



EnergyForward



U.S.– CANADIAN POWER PARTNERSHIPS

Capitol Hill Briefing

William Libro: Director, Federal Affairs, ALLETE / Minnesota Power

July 31, 2014



ALLETE is an Energy Company



Minnesota Power

- Regulated electric service in northeastern Minnesota
- 55% kWh sales to industrial customers
- Long-term, all requirement contracts provide for minimum demand payments
- 24/7 industrial demand creates high load factors
- Cost recovery eligible revenues
- 4th lowest rates among investor owned utilities in the U.S.



Superior Water, Light & Power Co.

- Regulated electric, natural gas and water service in northwestern Wisconsin



American Transmission Co.

- Wisconsin-based utility with electric transmission assets in parts of Wisconsin, Michigan, Minnesota and Illinois
- 8% ownership delivers steady earnings and cash flow
- FERC regulated; 12.2% allowed ROE



BNI Coal

- Lignite mining operations in North Dakota
- Low cost supplier of lignite in North Dakota
- Produces about 4 million tons annually
- Estimated 650 million tons in reserve
- Cost plus contract to May 2027



ALLETE Clean Energy

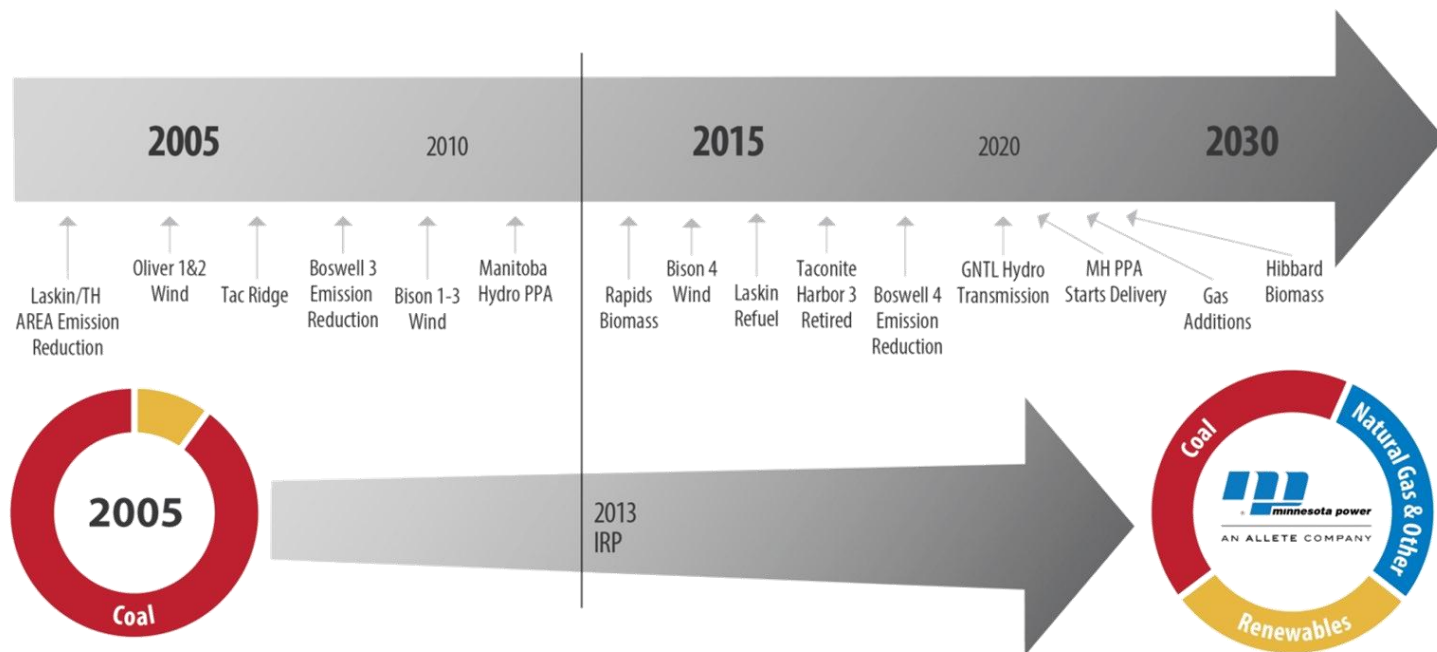
- Develops or acquires projects that create energy solutions via wind, solar, biomass, midstream gas and oil infrastructure, among other energy-related projects



ALLETE's operations are uniquely situated to meet the region's and nation's energy challenges



EnergyForward Resource Transformation



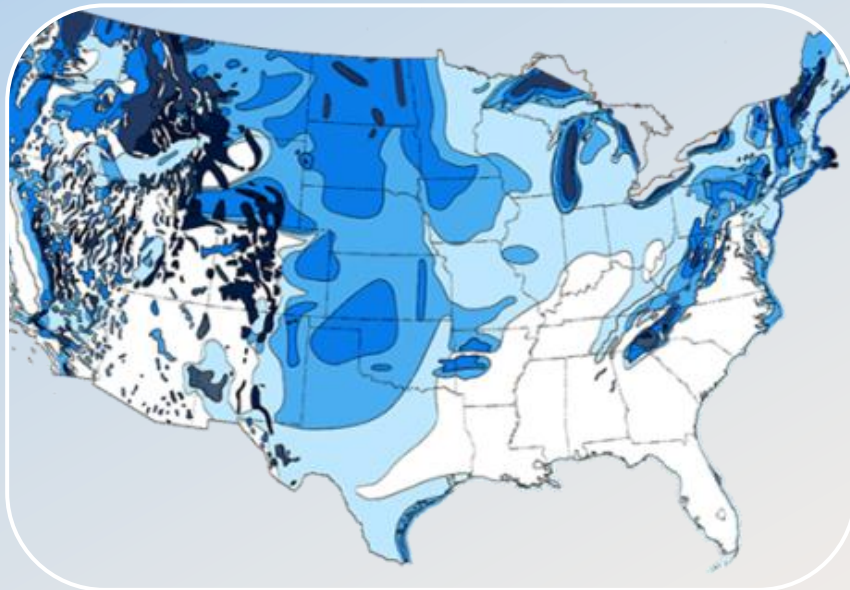
Becoming

- More flexible / diverse
- Less emitting

Remaining

- Affordable
- Reliable

Location: Minnesota Power's Renewable Strategic Advantage



Access to Quality Wind Sites in U.S.

- North Dakota capacity factor 45%±, double the U.S. average
- 60,000 acres in North Dakota



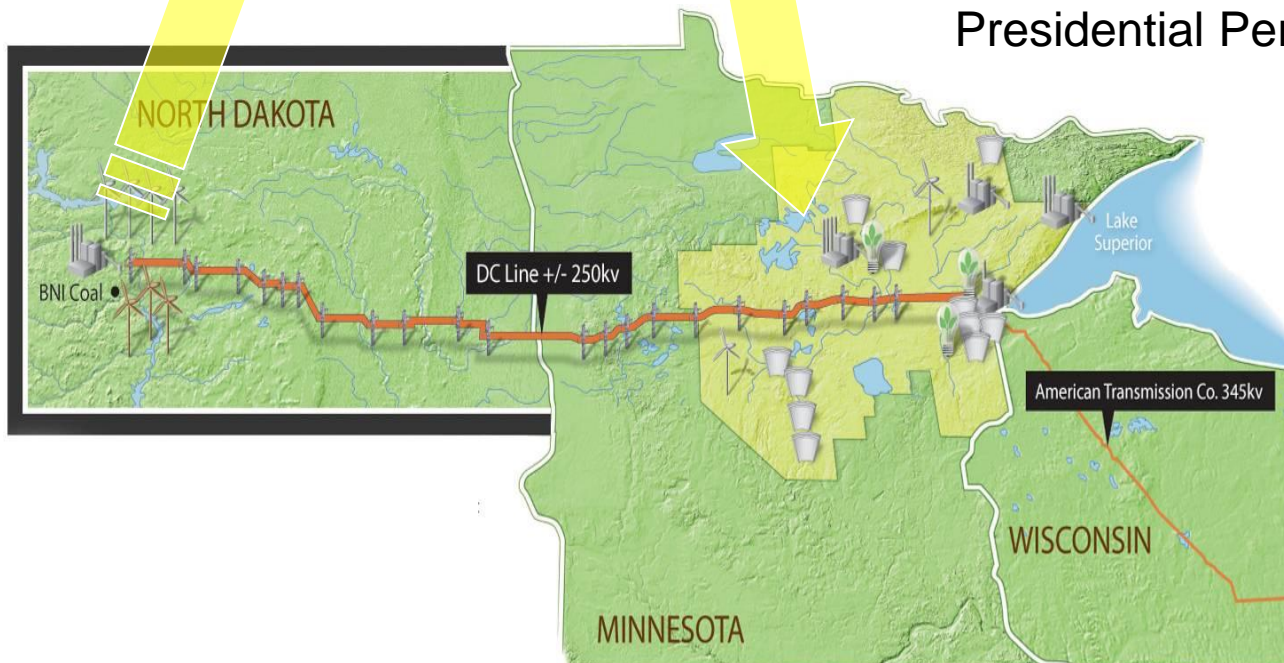
Access to Canadian Hydro Generation

- Minnesota Power has signed a 250 MW contract with Manitoba Hydro from 2020 through 2035
- Includes “wind storage” provision
- Minnesota Power has other contracts in place with Manitoba Hydro through 2022

Wind-Water Connection



- Leverage existing ND to MN DC line
- 250 MW power purchase agreement with Manitoba Hydro for carbon free hydroelectric energy begins 2020
- “Wind storage” provision facilitates North Dakota wind build-out and integration
- Requires U.S.- Canada transmission build- out / interconnection and Presidential Permit



MP's award-winning* Bison Wind Energy Center currently has 400 MW of wind operating in North Dakota – 600 MW expected to be on-line by 2015

* Awarded best wind project of the year: 2013 POWER-GEN International Conference

North Dakota: Large, Untapped Wind Resources

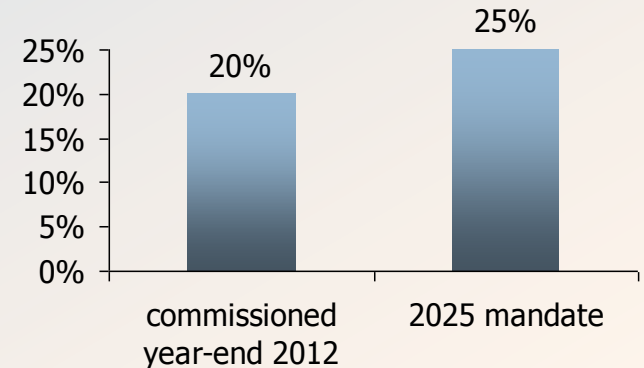
ALLETE plans to develop additional wind generation in ND



North Dakota Wind

- **Oliver County-100 MW (contract)**
- **Bison 1, 2 and 3 – 300 MW**
- **Bison 4: 200 MW under construction**
- **Total: 600 MW wind by 2015**

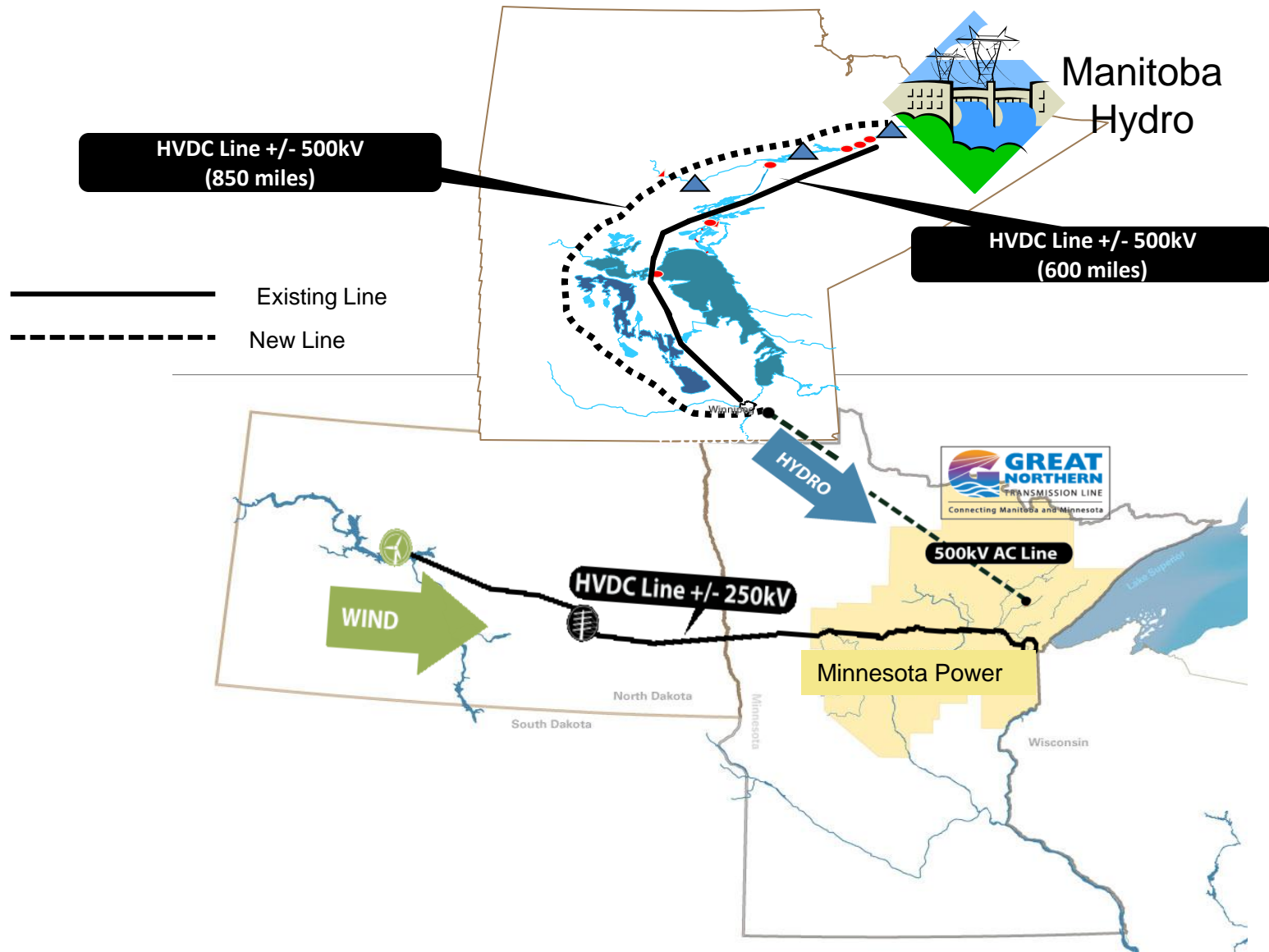
Renewable Milestones (MW)



Wind investments support low cost position

Hydropower + Windpower: A Perfect Marriage

Manitoba's Hydropower Facilitates North Dakota's Windpower



Great Northern Transmission Line

- U.S. portion is a joint project between Minnesota Power and Manitoba Hydro
- Integrates hydropower from Manitoba into Minnesota Power's load center on Minnesota's Iron Range
 - 500 kilovolt line from U.S. border to Iron Range
 - Approximately 220 miles, 883MW capacity, estimated \$500M-\$650M cost
- "Hydropower by wire" enables "wind by wire" from North Dakota
- Project will further diversify Minnesota Power's energy mix
 - Competitively and reliably meet our customer's energy needs
- Hydropower's "load-following" capability and the "wind storage" provision add value to both the wind and water assets
- Overall project (energy + transmission line) enhances regional reliability and provides wholesale energy market benefits
- State and federal permit applications deemed complete – environmental scoping underway

Questions?



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