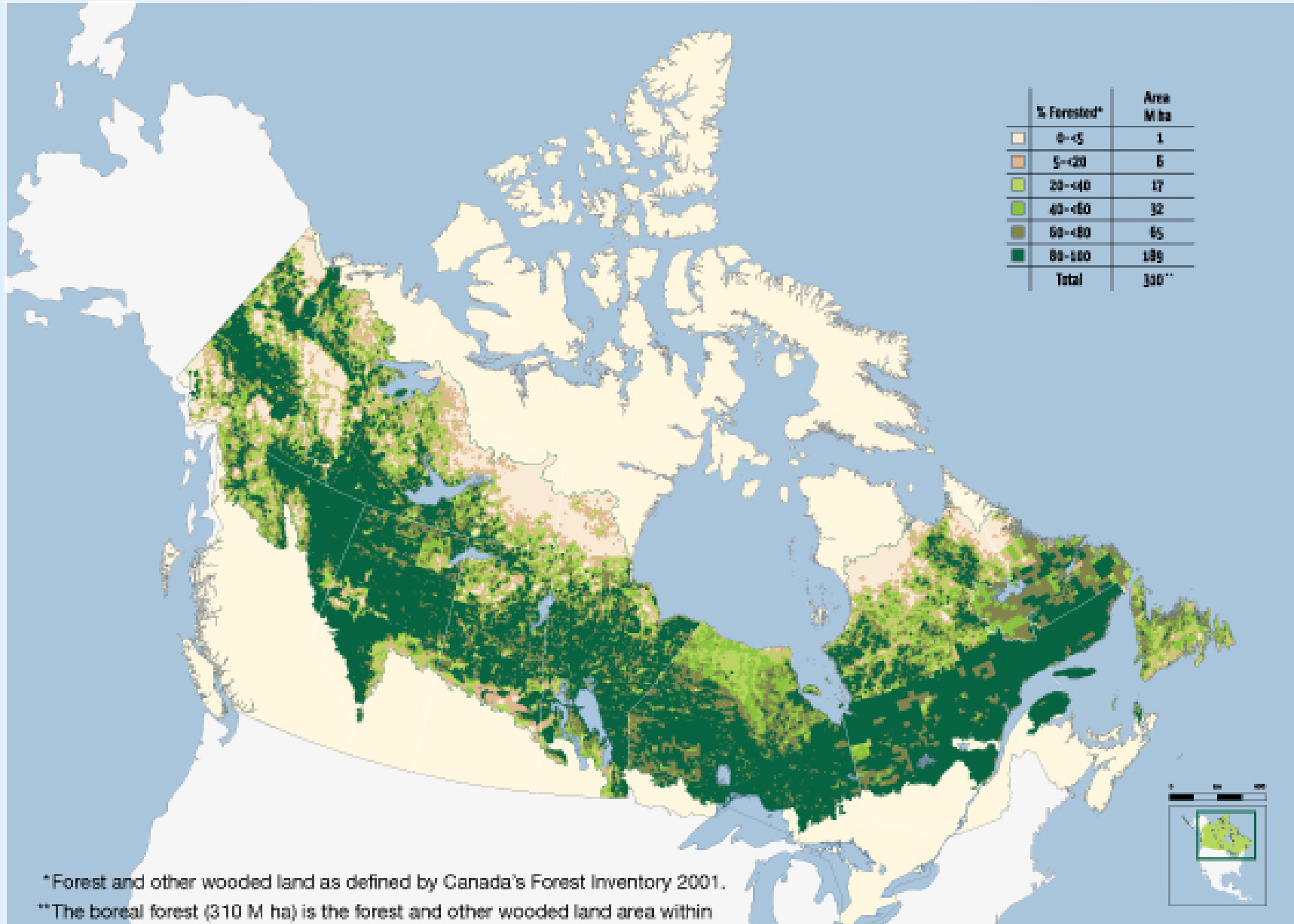
- “A hydro line will not preclude a UNESCO designation”.¹
- Province has already committed to an east side all weather road.
- Other UNESCO sites have limited human development

¹Jim Collinson, Former UNSECO World Committee Chair

Impact to East Side Boreal



Boreal Region in Canada

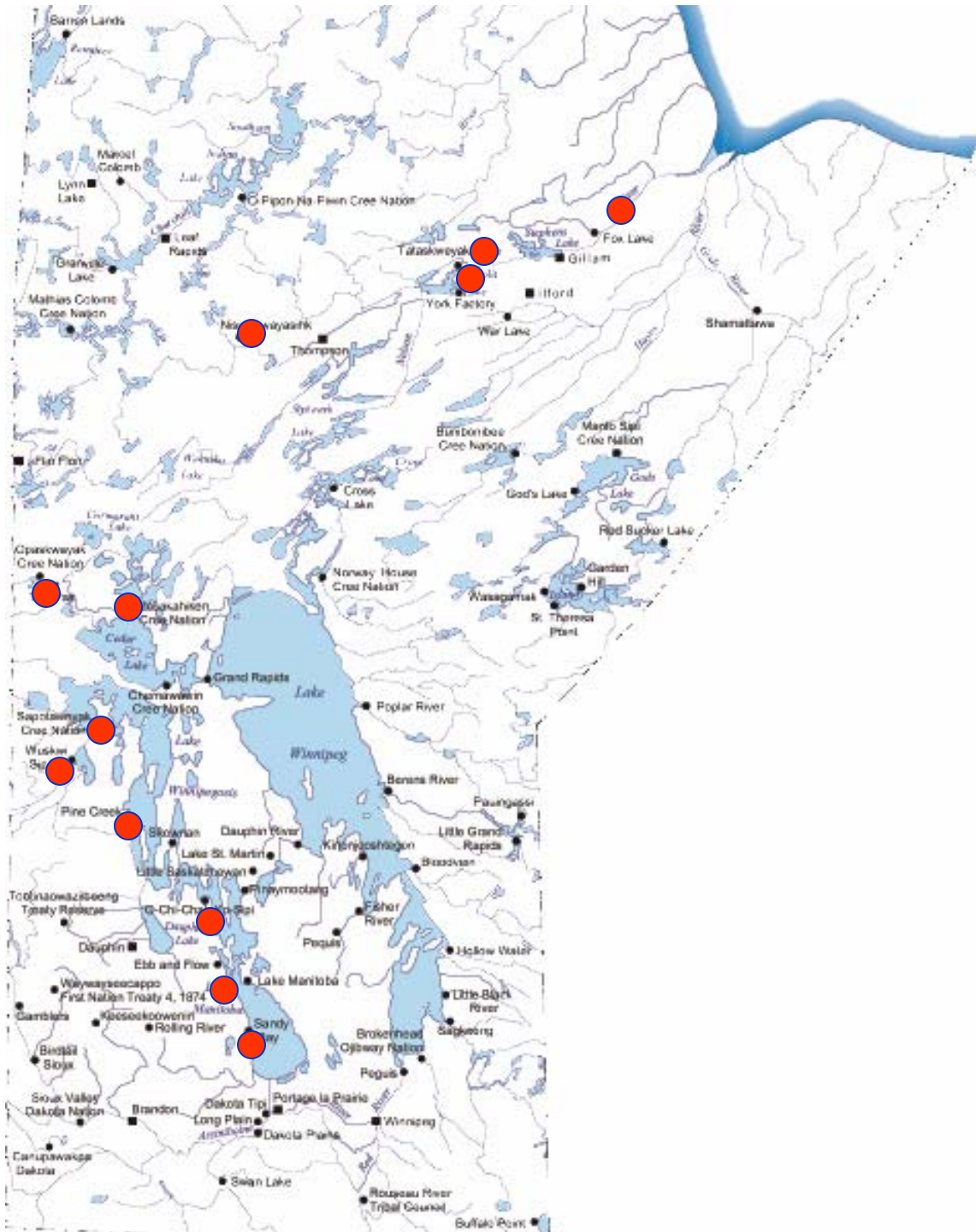


View From the Road



5. Affected Communities

- First nation communities on both routes that would likely be impacted.
- Far more private land owners on West route for negotiations.
- Considerable unknown on the West side since little is know about route.
- Negotiation costs are difficult to estimate but could certainly be comparable on both sides.



What About West Side

- There has been no discussion with west side communities
- West route in vicinity of at least 12 First Nations communities

Final Analysis

Features	East Side Line	Underwater Line	West Side Line
1a. Capital Cost	Green	??? (Purple)	Red
2. Line Losses	Green	Green	Red
3. Reliability	Green	Green	Red
4a. Environment	Red	Green	Red
4b. East Side Boreal	Red	Green	Green
5. Community Impact	Red	Green	Red

Compatible with Existing Policy?

Issue	Impact (ha)	Cost / Budget	Cost / Hectare
Forest Fires	166,050	-	-
Infestations	174,480	-	-
Total	340,530	\$25,000,000	\$73
Wind Storm 2007	25,000	-	-
Bipole 3	5,800	\$410,000,000	\$70,700

Not consistent with existing policy. 1000 times more expensive and far less efficient for protecting East Side boreal region.

Government Decision Matrix

- **Minister Selinger stated three risks to manage:**
 - **Reliability (East Side)**
 - **Reputation (West Side)**
 - **Environment (West Side)**

Stated at APEGM Lunch Presentation Friday May 9th, 2008

Concluding Comments

- The added expense of the line and reduced reliability is a risk all Manitobans are exposed to.
- Is the protection of the specific region worth the cost? Not according to current policy.
- Government is ignoring the communities on the East side and is risking 100's of millions of Taxpayers money.

www.bipole3.ca To Date Over 1000 Manitobans Agree!

The image shows two side-by-side screenshots of the website www.bipole3.ca/petition as viewed in Internet Explorer. The browser's address bar shows the URL and the user is logged in as 'techsmith cantasia'. The website header reads 'MANITOBA HYDRO BIPOLE 3 PETITION' with 'ADMIN | HOME' links. Below the header is a banner image of a power line tower. The main content area is titled 'Online Petition' and is addressed 'TO THE GOVERNMENT OF MANITOBA:'. It states: 'These are the reasons for this petition:' followed by a list of four points:

1. Manitoba Hydro has been forced by the Provincial government to construct a third high voltage transmission line ("BiPole III") down the west side of Lake Winnipegosis instead of the east side of Lake Winnipeg, as recommended by Manitoba Hydro.
2. The west side route is more than 400 kilometres longer than the eastern route recommended by Manitoba Hydro experts.
3. The line losses created by the west route will result in a lost opportunity to displace dirty coal-generated electricity, which will create added and unnecessary greenhouse gas emissions.
4. The former chair of the UNESCO World Heritage Committee has stated that an East Side BiPole and a UNESCO World Heritage Site can coexist.

Navigation and links are provided in a sidebar:

- NAVIGATION: Home, Background Information, Daily Blog, Online Petition
- LINKS
- MEDIA CLIPS: CTV News Report on Bipole 3 Hearings, CTV News Report on Bipole 3 Hearings II, Global News Coverage - November 30, 2008
- OTHER VIDEO CLIPS: Question Period Discussion Regarding UNESCO Designation, The Route Not Taken (Hugh McFadyen) Public Presentation
- WEBSITE LINKS: Critics Raise Eyebrows at Extra Cost of Western Manitoba Route, Manitoba Hydro

The Windows taskbar at the bottom shows the Start button, several open applications including 'Manitoba Hydro Bipol...', 'Rotary Bipole Presentati...', and 'premierresponse.pdf - A...', and system tray icons for Internet, volume, and network.