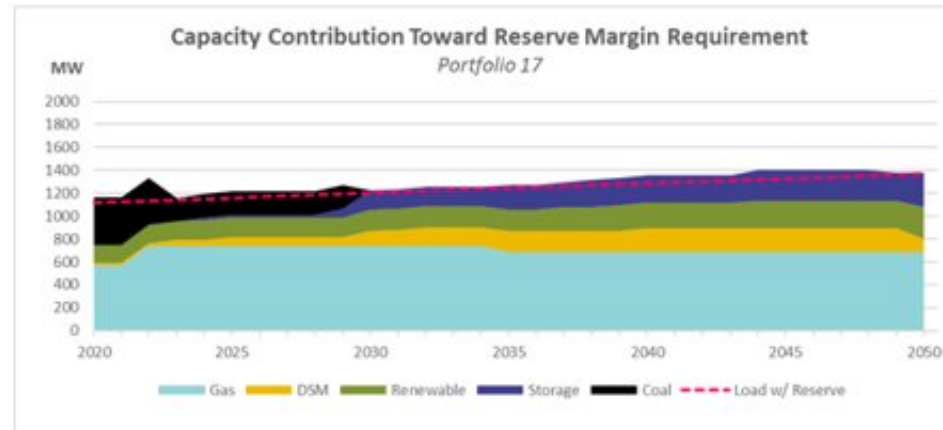


EIRP PORTFOLIO 17

Overview

- Carbon reduction goals: 80% by 2030, 90% by 2050
- Coal retirement: Drake Power Plant no later than 2023, Nixon Power Plant no later than 2030
- Other retirement: Birdsall Power Plant no later than 2035
- Replacement: Small, mobile natural gas generators, non-carbon generation and storage plus energy efficiency initiatives

Pathway	Portfolio	Carbon targets	2022	2023	2025	2026	2030	2035	2040	2050
Pathway E	Portfolio 17	2030 80%		Drake retire			Nixon 1 retire	Birdsall retire		
		2050 90%		Small, mobile, natural gas generator			Non-carbon, storage & DSM	Non-carbon, storage & DSM		
Gas	G-E17		LDC IT with oil backup		Expand/new pipeline capacity with NNT					



Attribute rank



Financial rank

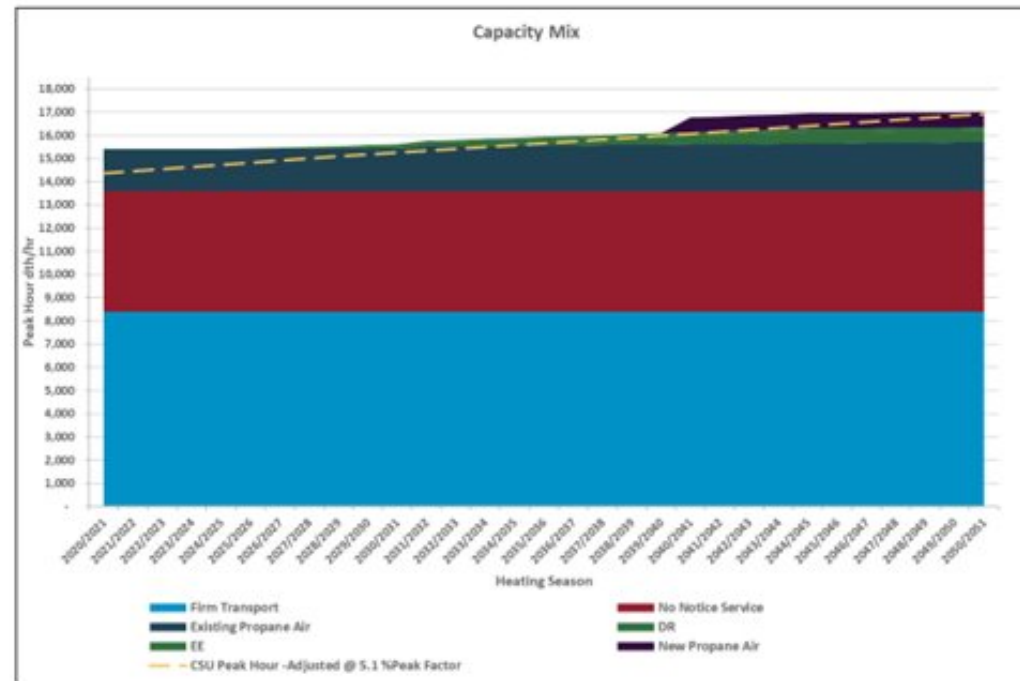
Resource Change 2021-2050 (MW)		Financial Metrics		Attribute Score	
Drake (2023)	-208	30 Year Revenue Requirement	\$36.47B	Reliability	100
Nixon 1 (2030)	-207	Average Annual Revenue Requirement	\$1.22B	Cost/Implementation	46
Nixon 2-3	0	Average Adjusted Debt Service Coverage	1.85	Environment/Stewardship	69
Birdsall (2035)	-54	Average Adjusted Days Cash on Hand	154	Flexibility/Diversity	88
Front Range	0	30 Year Electric Revenue	\$18.21B	Innovation	70
New Gas	156			Total score (normalized)	100
DSM	76	Sensitivities (\$ incremental)		Risks	
Storage	417	Social Cost	\$0.97B	<ul style="list-style-type: none"> • Tight on capacity with early Drake decommissioning • Electrification will provide a challenge in serving increased load while reducing GHG emissions • Future regulatory risk (ex. 100% renewables) • Transmission import limitations for wind generation 	
Solar	150	High Load	\$330M		
Wind	500	Low Load	(\$317)M		
Hydro	0	High Gas	\$458M		
Geothermal	10	Low Gas	(\$491)M		
Biomass/ Biogas	10	90x30	\$98M		
Carbon Capture	0	100x50	\$100M		
Nuclear	0	Drake 2022	(\$55)M		

GIRP PORTFOLIO 6

Overview

Addition: Demand response, energy efficiency, new propane air, existing propane air expansion

	Portfolio	2022	2025	2030	2032	2034	2035	2040	2043	2050
Pathway C DSM + new peak shaving capacity	G-6		Demand response and energy efficiency		Propane air expansion			Propane air new		



Resource Change 2021-2050 (Dth/hr)	
Existing PA	300
New PA	650
New Pipeline Capacity	0
New LNG	0
Demand Response	500
Energy Efficiency	150

Financial Metrics	
30 Year Revenue Requirement	\$35.71B
Average Annual Revenue Requirement	\$1.190B
30 Year Gas Revenue	\$5.73B

Attribute Score	
Reliability	83.5
Cost/ Implementation	100.0
Environment/ Stewardship	100.0
Flexibility/ Diversity	86.8
Innovation	72.7
Total score (normalized)	100.0

Sensitivities (\$ incremental)	
High Growth	\$7.79M
Low Growth	(\$12.54M)
Renewable Natural Gas (voluntary)	\$64.10M
Non-firm Options	Included in EIRP Portfolios
Peaking Capacity Options	Requires Study
High DR	NA
High EE	NA
High DSM	(\$1.70M)
Distributed Generation on LDC System	Increases EIRP New Fixed Gas Costs by 86%

Risks	
<ul style="list-style-type: none"> High growth advances capital plan by 5 years, increases fixed gas costs Potential public push back on new PA Plant Electrification reduces load growth/revenue Regulatory risk mandating RNG Non-firm options require oil backup for DG DSM needs proof of concept, program development 	



Attribute rank