



Energy Connections

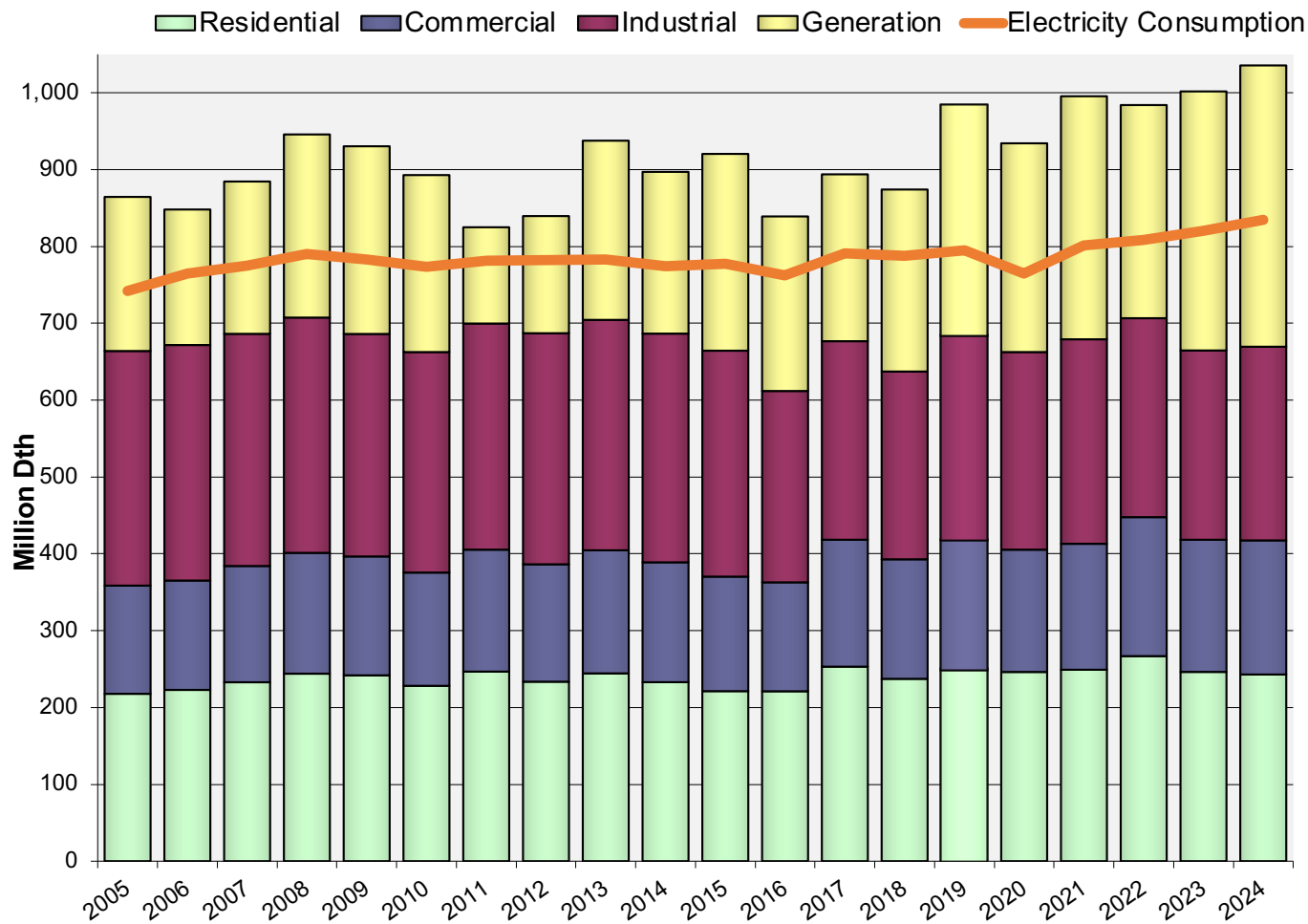
One System on Edge

Dan Kirschner, CEO

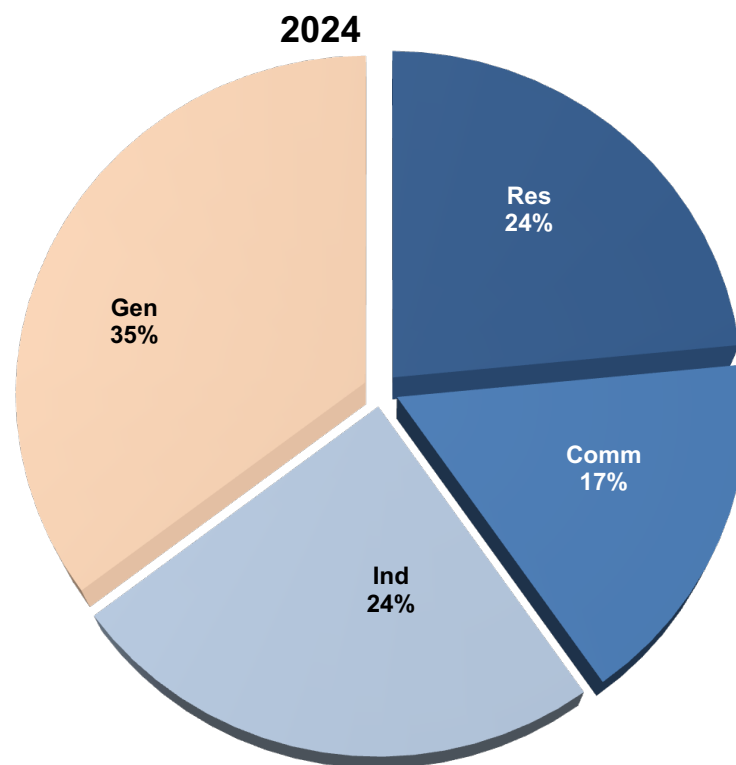
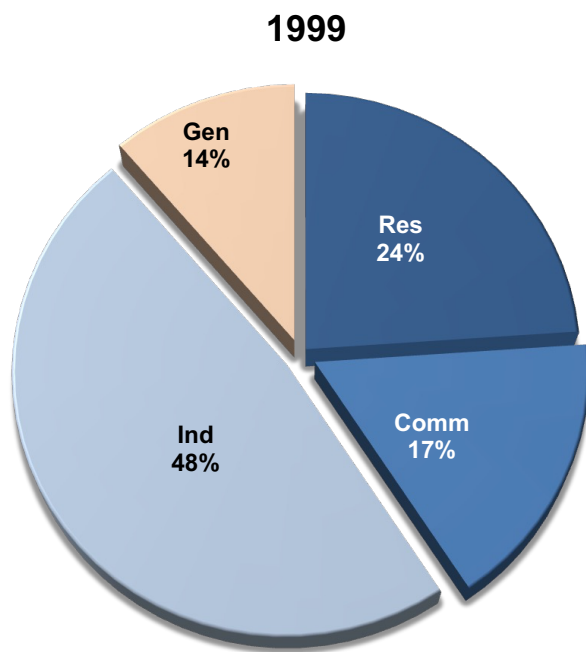
Northwest Gas Association



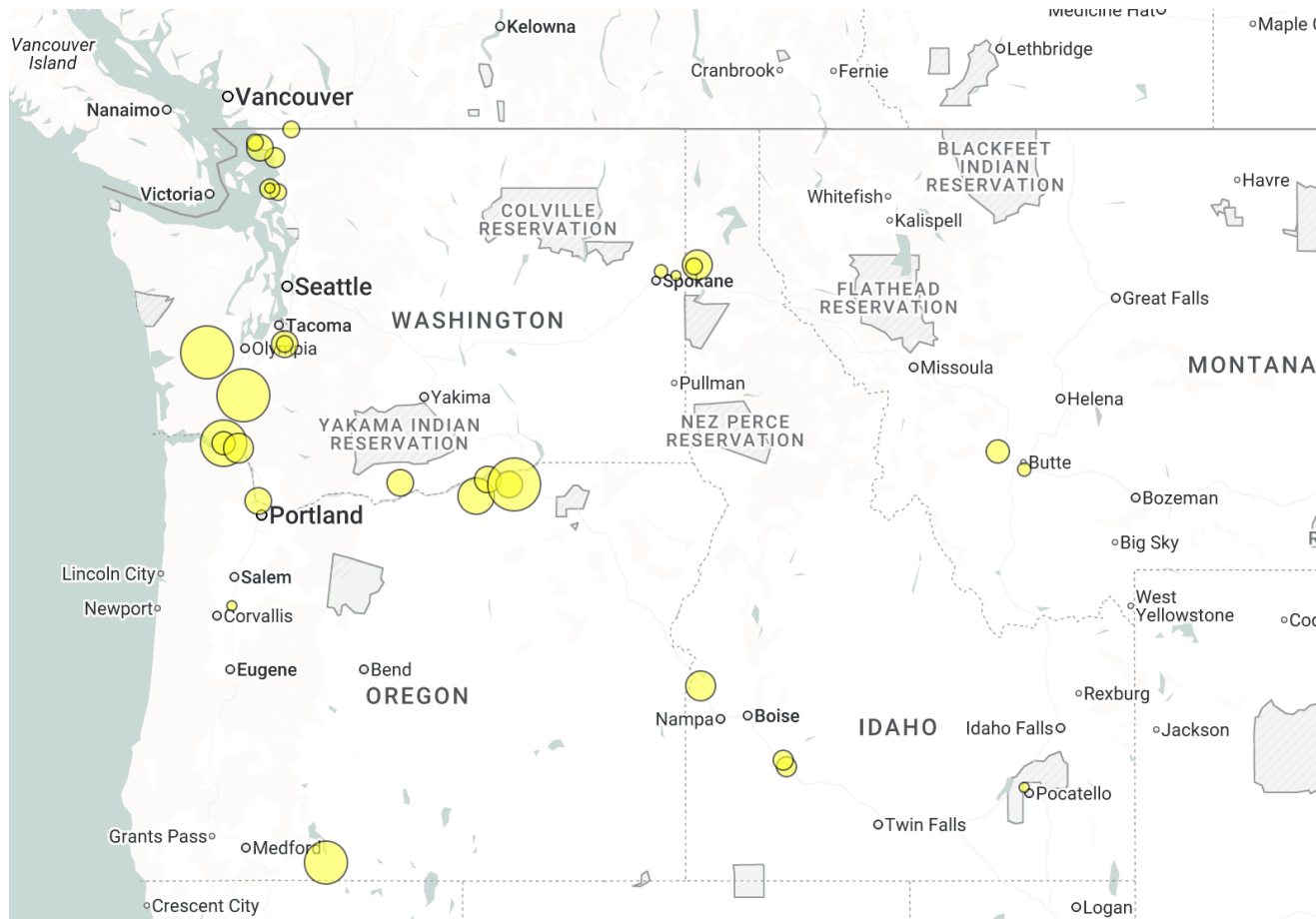
Historic Gas Demand - Regional



Load Composition



Natural Gas-Fired Generation



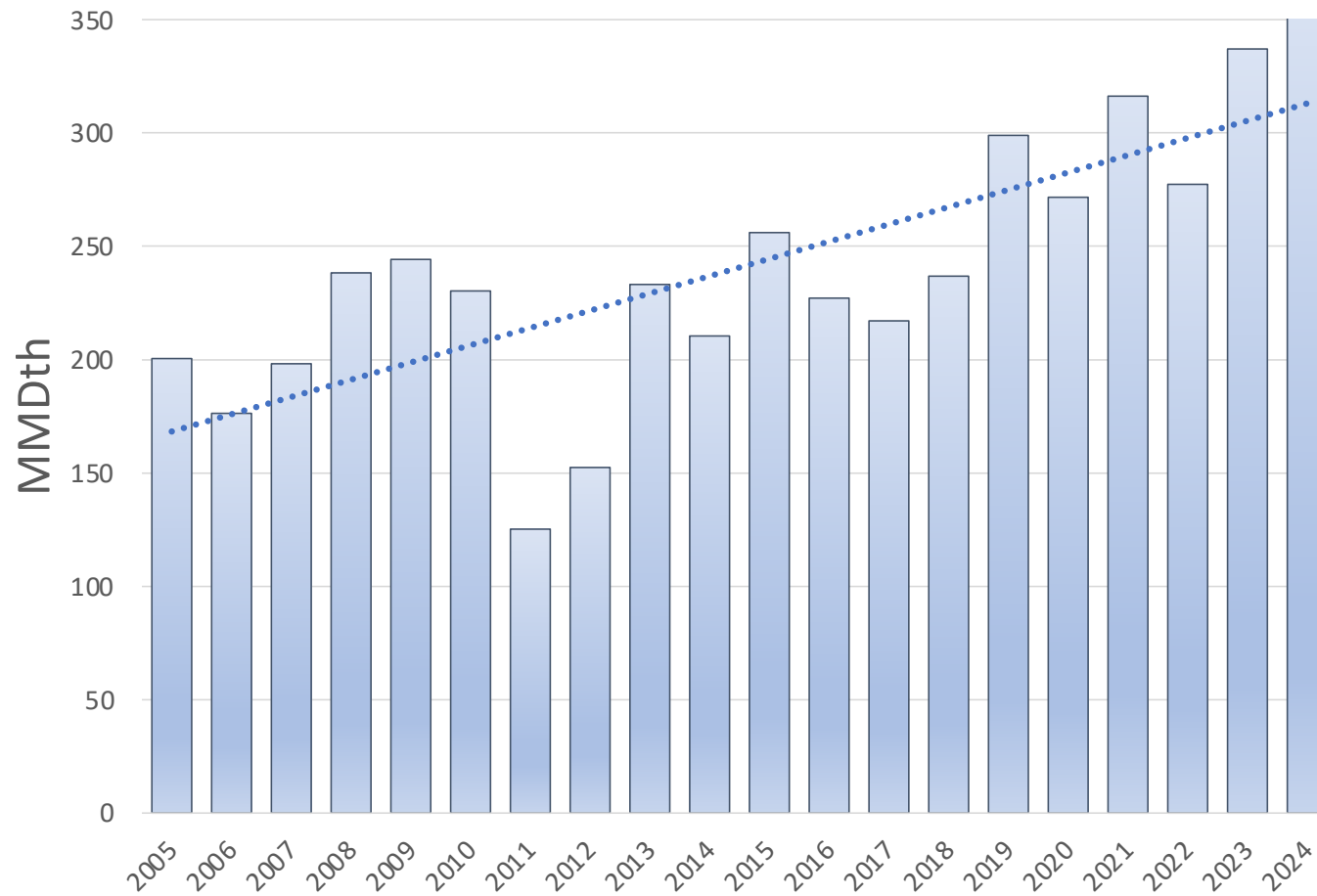
10,000 MW Nameplate
(15% of system capacity)

7,882 MWa capability
(23.3% of system capability)
6,123 MWa baseload
+
1,759 MWa peaking

Source: NW Power & Conservation Council

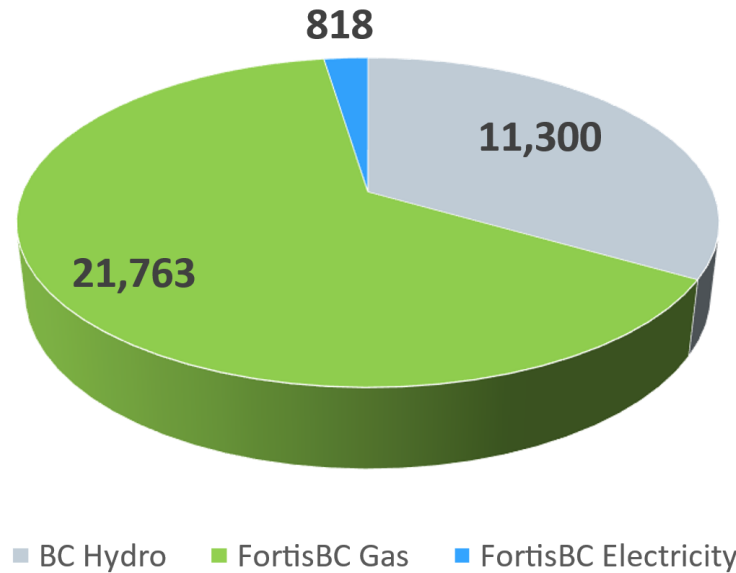
Generation Demand

Source: U.S. Energy Information Administration; Statistics Canada



BC Peak Energy Deliveries

British Columbia Peak Energy Usage
(MW) January 2024

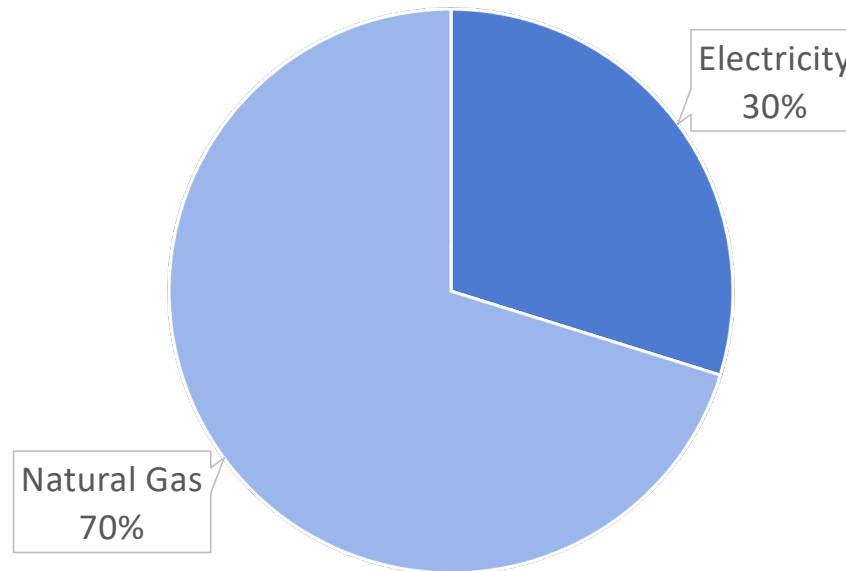


Source: BCHydro, FEI, FBC

January 14, 2024, 9am-10am (OR/WA):

- 92,829 Dth delivered via electric system (27,206 MW)
- 218,546 Dth delivered via gas system (64,050 MW)

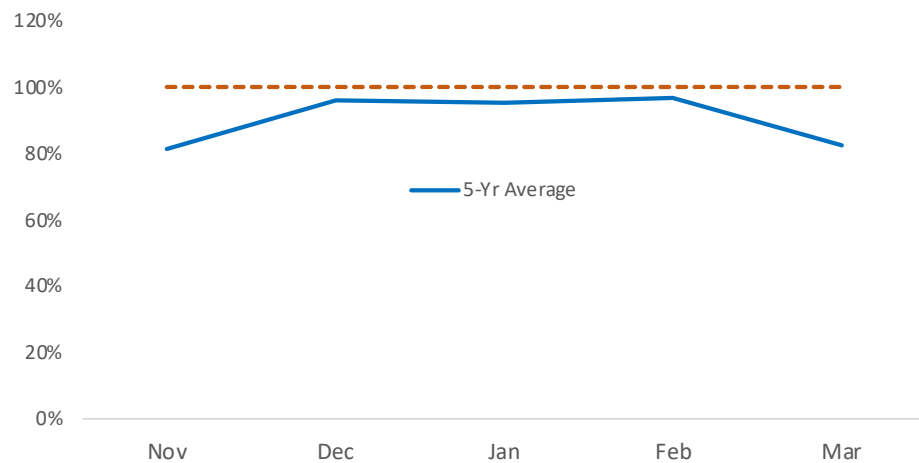
OR & WA Combined



**PLUS: 34,823 Dth of gas
to generate electricity**

Pipeline Utilization

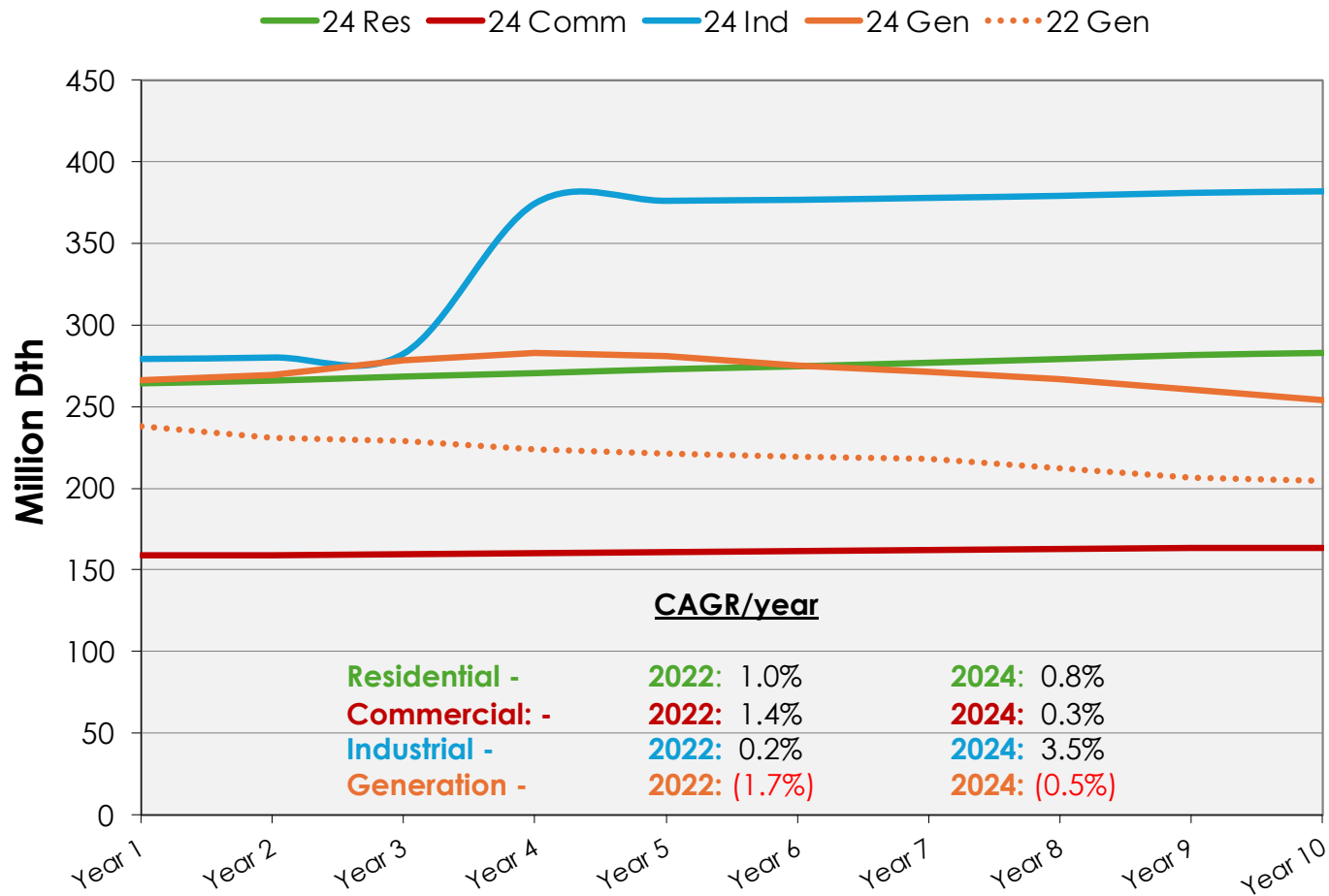
PNW Pipeline Utilization



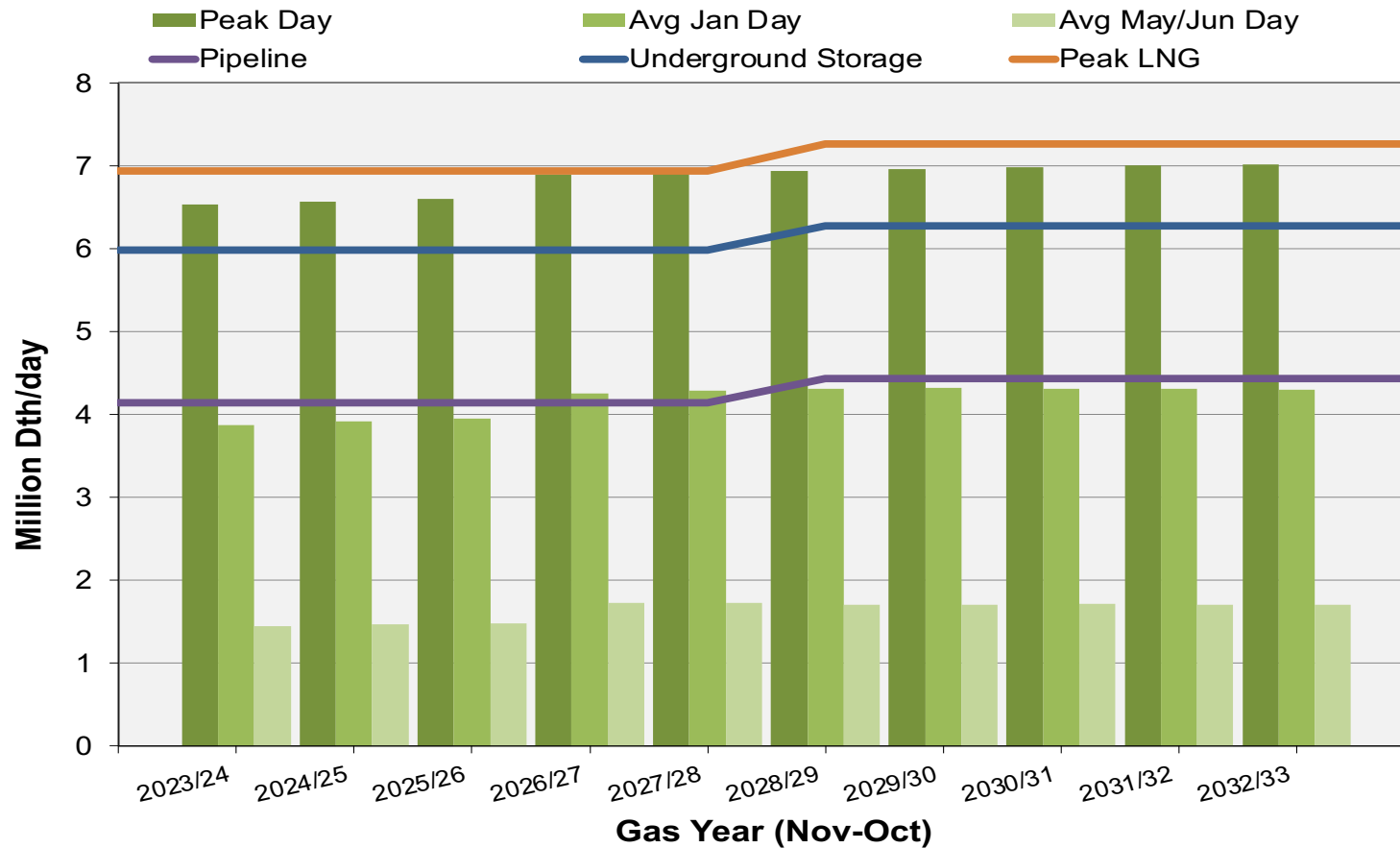
	Nov	Dec	Jan	Feb	Mar
2018/19 Winter	82%	100%	108%	118%	94%
2019/20 Winter	84%	97%	96%	91%	85%
2020/21 Winter	77%	90%	89%	95%	81%
2021/22 Winter	75%	93%	94%	88%	67%
2022/23 Winter	88%	101%	89%	93%	85%

Load Factor	Nov	Dec	Jan	Feb	Mar
Max	88%	100%	100%	100%	94%
Min	75%	90%	89%	88%	67%
5-Yr Average	81%	96%	95%	97%	82%
	100%	100%	100%	100%	100%

10 Year Annual Demand Forecast

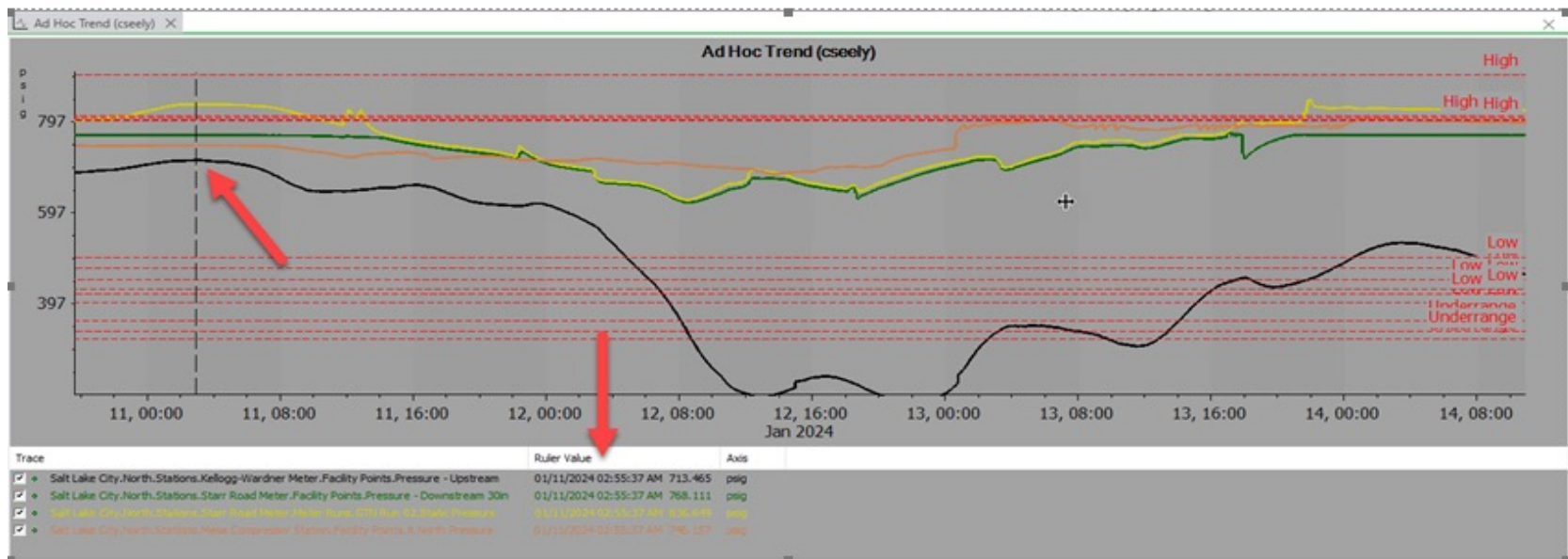


Peak/Avg Supply Demand Balance



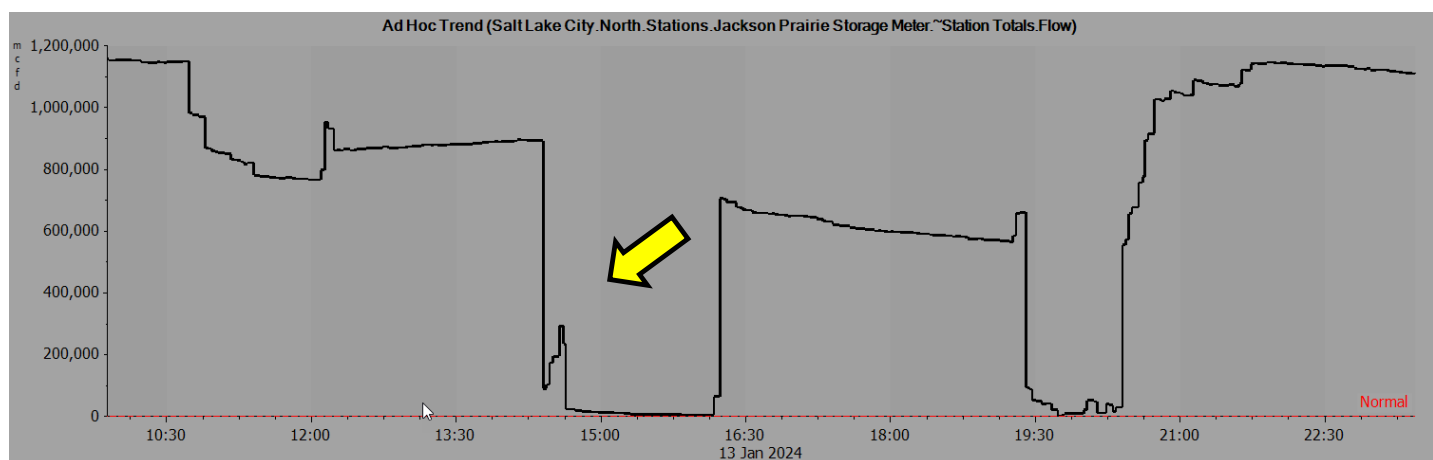
Kellogg Lateral Low-Pressure Situation (WA/ID)

- 3:00 am CST on Friday, Jan 12th – GTN lost 800 MDth/d in supply which severely impacted the pressure they were giving NWP at Starr Road.
 - Morning with low pressures at the end of the 6" Kellogg Lateral that serves Avista in northern Idaho.
 - Low pressure situation exacerbated during the morning pull.
 - NWP worked proactively with Avista to mitigate a complete outage to the Kellogg community. Pressures stabilized overnight.



Jackson Prairie outage

- Saturday, Jan 13th 2:24 pm CT: NWP lost all flow from JP Storage
 - Communications outage caused complete shut down.
 - Free flow was not an immediate option for remediation
 - Customer nomination was net 1,100 MDth/d
 - Current physical withdrawal was 980 MDth/d



Analysis

- The region is dangerously close to experiencing significant energy supply disruption.
- Demand for energy in the PNW is projected to surge.
- Regional assessments rely on capacity additions that may not be deployed.
- Gas and Electric interdependence is increasing and demands enhanced coordination.
- A reliable, affordable and sustainable energy future will require collaboration on actionable solutions, **including support for energy infrastructure.**