

2021-2022 IRP Technical Conference

April 28, 2021



**Dominion
Energy®**

2021 IRP Schedule

February 9, 2021 – Technical Conference

- Review of IRP Standards and Guidelines
- Review of 2020 PSC Order Regarding IRP
- March 2020 Stakeholder Meeting Review
- Rural Expansion Update
- LNG Update
- Hedging

April 28, 2021 – Technical Conference

CONFIDENTIAL MEETING

- Heating Season Review
- System Integrity Update
- Wexpro Matters (Confidential)
- RFP Review (Confidential)

May 18, 2021 – Technical Conference

- IRP Project Detail Discussion
- Long Term Planning Update
- Hydrogen Pilot Update
- Future STEP Project Update

June 22, 2021 – Technical Conference

- Presentation and Review of 2021-2022 IRP

Integrity Management Update

Richard Kiser

Integrity Management

	2021	2022	2023
Transmission Integrity Management Program	8,189	7,316	7,891
Distribution Integrity Management Program	1,862	2,089	2,193
Total Integrity Management Cost (\$ Thousands)	10,050	9,405	10,083

Year	HCA Miles Assessed	Anomalies Repaired
2012	26.470	28
2013	50.367	27
2014	54.555	20
2015	11.040	2
2016	37.226	4
2017	12.935	8
2018	30.212	9
2019	25.571	3
2020	54.624	8

Integrity Management

- Mega Rule

- Part 1 published October 1, 2019 with effective dates of

- October 1, 2019
 - Assessments outside HCAs, for MCAs, Class 3 & 4 (non HCA)
 - 1st Assessment completed July 3, 2034, re-assess every ten years
 - Launcher & receiver safety requirements
 - Verification of pipeline material properties for transmission pipelines
 - July 1, 2020
 - Expanded records requirements through out Part 192, traceable, verifiable, and complete
 - MAOP Reconfirmation
 - Material properties verification
 - July 1, 2021
 - Transmission pipelines MAOP reconfirmation
 - 50% complete July 3, 2028, 100% July 2, 2035

Integrity Management

- Mega Rule (cont.)

- Part 2

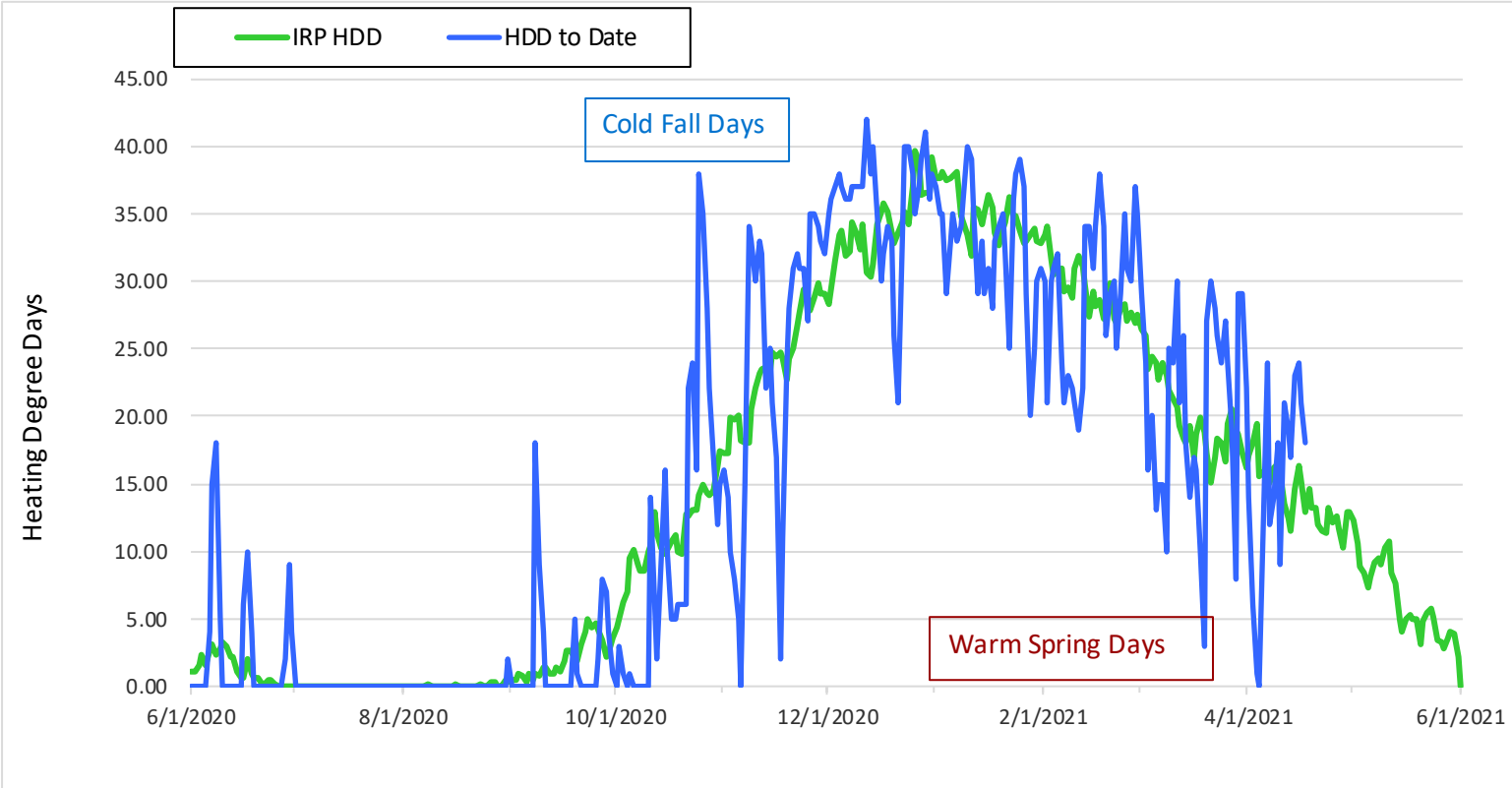
- Expected publish date was later this year, it is expected to be likely early 2022
 - Some of the major topics include;
 - Repair Criteria for both HCA and non-HCA areas
 - Extreme weather inspections
 - Strengthening assessment requirements
 - Management of change

- Part 3

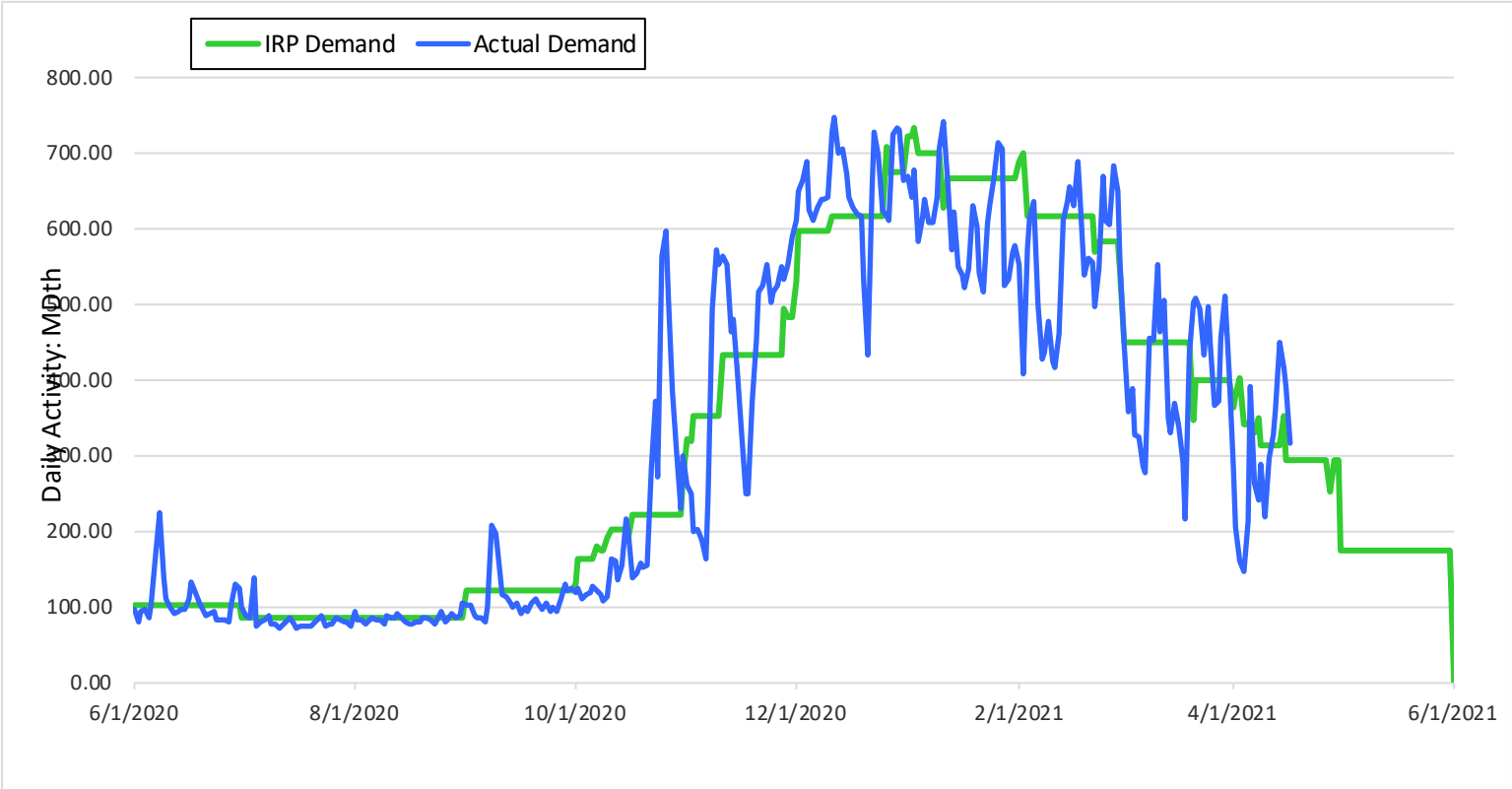
- This part is expected to have no impact on the distribution company as it is focused on facilities not part of the distribution system. However, the focus is on publishing it before Part 2 so it is contributing to the delay part 2 publication.

2020-2021 Heating Season Review

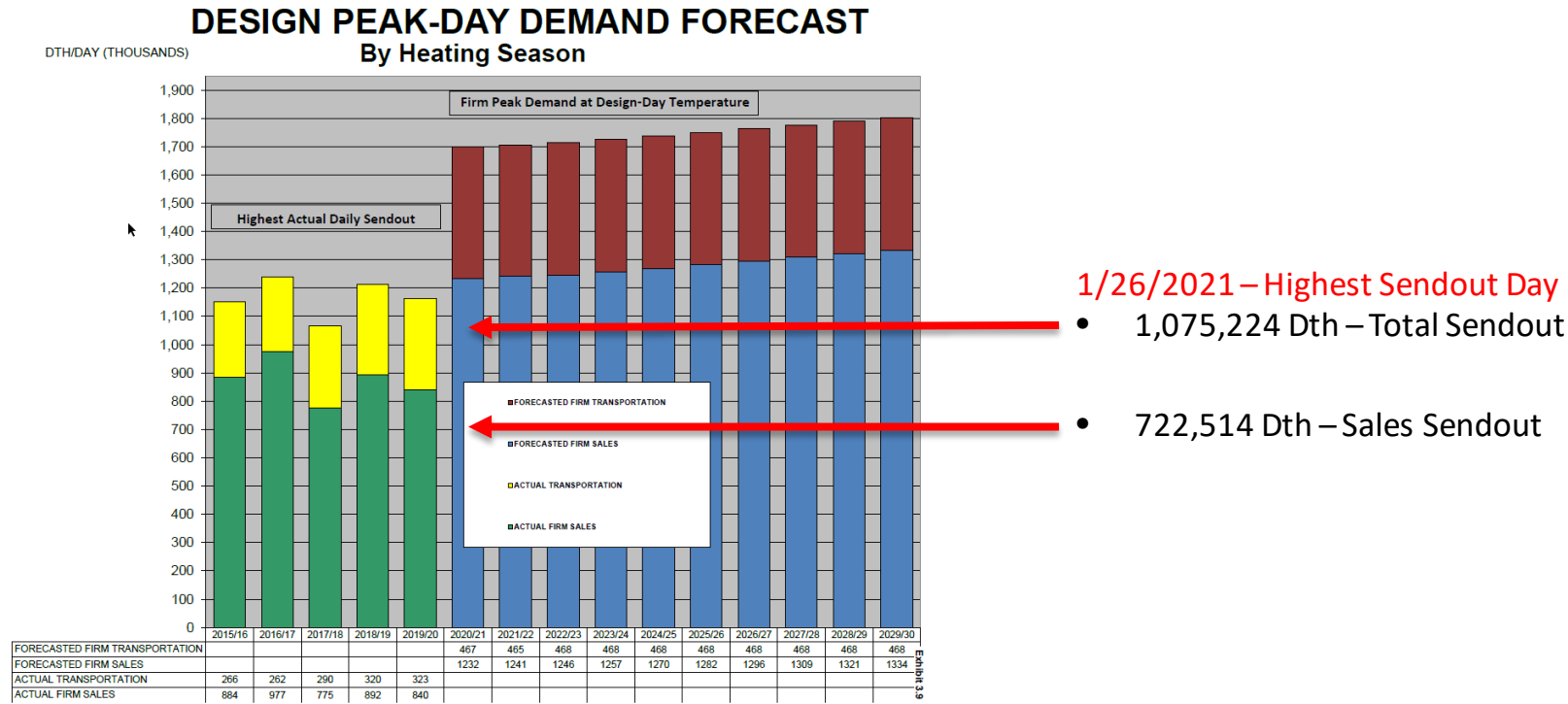
Heating Degree Days



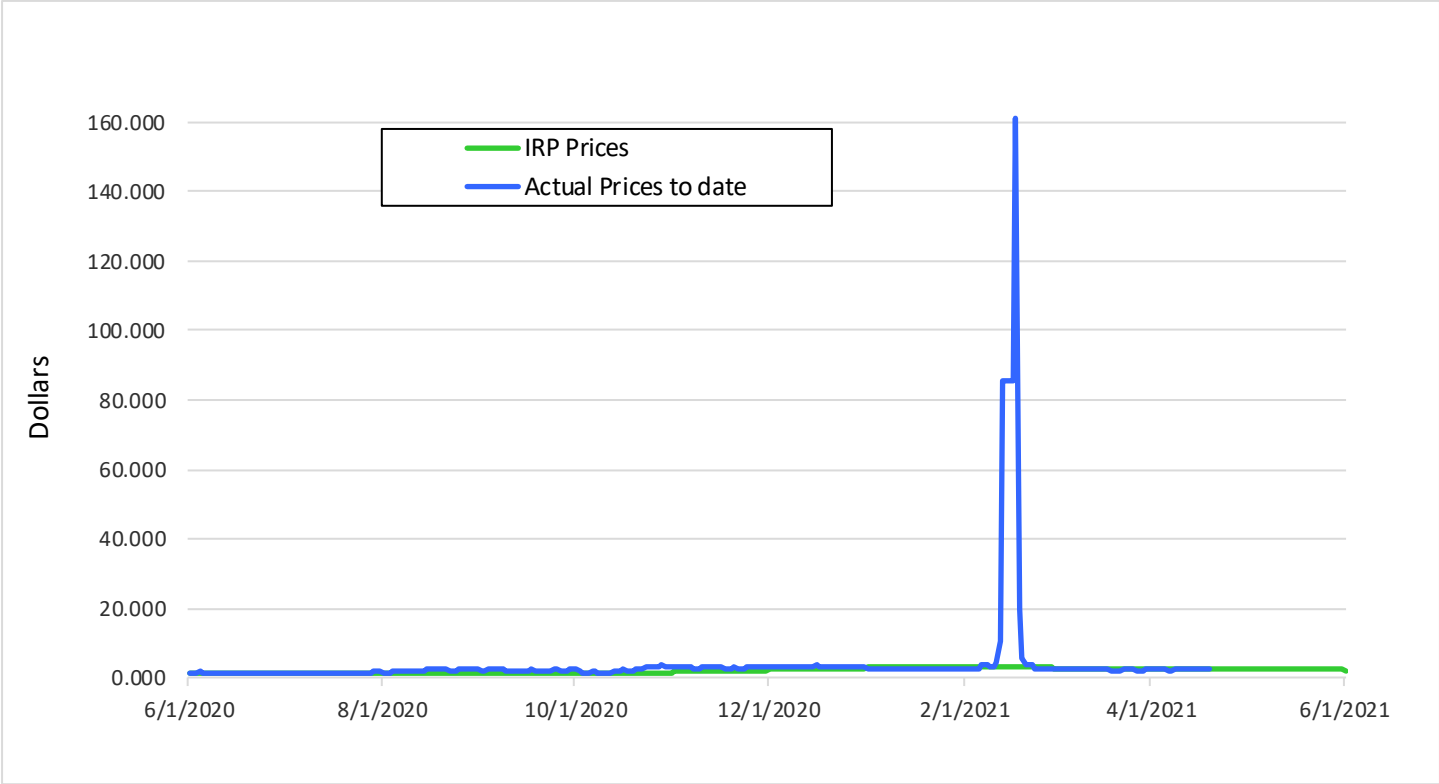
Demand



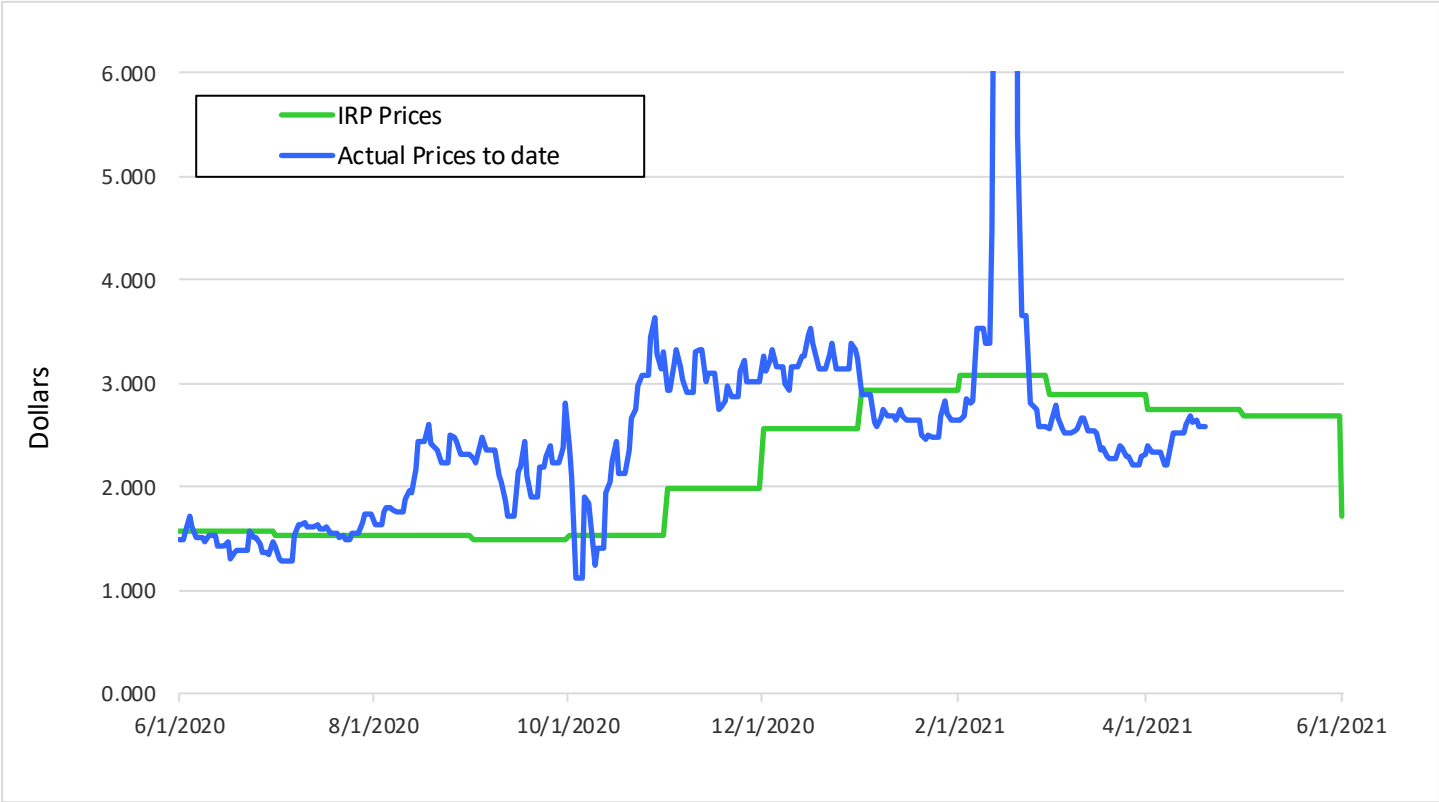
Highest Sendout vs. Peak Design Day



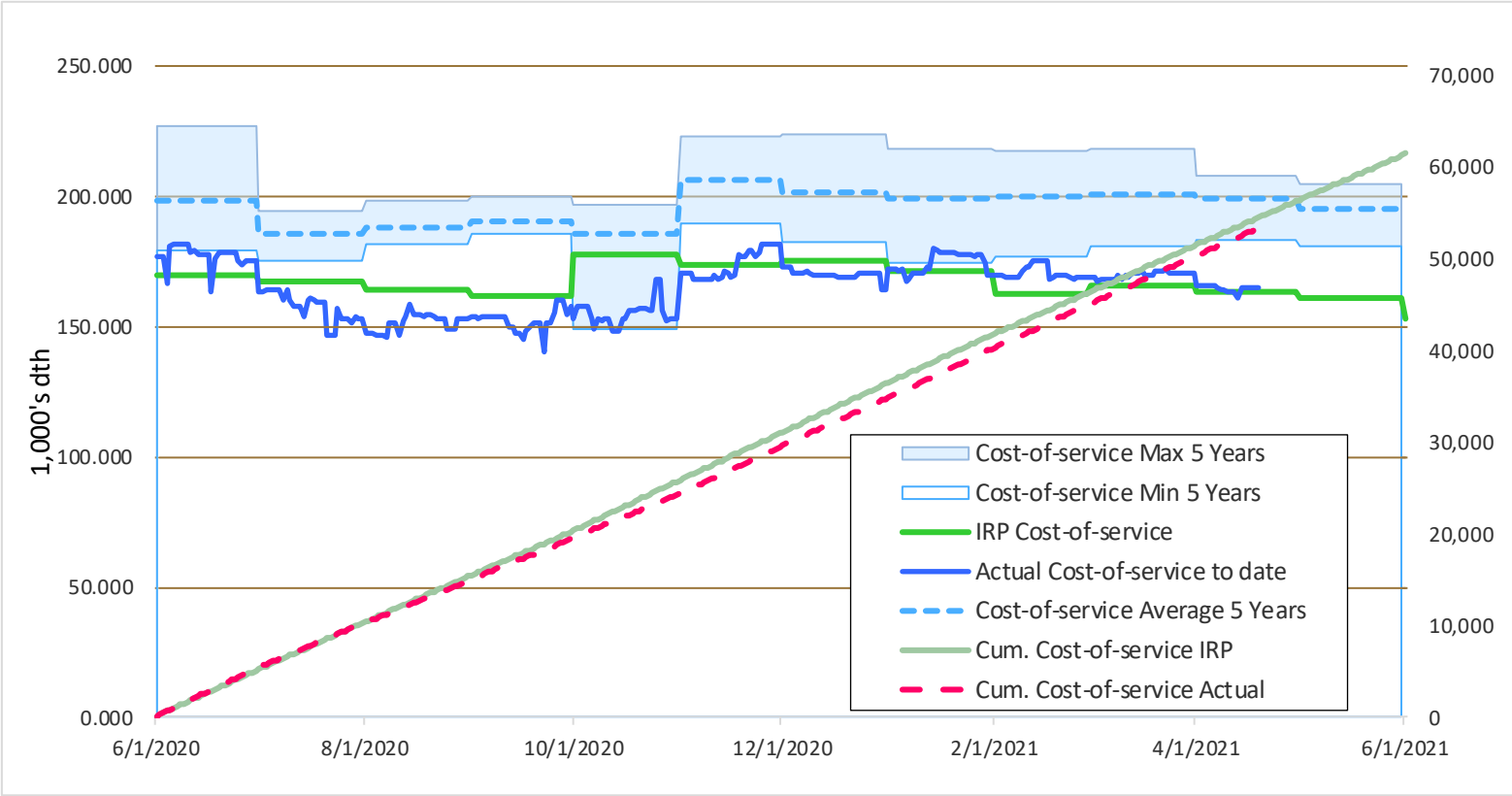
Index Prices*



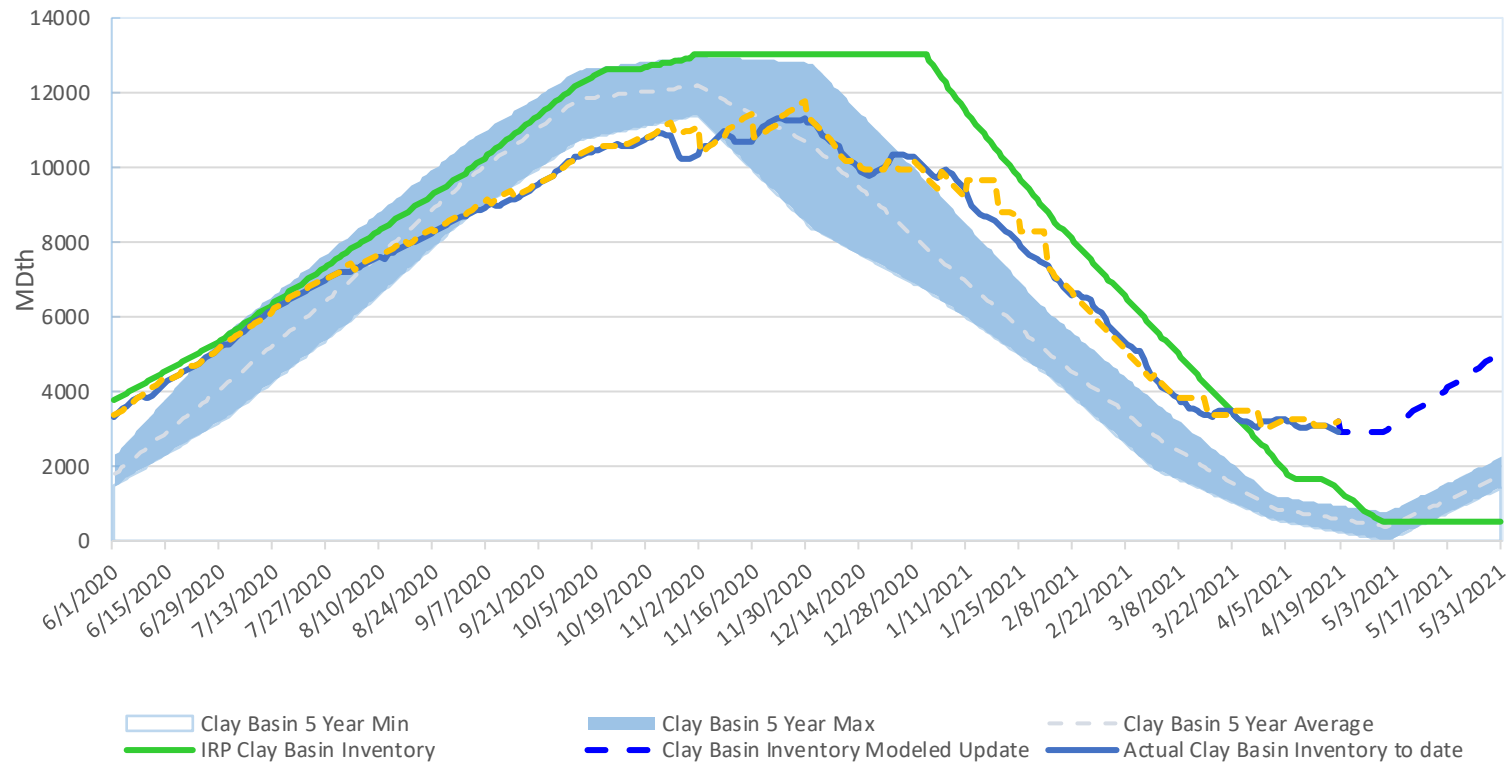
Index Prices*



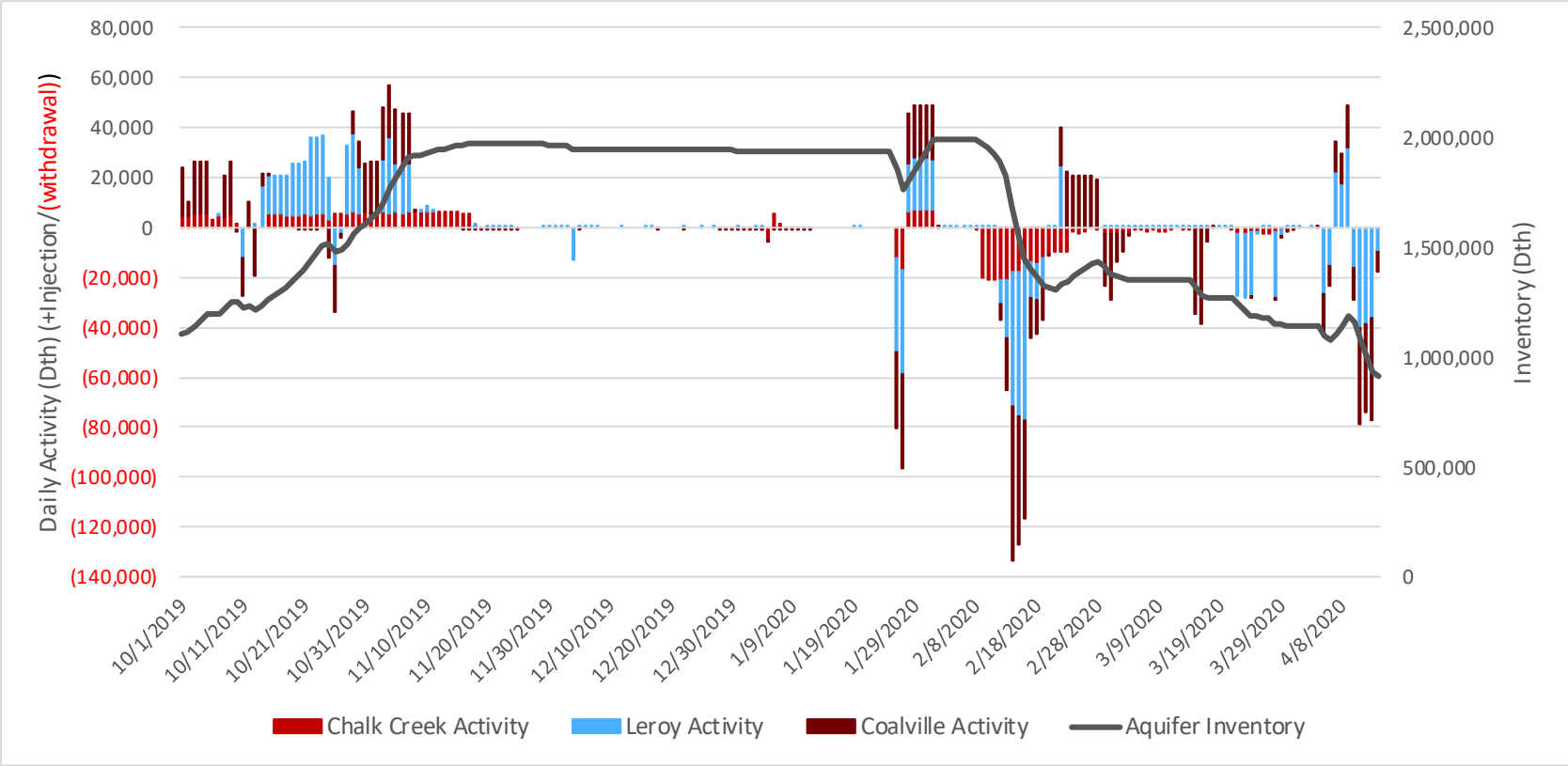
Cost-of-Service Production



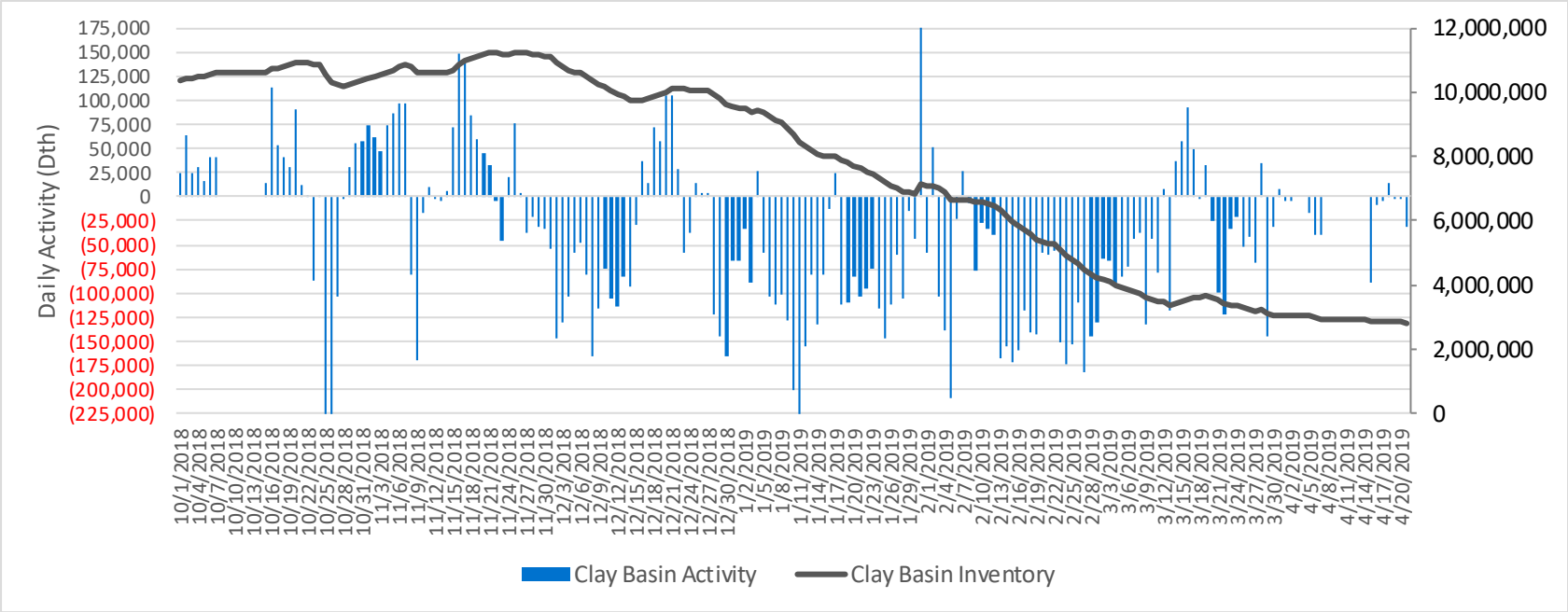
Clay Basin Inventory



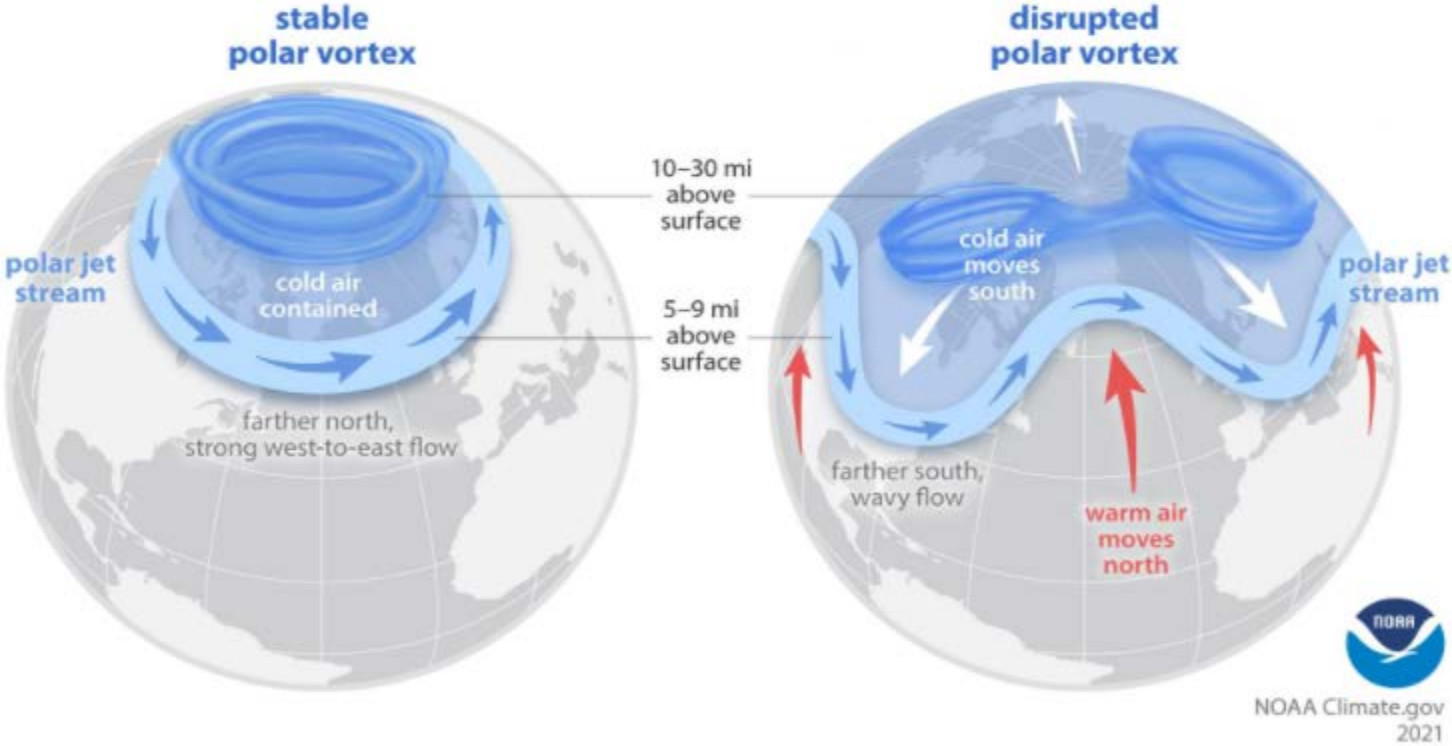
Aquifer Usage



Clay Basin Usage

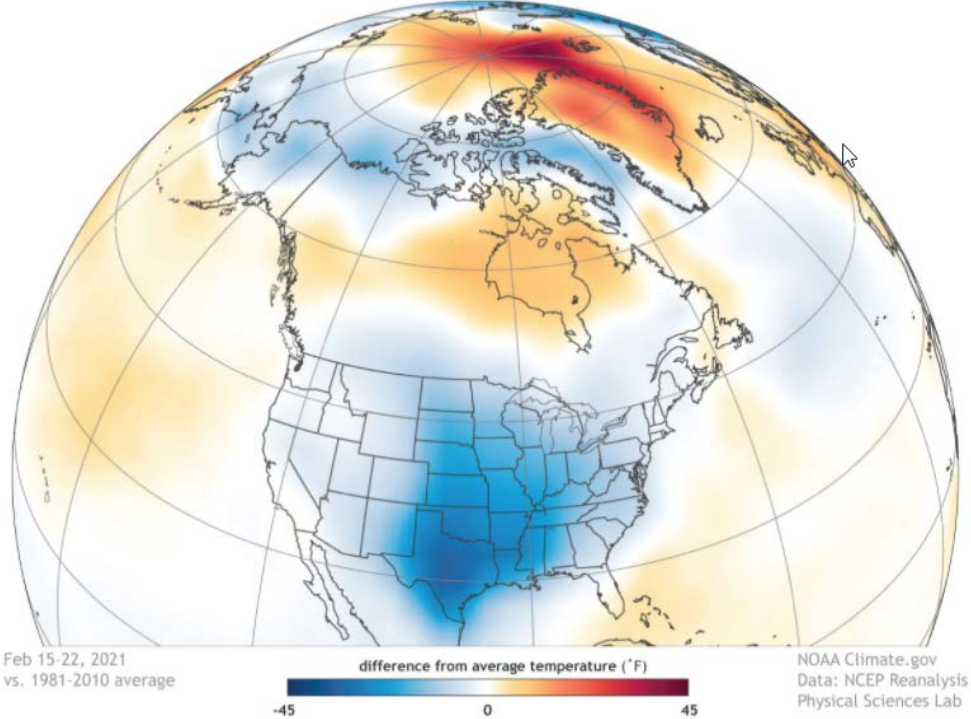


The Polar Vortex



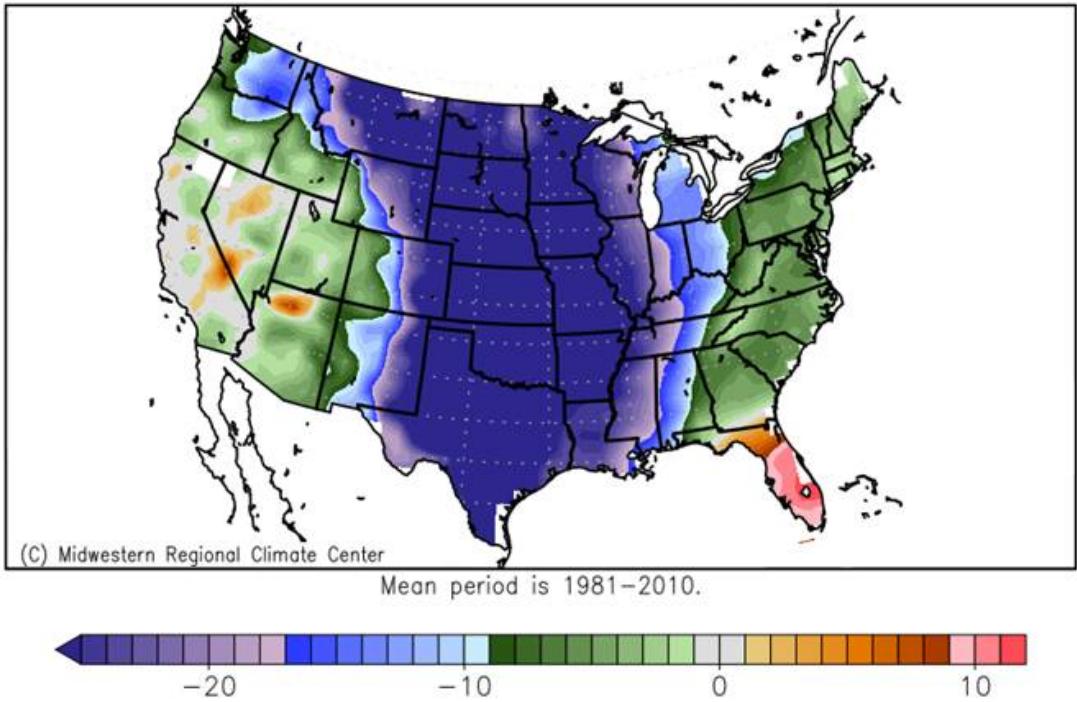
Extreme Cold Impacts South-Central United States

Extreme cold in south-central United States (February 15-22, 2021)



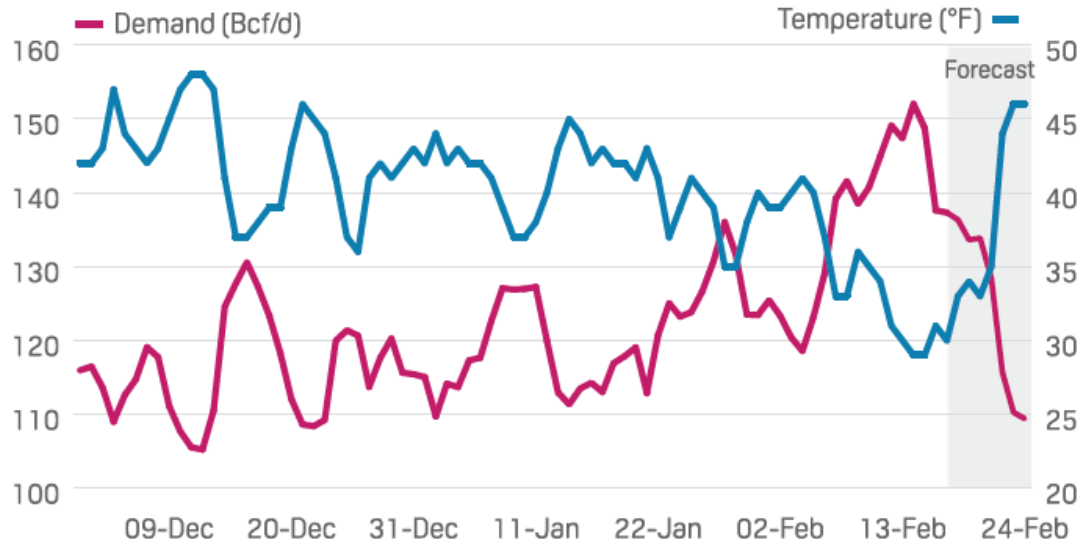
Extreme Cold Impacts South-Central United States

Average Temperature (°F): Departure from Mean
February 12, 2021 to February 18, 2021



Near-Record Demand

- Demand of 152 Bcf/d near record of 155 Bcf/d
- Demand concentrated in Texas/Midcon

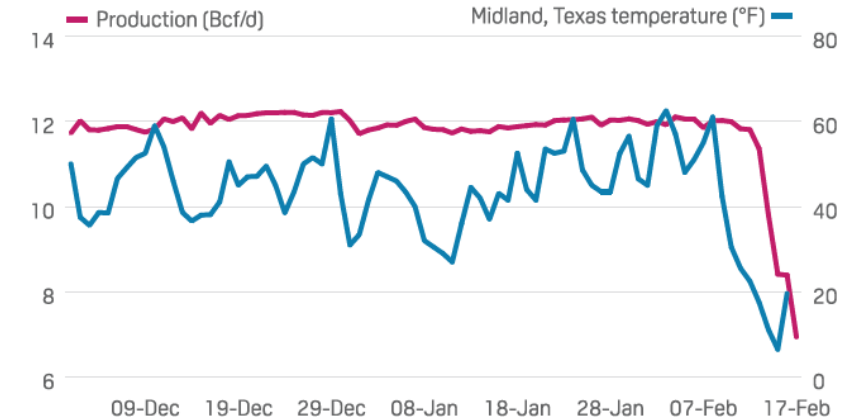


Note: Total US gas demand includes LNG and pipeline exports.
Temperatures calculated as a population-weighted average.
Source: S&P Global Platts Analytics

Supply Reductions

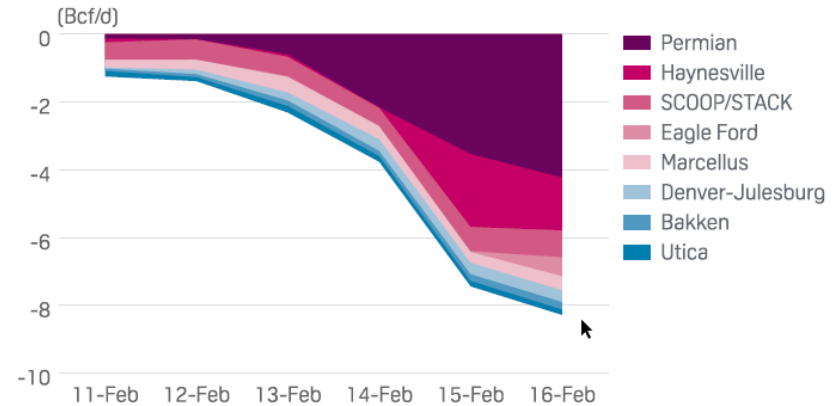
- Freeze-offs dropped US production by almost 18 Bcf/d (20% of total production)
- Texas/Midcon production had biggest drop offs

PERMIAN GAS PRODUCTION PLUMMETS AMID HISTORIC WEST TEXAS FREEZE-OFF



Source: S&P Global Platts Analytics

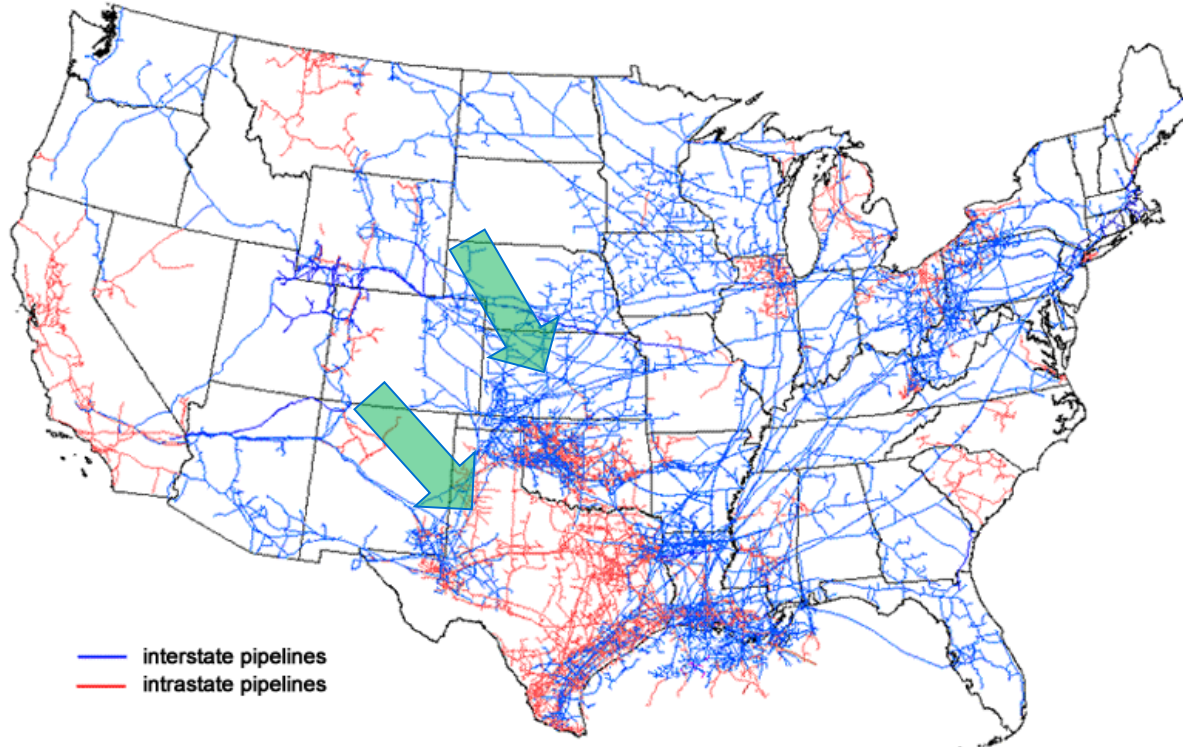
US GAS PRODUCTION PLUMMETS AMID HISTORIC FREEZE OFF



Data reflects change in gas production by basin versus pre-storm, prior 30-day averages

Source: S&P Global Platts Analytics

Impact on the Rockies



Source: U.S. Energy Information Administration, *About U.S. Natural Gas Pipelines*

Pricing Impact

Kern Opal

2/8 -2/10 -	\$1.690
2/11 -	\$4.490
2/12 -	\$10.420
2/13 -2/16 -	\$85.560
2/17 -	\$160.84
2/18 -	\$20.000
2/19 -	\$5.405

Dominion South

2/8 -2/10 -	\$1.600
2/11 -	\$3.320
2/12 -	\$4.135
2/13 -2/16 -	\$3.945
2/17 -	\$7.875
2/18 -	\$5.915
2/19 -	\$4.010

Transco Z6 non-NY

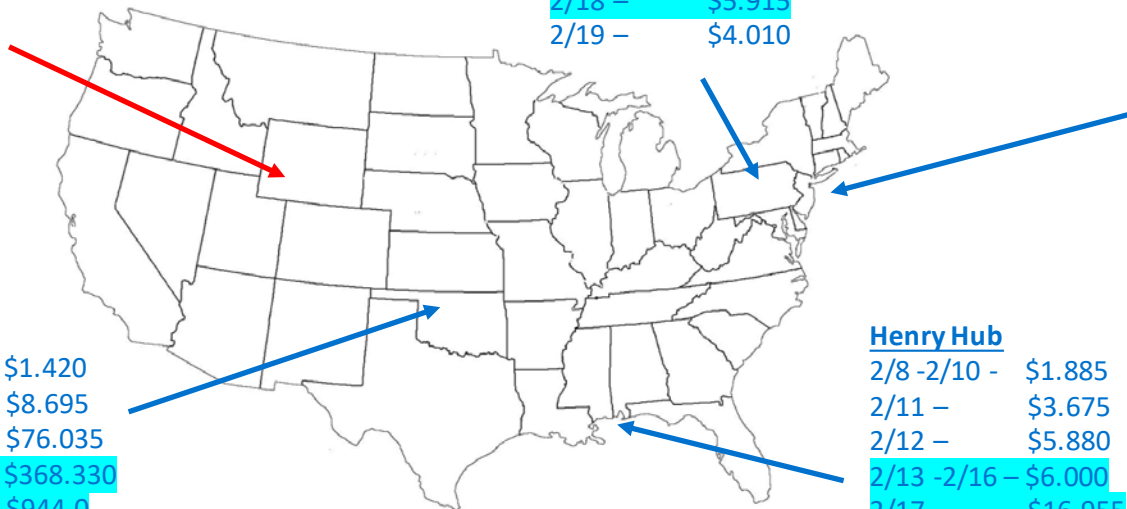
2/8 -2/10 -	\$1.840
2/11 -	\$3.990
2/12 -	\$5.830
2/13 -2/16 -	\$5.685
2/17 -	\$15.37
2/18 -	\$13.860
2/19 -	\$5.770

Oneok, Okla

2/8 -2/10 -	\$1.420
2/11 -	\$8.695
2/12 -	\$76.035
2/13 -2/16 -	\$368.330
2/17 -	\$944.0
2/18 -	\$1193.150
2/19 -	\$16.620

Henry Hub

2/8 -2/10 -	\$1.885
2/11 -	\$3.675
2/12 -	\$5.880
2/13 -2/16 -	\$6.000
2/17 -	\$16.955
2/18 -	\$23.650
2/19 -	\$7.495



DEUWI Purchasing Plan

- Wexpro Cost-of-Service Production
- Baseload Contract Purchases (First of Month Index)
- Peaking Contract Purchases (First of Month Index)
- Storage Withdrawals (Clay Basin - DEQP)
- Storage Withdrawals (Belle Butte – Spire)
- Storage Withdrawals (Aquifers – DEQP)
- Baseload Contract Purchases (Daily Index) – Daily Price Exposure
- Spot Gas Purchases (Daily Index) – Daily Price Exposure
- Peaking Contract Gas Purchases (Daily Index) – Daily Price Exposure



Increase
Withdrawals



Minimize
Purchases

DEUWI Purchasing Results

- Gas Supply Costs – February 12-18, 2021 (7 days)

Supply Type	Amount (MDth)	%	Cost/Dth	Total Cost
Wexpro	1,212.60	28%	\$ 4.04	\$ 4,899,902
Base (FOM)	682.50	21%	\$ 2.80	\$ 1,914,171
Peaking (FOM)	175.00	13%	\$ 3.53	\$ 617,750
Clay Basin Withdrawal	928.08	3%	\$ 3.63	\$ 3,366,369
Aquifers Withdrawal	562.75	16%	\$ 3.63	\$ 2,041,215
Belle Butte Withdrawal	116.20	4%	\$ 3.63	\$ 421,485
Base (Daily)	104.80	2%	\$ 76.17	\$ 7,982,158
Spot/Peaking (Daily)	546.80	13%	\$ 102.61	\$ 56,109,019
	4,328.72			\$ 77,352,069

- Offsets – February 12-18, 2021 (7 days)

Offset Method	Purchase Offset (MDth)	Savings
Wexpro Production	1,212.60	\$ 118,331,865
Storage Withdrawals	1,607.03	\$ 174,568,676
FOM Deals	857.50	\$ 84,615,780
	3,677.12	\$ 377,516,321

Moving Forward

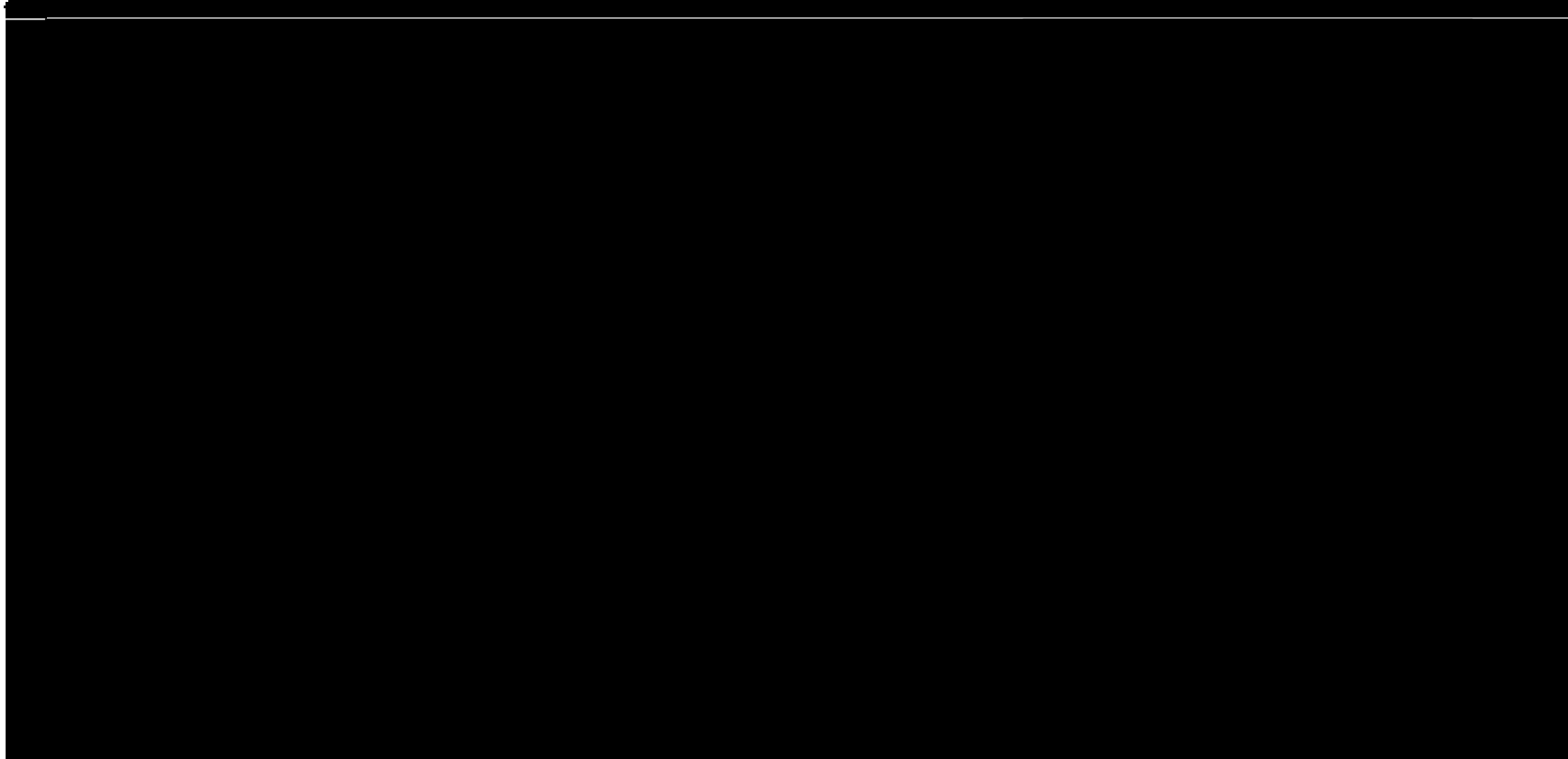
- Some utilities reported \$2.5 - \$3.5 billion in natural gas purchase costs
- Some utilities are seeking long-term alternatives to spread costs over an extending timeframe
- DEUWI – approximate 7% increase in rates due to this event
- Fall 2022 – Magna LNG storage facility completion will provide supply reliability
- DEUWI is evaluating additional hedging opportunities
 - Additional FOM pricing contracts
 - Additional storage contracts
 - Expansion of Wexpro cost-of-service production

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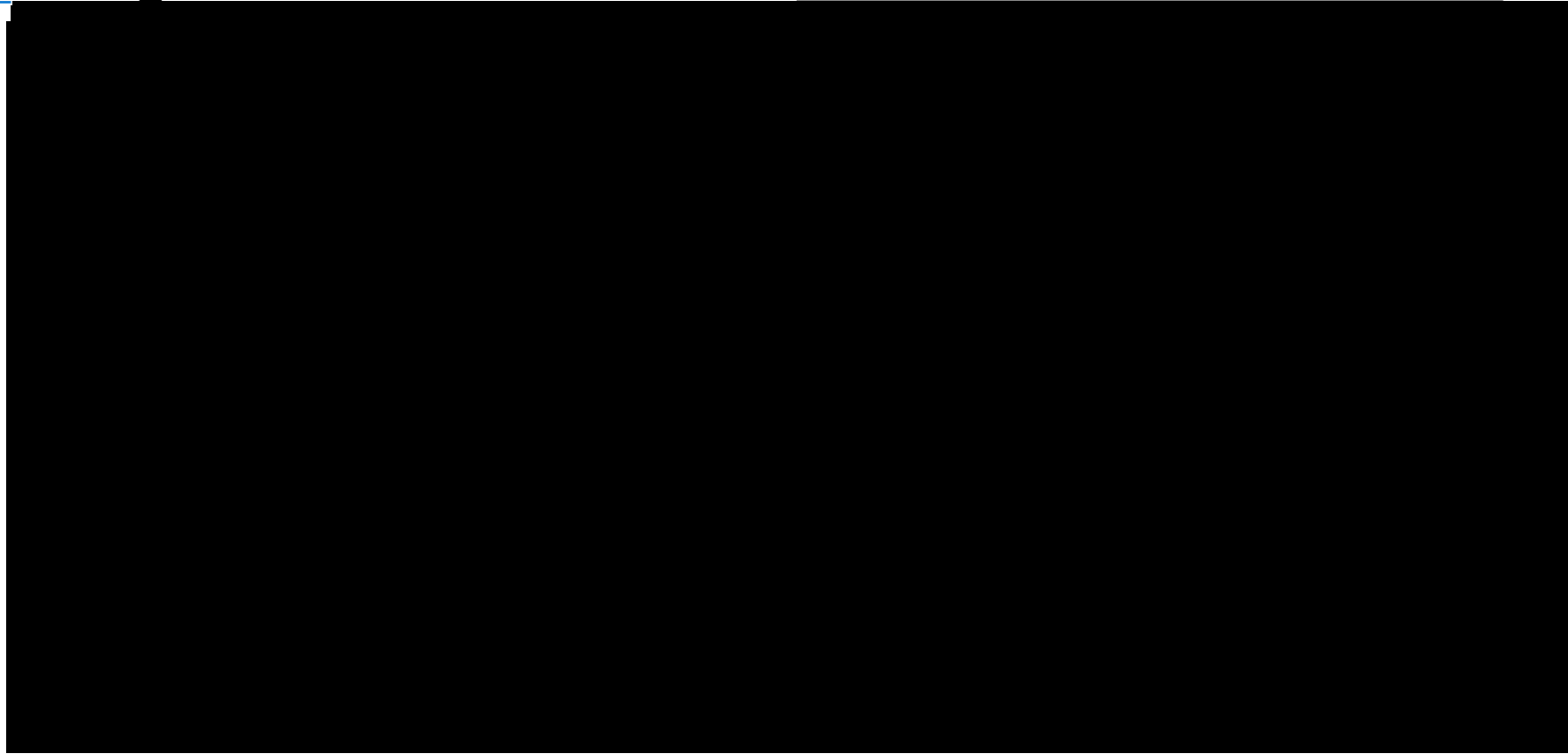
CONFIDENTIAL SECTION

Wexpro Matters Update

Location Map

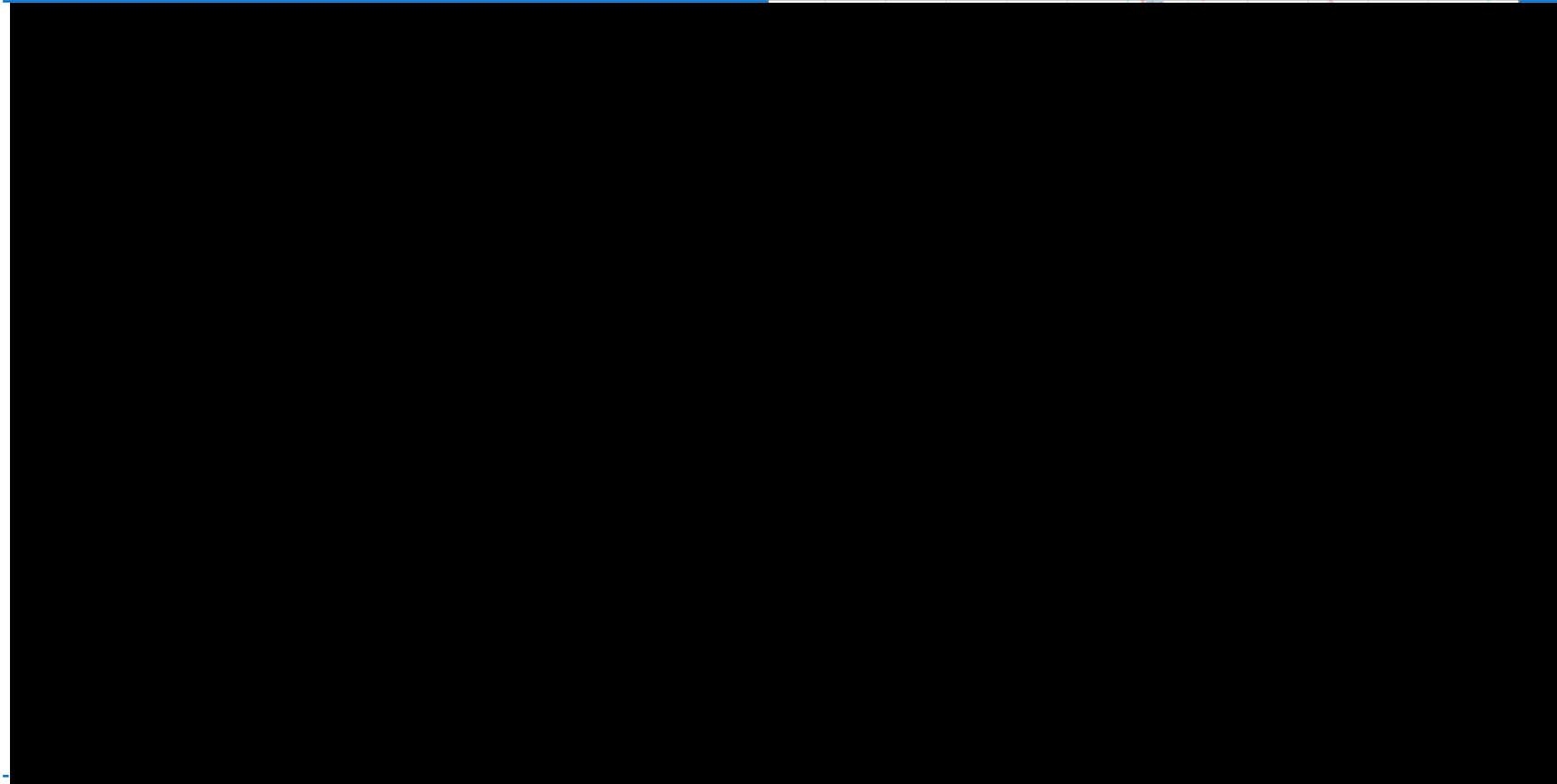


Program Overview



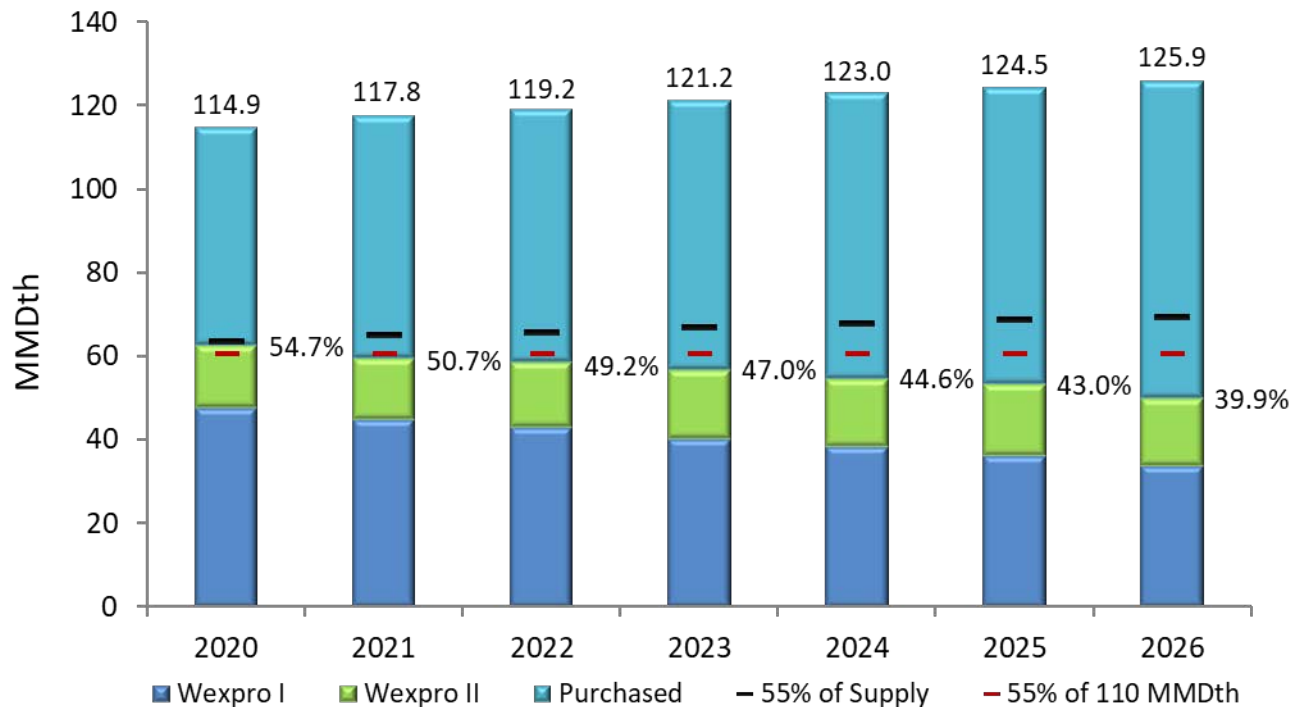
Land

Land



IRP 2021

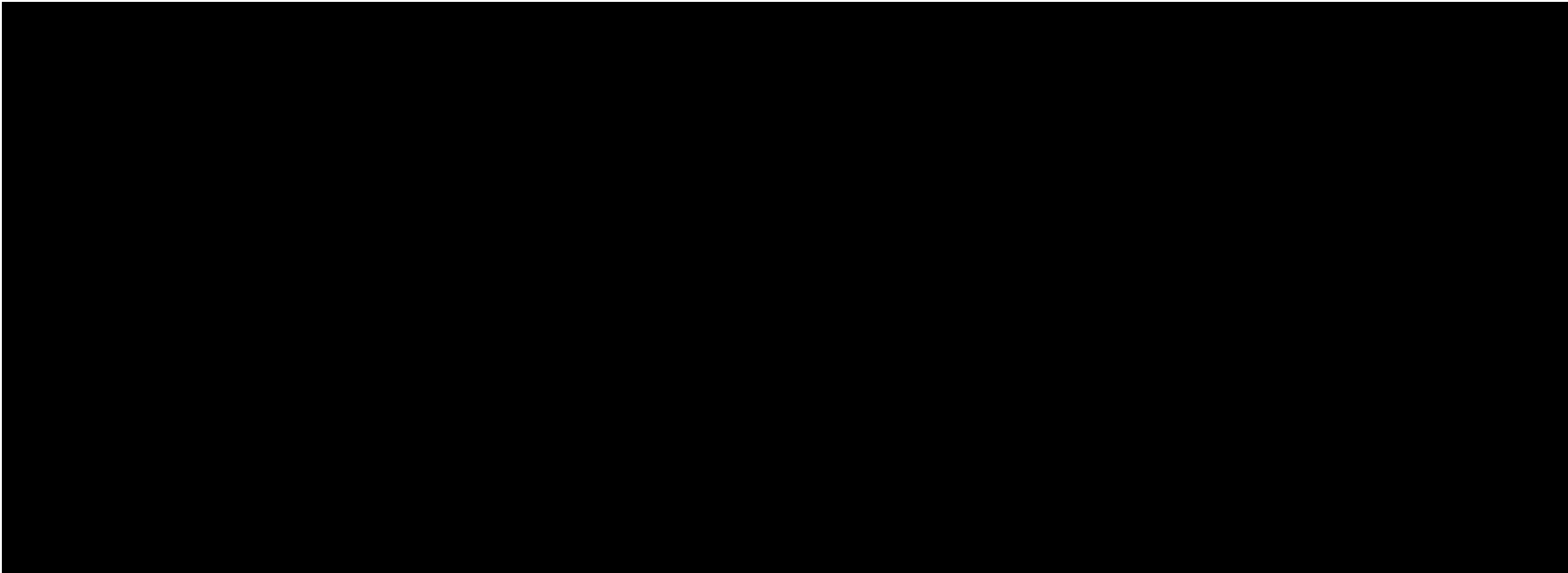
Total DEUWI Gas Supply (IRP Year: June - May)



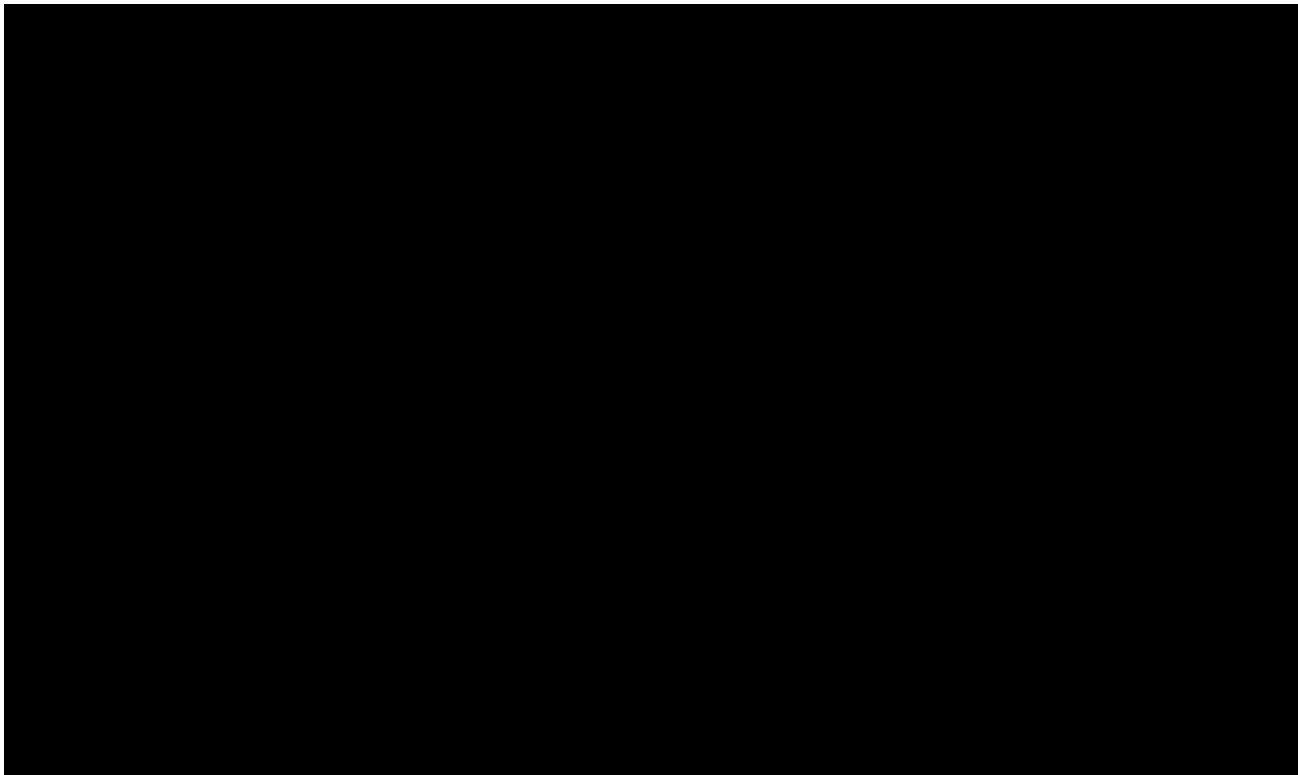
2021-2022 Gas Supply RFP

Steven Wall

RFP Responses



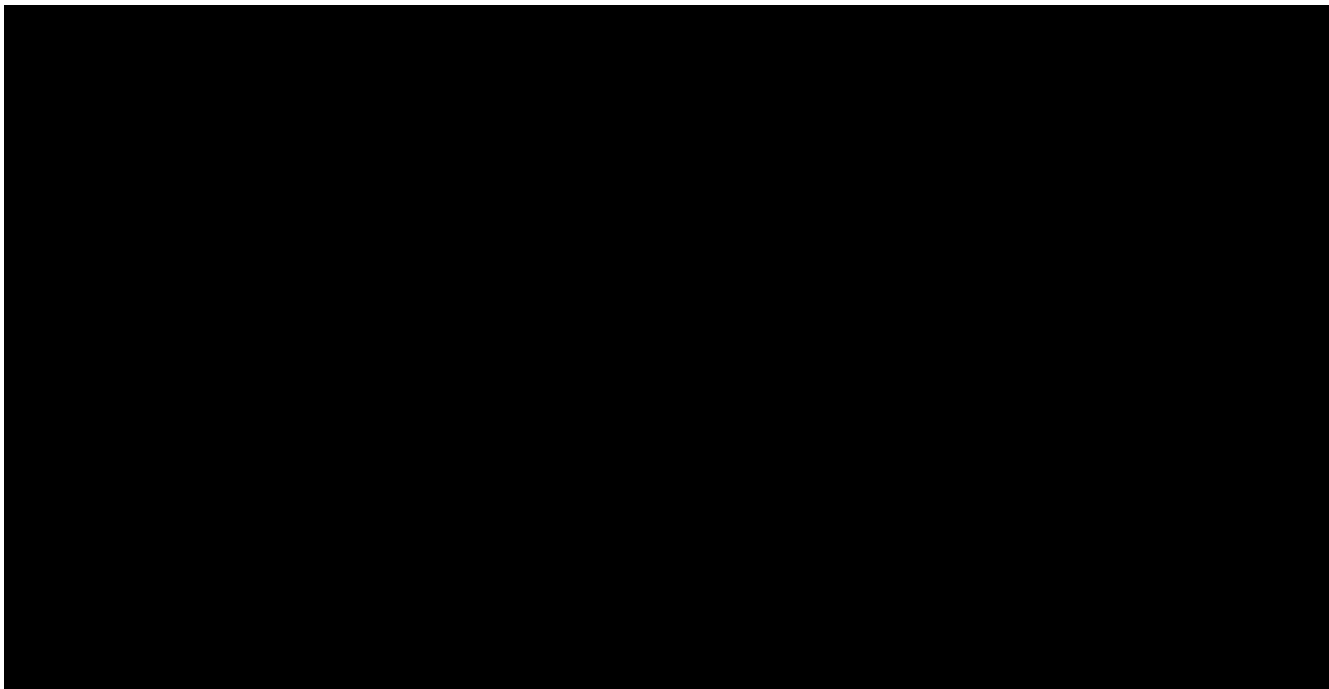
Baseload Supply (Dth)



DEQP Peaking Supply (Dth)



KRGT Peaking Supply (Dth)



Total Supply Recommended 2020-2021 (Dth)

