

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**Otter Tail Power Company
Advance Prudence – Astoria Fuel Inventory System
Application**

Case No. PU-23-66

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

July 23, 2024

Appearances

Chair Randy Christmann, Commissioner Julie Fedorchak, Commissioner Sheri Haugen-Hoffart.

Timothy J. Dawson, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, ND 58503.

Cary Stephenson, Associate General Counsel, Otter Tail Power Company, 215 S. Cascade Street, Fergus Falls, MN, on behalf of Otter Tail Power Company.

Brian L. Johnson, Special Assistant Attorney General, 122 East Broadway Avenue, Bismarck, ND 58501, on behalf of Public Service Commission Advocacy Staff.

John M. Shuh, General Counsel, Public Service Commission, State Capitol, 600 East Boulevard Avenue, Bismarck, ND 58505, on behalf of the Public Service Commission Advisory Staff.

Preliminary Statement.

On February 8, 2023, Otter Tail Power Company (OTP) filed an application with the North Dakota Public Service Commission (Commission) seeking an Advanced Determination of Prudence (ADP) under North Dakota Century Code Section 49-05-16 for a liquified natural gas storage (LNG) system to be constructed at Astoria Station (Astoria), OTP's 250 Megawatt (MW) natural gas-fired, frame-style, simple cycle combustion turbine generation facility near Astoria, South Dakota.

On October 11, 2023, the Commission issued a Notice of Hearing (Notice), scheduling a public hearing for December 12, 2023, at 8:30 a.m. Central Time in the Commission Hearing Room on the 12th Floor of the State Capitol, 600 East Boulevard Avenue, Bismarck, ND 58505.

The Notice identified the issue to be considered in this proceeding is whether OTP should be granted an advanced determination that its proposed resource addition is prudent.

On December 12, 2023, the hearing was held as scheduled.

On May 1, 2024, OTP made a supplemental filing.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes the following findings of fact:

Findings of Fact

1. OTP is an investor-owned electric utility headquartered in Fergus Falls, Minnesota, authorized to provide public utility service in North Dakota under the regulatory jurisdiction of the Commission.
2. Astoria is OTP's 250 MW natural gas fired, frame-style, simple cycle combustion turbine generation facility located near Astoria, South Dakota. OTP placed Astoria into service in 2021 following the Commission's issuance of an order granting an advanced determination that Astoria is reasonable and prudent per the terms of the November 3, 2017, Order on Settlement, and associated Settlement Agreement in Case No. PU-17-140.
3. OTP testified and Public Service Commission Advocacy Staff (Advocacy Staff) witness James Heidell agreed that onsite liquified natural gas (LNG) fuel storage is the least cost method to provide an alternative fuel source for Astoria.
4. OTP has suggested in its ADP application and testimony filed in this proceeding that it is seeking to add an onsite fuel inventory system at Astoria in order to insulate customers from reliability and intraday pricing risks posed by the current single fuel source Astoria relies upon.
5. Astoria obtains its fuel from the Northern Border Pipeline.
6. The location for Astoria was strategically chosen based upon its proximity to the Northern Border Pipeline and nearby electric transmission lines.
7. At the time of the Commission's advance prudence determination in Case No. PU-17-140, neither OTP nor Advocacy Staff identified fuel supply as a potential risk.
8. Within the past ten years, numerous significant weather events have caused natural-gas supply disruptions in North America. The most notable of these events were

the 2014 Polar Vortex (January 5-8, 2014), Storm Uri (February 13-17, 2021) and Storm Elliot (December 22-26, 2022).

9. Astoria was not operational for either the 2014 Polar Vortex or Storm Uri. However, evidence suggests that natural-gas service at Astoria would likely have been interrupted during the 2014 Polar Vortex but would not have been during Storm Uri.

10. During storm Elliott, Astoria's fuel supply from Northern Border Pipeline was interrupted due to lack of adequate supply. This interruption caused Astoria to go into a forced outage status with the Midcontinent Independent System Operator (MISO).

11. OTP testified that 80% of its MISO accredited capacity is based upon tier 2 hours (hours where excess available generation is limited). An unplanned outage during the tier 2 hours will result in a seasonal reduction in capacity credit for a three-year period. The forced outage status is anticipated to cause Astoria to be derated by 50 MW for a three-year period.

12. OTP testified that it currently has 1200 MW of accredited capacity in MISO, and that its MISO capacity requirement is 1100 MW.

13. OTP is not expected to fall short of its accredited capacity requirement as a result of the derating of Astoria.

14. OTP also identified intraday pricing risk as a second reason for adding an onsite fuel inventory system at Astoria.

15. OTP testified that intraday pricing risk is driven by the fact that OTP must buy day ahead natural gas for Astoria and offer its output to the MISO market well in advance of MISO clearing OTP's offer. Depending upon how MISO clears OTP's offer, OTP may need to secure additional natural gas at the prevailing market rates, or sell back unused gas.

16. Fuel costs are a direct pass-through to OTP customers and are normally recovered through OTP's energy adjustment rider. Due to this, OTP has very little risk of failing to receive full recovery of the daily fuel costs regardless of the prevailing market rates. OTP customers are the primary bearers of market price risk.

17. The addition of an onsite fuel inventory system would neither increase nor decrease the risk to OTP. It would however, increase costs to OTP customers and provide OTP an opportunity to earn a return on investment.

18. The perceived need for an onsite fuel inventory system is based upon the risk associated with extreme weather events. The record in this proceeding demonstrates that predicting the location, frequency and severity of such events is not possible with

any degree of accuracy. It is further impossible to predict what impact any future weather events may or may not have upon Astoria's ability to operate.

19. OTP has requested the Commission to find that an onsite fuel inventory system at Astoria is a necessary insurance policy for OTP customers. The record in this proceeding demonstrates that this 'insurance policy' could be called upon as many as ten times over the life of Astoria, or it may never be called upon.

20. Advocacy Staff witness Heidell testified that he would anticipate annual savings as a result of an onsite fuel inventory system at Astoria between \$0.8-6.5M per year. This range differs based upon how often a winter storm occurs that results in an interruption to natural gas supply between once every two to once every four years. These hypothetical and highly speculative savings amounts are insufficient to justify the significant rate increase to North Dakota OTP customers that would result from adding the onsite fuel inventory system at Astoria.

21. After considering all testimony and evidence presented in this proceeding, the Commission finds that OTP has not met the burden to approve the application for an advanced prudence determination for an onsite fuel inventory system for Astoria is prudent.

From the foregoing Findings of Fact, the Commission now makes the following:

Conclusions of Law

1. The Commission has jurisdiction in this matter.
2. OTP has not demonstrated that the LNG fuel storage at Astoria as proposed is a prudent addition.

From the foregoing Findings of Fact and Conclusions of Law, the Commission issues its:

Order

Otter Tail Power Company's application for an advanced determination of prudence for an LNG fuel storage system at Astoria is DENIED without prejudice.

PUBLIC SERVICE COMMISSION


Sheri Haugen-Hoffart
Commissioner


Randy Christmann
Chair


Julie Fedorchak
Commissioner