



Kansas City Board of Public Utilities Electric Rate Hearing

June 14th, 2023



Agenda

- Rate Hearing Overview
- Rate Study Process
- Electric Utility Rate Study
 - Revenue and Revenue Requirements
 - Cost of Service
 - Rate Design



Overview of Rate Hearing

- The BPU is requesting two base rate increases:
 - 2.5% effective July 1, 2023
 - 2.5% effective July 1, 2024
- Additional changes to the Rate Manual:
 - Creation of an ERC Reserve Fund to be gradually funded over the next five years to 120 days of fuel and purchased power expense
 - Creation of a Green Rider for customers that want to procure energy with renewable attributes

Key Drivers for Proposed Rate Increases

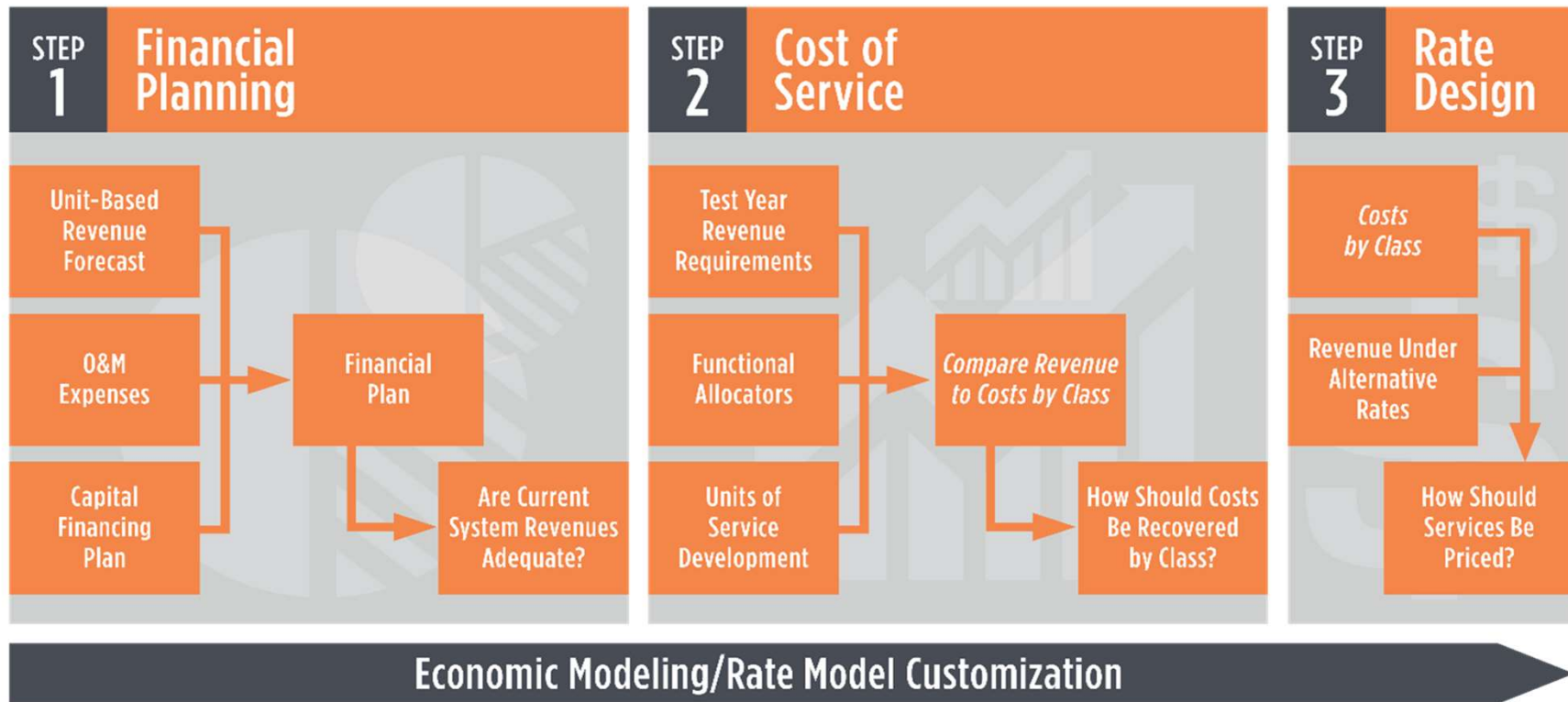
- Meeting key financial policy metrics:
 - Target 1: Cash operating reserves of 120 days of operating expenses
 - Target 2: Maintaining net revenue of at least 160% of annual debt service payments, excluding PILOT revenue
- Increasing the amount of fixed purchased power capacity payments recovered in base rates from \$2.6 to \$4.6 million:
 - The increased recovery in base rates is offset by a \$2 million decrease in purchased power costs recovered in the ERC and has a net zero impact on customer's total bills.
- Large inflationary increases to operating expenses in last few years



Rate Study Process



Rate Study Overview



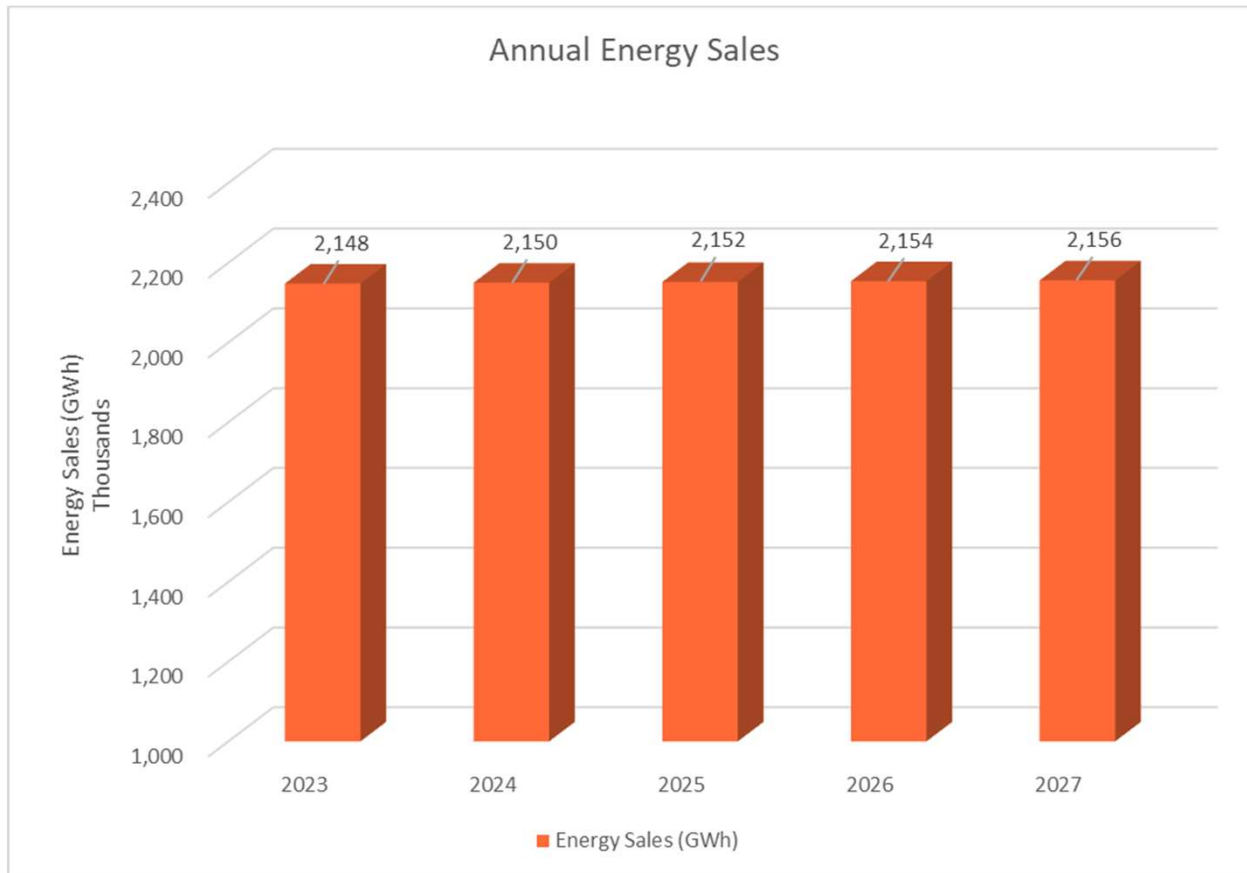
Key Outcomes of the Electric Study

- Meet cash revenue requirements of the utility
- Increase operating reserves to meet updated financial target of 120 days of O&M expenses
- Adjust customer class revenue targets based on the results of the cost of service study
- Design rates to equitably recover class revenue targets while meeting the additional goals of the BPU, such as recovery of more fixed costs in fixed charges



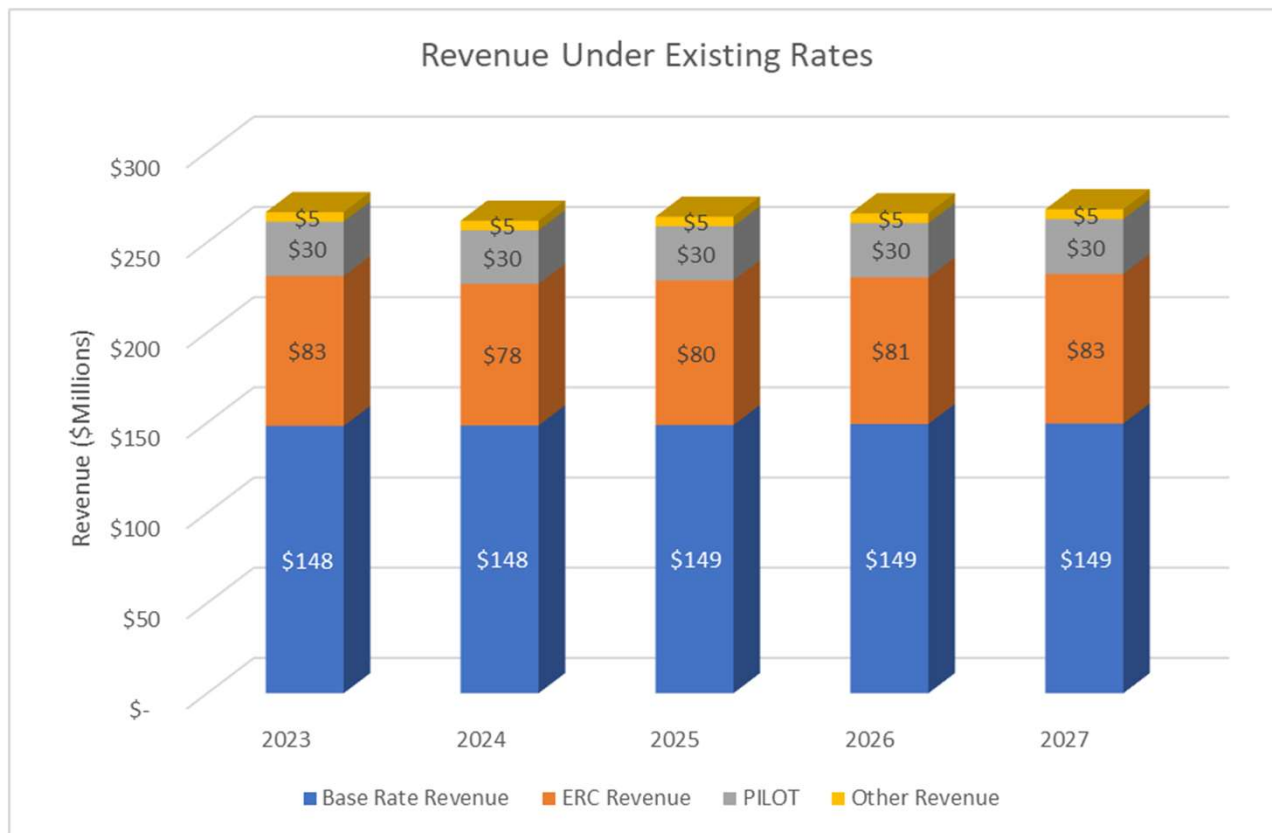
Step 1 – Financial Planning

Electric Load Forecast



- Weather normalized load forecast is developed by BPU
- Long term forecasted sales growth rate is almost stagnant at 0.1% year over year

Electric Revenue Under Existing Rates



- Revenue calculated using existing BPU rates
- Fuel and Purchased Power costs and revenue developed from the Production Cost Model used to establish the ERC

Electric Operation & Maintenance Expense

Increase from current \$2.6 million recovered in base rates

Operation and Maintenance Forecast					
Description	2023	2024	2025	2026	2027
Non-ERC Capacity Purchases	\$4,642,931	\$4,642,931	\$4,642,931	\$4,642,931	\$4,642,931
Production	\$40,065,184	\$36,785,112	\$37,319,914	\$37,866,458	\$38,437,508
Transmission	\$4,480,554	\$4,543,959	\$4,610,958	\$4,681,392	\$4,755,314
Distribution	\$30,822,838	\$31,227,187	\$31,641,417	\$32,072,522	\$32,524,876
Customer Accounts	\$3,514,947	\$3,559,077	\$3,606,481	\$3,661,012	\$3,718,752
Sales	\$54,825	\$54,825	\$54,825	\$54,825	\$54,825
Administrative and General	\$27,136,471	\$27,241,958	\$27,350,399	\$27,458,238	\$27,569,019
Less Non-cash GASB 68 Item	(\$840,500)	(\$840,500)	(\$840,500)	(\$840,500)	(\$840,500)
Total O&M Expense	\$109,877,250	\$107,214,549	\$108,386,425	\$109,596,878	\$110,862,725

Operations & Maintenance Escalation Rates				
Description	2024	2025	2026	2027
Personnel Costs	2.50%	2.50%	2.50%	2.50%
Services	2.00%	2.00%	2.00%	2.00%
Material and Supplies	2.00%	2.00%	2.00%	2.00%
Other Operating Expenses	1.00%	1.00%	0.00%	0.00%
Employee Healthcare/Medical	5.00%	5.00%	5.00%	5.00%
Retiree Healthcare/Medical	2.00%	2.00%	2.00%	2.00%

Capital Improvement Plan (CIP)

Capital Improvement Plan					
CIP by Function	2023	2024	2025	2026	2027
Production	\$ 8,440,000	\$ 6,743,000	\$ 8,770,000	\$ 8,545,000	\$ 8,545,000
Transmission	\$ 2,444,640	\$ 6,996,530	\$ 250,000	\$ 1,750,000	\$ 9,250,000
Distribution	\$ 19,326,000	\$ 25,725,031	\$ 28,825,031	\$ 23,251,000	\$ 13,751,000
Support Services	\$ 955,000	\$ 1,605,000	\$ 1,605,000	\$ 1,605,000	\$ 1,595,000
General/Common	\$ 4,161,440	\$ 4,040,640	\$ 3,400,640	\$ 2,892,640	\$ 3,113,200
Total CIP	\$ 35,327,080	\$ 45,110,201	\$ 42,850,671	\$ 38,043,640	\$ 36,254,200

- Based on current BPU plan from the 2023 budget
- The electric utility is responsible for 80% of general and common capital projects

CIP Financing

Capital Improvement Plan Financing					
Description	2023	2024	2025	2026	2027
Beginning Fund Balance	1,500,000	40,000,000	20,000,000	-	-
Sources of Funds	-	-	-	-	-
Cash Funded Capital Projects	23,827,080	23,110,201	22,850,671	38,043,640	36,254,200
Environmental Bond Proceeds at Par	-	-	-	-	-
Capital Bond Proceeds at Par	50,505,000	-	-	-	-
EDA Grant	-	2,000,000	-	-	-
Total Sources	74,332,080	25,110,201	22,850,671	38,043,640	36,254,200
Uses of Funds	-	-	-	-	-
Capital Improvements	35,327,080	45,110,201	42,850,671	38,043,640	36,254,200
Capitalized Interest Payment	-	-	-	-	-
Debt Issuance Expense	505,000	-	-	-	-
Total Uses	35,832,080	45,110,201	42,850,671	38,043,640	36,254,200
Ending CIP Fund Balance	40,000,000	20,000,000	-	-	-

- \$50 million Capital Bond to be issued in 2023 as a result of this study
- Cash financing for the remainder of the CIP

Financial Metrics Under Existing Rates

Financial Metrics Under Existing Rates						
Description	2022	2023	2024	2025	2026	2027
Revenue Surplus / (Deficiency) Under Existing Rates	\$ 12,930,453	\$ 786,157	\$ (835,770)	\$ (1,075,671)	\$ (12,937,820)	\$ (11,855,808)
Operating Cash Balance						
Beg Balance	\$ 25,619,100	\$ 38,549,553	\$ 39,335,710	\$ 38,499,941	\$ 37,424,270	\$ 24,486,449
Annual Cash Flow	\$ 12,930,453	\$ 786,157	\$ (835,770)	\$ (1,075,671)	\$ (12,937,820)	\$ (11,855,808)
End Balance	\$ 38,549,553	\$ 39,335,710	\$ 38,499,941	\$ 37,424,270	\$ 24,486,449	\$ 12,630,642
Days of O&M Reserved	82	74	76	72	47	24
Target Minimum Days Cash	90	120	120	120	120	120
Annual Debt Service Coverage without PILOT Revenue						
Total System Achieved (Total Debt)	1.85	1.61	1.48	1.47	1.54	1.53
Target Minimum Coverage	1.60	1.60	1.60	1.60	1.60	1.60

- Existing base rate revenues are not sufficient beginning in 2024 and continue to erode throughout the study period
- Days of O&M reserved and debt service coverage are both below minimum targets starting in 2024

Recommended Rate Changes

Description	2023	2024
Recommended Base Rate Increase	2.5%	2.5%
Date of Increase	July 1, 2023	July 1, 2024

- Transfer ~\$2.0 million from ERC to base rates for Non-ERC Capacity Purchases
- Establish a separate ERC Reserve Fund to maintain a 120 days of cash reserves linked to fuel and purchased power costs recovered through the ERC
 - Gradually build to target reserve of ~\$27 million
 - Additional \$1.5 million per quarter in ERC through 2027
 - If not recovered through ERC, base rates would need to increase to generate an additional \$27 million

Financial Metrics Under Proposed Rates

Financial Metrics Under Proposed Rates						
Description	2022	2023	2024	2025	2026	2027
Revenue Surplus / (Deficiency) Under Proposed Rates	\$ 12,930,453	\$ 5,612,982	\$ 10,755,597	\$ 12,422,116	\$ 783,171	\$ 2,134,842
Operating Cash Balance						
Beg Balance	\$ 25,619,100	\$ 38,549,553	\$ 44,162,535	\$ 54,918,133	\$ 67,340,249	\$ 68,123,420
Annual Cash Flow	\$ 12,930,453	\$ 5,612,982	\$ 10,755,597	\$ 12,422,116	\$ 783,171	\$ 2,134,842
End Balance	\$ 38,549,553	\$ 44,162,535	\$ 54,918,133	\$ 67,340,249	\$ 68,123,420	\$ 70,258,262
Days of O&M Reserved	82	84	108	130	130	132
Target Minimum Days Cash	90	120	120	120	120	120
Annual Debt Service Coverage without PILOT Revenue						
Total System Achieved (Total Debt)	1.92	1.75	1.75	1.78	1.86	1.85
Target Minimum Coverage	1.60	1.60	1.60	1.60	1.60	1.60

- The 2.5% proposed rate adjustments in both 2023 and 2024 as well as the \$50 million bond issuance in 2023 help BPU reach their financial metric targets by 2025



Step 2 – Cost of Service

Cost of Service Basics

- Step 1: Cost of Service/Net Revenue Requirements are functionalized by:
 - Production
 - Transmission
 - Distribution
 - Customer
 - Direct
- Further classified by:
 - Energy
 - Demand
 - Customer
 - Direct

Cost of Service Basics (cont.)

- Step 2 – Develop units of service for each rate class as a basis to allocate functionalized costs to each class
 - Basis for units of service include:
 - Energy (kWh) sales adjusted for losses
 - Average and Excess Demand
 - Coincident and Non-coincident peak (kW)
 - Weighted number of customers, meters, services, etc.
 - Revenue
- Step 3 – Calculate unbundled cost of service for each rate class and summarize for indicated cost of service adjustments
- Step 4 – Calculate unit costs for each rate class to provide guidance for Rate Design

Cost of Service Study Results

	Total System	Residential	Small General Service	Medium General Service	Large General Service	Large Power Service	USD 500	Private Area Lighting	KCK	BPU Interdepartmental
Cost of Service Summary										
Revenue Requirement	\$ 151,326,325	\$ 57,714,955	\$ 15,766,386	\$ 30,367,093	\$ 10,718,146	\$ 26,614,713	\$ 4,285,166	\$ 1,616,531	\$ 2,686,724	\$ 1,556,611
Revenue from Current Rates	\$ 147,635,439	\$ 53,092,238	\$ 17,308,307	\$ 31,960,311	\$ 11,559,431	\$ 27,320,996	\$ 4,295,902	\$ 1,596,941	\$ -	\$ 501,312
Class Deficiency	\$ 3,690,886	\$ 4,622,717	\$ (1,541,922)	\$ (1,593,218)	\$ (841,285)	\$ (706,283)	\$ (10,736)	\$ 19,590	\$ 2,686,724	\$ 1,055,299
Adjustment for KCK and BPU Deficiency	\$ -	\$ 1,468,359	\$ 401,122	\$ 772,587	\$ 272,687	\$ 677,120	\$ 109,021	\$ 41,127	\$ (2,686,724)	\$ (1,055,299)
Adjusted Class Cost of Service	\$ 151,326,325	\$ 59,183,315	\$ 16,167,507	\$ 31,139,680	\$ 10,990,832	\$ 27,291,833	\$ 4,394,188	\$ 1,657,658	\$ -	\$ 501,312
Indicated % Adjustment	2.50%	11.47%	-6.59%	-2.57%	-4.92%	-0.11%	2.29%	3.80%		
Energy Sales (kWh)	2,222,687,617	583,000,000	190,000,000	474,000,000	202,000,000	640,000,000	59,000,000	7,713,967	40,021,402	26,952,248
Rev. Requirement - \$/kWh	\$ 0.0681	\$ 0.1015	\$ 0.0851	\$ 0.0657	\$ 0.0544	\$ 0.0426	\$ 0.0745	\$ 0.2149	\$ -	\$ 0.0186
Rev. from Current Rates	\$ 0.0664	\$ 0.0911	\$ 0.0911	\$ 0.0674	\$ 0.0572	\$ 0.0427	\$ 0.0728	\$ 0.2070	\$ -	\$ 0.0186
Difference	\$ 0.0017	\$ 0.0104	\$ (0.0060)	\$ (0.0017)	\$ (0.0028)	\$ (0.0000)	\$ 0.0017	\$ 0.0079	\$ -	\$ -
Indicated Adjustment	2.50%	11.47%	-6.59%	-2.57%	-4.92%	-0.11%	2.29%	3.80%	0.00%	0.00%



Step 3 – Rate Design

Proposed Base Rate Increases by Class

Base Rate Summary		
Class	2023	2024
Residential	3.75%	3.75%
Small General Service	1.75%	1.73%
Medium General Service	1.75%	1.73%
Large General Service	1.75%	1.73%
Large Power Service	1.75%	1.73%
USD 500	2.50%	2.50%
Private Area Lighting	2.50%	2.50%
BPU Interdepartmental	2.50%	2.50%

- Based on the COS results, the Residential class has a higher than system average increase, while the commercial classes have a lower than system average increase. Lighting, USD 500, and Interdepartmental all receive the system average increase

Cost Causation Principles in Rate Design

Customer

- Costs that vary based on the number of customers on system
- Billing, meter reading, onsite distribution facilities, and some distribution field equipment

Demand

- Cost caused by peak loads on system
- Non-variable generation, transmission, non-customer distribution

Energy

- Costs that vary with the number of kWh produced or consumed
- Fuel, variable generation costs, variable transmission charges

Electric Rate Design Guidelines

- Make directional changes that reflect Cost of Service results while maintaining reasonable adjustments relative to other classes
- Capped the maximum increase for any class at 150% of the system average
- Work towards recovering more fixed costs through fixed charges to improve revenue stability and reflect cost causation principles

Key Changes to Electric Rate Design

- Merging of the standard Residential and Residential Electric Heating classes into one consolidated Residential class
- Modifying the ERC Rider to allow for additional recovery over costs to build and maintain an ERC reserve fund
- Creation of a Green Rider for customers that want to procure energy with renewable attributes



Summary and Conclusions

Summary and Conclusions

Why are these rate adjustments recommended?

- BPU costs have increased since the last rate increase in 2018 due to large inflationary pressures.
- BPU cash reserves are below the recommended level and need to be funded to meet the financial target of 120 days of operating expenses.
- Rate adjustments are needed to maintain safe and reliable service while also allowing BPU to invest in growth and replace aging infrastructure in the changing electric industry.

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