



Common Voice Northwest

Energy Task Force

Presentation to

TBDML



Energy Task Force

- **Today's presentation**
 - Quick Update on N.W.O. Issues
 - Long Term Energy Plan
 - North of Dryden Plan
 - Thunder Bay Generation Station
 - Thunder Bay District Projects
 - East-West Tie Line
 - Little JackFish
 - Pic Mobert
 - North of Dryden Plan

Long Term Energy Plan

- Province launched another draft Long Term Energy Plan
- Energy Task Force responded
- Copy on NOMA Web Site



North of Dryden Plan

- Released mid-August
- Improved service to Ear Falls, Red Lake, Pickle Lake and remote communities
- Connection to Ring of Fire
- Ignores role of Thunder Bay Generating Station



North of Dryden Plan

- Explores new generation in Red Lake to Pickle Lake area
- Plan commenced in 2010
- Fails to acknowledge calls for improved service since 1994 and promises by Energy Minister Smitherman 5 years ago



North of Dryden Plan

- **ETF response this week**
- **Sent to**
 - Minister of Energy
 - CEO of OPA
 - Area MPPs
 - NOMA Members
 - NOACC



North of Dryden Plan

- Minister Chiarelli raised the importance of the ETF's response to the North of Dryden plan and tied it to the future of the Thunder Bay Generating Station
- Announced that he was meeting soon with the Energy Task Force




North of Dryden Plan

- Hints out of Queens Park suggest good news
- Waiting for a meeting
- Minister Gravelle setting up



Thunder Bay Generation Station and the Future of the Northwest

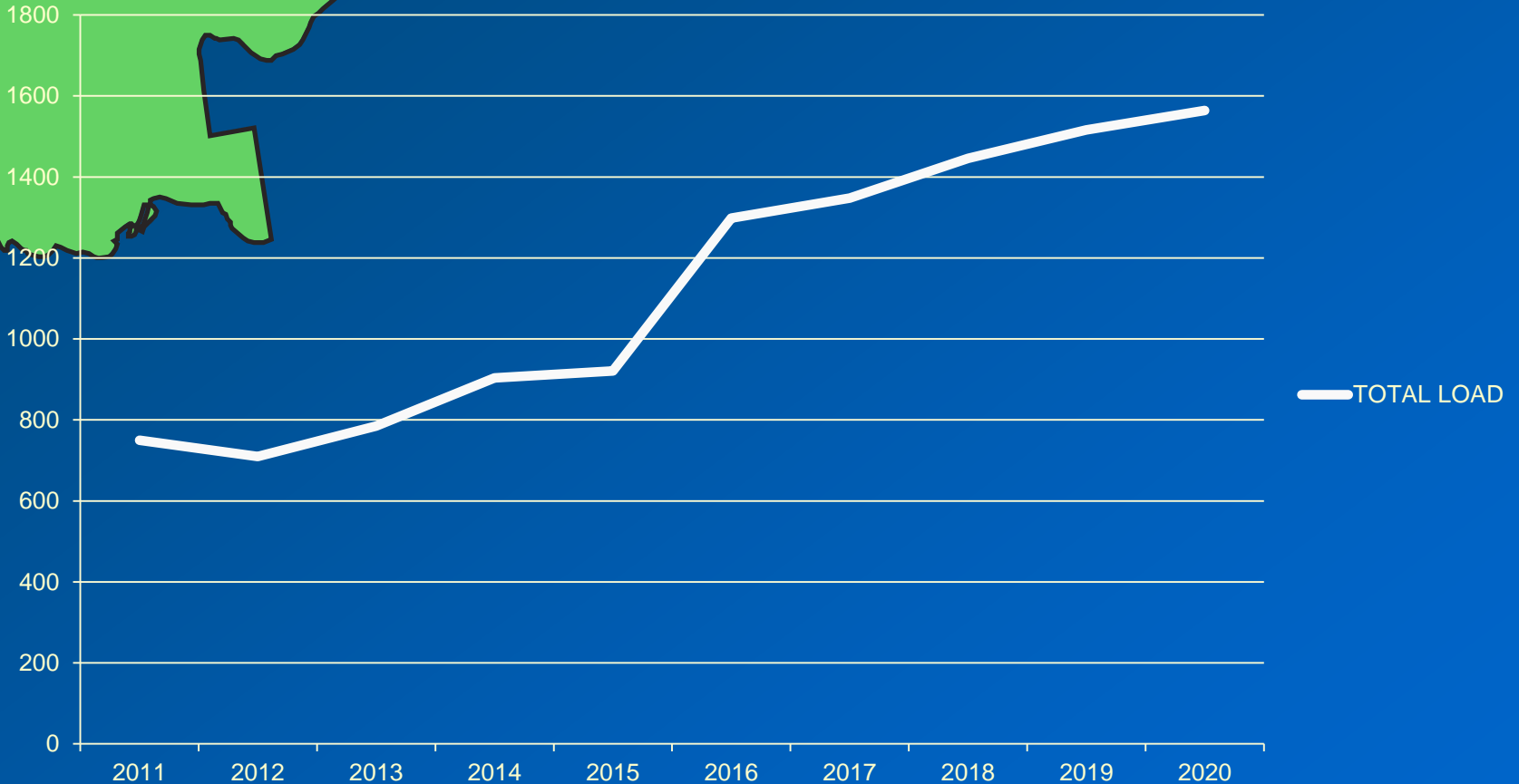
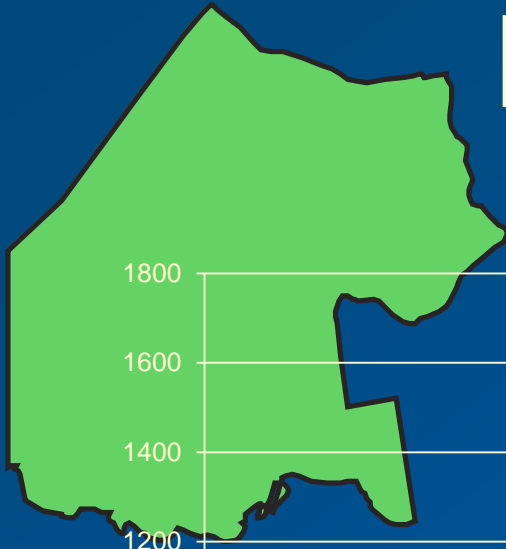
DEMAND BY 2020



• FORESTRY	+ 18 MW
• REMOTES	+ 42 MW
• MINING	+ 710 MW
• TCP	+ 110 MW
• EXISTING	720 MW
• TOTAL by 2020	1,660 MW

DEMAND 2011 to 2020

TOTAL LOAD



DEMAND

- OPA PROJECTED GROWTH (by 2020)
 - January 2013
 - 70 MW growth
 - May 2013
 - 690 MW (1000% increase)

DEMAND

- **Difference between ETF & OPA**
 - January – 990 MW
 - May – 260 MW
- **ETF has done its job to educate the OPA and Government on the Demand**

DEMAND

- OPA agrees that Demand should be met by supply
- Question is HOW

SUPPLY

OPA Solutions include:

- Atikokan GS
 - Enhancing the existing East West Tie Line
 - Renegotiating existing demand response contracts with Pulp and Paper industry
 - Getting more power out of existing hydro dams
 - Importing power from the west
 - Conservation

SUPPLY

OPA Solutions DO NOT include:

- **Converting Thunder Bay Generating Station to Natural Gas**
 - Too expensive
 - Not needed for power demand

ATIKOKAN OUTPUT

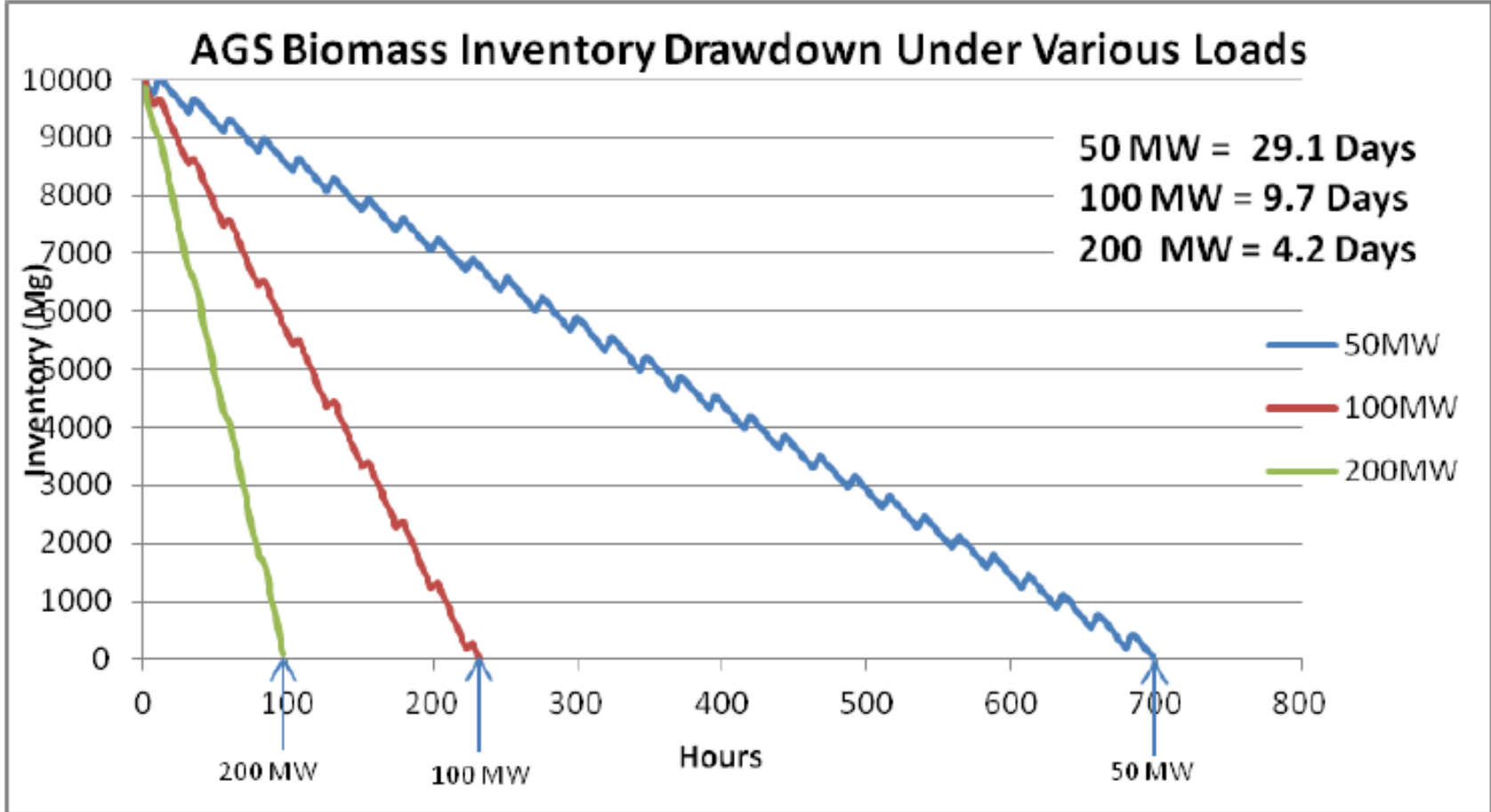


FIGURE 1 OUTPUT OF THE BIOMASS FUELED ATIKOKAN GENERATING STATION

SUPPLY

- OPA Solutions include:
- Enhancing the existing East West Tie Line
 - We need the supply from the East to meet energy demands
 - City of Thunder Bay, on behalf of ETF (and NOACC and NOMA) was before OEB in support of the concept.
 - OEB has selected 'transmitter' to plan for the line
 - Decision now under appeal by Pic River First Nation
 - A part of the solution for the Northwest's needs

SUPPLY

OPA Solutions include:

Renegotiating existing demand response contracts with Pulp and Paper industry

- 50 MW of reduction
- Minimal opportunity to increase

SUPPLY

OPA Solutions include:

- **Getting more power out of existing hydro dams**
 - Operators already maximize output
 - Minimal results based on realities of existing system
 - Large part of system run-of-the-river

SUPPLY

OPA Solutions include:

Importing power from the west

- **No power available from Manitoba until 2025 (approx 150 MW)**
- **Minnesota and Wisconsin buy power from Manitoba (therefore no power to sell)**
- **OPA says they can get power from ‘spot market’ – translation – they can buy power from coal producing generators in USA**

SUPPLY



OPA Solutions include: Conservation

- By 2020 78% of the electrical load will be industrial
- A large % of that industrial load will be new and will take advantage of the most advanced energy efficiency technology
- = minimal savings from conservation

SUPPLY

Thunder Bay Generating Station

- Essential for the Northwest
- Essential for Thunder Bay
- Essential for the Pulp and Paper Industry (stability) and the mining industry (supply)
- Asset paid for by the rate payers of Ontario
- Jobs retained in Thunder Bay as opposed to located in western provinces or USA (and paying taxes to Ontario)

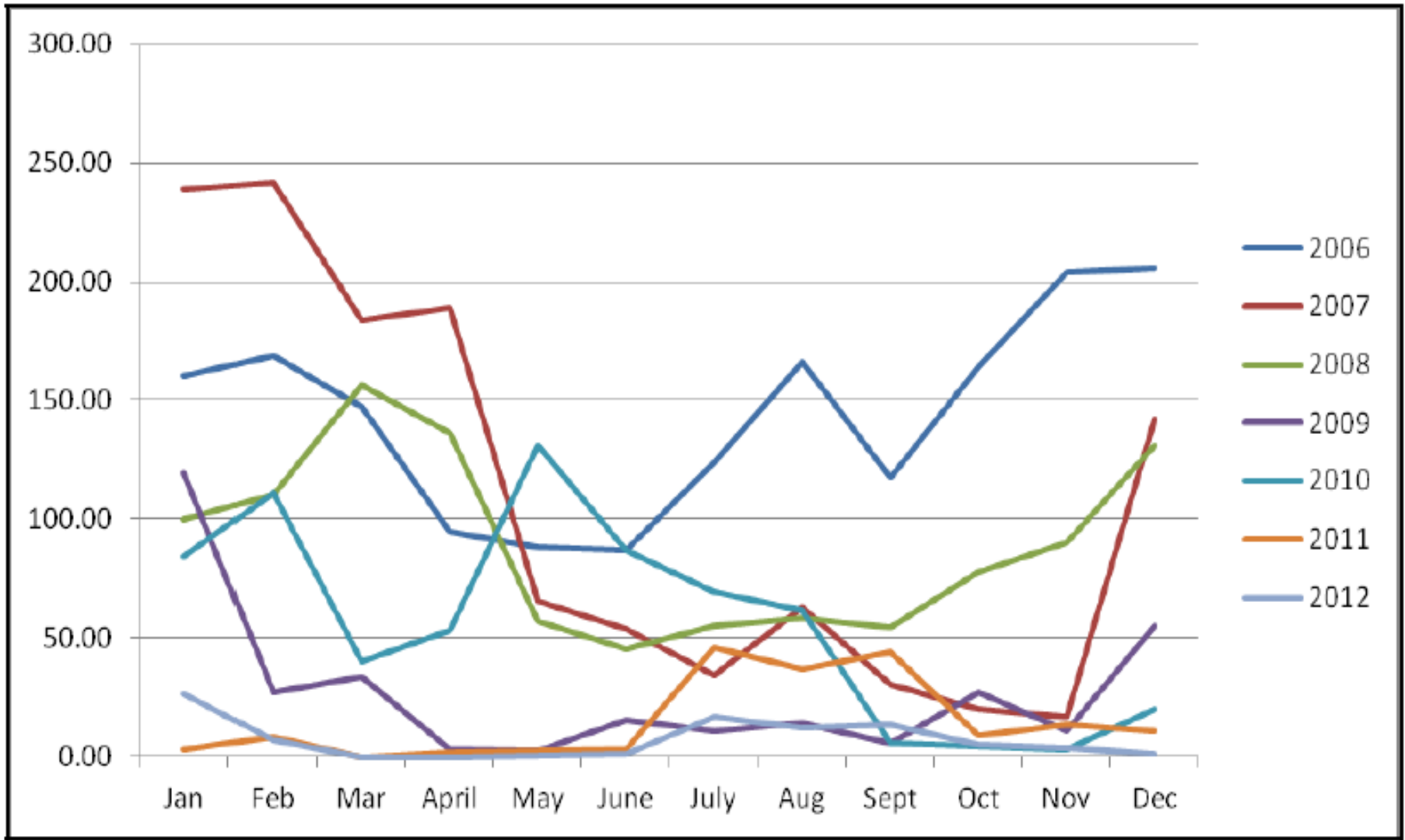


FIGURE 2 THERMAL OUTPUT 2006 - 2012 TBGS + ATGS (GWH)

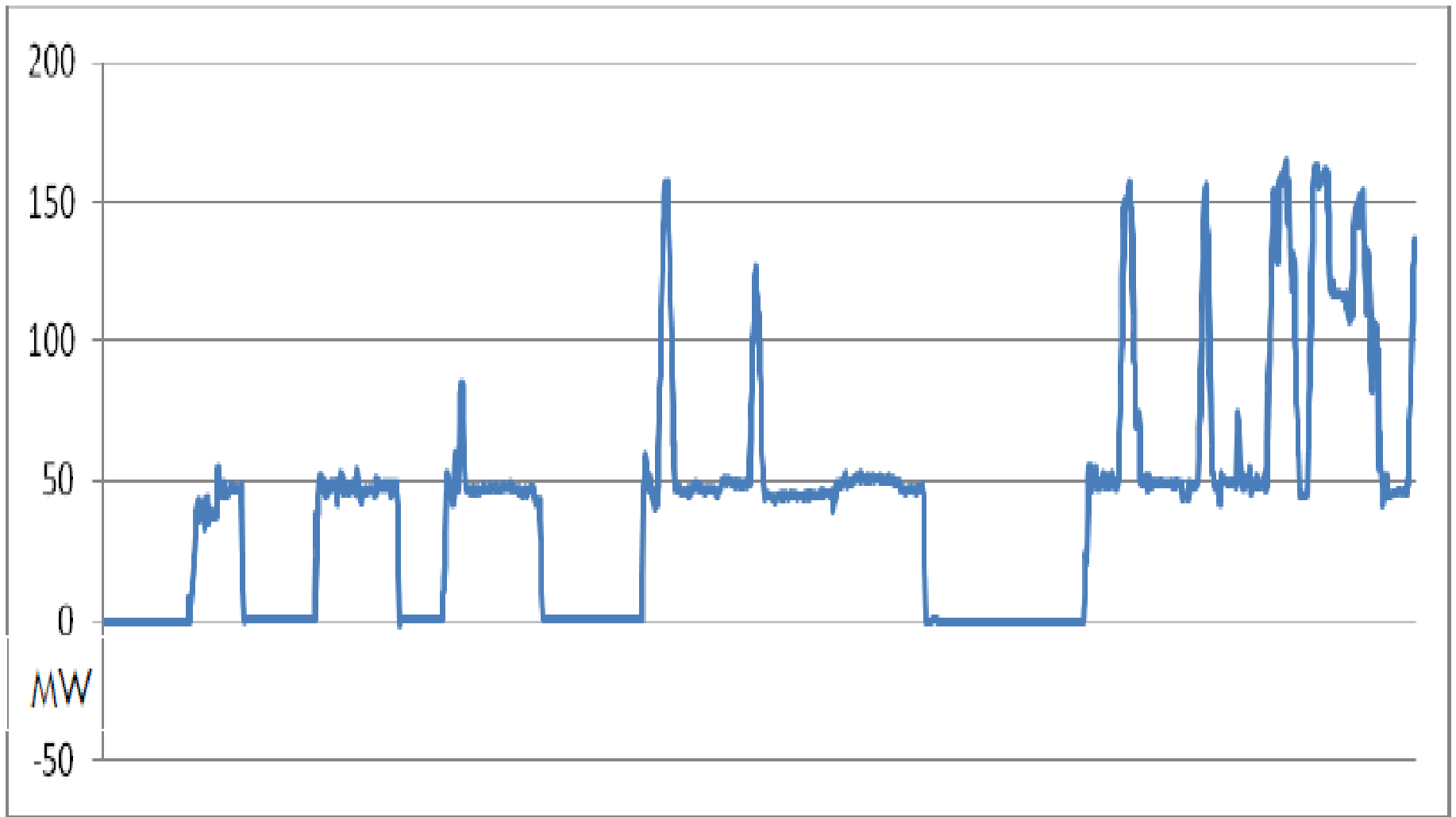


FIGURE 3 TBGS GENERATION JANUARY 14 TO 22, 2013 (MW)

RELIABILITY MUST RUN CONTRACT

- OEB has approved a RMR Contract for the Thunder Bay GS for 2013
- OEB determined that one 150 MW unit was essential for system stability to meet the needs of Thunder Bay and region
- OPG will have to apply for 2014 and beyond
- Demand will only increase over time

Thunder Bay District Projects

- East-West Tie Line
- Little JackFish Hydro Electric Project
- Pic Moberg Plan
- North of Dryden Plan

Thunder Bay District Generation

Generating Stations

- ▲ 1 - Caribou
- ▲ 2 - White dog
- ▲ 3 - Ear Falls
- ▲ 4 - Manitou
- ▲ 5 - Valerie
- ▲ 6 - Calm
- ▲ 7 - Sturgeon
- ▲ 8 - Kakabeka
- ▲ 9 - Silver Falls
- ▲ 10 - Pine Portage
- ▲ 11 - Cameron Falls
- ▲ 12 - Alexanders Land
- ▲ 13 - Aguasabon
- 14 - Thunder Bay
- 15 - Atikokan
- ▲ 16 - Twin Falls
- ▲ 17 - Umbata Falls
- ▲ 18 - Wawatay
- 19 - Nipigon NUG



Thunder Bay District 115 kv



Thunder Bay District 230 kv



East-West Tie Line

- 6 applications for 'transmitter'
- Upper Canada Transmission selected by OEB
- Pic River FN filed appeal

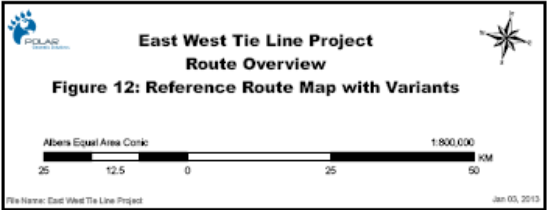
East-West Tie Line


- delay 2017 completion
- Issue is equity
- Original Pic River et al application had one third ownership

East-West Tie Line

- ‘Transmitter’ plans line
- Future process before OEB to determine who builds, owns and operates the line
- May or may not be transmitter


East-West Tie Line





Little JackFish Hydro Electric Project

OPG proposing to develop 80 MW of renewable hydroelectric generation in partnership with Waakinaysay Ziibi Inc (WZI) – a development corporation representing Lake Nipigon First Nations (LNFN).




Little JackFish Hydro Electric Project

The EA is approaching the
completion phase


OPG continues to work with WZI
to complete the community
consultations required to initiate
the closing of the EA.

This is expected to be completed
early in the new year.




Little JackFish Hydro Electric Project

A significant amount of Geotechnical and hydrology work has been completed to optimize the project design and improve the cost profiles.




Little JackFish Hydro Electric Project

The hydrology design has allowed the project to incorporate some time shifting and storage of water which will help with the accommodation of more wind and renewable on the grid



Little Jackfish Hydro Electric Project

The tender for the EPC contracts have been developed and the pricing has been prepared so that it could be used to start the contract discussions with the OPA.



Little JackFish Hydro Electric Project

Because of the lack of commitment on the transmission infrastructure, the project costs also include a provision for a 115 kv transmission line from Kama bay east of Lake Nipigon to the project site.

The EA work for this transmission alignment has also been included in the EA work for the project, so it is also nearly complete.



Little JackFish Hydro Electric Project





Pic Moberg Plan

- The Gitchi Animki Hydroelectric Project consists of two water power generating stations with a combined generating capacity of 18.9 MW, Gitchi Animki Bezhig, and Gitchi Animki Niizh.



Pic Mobert Plan

- The project is being undertaken by the Pic Mobert Hydro Power Joint Venture,
 - a joint venture of subsidiary companies of the Pic Mobert First Nation and Regional Power Inc.;
 - the joint venture is equally owned by the two partners.



Pic Moberg Plan

Gitchi Animki Bezhig (Upper Site), an approximate 8.9 MW site that will ultimately replace the Ministry of Natural Resources (MNR) existing regulating dam that manages lake levels and flood risks on White Lake;

Gitchi Animki Niizh (Lower Site), an approximate 10.0 MW site located approximately 16 km south of the Gitchi Animki Bezhig



Pic Mobert Plan

- Tenders for construction of the project will be issued in February, 2013

North of Dryden Plan

- Focus on Ear Falls, Red Lake, Pickle Lake and northern remote communities
- Oozes into Thunder Bay District

North of Dryden Plan

- Assumes Ring of Fire electricity connection to Pickle Lake (and designs service accordingly)
- Alternate connection from Marathon through Nakina to RoF

North of Dryden Plan

- Also plans for the Ring of Fire without any reference to any other plans for
 - Electricity
 - Roads
 - Rail
 - Telecommunications

North of Dryden Plan

- Ignores existence of Little Jackfish project especially the proposed transmission line

North of Dryden Plan

- ETF called for a number of sub-regional plans:
 - Nipigon - Greenstone area
 - North Shore area
 - Thunder Bay area

North of Dryden Plan

- ETF called for further consultation on the next draft in
 - Thunder Bay
 - Greenstone

North of Dryden Plan

- ETF response available at

www.noma.on.ca

North of Dryden Plan

- ETF requests endorsation from municipal councils to be sent to
 - Minister of Energy and
 - CEO of the OPA

www.noma.on.ca



THANK YOU

QUESTIONS?