

# Minnesota Power Overview

MN DEED Energy Transition Office and Task Force Meeting

September 27, 2022

Josh Skelton, COO Minnesota Power

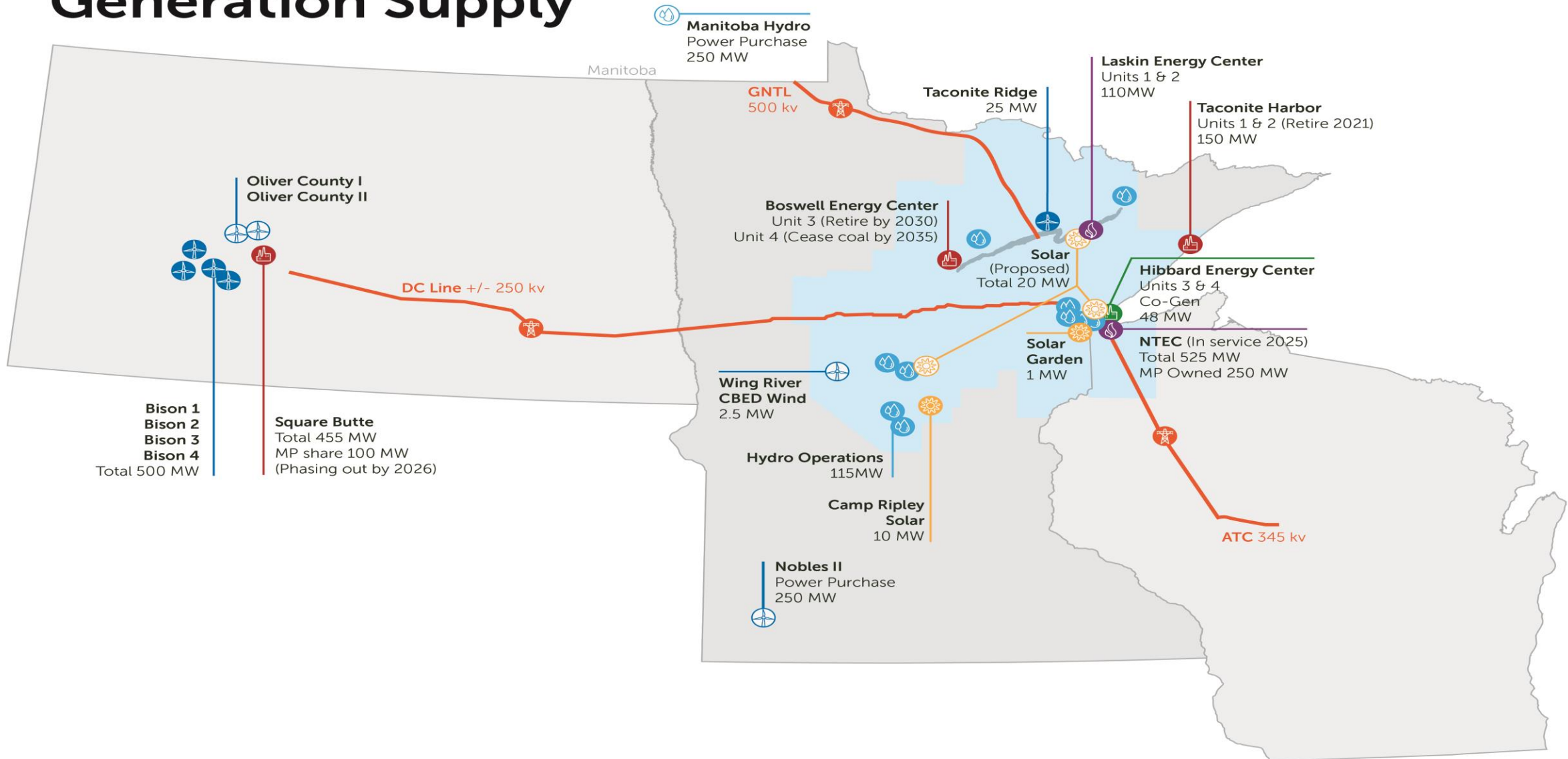


# FORWARD LOOKING STATEMENT

Any statement contained in this presentation and statements that ALLETE, Inc. representatives may make in connection with this presentation that are not historical facts are forward-looking statements. Actual results may differ materially from those projected in the forward-looking statements. These forward-looking statements involve risks and uncertainties and investors are directed to the risks discussed in documents filed by ALLETE, Inc. with the Securities and Exchange Commission. Date 1.12.2021

# MP at a Glance!

## Generation Supply







EnergyForward



# 100% CARBON-FREE ENERGY BY 2050

Our commitment to **climate, customers** and **communities**





# MINNESOTA POWER'S ENERGYFORWARD TRANSITION

## Yesterday

Nine coal units

95% of energy from carbon sources

---

## Today

First Minnesota utility to deliver 50% of energy from renewable sources

7 of 9 coal units closed or transitioned

50% reduction in carbon

Achieving state standards a decade early

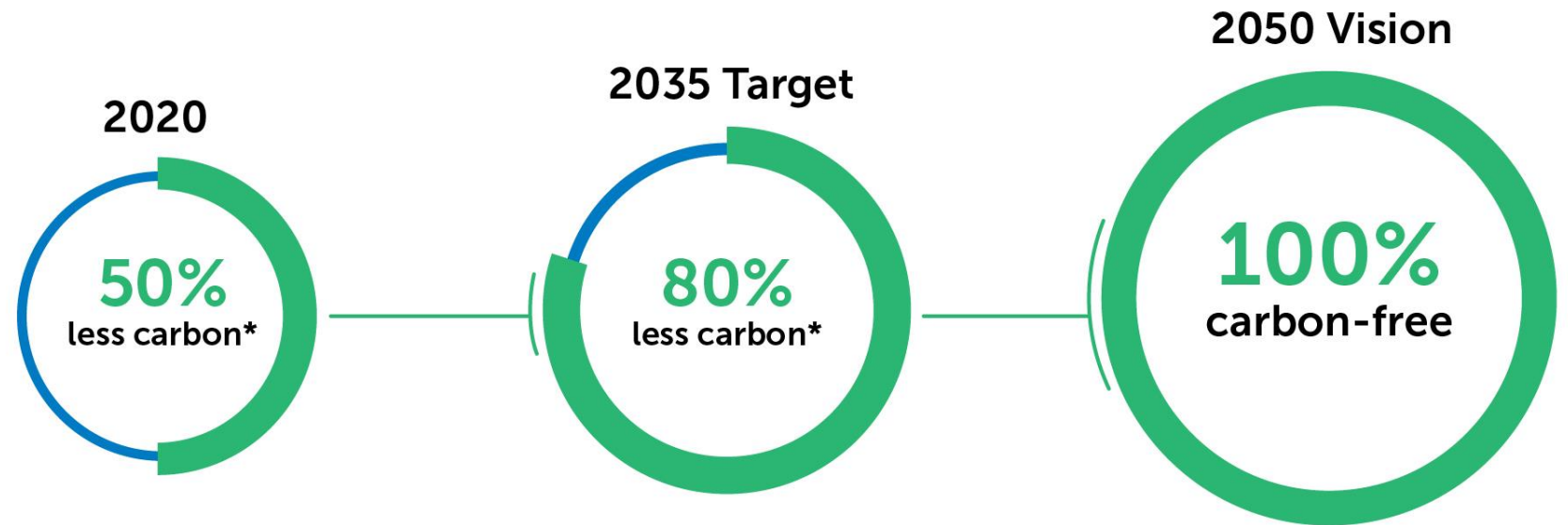
---

## Tomorrow

100% carbon-free energy by 2050

# OUR 100% CARBON- FREE ENERGY VISION

We are committed to making a sustainable transition to a **reliable, affordable** and **carbon-free** energy mix for our customers.



\*From 2005 levels

# WHY NOW?

Expectations are high for tackling **climate change**.

---

## Minnesota Power's responsibilities



Use our expertise to find a sustainable path to carbon-free energy that meets customer expectation for safety, reliability and cost.



Engaged stakeholders in a 12-month process that tested our assumptions and added knowledge to inform strategies.



Announced our vision and the next steps in our plan as part of our Integrated Resource Plan in February 2021, inviting broad public and regulator input.

# BLUEPRINT TO BUILD OUR CARBON-FREE ENERGY FUTURE



Expand renewable sources of energy—Add an estimated 400 MWs of wind and solar



Achieve coal-free energy supply

- **2030** Retire Boswell Energy Center Unit 3
- **2035** Coal-free energy supply at MP Boswell Energy Center Unit 4



# BLUEPRINT TO BUILD OUR CARBON-FREE ENERGY FUTURE

CONTINUED



Strengthen the electric grid




Adopt innovative solutions



Engage with stakeholders



Collaborate with State of Minnesota and others to develop a sustainable transition plan for host communities



# WHAT WILL A SUSTAINABLE ENERGY FUTURE LOOK LIKE?

100% Carbon-free energy

---

Safe and reliable

---

Affordable

---

Resilient

---

Technologically flexible

---

Equitable results among all customer classes

---

Just transition for our employees and community partners



# WHY 2050?

## A sustainable plan

1. Ensure reliability
2. Manage costs for customers
3. Time for just transition for host communities and employees
4. Allows time for technology to develop and advance

---

We have **exceeded state clean energy goals** without risking safety, reliability and affordability—and we will continue to do so.





# WHAT YOU CAN EXPECT FROM MINNESOTA POWER

We have a **bold vision** to deliver 100% carbon-free energy as part of *EnergyForward*

---

We will **listen carefully** to our stakeholders so we can continue to improve our plan

---

We will **provide tools and support** to help customers adapt to climate change

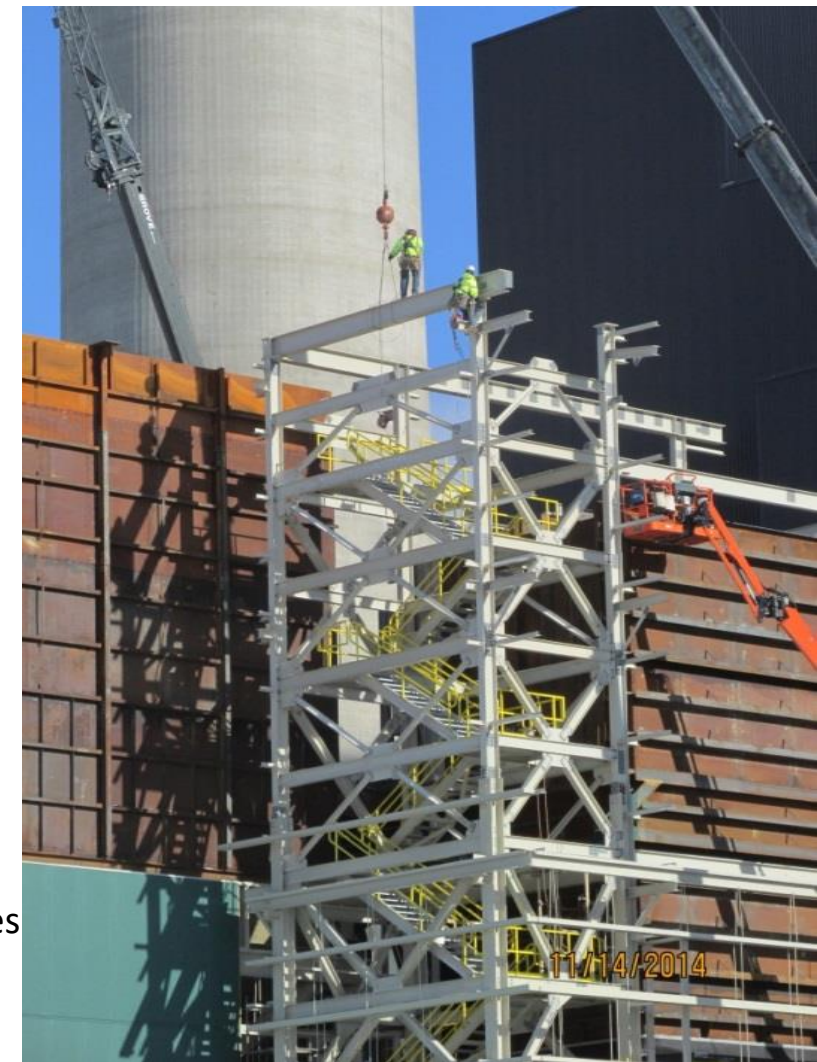
---

We will **prioritize our customers, communities** and **employees** as we implement this plan

# Appendix

# Boswell Energy Center Stats

- MP's Largest Generating Site
- 4 Generating Units (937 MW)
  - BEC 1-2 (67 MW's each) **1958 & 1960, Retired in Dec 2018**
  - BEC 3 (352 MW's) **1973**
  - BEC 4 (585 MW's) **1980**
    - **20% Ownership WPPI**
- Recently completed environmental projects:
  - BEC 12, and 4 Low Nox (2008) ~\$80M
  - Boswell Turbine Upgrades (+60 MW) ~\$50M
  - BEC 3 Env Retrofit (2007-2009) ~\$240M
  - BEC 4 Env Retrofit (2013 – 2015) ~\$300M
- Industrial Corridor
  - Itasca Greenhouse, MDI, Lonza, Nelson Shims, Huber Engineered Woods (under development)
- 165 Employees
  - Operations, mechanical and electrical maintenance, engineers, accounting, environmental compliance, administration
  - Participation on local boards, non-profit groups, and community involvement
  - Yellow Ribbon Committee Members(~20 Veterans)
  - United Way Giving
- Economic Impact (2019 data)
  - \$18M Annual Payroll
  - \$4M (\$41.1M Total Levy) Itasca County Taxes
  - \$1.6M (\$2.95M Total Levy) Cohasset Taxes
  - \$1.6M (\$14.4M Total Levy) ISD 318 Taxes
  - \$2.1M Fiscal Disparity
  - \$0.7M State of MN taxes

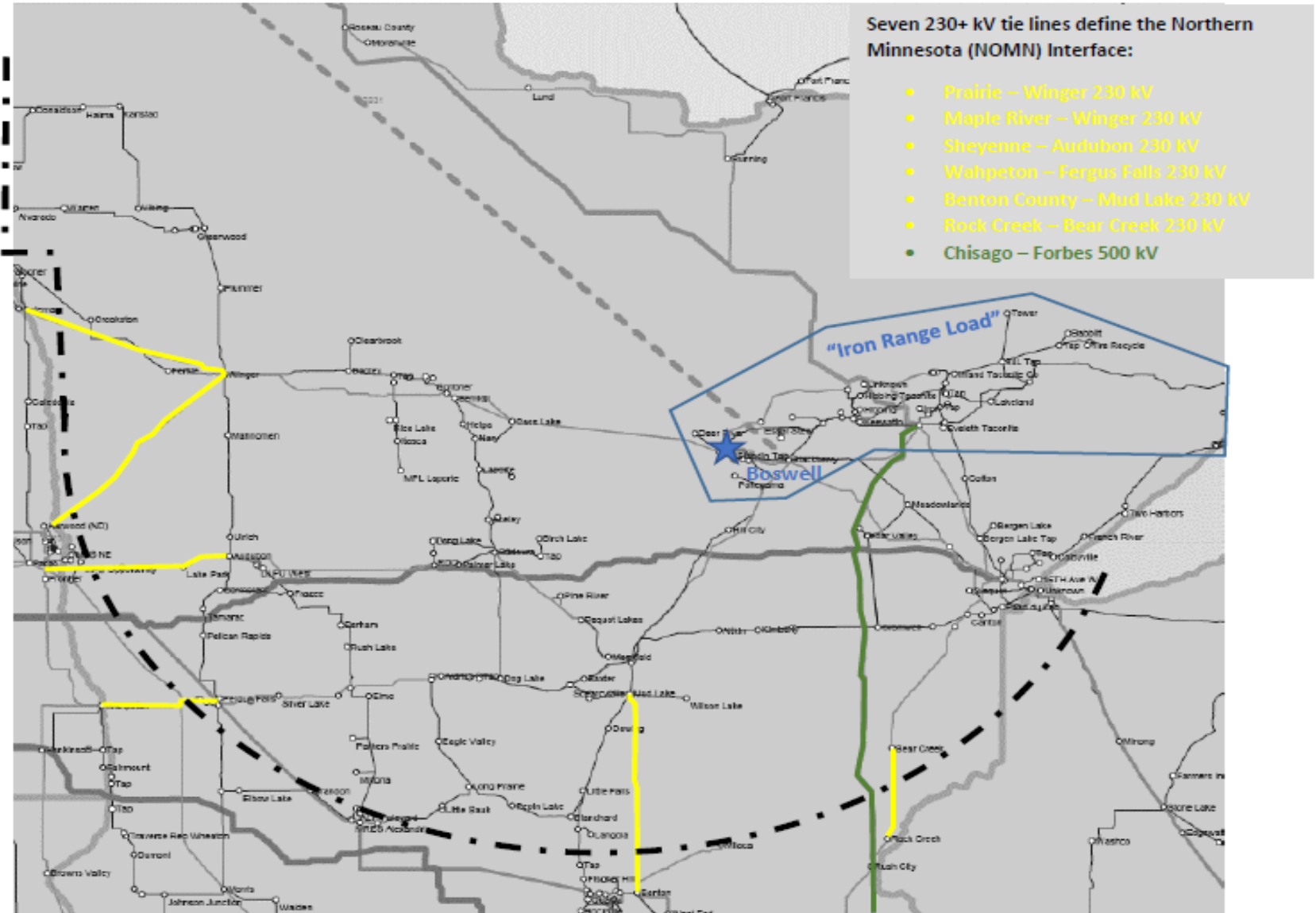


AN ALLETE COMPANY

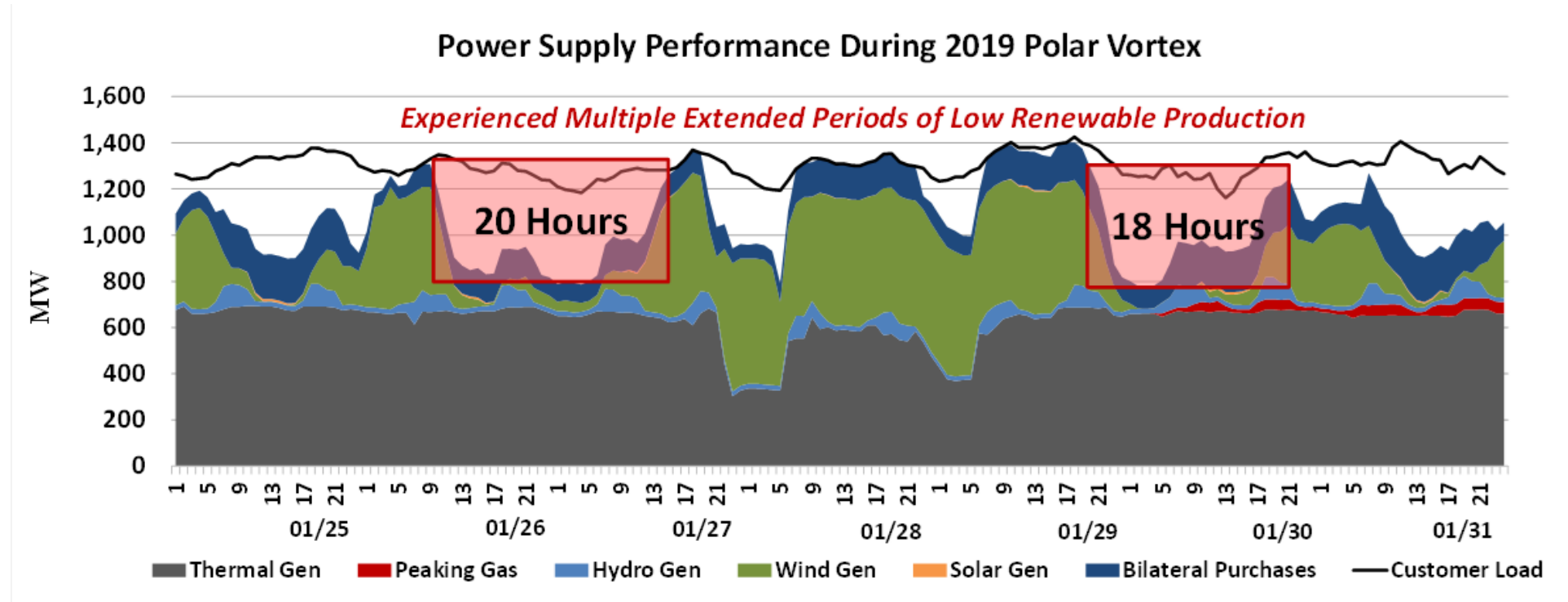


# Reliability Requires Thoughtful and Intentional Planning

- Grid is built around major generation sources
- Long lead time projects
- Need incorporation into broader regional plan



# Polar Vortex Demonstrated Need for Reliability



**More extreme weather events + intermittent renewables = grid reliability more important than ever**