

**Minnesota Power  
is  
Moving**

***EnergyForward***



***“A Unique Approach to Regional  
Energy Storage”***

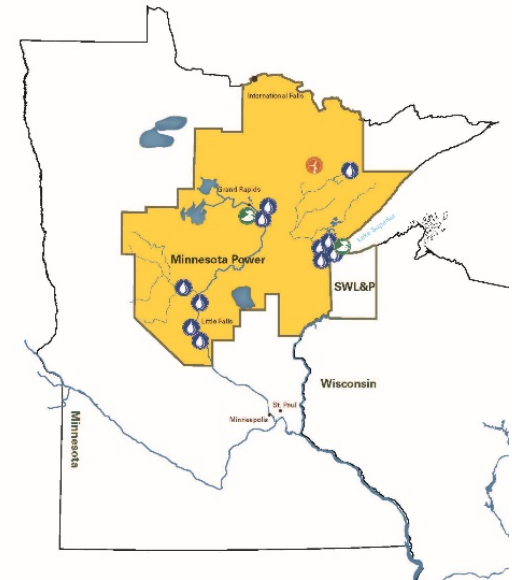
**Julie Pierce, Director – Power Supply**

**Legislative Energy Committee**

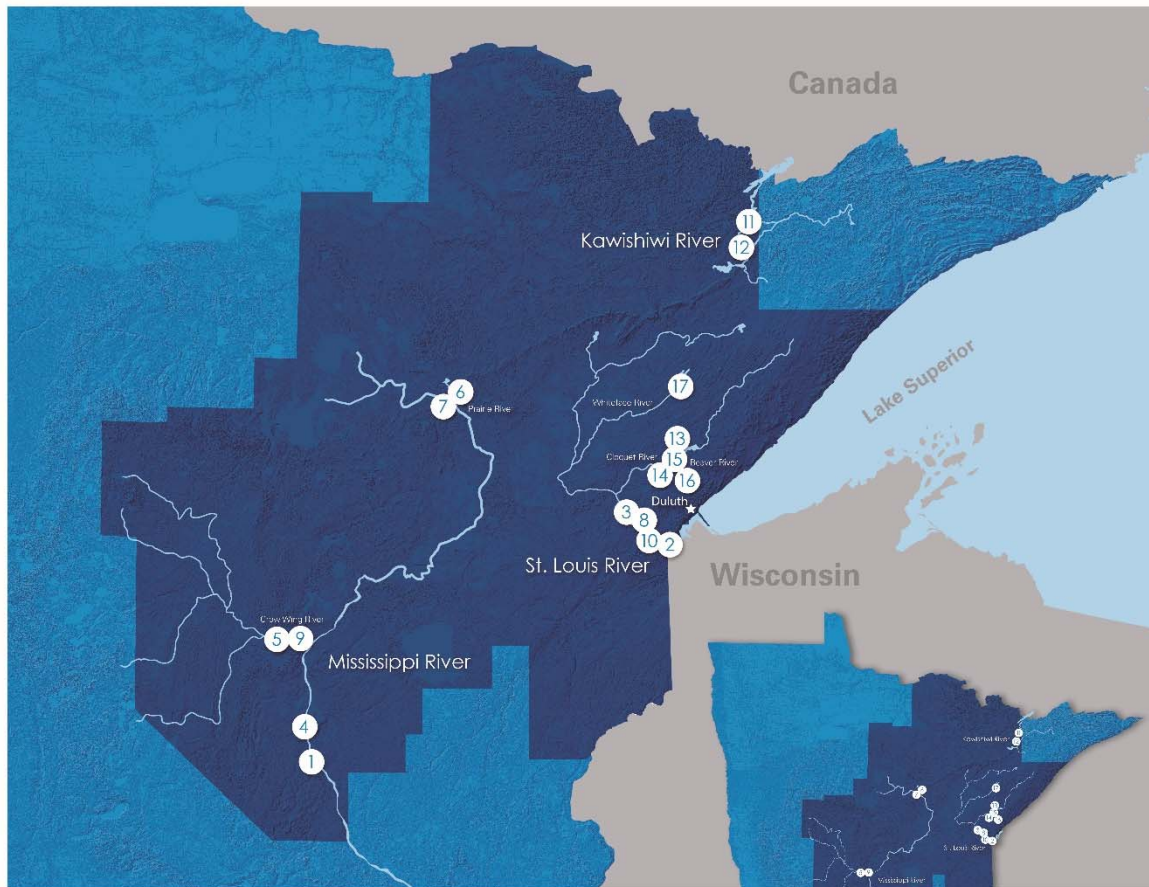
**November 18, 2015**

# ALLETE – An Energy Centric Family

- Headquartered in Duluth, MN for more than a century.
- High Load Factor - Industrial Customers 50% of 2013 kWh sales.
- 16 Municipal Wholesale Customers.
- 144,000 Electric Customers.
- Strong tradition and history of community involvement – talents and treasures.



# A History of Hydroelectric Operations



## Minnesota Power's Hydroelectric Facilities

### Hydroelectric Generation Facilities

- 1 Blanchard
- 2 Fond du Lac
- 3 Knife Falls
- 4 Little Falls
- 5 Pillager
- 6 Prairie River
- 7 Grand Rapids
- 8 Scanlon
- 9 Sylvan
- 10 Thomson
- 11 Winton

### Hydroelectric Reservoir Dams

- 12 Birch Lake
- 13 Boulder Lake
- 14 Fish Lake
- 15 Island Lake
- 16 Rice Lake
- 17 Whiteface

- A century of experience
- Three River Systems
- ~115 MW of power supply
- Both Run of River and Reservoir systems



# Thomson Hydro

**HARNESSING** THE POWER OF  
MOVING WATER



- Reservoirs provide daily energy storage and recreational opportunities.

# Wind & Water - A Powerful Renewable Energy Solution

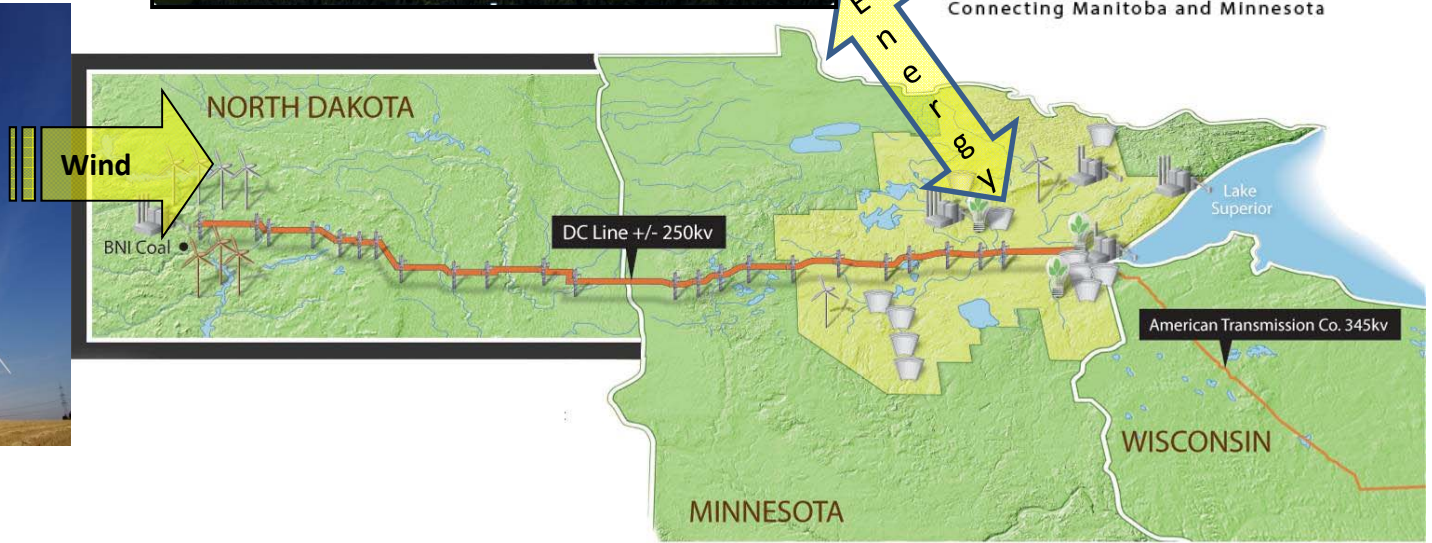


### Keeyask Generating Station

- 695 MW = 7 units
- \$1.7 billion general civil contract awarded
- Three party consortium (BE) led by Bechtel
- Construction start – July 2011
- ISD – December 2019
- In partnership with KCN



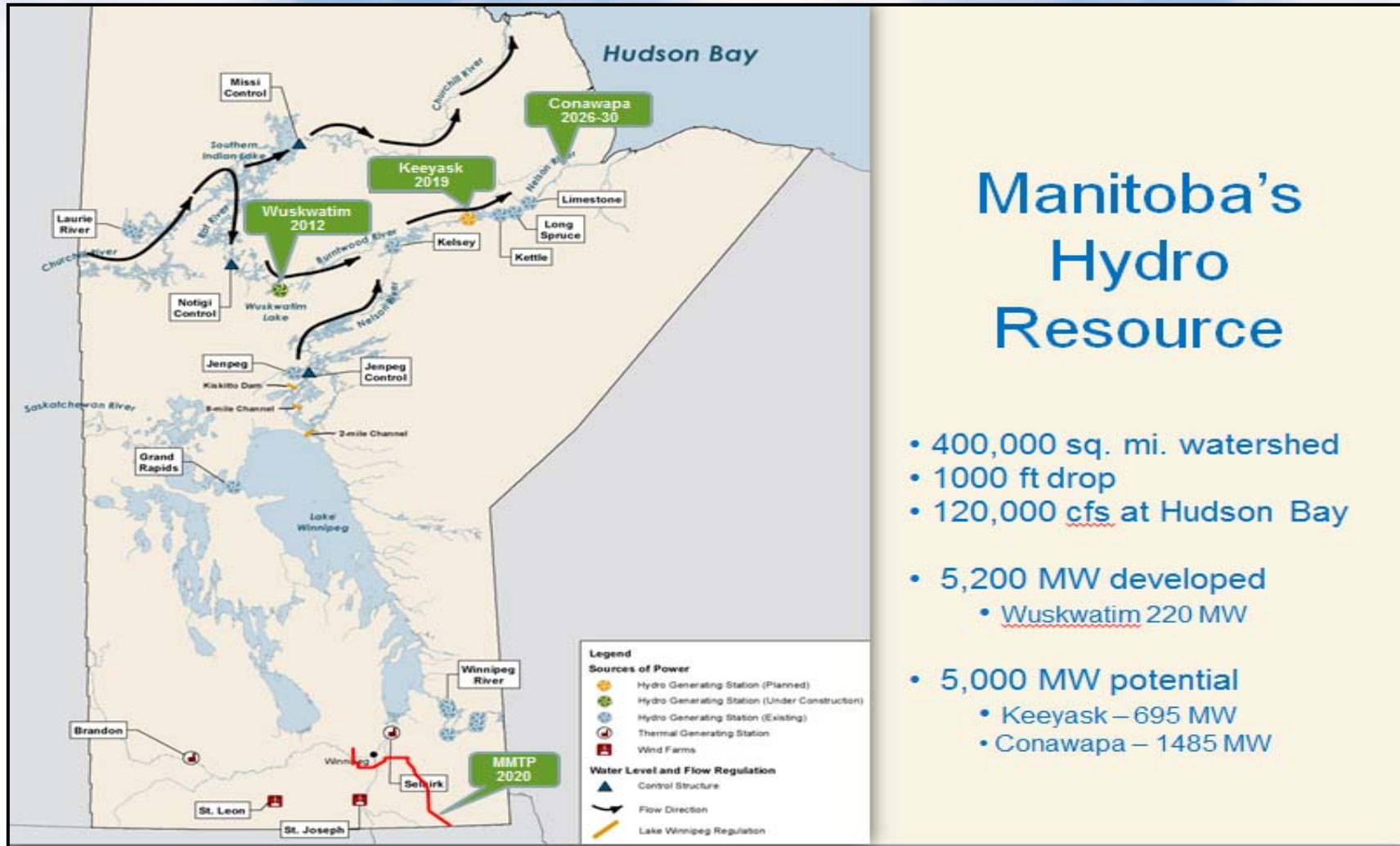
SIEMENS



Creative and strategic transmission investments enable a compelling renewable project solution.







Recent Canadian Provincial and Federal approvals of Manitoba Hydro's proposed Keeyask Generating station and Minnesota – Manitoba Transmission Projects pave the way for MP's 500 KV Great Northern Transmission Line.



**Questions bring forward  
new ideas!**

***Thank You***

