

2023-2024 IRP Technical Conference
July 11, 2023



**Dominion
Energy[®]**

2023 IRP Schedule

Jan 24, 2023 – 10:00 AM to Noon

- Review IRP Standards and Guidelines
- Review 2022 PSC Order regarding IRP
- Pricing Update

April 25, 2023– 10:00 AM to Noon

- Heating Season Review
- Gas Supply Hedging
- Transportation and Storage Planning
- LNG Operations Update

Jul 11, 2023 – 10:30 AM to Noon

- Final Presentation

April 4, 2023 – 10AM to Noon

CONFIDENTIAL MEETING

- Wexpro Matters (Confidential)
- System Integrity
- Rural Expansion Update

May 2, 2023 – 1:30 PM to 3:30 PM

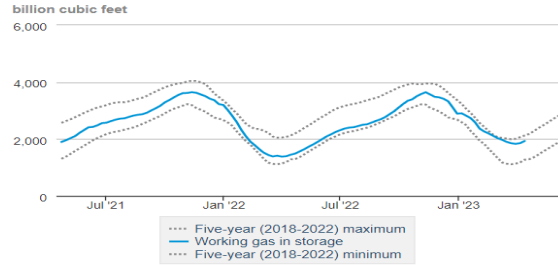
- RFP Review (Confidential)
- Sustainability Update
- Long-Term Planning
- IRP Project Detail Discussion

2023-2024 Integrated Resource Plan

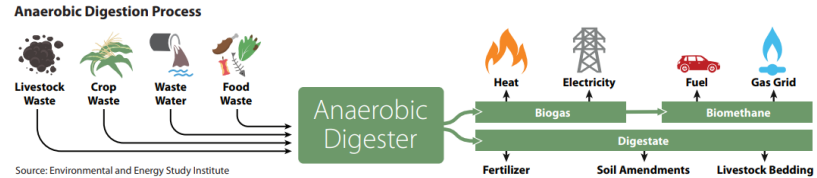
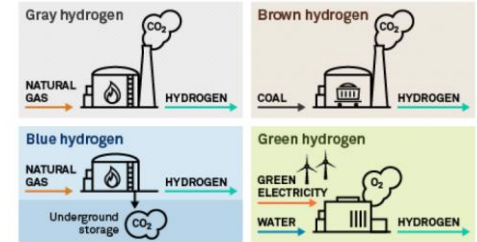
- 1 – Executive Summary
- 2 – Industry Overview
- 3 – Customer and Gas Demand Forecast
- 4 – System Capabilities and Constraints
- 5 – Distribution System Action Plan
- 6 – Integrity Management
- 7 – Environmental Review
- 8 – Purchased Gas
- 9 – Cost of Service Gas
- 10 – Gathering, Transportation and Storage
- 11 – Supply Reliability
- 12 – Sustainability
- 13 – Energy-Efficiency Programs
- 14 – Final Modeling Results

Industry Overview

- Regulatory Updates
- Discussion of Industry Trends
 - Pricing
 - Production
 - Storage
 - LNG Exports
 - Sustainability
- Review of UT/WY IRP Process
- Heating Season Review

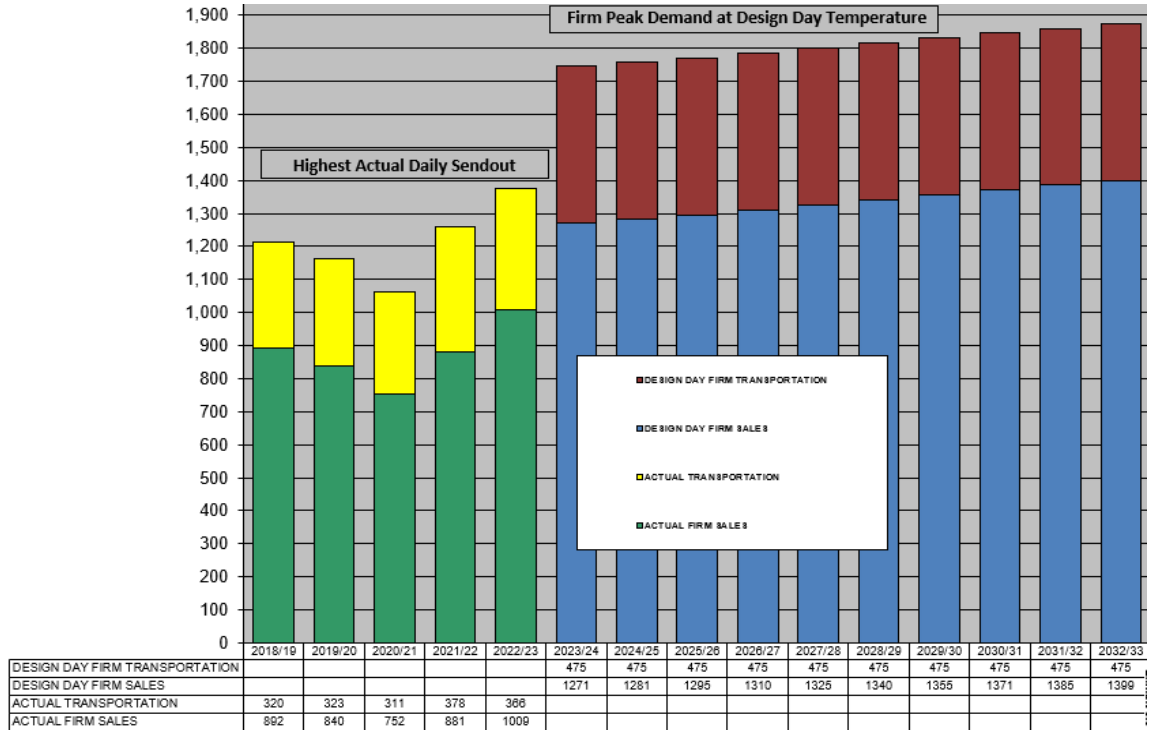


eia Data source: U.S. Energy Information Administration Form EIA-912, Weekly Underground Natural Gas Storage Report



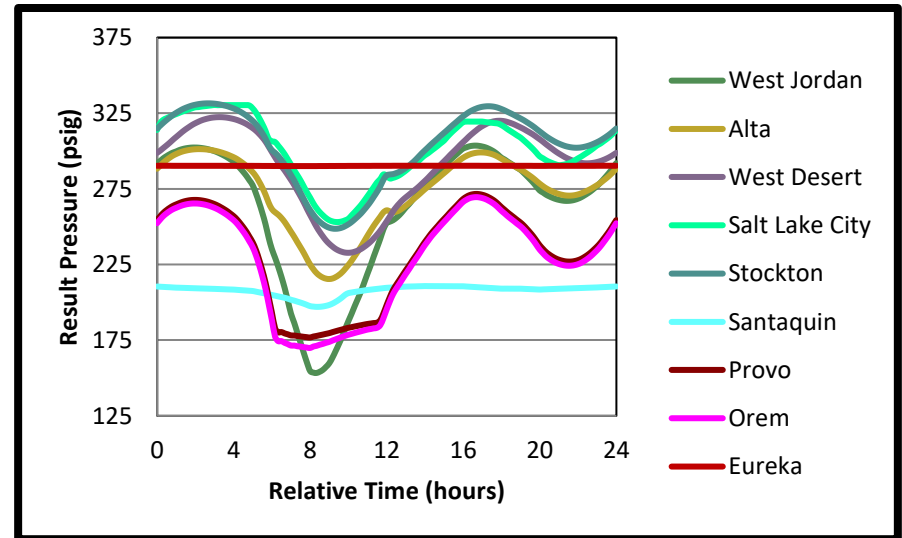
Customer and Gas Demand Forecast

- 2023-2024 Design-day firm sales demand = 1.27 MMDth



System Capabilities and Constraints

- Distribution system meets current design-day needs
 - Feeder line systems have adequate capacity to meet average-daily and peak-hourly demands
 - Supply contracts are adequate
- Projects have been identified to address constraints and concerns
 - FL135, Central 20-inch Loop
 - FL85 Extension to Eagle Mountain
 - Rockport Gate Station
 - FL13 East HP Station
 - Saratoga (TG0005) Gate Station
 - Monticello Gate Station
- Long-term Planning
 - Peak Day growth vs customer growth
 - Long-term supply
 - Impact of industry-wide sustainability initiatives



Distribution Action Plan

High Pressure Projects

Year	Project	Estimated Cost	Revenue Requirement
2023	WA1602 FL13 East HP Station, District Regulator Station, and ILI Facilities, Salt Lake City, UT	\$2,800,000	\$322,000
	WA1596 – Replace WA0866 with High- Capacity District Regulator Station for South Salt Lake City, UT	\$1,500,000	\$172,500
	WA1617 – New Reg Station Grantsville on Sheep Lane	\$750,000	\$86,250
	FL147 – 1 Mile of 8-inch for New Reg Station on Sheep Lane	\$2,000,000	\$230,000
	WA1609 – Replacement of WA0045 North Temple and I-215 Station	\$3,000,000	\$345,000
	AC Mitigation 2.6 Miles on FL36	\$1,700,000	\$195,500
2024	SY0002 Syracuse District Regulator Station	\$750,000	\$86,250
	FL47 Phase 2 Extension for SY0002 Syracuse District Regulator Station	\$4,000,000	\$460,000
	MZ0003 – Remodel of Monticello Gate Station	TBD	TBD
	Eagle Mountain District Regulator Station, near 4000 N and Hwy 73	\$750,000	\$86,250
	FL85 Extension for Eagle Mountain District Regulator Station	TBD	TBD
2025	South Bluffdale District Regulator Station	\$750,000	\$86,250
	FL Extension for Bluffdale Station	\$6,500,000	\$747,500
	South St. George – River Road District Regulator Station	\$750,000	\$86,250
	FL71-5 Extension for South St. George DR Station – River Road	\$4,000,000	\$460,000
	Central 20-inch Loop (Phase 2) – Approximately 10 miles	\$45,000,000	\$5,715,000
	WA1604 – Replace WA0441	\$1,000,000	\$115,000
2026	FL Extension for WA1604 Across Jordan River	\$3,000,000 to \$4,000,000	\$345,000 to \$460,000
	South Hurricane District Regulator Station	\$750,000	\$86,250
	FL Extension for South Hurricane Station	\$6,500,000	\$747,500
	Rockport Gate Station	TBD	TDB
	SLO114 Remodel	TBD	TBD
	FL21-10 – 6,800 LF Replacement	\$3,000,000 to \$5,000,000	\$345,000 to 575,000
	TG0005 Saratoga KRGT Gate Station	\$5,000,000+	\$575,000+
2028	Central 20-inch Feeder Line Loop (Phase 3) – Approximately 5 Miles	TBD	TBD

Distribution Action Plan

- Intermediate-High Pressure Projects
 - Belt Main Replacement Program
 - Aging Infrastructure Replacement (Not included in the Infrastructure Rate Adjustment Tracker)
- Mountain West Pipeline Transition
- Intermediate-High Pressure Projects
- Rural Expansion
 - Eureka
 - Goshen/Elberta
 - Green River
 - Next Steps

Integrity Management

	2023	2024	2025
	Cost (\$ Thousands)		
Transmission Integrity Management Program	\$8,709	\$8,616	\$9,537
Distribution Integrity Management Program	\$2,385	\$1,089	\$985
Total Integrity Management	\$11,094	\$9,705	\$10,531

YEAR	TRANSMISSION MILES ASSESSED	HCA MILES ASSESSED	ANOMALIES REPAIRED
2012	34.430	26.470	28
2013	93.391	50.367	27
2014	80.049	54.555	20
2015	15.903	11.040	2
2016	62.575	37.226	4
2017	49.555	12.935	8
2018	76.327	30.212	9
2019	111.383	25.571	3
2020	188.832	54.624	8
2021	118.389	11.066	11
2022	55.35	4.512	4

Environmental Review

- DEU is fully committed to meeting the energy needs of our customers in an environmentally responsible manner
 - Commitment to compliance with environmental laws and regulations
- DEUWI Greenhouse (CO₂e) Gas Intensity

Reporting Year	DEUWI CO ₂ e Intensity (MT CO ₂ e/MMBtu)
2019	0.0008
2020	0.0009
2021	0.0011

- Conservation efforts will continue to have a positive environmental impact
 - Estimated savings of more than 950,000 Dth of natural gas in 2022
 - Equivalent of about 50,000 metric tons of CO₂e or nearly 11,000 passenger vehicles each driven for one year (calculated using EPA's GHG equivalencies calculator)
 - Lifetime savings attributable to the ThermWise[®] program totals more than 850,000 tons of CO₂e
 - Equivalent of about 189,000 passenger vehicles each driven for one year

Purchased Gas

- Balanced portfolio of gas purchases of approximately 65.6 MMDth
- Hedging review will continue
- Historical heating season pricing:

Month	2021-2022	2022-2023	Difference
Nov	\$6.34	\$5.73	(\$0.61)
Dec	\$5.78	\$11.39	\$5.61
Jan	\$7.87	\$49.57	\$41.70
Feb	\$5.04	\$12.44	\$7.40
Mar	\$4.38	\$5.07	\$0.69
Average	\$5.88	\$16.84	\$10.96

Cost-of-Service Gas

- Level of Production
 - 56.5 MMDth (46% of forecasted demand)
 - Cost-of-service production starting to increase with increasing drilling
- Drilling Plans
 - For calendar year 2023, Wexpro plans on completing to production 38.8 net wells
 - Focus will be on the Trail, Canyon Creek, and Alkali Gulch fields
 - 2024 through 2028, the total planned net wells 37.8, 37, 37.4, 37.5 and 27.5

Gathering, Transportation, and Storage

- Transportation Capacity
 - Contracted capacity is adequate to meet design-day demands
 - Contract extension negotiated for Contract #2361 with MWP through October 31, 2027
- No-Notice Transportation
 - Provides for reservations of transportation capacity for daily adjustments
- Firm Peaking Services
 - Firm Peaking Services offered by both KRGT and DEQP have been the most cost-effective and reliable solution to meet peak-hour demand
 - Contracts are in place for each heating season through February 2024
- Storage Contracts
 - New storage contract with Spire Storage West set to begin April 1, 2024

Supply Reliability

LNG Process Overview



Pipeline

Gas delivered at ~300 psig, plant boosts pressure to 640 psig



Pretreatment

Remove CO₂, H₂O, H₂S & Hg



Liquefaction

N₂ refrigeration cycle lowers temp to -265 F, producing LNG



Storage

LNG constantly vaporizing, producing boil-off gas (BOG). BOG sent to intermediate high pressure distribution system



Vaporization

Pump LNG out of tank at up to 720 psig and re-vaporize with heat exchangers to 70 F

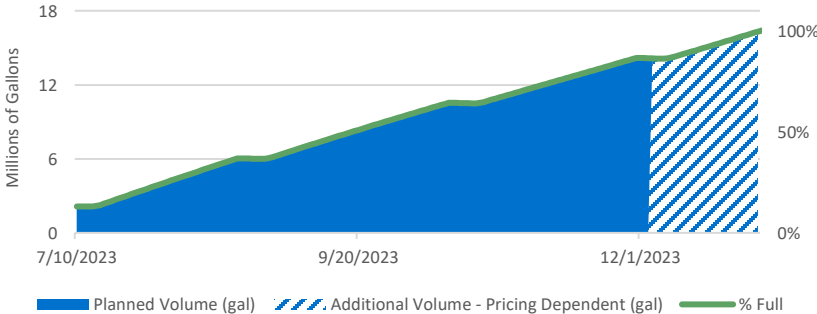


Pipeline

Re-odorize and deliver back to high pressure pipeline

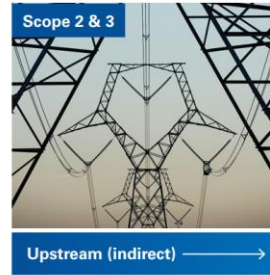
2023 Plan

- Started liquefaction in April
- Significant equipment issue forced outage near end of April
- Liquefaction resumed July 10
 - Anticipate minor outages for equipment maintenance
 - Tank projected to be 80% full by end of November.
- Additional vaporization planned in the fall to ensure plant is ready for heating season



Sustainability

- Updates provided on Dominion Energy corporate initiatives
 - Scope 1, Scope 2 and Scope 3
- Updates provided on DEUWI sustainability initiatives
 - Methane reduction initiatives
 - Wexpro sustainability initiatives
 - Responsibly sourced natural gas (RSG)
 - Renewable natural gas (RNG)
 - Thermwise[®] energy efficiency programs
 - GreenTherm[®] voluntary renewable natural gas
 - CarbonRight[™] program
 - Hydrogen initiatives
 - Sustainability legislation
 - Community programs



Purchased power and fuel for power generation

Natural gas purchased to serve our customers

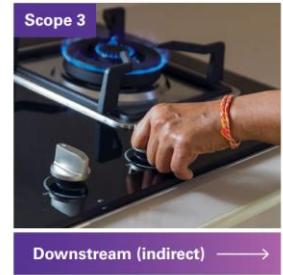
Facility use of electric power



Owned power generation

Fugitive natural gas emissions from compression, venting, and leaks

Fuel use for vehicle fleet



Customer combustion of natural gas, including:

- Residential heating
- Cooking
- Commercial use
- Manufacturing

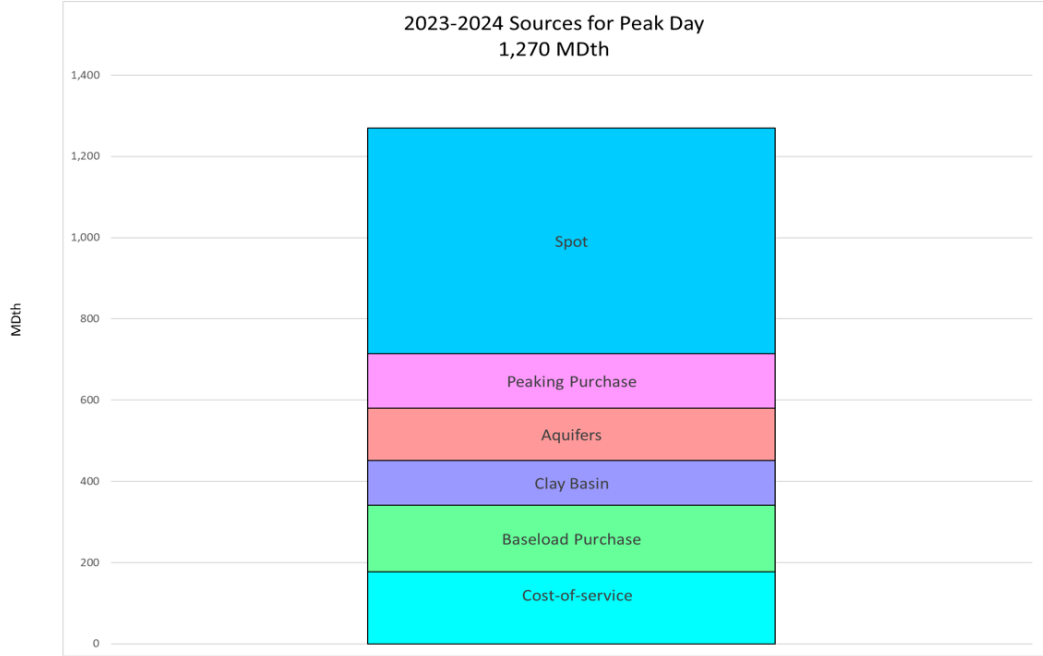
Energy Efficiency Programs

- Provided results of 2022 programs
- Provided expectations for 2023 programs

2023 IRP Forward Curve	Total Resource Cost		Participant Test		Utility Cost Test		Ratepayer Impact Measure Test	
	NPV	B/C	NPV	B/C	NPV	B/C	NPV	B/C
ThermWise® Appliance Rebate	\$4.89	1.79	\$18.57	3.83	\$5.18	1.88	(\$0.60)	0.95
ThermWise® Builder Rebates	\$12.91	2.18	\$35.08	3.72	\$15.63	2.89	\$4.04	1.20
ThermWise® Business Rebates	\$2.82	1.53	\$11.40	3.37	\$4.95	2.55	\$0.65	1.09
ThermWise® Weatherization Rebates	\$4.20	1.46	\$16.83	2.86	\$5.57	1.72	(\$0.52)	0.96
ThermWise® Home Energy Plan	\$0.64	2.24	\$2.29	57.96	\$0.63	2.21	\$0.00	1.00
Low Income Efficiency Program	\$0.83	2.10	\$2.36	9.33	\$0.85	2.16	\$0.04	1.03
Energy Comparison Report	\$1.96	4.56	\$2.61	6.22	\$1.96	4.56	\$1.03	1.70
Market Transformation Initiative	(\$1.32)	0.00	\$0.00	N/A	-\$1.32	0.00	(\$1.32)	0.00
Totals	\$26.93	1.78	\$89.14	3.61	\$33.44	2.19	\$3.32	1.06

Final Model Results

- Plan includes adequate supplies to meet design-day demand



Questions?