2022-2023 IRP Technical Conference May 17, 2022



2022 IRP Schedule

February 17, 2022 – Technical Conference

- Review IRP Standards and Guidelines
- Review 2021 PSC Order regarding IRP
- LNG Project Update
- DEQP Sale Update and Contract Discussion

April 19, 2022 – Technical Conference

CONFIDENTIAL MEETING

- Heating Season Review
- Gas Supply Hedging
- Wexpro Matters (Confidential)
- RFP Review (Confidential)

May 17, 2022 – Technical Conference		June 28, 2022 – Technical Conference	
•	Rural Expansion Update	 Presentation and Review of 2022-2023 IRP 	
	IRP Project Detail Discussion		

- Long-Term Planning
- Sustainability Update
- System Integrity



Rural Expansion

Austin Summers



Eureka Update

- 90 services have been installed with 145 remaining; Total of 235 under contract
- Over 40 meters have been set, with new scheduled meter sets every week
- Residents are reacting positively from the service of DEU and Fugal in creating the most cost-effective installation of meters and risers

	Original Estimate	Recorded in Tracker	Current Cost
Mains	\$21,521,000	\$20,886,810	\$21,289,936
Services	\$746,000	\$49,213	\$83,509
Total	\$22,267,000	\$20,936,023	\$21,373,445



Goshen

- IHP work has been awarded to contractor; installation of 4" main commenced early May 2022
- Drawings for HP line next to US 6 have been completed; project will be bidding in coming weeks
- Almost all property purchases are complete
- Held Q&A meeting with Goshen residents May 4, 2022

Green River

- Survey Field Work and Geotechnical Studies complete for HDD's (Horizontal Drilling)
- Cathodic Studies are in process on PEMC line
- Working on rail permit and permit to cross the Green River

Spending Caps & Future Projects

- Current projects should bring us close to budget on 2% cap
- Have new interest from Genola and Bear Lake valley



Project Detail Discussion

Jason McGee



2022-2023 Distribution Action Plan

High Pressure Projects 2022-2023:

Year	Project	Estimated Cost	Revenue Requirement
	LE0021 District Regulator Station for American Fork and Lehi	\$750,000	\$88,425
	Central 20-inch Feeder Line Loop (Phase 1)	\$32,813,000	\$3,868,653
	SY0002 Syracuse District Regulator Station	\$500,000	\$58,950
2022	FL47 Extension for SY0002 Syracuse District Regulator Station	\$5,500,000	\$648,450
	WA1605 - FL13 West HP Station and ILI Facilities, Magna, UT (720 corridor)	\$900,000	\$106,110
	WA1602 FL13 East HP Station, District Regulator Station, and ILI Facilities, Salt Lake City, UT (720 Corridor)	\$2,800,000	\$330,120
	WA1596 – Replace WA0866 with High Capacity District Regulator Station for South Salt Lake City, UT	\$1,500,000	\$176,850
	South St. George – River Road District Regulator Station	\$750,000	\$88,425
2023	FL71-5 Extension for South St. George – River Road	\$4,000,000	\$471,600
	TG0005 Saratoga KRGT Gate Station	\$2,000,000 to \$5,000,000	\$235,800+
	Eagle Mountain District Regulator Station, near 4000 N and Hwy 73	TBD	TBD
	FL85 Extension for Eagle Mountain District Regulator Station	\$3,000,000	\$353,700



2022-2023 Distribution Action Plan

High Pressure Projects 2024-2028:

Dominion Energy®

Year	Project	Estimated Cost	Revenue Requirement
	South Bluffdale District Regulator Station	\$750,000	\$88,425
	FL Extension for Bluffdale Station	\$6,500,000	\$766,350
2024	South Hurricane District Regulator Station	\$750,000	\$88,425
	FL Extension for South Hurricane Station	\$6,500,000	\$766,350
	Rockport Gate Station	TBD	TBD
	Central 20-inch Loop (Phase 2)	TBD	TBD
	SL0114 Remodel	TBD	TBD
2025	WA1604 – Replace WA0441	\$1,000,000	\$117,900
	FL Extension for WA1604 Across Jordan River	\$3,000,000	\$353,700
	FL21-10 – 6,800 LF Replacement	\$3,000,000 to \$5,000,000	\$353,700+
2028	Central 20-inch Feeder Line Loop (Phase 3)	TBD	TBD
TBD	RE0027 - Lindon HP Station Capacity Upgrade	\$2,500,000	\$294,750

- Feeder Line Replacement
 - FLR provides a detailed report in a separate meeting June 2022.
- Plant Projects: On-System LNG
 - Construction activities still on-track for late 2022 in-service; select commissioning activities underway
- Intermediate-High Pressure Projects
 - Belt Main Replacement Program
 - Aging Infrastructure Replacement (Not included in the Infrastructure Rate Adjustment Tracker)



Long-Term Planning

Tip Richards



	2018	2019	2020	2021	2022
Peak Day Growth	1.83%	3.03%	0.64%	1.66%	1.77%
Customer Growth	2.28%	2.60%	2.35%	2.45%	2.63%

- Average yearly growth (over past 5 years):
 - 1.8% for Peak Day Demand
 - 2.5% for Customer Count



Projected Population Growth

- Kem C. Gardner Policy Institute
 Population Change
- Top 6 counties with 50-year absolute population increases shown

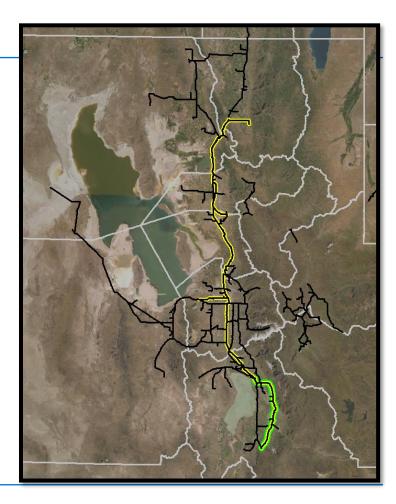




Dominion Kem C. Gardner Policy Institute 2015-2065 State and County Projections P. 20 **Energy***

720-psig Corridor

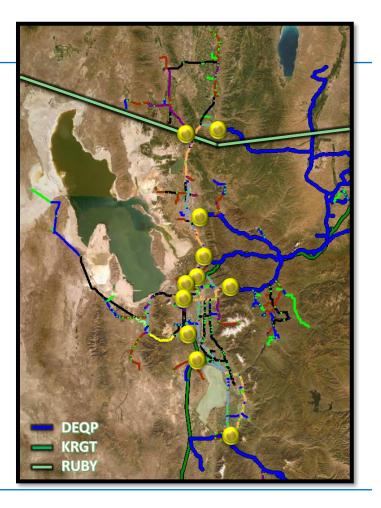
- Demand growth will drive projects and require reinforcements
- Aging infrastructure will be replaced which still comprises a significant portion of the system
- The 720-psig corridor will continue to extend from Payson to Hyrum





Future Transportation Capacity

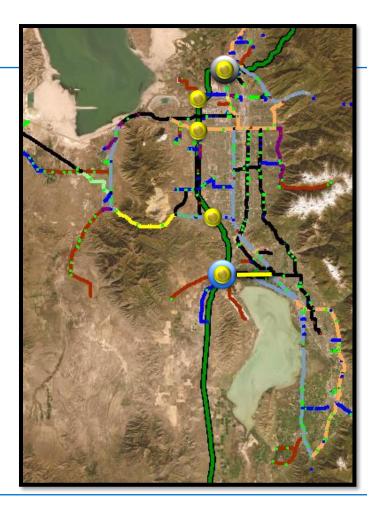
- In the long-term, the Company will require additional upstream pipeline capacity to the Wasatch Front
- The Company is considering constructing a new Ruby Pipeline gate station near Brigham City





Saratoga Tap to Central

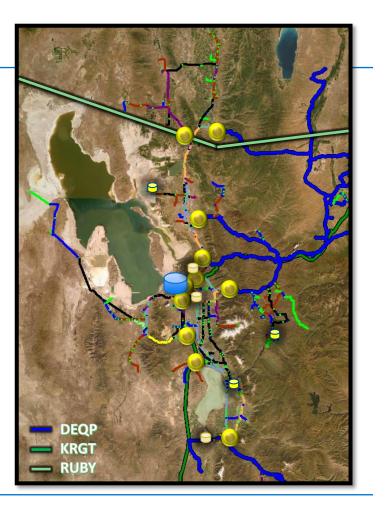
 The Company is considering increasing the size of FL85, that runs from the Saratoga KRGT gate station to the Central HP system, to increase supply. Doing so will increase the takeaway capacity downstream of the KRGT gate station at Saratoga Springs and will increase flows to the Central HP system





Modular LNG Sites and RNG

- Modular LNG could provide additional storage and supply reliability in the long term
- RNG sites could provide additional potential supply resources on the system





Sustainability Update

Kelly Mendenhall



Industry update

- Utility industry stakeholders are increasingly advocating for enhanced environmental performance
 - Example stakeholders: Capital providers, customers, policymakers
- In response, natural gas utility companies nationwide are publicly pursuing emission reduction targets and other environmental goals
 - 86% of peer group U.S. utilities (electric and/or gas) have made net zero commitments¹
 - 20% of natural gas value chain now represented by One Future, an industry consortium focused on reducing methane emission intensity
- Environmental-related initiatives must (and can) work in harmony with key public-service company obligations: Safety, reliability, and affordability



¹ Scope 1 net zero commitments. Peer group includes: Allete, Alliant, Ameren, Avangrid, Avista, Berkshire Hathaway Energy, Black Hills, Centerpoint, ConEdison, CMS Energy, DTE Energy, Dominion Energy, Duke Energy, Eversource Energy, Exelon, National Grid, NextEra Energy, NiSource, NRG Energy, PPL, PSEG, Sempra, Southern Company, Washington Gas, WEC Energy, Xcel Energy, American Electric Power, Entergy, Evergy, Edison International, FirstEnergy, Hawaiian Electric, Portland General Electric, Atmos, Southwest Gas

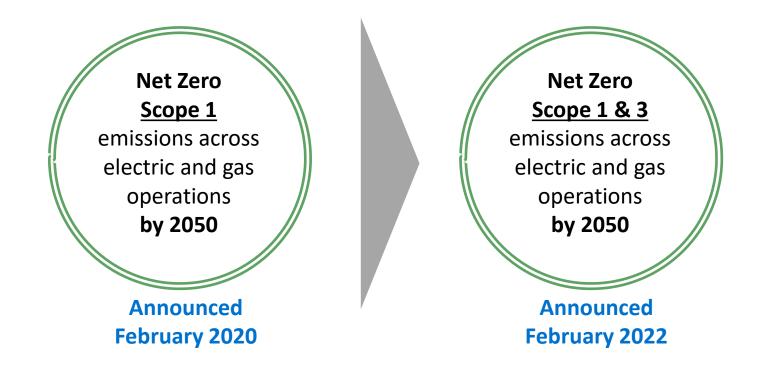
Defining terms: Emissions scopes

	Natural gas distribution ¹	Dominion Energy Gas Distribution segment ²	Current/potential tools
Scope 1 sources	 Fugitive operating emissions (valves & pipes, venting to atmosphere for repairs and maintenance, etc.) 	15% (of total segment emissions)	 Systematic infrastructure replacement Modified operating procedures Validated leak assumptions
Scope 3 sources: Upstream	 Emissions created during natural gas production and transportation processes 	10% (of total segment emissions)	 Supplier accountability Responsibly sourced gas (RSG)
Scope 3 sources: Downstream	 Emissions created by customer use (combustion of delivered natural gas in homes, businesses, and industries) 	75% (of total segment emissions)	 ThermWise (energy efficiency) GreenTherm (RNG) CarbonRight (carbon offsets) Additional on-system RNG Hydrogen blending



¹ In this example, emissions from gas production undertaken by Wexpro would be considered "Scope 3: Upstream" from DEU's natural gas distribution perspective. However, since Wexpro is a subsidiary of Dominion Energy, Dominion Energy includes Wexpro production emissions as **Scope 1.** ² From Dominion Energy's 2021 Climate Report. Figures represent Dominion Energy's national gas distribution operations. The 15% figure includes Wexpro's production emissions. The 10% figure includes all non-Wexpro gas production

Dominion Energy's Net Zero approach





DEU

- Ongoing infrastructure replacement programs
- Leaks identified by leak survey 2021
 - More than 21 million feet of pipeline and 204,000 services surveyed in 2020
 - 542 leaks all of which repaired
- Repair and maintenance procedure modifications
- Wexpro
 - Have already reduced emissions more than 50% since 2010
 - Well certification program ongoing
 - Pneumatic controller replacement ongoing to be completed by 2024
 - Evaluating options for capturing emissions during well liquid unloading



- Responsibly Sourced Natural Gas (Certified/RSG)
 - DEU is developing its understanding of the certification, benefits, and costs of RSG
 - As part of the 2022 annual supply RFP process, received offers of RSG supply options from two counterparties
 - While cost premiums have reduced from prior years, RSG is still more expensive
 - As a result, no RSG supply packages were pursued
 - However, DEU will provide preference to RSG suppliers if costs are equal
 - In addition, multiple counterparties have made unsolicited RSG option proposals outside of the annual RFP





ThermWise®

- Program approved in 2007
- Customers may voluntarily request rebates on energy efficiency investments in homes and businesses and/or participate in energy audit program
- 2022 budget: \$30.2 million
- Program approved in 2019
- Customers may voluntarily purchase RNG attributes
- Participating customers: 2,202¹
- Program approved in 2021 & launched in March 2022
 - Customers may voluntarily purchase carbon offsets
 - Typical residential customer can offset 100% of natural gas usage carbon emissions for ~\$5/month
 - Participating customers: 438¹



Green**Therm**®

- Renewable Natural Gas (RNG)
 - Kem C. Gardner Institute has studied the opportunities for RNG in Utah

Renewable Natural Gas: A Sustainable Approach to the Energy Transition

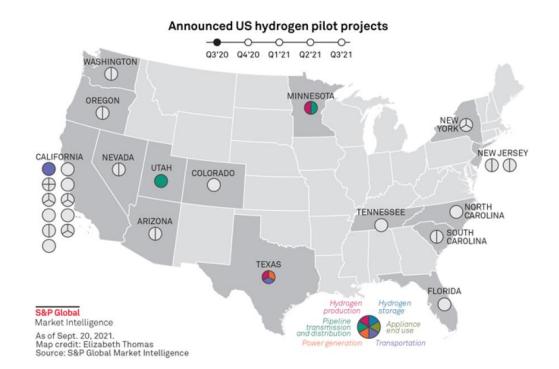
Renewable natural gas offers a new and promising energy source that will help decarbonize a portion of Utah's energy mix. DEU is currently evaluating Utah's potential RNG feedstock with expected completion by yearend 2022

January 2022



DEU Scope 3: Downstream—Potential tools

- Hydrogen blending
 - Hydrogen is being pursued across the U.S., Canada, and Europe as a promising next generation technology for decarbonization
 - Hydrogen blending has been proven to be safe
 - DEU is pursuing the expansion of hydrogen blending in our natural gas distribution system





DEU hydrogen blending expansion

- ✓ Phase 1: Training Facility pilot program (2021)
 - Comprehensive analysis of 5% blend levels
 - No adverse impacts to safety or appliance performance





DEU hydrogen blending expansion

- Phase 2: Hydrogen blending expansion—Starting small
 - Delta, Utah an ideal location to pilot community expansion
 - Closed loop, IHP system serving ~1,800 meters
 - Blend level: 5% (predominantly grey hydrogen with some green hydrogen)
 - No cost to customers—DEU not seeking cost recovery
 - ~\$2 million investment
 - Timeline
 - Second half of 2022: Community and customer outreach
 - Late 2022/early 2023: Installation of blending equipment
 - Early 2023: Blending commences
 - 2023+: Regular monitoring/evaluation





System Integrity

Richard Kiser



Integrity Management

Richard Kiser

Energy

- Mega Rule Part II expectation to be published summer 2022.
 - New repair criteria in high consequence areas.
 - Extreme event inspections.
 - Update and bolster pipeline corrosion control.
 - Clarify certain integrity management provision and assessment requirements.
- Mega Rule Part III published fall 2021, not applicable DEUWI assets.

	2022	2023	2024
Transmission Integrity Management Program	6,639	7,266	7,478
Distribution Integrity Management Program	2,189	1,843	1,408
Total Integrity Management Cost (\$ Thousands)	8,828	9,109	8,886

Year	Transmission	HCA Miles	Anomalies
	Miles Assessed	Assessed	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

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Questions?

