



PU-24-342 Application to Amend Order

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Informal Hearing Presentation

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Agenda

1. Thermal Generation Commitment Background and Amendments Sought
2. Firm Dispatchable Competitive Acquisition Proceeding
3. Pipeline Project Development



Amendments Sought

- The Company proposes modifying the thermal generation commitment to keep it in place beyond 2025 and provide an ongoing incentive for the Company to continue to pursue the construction of thermal generation in North Dakota
 - Replace the timeline commitment with a mandatory semi-annual reporting requirement to the Commission.
- Commission Staff has long advocated for principled resource planning
 - Removal of the prior deadline will allow time to refine and improve the plans for North Dakota generation consistent with prudent resource planning, while incentivizing investment in the state
- Commission will continue to have ability to take remedial action

Thermal Generation Commitment

- The Company and the Commission have long agreed that there are local reliability and system benefits in locating thermal generation within or near our North Dakota service territory.
- Longstanding interest of the Commission to ensure reliable service for North Dakota customers.
- 2016 Order in PU-12-813 contained a commitment that by the end of 2025 the Company will build or have located in eastern North Dakota a natural gas-fired electric generation facility with a capacity of at least 200 MW
 - The turbine must reasonably address a system capacity need; and
 - Represent a least cost resource (when also considering the local reliability and system benefits of developing thermal generation in North Dakota).

Thermal Generation Commitment

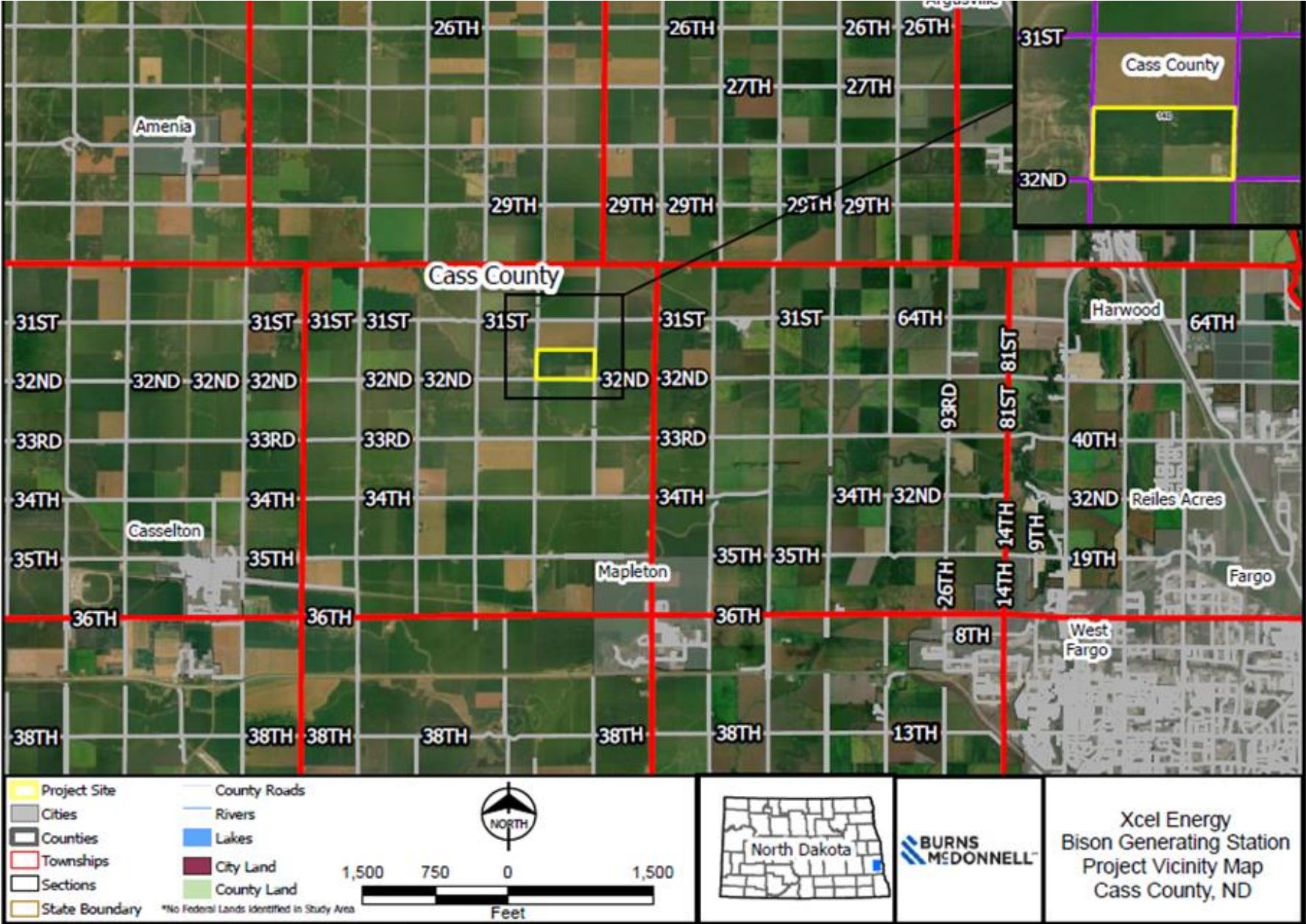
- If the combustion turbine is not in service by December 31, 2025, the Company agreed to refund to North Dakota customers half of the revenues associated with the continued cost recovery of six biomass PPAs from 2016 through 2025.
 - This refund stipulation is without qualification, provided that the Company could always petition the Commission for an extension, or modification, if necessary
- Thermal generation commitment should be viewed as a positive means of incentivizing Company investment in North Dakota, as compared to a monetary penalty
- Since the 2025 thermal generation commitment was established in the 2016 Settlement Agreement, the Company has been working toward meeting this commitment
 - In January 2024 the Company submitted a bid proposal to the Minnesota Public Utilities Commission (MPUC) to construct 447 MW of firm dispatchable resources directly adjacent to the Xcel Energy Bison Substation in Harmony Township, Cass County, North Dakota (Bison Generating Station)

Bison Generating Station

- As the first new gas plant proposed in the area, the Bison Generating Station would bear the cost for necessary natural gas system upgrades to provide adequate supply.
- The Bison Proposal in its current form, when also considering the local reliability and system benefits of developing thermal generation in North Dakota, is currently not economically competitive
 - Primarily due to the significant costs associated with the natural gas system upgrades
- The Company has been seeking alternate means of securing lower cost natural gas supply for the Bison Generating Station
 - Potential natural gas pipeline from the Bakken formation to eastern North Dakota and beyond
- Having the Bison Generating Station as an off-taker would make this potential new pipeline more feasible while making the Bison project more cost-effective
 - Plus have other benefits for communities along the pipeline corridor

Bison Generating Station

Project Vicinity Map



Firm Dispatchable Competitive Acquisition Proceeding

- Initiated in November 2023
- Bids submitted in January 2024
 - Company Bids: Bison CT (near Fargo); Lyon County CT (SW MN), and Sherco Storage
 - Third-Party Bids included extension of the Mankato Energy Center and Cannon Falls PPAs
- IRP submitted in February 2024 affirmed need for Firm Dispatchable Resource in the 2027-2029 timeframe.
- Economic Modeling conducted to evaluate proposal.
- Bison CT not selected due to high cost of gas capacity.
- Settlement agreement in Firm Dispatchable to proceed with one new CT, Lyon County, and extending two existing gas resources, MEC and Cannon Falls.

Additional Need for Firm Dispatchable

- Additional Firm Dispatchable resources will be needed.
 - Resource Plan capacity expansion modeling supports additions in 2030 and beyond.
 - Potential for large new load additions could drive resource additions.
 - Further developments and investment in gas infrastructure will be needed and may impact the timing of CT investments.

Pipeline Project Development

Two Pipeline Suppliers: North Dakota and Minnesota

- We prefer the North Dakota/Bakken project
- Large pipeline projects require significant development time
- Recent smaller project in the upper Midwest involved 18 months of project development

For a 300-mile project:

- Capital costs likely around \$800 million
- Estimated Annual Revenue Requirement \$160 million
- Need combined support from multiple producers and end-use customers

New Source from Bakken

- Require significant quantities for competitive project
- Challenges aligning multiple customers at same time
- Projects often incubate until market dictates action

Amendments Sought

Proposed language in Second Revised Negotiated Agreement:

To keep the Commission informed on the progress of this commitment, the Company agrees to provide semi-annual reports detailing the development of a North Dakota thermal generation resource and an update on natural gas pipeline development in the state (which could have beneficial impacts on resource costs). If, after a semi-annual report, the Commission has concerns regarding the Company's ability to meet its commitment, the Commission can, at its option and after hearing, take remedial action.

