



**CHUGACH ELECTRIC ASSOCIATION, INC.
ANCHORAGE, ALASKA**

AUDIT AND FINANCE COMMITTEE MEETING

AGENDA

Harold Hollis, Chair
Sisi Cooper, Vice Chair

Sam Cason, Director
Rachel Morse, Director
Bettina Chastain, Director

March 29, 2023

4:00 p.m.

Chugach Board Room

- I. CALL TO ORDER (4:00 p.m.)
 - A. Roll Call
- II. APPROVAL OF THE AGENDA*
- III. APPROVAL OF THE MINUTES*
 - A. November 30, 2022 (Cacy)
- IV. PERSONS TO BE HEARD
 - A. Member Comments
- V. NEW BUSINESS (none)
- VI. CEO REPORTS AND CORRESPONDENCE (4:10 p.m.)
 - A. 4th Quarter 2022 Capital Tracking Report (Sims/Griffin) (4:10 p.m.)
 - B. 4th Quarter 2022 Operating Budget Status Report (Sims/Griffin) (4:15 p.m.)
 - C. 4th Quarter 2022 Contract Status Report (Travis) (4:20 p.m.)
- VII. NEW BUSINESS* (scheduled) (4:25 p.m.)
 - A. 2022 Year-End Financials and Variance Report (Griffin) (4:25 p.m.)
 - B. Hybrid Approach to Capital Credit Retirement (Ayers) (4:45 p.m.)
 - C. BRU ARO Investment Portfolio Review (APCM/Highers) (4:55 p.m.)
- VIII. EXECUTIVE SESSION* (scheduled) (5:10 p.m.)
 - A. BRU ARO Investment Strategy Review (APCM/Highers) (5:10 p.m.)
 - B. Review 2022 Independent Audited Financial Statements (KPMG) (5:25 p.m.)
 - C. Board and Auditor Discussion (Board/KPMG) (5:45 p.m.)
 - D. 2022 Year-End Financial Report (Sims/Griffin) (6:00 p.m.)
- IX. NEW BUSINESS* (none)
- X. DIRECTOR COMMENTS (6:30 p.m.)
- XI. ADJOURNMENT* (6:45 p.m.)

* Denotes Action Items

** Denotes Possible Action Items

3/27/2023 1:32:12 PM

CHUGACH ELECTRIC ASSOCIATION, INC.
Anchorage, Alaska

November 30, 2022
Wednesday
4:00 p.m.

AUDIT AND FINANCE COMMITTEE MEETING

Recording Secretary: Sandra Cacy

I. CALL TO ORDER

Chair Hollis called the Audit and Finance Committee meeting to order at 4:03 p.m. in the boardroom of Chugach Electric Association, Inc., 5601 Electron Drive, Anchorage, Alaska.

A. Roll Call

Committee Members Present:

Harold Hollis, Chair
Sam Cason, Director
Sisi Cooper, Director
Rachel Morse, Director
Bettina Chastain, Director

Board Members Present:

Mark Wiggin, Director (*via teleconference*)
Erin Whitney, Director (*via teleconference*)

Guests and Staff Attendance

Present:

Sherri Highers	Julie Hasquet	Curtis Sims
Arthur Miller	Matthew Clarkson	Jessie Anderson
Karen Griffin	Nathan Golab	Jean Kornmuller
Andrew Laughlin	Ron Vecera	Eugene Ori
Mike Miller	Todd McCarty	Andrew White
Bart Armfield, Consultant	Andrew Laughlin	Ashton Doyle

Via Teleconference:

Arden Quezon	Melissa Beedle, KPMG	Blake Phillips, APCM
Michael Hayhurst, KPMG	Josh Travis	

II. APPROVAL OF THE AGENDA

Director Cason moved and Director Chastain seconded the motion to approve the agenda. The motion passed unanimously.

Director Morse was not present at the time of vote.

III. APPROVAL OF THE MINUTES

Director Chastain moved and Director Cason seconded the motion to approve the August 24, 2022, Audit and Finance Committee Meeting minutes. The motion passed unanimously.

Director Morse was not present at the time of vote.

IV. PERSONS TO BE HEARD

- A. *Member Comments*
None.

V. NEW BUSINESS

None.

VI. CEO REPORTS AND CORRESPONDENCE

- A. *3rd Quarter 2022 Capital Tracking Report (Sims/Griffin)*
The 3rd Quarter 2022 Capital Tracking Report was provided in the meeting packet.
- B. *3rd Quarter 2022 Operating Budget Status Report (Sims/Griffin)*
The 3rd Quarter 2022 Operating Budget Status Report was provided in the meeting packet.
- C. *3rd Quarter 2022 Contract Status Report (Vecera)*
The 3rd Quarter 2022 Contract Status Report was provided in the meeting packet.

Arthur Miller, Chief Executive Officer, gave a summary of the CEO Reports and Correspondence items and responded to questions from the Board.

VII. NEW BUSINESS

- A. *3rd Quarter 2022 Financial Information and Variance Report (Griffin/Highers)*
Karin Griffin, Vice President of Finance and Accounting, presented the 3rd Quarter 2022 Financial Information and Variance Report and responded to questions from the Committee.

Director Morse arrived at 4:14 p.m.

VIII. EXECUTIVE SESSION

- A. *BRU Investment Fund Review (APCM)*
- B. *Review Chugach's 2022 Audit Plan (KPMG)*
- C. *3rd Quarter 2022 Financial Report (Sims/Griffin)*
- D. *2023-2027 Capital Improvement Plan (Laughlin/Highers)*
- E. *2023 Operating Budget (Highers)*

At 4:17 p.m., Director Cason moved and Director Morse seconded the motion that pursuant to Alaska Statute 10.25.175(c)(1), the Board of Directors Audit and Finance Committee go into executive session to discuss and receive reports regarding financial matters, the immediate knowledge of which would clearly have an adverse effect on the finances of the cooperative. The motion passed unanimously.

Director Wiggin left during Executive Session, the time was not noted.

The meeting reconvened in open session at 7:30 p.m.

IX. NEW BUSINESS

A. Pre-Approval for FY2022 Audit Services (Highers)*

Director Cason moved and Director Chastain seconded that the Audit and Finance Committee recommend the Board of Directors approve the retention of KPMG for audit services for FY2022 in accordance with the estimated fees outlined in KPMG's audit plan and strategy for the year ending December 31, 2022, as presented in executive session and consistent with the estimated fees in KPMG's contract, due to expire April 15, 2023. The motion passed unanimously.

B. 2023 Operating and Capital Budget (Highers)*

Director Cooper moved and Director Morse seconded that the Audit and Finance Committee recommend the Board of Directors approve the 2023 Operating and Capital Budget which is expected to produce margins of \$8.4 million, MFI/I ratio of 1.20, TIER ratio of 1.22 and Equity to Total Capitalization ratio of 16.3%. These results are based on a Total Cost of Service of \$347.4 million, Total Revenue of \$355.0 million, Non-Operating Margins of \$0.8 million, and a capital expenditure cash requirement of \$154.5 million. The motion passed unanimously.

X. DIRECTOR COMMENTS

Director comments were made at this time.

XI. ADJOURNMENT

At 7:41 p.m., Director Morse moved and Director Cooper seconded the motion to adjourn. The motion passed unanimously.

**CHUGACH ELECTRIC ASSOCIATION
CAPITAL PROJECT TRACKING REPORT
As of December 31, 2022**

CIP Ref #	Project Name ¹	Project Manager	BOD Project Approval Date	Estimate			Actuals			Variance		Physical Project Completion	Comments
				Estimate	Revisions to Estimate	Revised Estimate	Spending to Date	Forecast to Completion	Total Estimated Completion Cost	Total Estimated Cost vs. Revised Estimate			
										Amount	%		
Reliability													
02.0142	Daves Creek 352 Reliability Improvements Phase I E1913922	Miller, Mike	5/26/2021	\$1,600,000	\$0	\$1,600,000	\$1,438,463	\$2,000	\$1,440,463	(\$159,537)	90%	97%	This project converted/rebuilt the overhead, 12.5kV, V-phase feeder to a three-phase feeder from the Dave's Creek Substation to Sunrise Inn near Cooper Landing while replacing approximately 100 poles. This project was bid in July with the low bid going to Alaska Line Builders (ALB). Project construction was completed on 1/20/22 with the final inspection on 1/26/22 and is now in the close-out phase. Final walk through took place on 7/7/22, and warranty work has been completed as of 8/24/22. Close-out packet has been sent to project coordinator as of 2/15/23.
03.0485	O'Malley OH/UG: Rockridge Drive to Hillside Drive ⁴ E1813812, E1913870	Miller, Mike	4/28/2021	\$4,100,000	\$0	\$4,100,000	\$3,785,316	\$4,000	\$3,789,316	(\$310,684)	92%	97%	This project converted the overhead 12.5kV circuit to underground per Title 21 mandates and in conjunction with DOT road improvements. This project was bid in October 2021 with the low bid going to Lineworks. Lineworks completed construction of this project in October 2022. The project is currently in the close-out phase.
03.0810 11.0006	Jewel Lake Road OH/UG: Strawberry Road to W. 84th Ave ² E2013957, E2120058	Miller, Mike	2/16/2022	\$3,300,000	(\$1,164,024)	\$2,135,976	\$2,263,021	\$2,000	\$2,265,021	\$129,045	106%	97%	This project retired approximately one mile of overhead three-phase primary 12kV and installed new underground replacement circuits on the west side of Jewel Lake Road between Strawberry Road and 84th Avenue. In addition, conduit was installed for future 35kV subtransmission infrastructure and communications. Bids were solicited for the project with Sturgeon Electric selected as the contractor. Bids were substantially lower than engineering's estimates due to heavy competition amongst bidders. Construction began in June 2022 and was completed in September 2022. This project has been moved to the close-out phase. Closeout packet has been sent to project coordinator as of 2/15/23.
05.0300	Campbell Lake Substation Rebuild C2130007, E1920057, E2114076, E2120053	Moe, Jesse	2/16/2022	\$7,400,000	\$0	\$7,400,000	\$923,735	\$6,476,265	\$7,400,000	\$0	100%	20%	Design responsibility has moved from an in-house effort to EPS. A new baseline schedule has been developed with construction now slated for Q2 of 2024. Switchgear procurement is underway. Estimated energization date is December 2024.
12.1027	Battery Energy Storage System - BESS ⁵ E1720056, E1720057, P2031027	Laughlin, Andrew	12/15/2021 10/26/2022	\$43,875,000	\$2,737,500	\$46,612,500	\$13,378,260	\$33,234,240	\$46,612,500	\$0	100%	5%	The sale and purchase agreement for the battery energy storage system (BESS) was executed in December 2022. Contracts for the 38 kV switchgear and medium voltage transformers sent to vendors for signature in December 2022.
20.0252 20.0196	ERP Replacement I2140001, I2140007, I2140018	Wood, Melanie	1/19/2022	\$16,973,000	\$0	\$16,973,000	\$3,556,195	\$11,328,963	\$14,885,158	(\$2,087,842)	88%	11%	Phase one of system testing started in December 2022 with a targeted completion in March 2023. Conversion workshops were started in December.
Retirements & Replacements													
10.0207	East Cable Terminal Reactor Replacement E2120054	Moe, Jesse	11/22/2021	\$3,200,000	\$0	\$3,200,000	\$291,454	\$2,908,546	\$3,200,000	\$0	100%	25%	Design is now scheduled for completion in early 2023. The project will go out to bid to an OELCC contractor Q2 2023. Construction is slated to begin in May 2023 and is now expected to be completed in Fall 2023. The procurement contract for the HICO reactor has been completed, with delivery expected in Q3 2023. Factory acceptance testing for the reactor was done in January 2023. Design is 65% complete.
10.0240	Retire INSS 138kV Facilities E1720055	Moe, Jesse	1/24/2018	\$2,700,000	\$0	\$2,700,000	\$2,358,548	\$6,452	\$2,365,000	(\$335,000)	88%	97%	The retirement portion of this project has been completed by the OELCC time and materials contractor brought on the summer of 2020 for COVID mitigation. Due to high commodity pricing associated with the affects of COVID on supply chains, the moving of transformers to new foundations will be addressed in a future project. This portion of the project is currently in closeout.
10.0364	115kV Quartz Creek T/L Rebuild: Girdwood to Indian Substation E2020053	Merkel, Justin	10/26/2022	\$21,200,000	\$0	\$21,200,000	\$1,082,401	\$20,117,599	\$21,200,000	\$0	100%	30%	The design of the line rebuild is 95% complete. Procurement is underway for steel pole, steel pipe piles, and communication conductor. Power conductor is out for purchase order. Permitting is 80% complete. Clearing slated for early 2023. Construction is estimated to begin late 2023 and continue through 2024.

**CHUGACH ELECTRIC ASSOCIATION
CAPITAL PROJECT TRACKING REPORT
As of December 31, 2022**

CIP Ref #	Project Name ¹	Project Manager	BOD Project Approval Date	Estimate			Actuals			Variance		Physical Project Completion	Comments
				Estimate	Revisions to Estimate	Revised Estimate	Spending to Date	Forecast to Completion	Total Estimated Completion Cost	Total Estimated Cost vs. Revised Estimate			
										Amount	%		
Agency Mandated													
20.0304	Eklutna Fish & Wildlife ³ P1990277, P2000898	Brodie, Mike	11/26/2019 12/16/2020 12/15/2021 12/14/2022	\$5,383,203	\$0	\$5,383,203	\$3,534,327	\$1,735,830	\$5,270,157	(\$113,046)	98%	68%	Eklutna F&W is a multi-year project with final completion of the program in late 2024. 2022 was the second year of a 2-year study program on the Eklutna River, Lake, and plant facilities. Year 1 study reports have been finalized and distributed to the project technical working groups. The field work and data collection effort for the study year 2 was completed in Oct 2022. Draft year 2 study reports are expected at the end of 1st quarter 2023. Draft program development will occur through 2023 with the final program likely submitted to the State of Alaska (Governor) in Q2 2024 for approval in accordance with the 1991 Eklutna Fish & Wildlife Agreement.
Operating Efficiency													
20.0036 20.0358	One Campus Plan - Phase 1 & 2 A2240023, A2240032, A2240033, A2240036, A2340003, A2340004, A2340005	Resnick, Josh	12/14/2022	\$64,298,000	\$0	\$64,298,000	\$512,619	\$63,785,381	\$64,298,000	\$0	100%	4%	The One Campus Plan is a multi-year project with final completion of the program in late 2025. The project is currently in the design phase with environmental borings and hazmat studies recently performed. Project is on schedule and expected to go to bid in the second half of 2023.
Totals				\$174,029,203	\$1,573,476	\$175,602,679	\$33,124,339	\$139,601,276	\$172,725,615	(\$2,877,064)	98%		

¹ Report tracks projects with costs exceeding \$1M


² Projects funded by the Undergrounding Ordinance

³ Projects funded by a combination of the Undergrounding Ordinance and DOT

⁴ Represents Chugach's portion. Estimate is based on the approved capital budgets for 2020, approved resolution No 02 02 21, and the budget included in the 2023-2027 CIP reviewed by the BOD on 12/14/2022.

⁵ Represents Chugach's portion. Project cost is shared at 75% CEA / 25% MEA.



TO: Sherri L. Highers, Chief Financial Officer
THROUGH: Karen Griffin, Vice President, Finance & Accounting 
FROM: Curtis Sims, Sr. Manager, Budget & Financial Reporting
DATE: December 31, 2022
SUBJECT: *4th Quarter 2022 Operating Budget Status Report*

There were no budget adjustments in the fourth quarter of 2022. See Operating Budget Status Report on page 2.

CHUGACH ELECTRIC ASSOCIATION, INC.
OPERATING BUDGET STATUS REPORT
4th QUARTER 2022

CATEGORY	2022 Q3 AMENDED BUDGET	2022 Q4 BUDGET REVISIONS	2022 Q4 AMENDED BUDGET
Operating Revenue and Patronage Capital	\$ 345,060,581	\$ -	\$ 345,060,581
Fuel and Purchased Power Expense	102,741,756	-	102,741,756
Power Production Expense	36,919,666	-	36,919,666
Transmission Expense	11,473,532	-	11,473,532
Distribution Expense	28,908,401	-	28,908,401
Customer Expense	11,510,953	-	11,510,953
Administrative, General & Other	45,736,436	-	45,736,436
Depreciation and Amortization Expense	61,413,835	-	61,413,835
Interest Expense, Net	38,424,734	-	38,424,734
Total Cost of Electric Service	\$ 337,129,313	\$ -	\$ 337,129,313
Patronage Capital & Operating Margins	\$ 7,931,268	\$ -	\$ 7,931,268
Non-Operating Margins - Interest	291,144	-	291,144
Allowance for Funds Used During Construction	301,074	-	301,074
Non-Operating Margins - Other	(145,180)	-	(145,180)
Patronage Capital or Margins	\$ 8,378,306	\$ -	\$ 8,378,306
MFI/I	1.20		1.20
TIER	1.21		1.21

CHUGACH ELECTRIC ASSOCIATION, INC.
OPERATING BUDGET STATUS REPORT
3RD QUARTER 2022

CATEGORY	2022 Q2 AMENDED BUDGET	2022 Q3 BUDGET REVISIONS	2022 Q3 AMENDED BUDGET
Operating Revenue and Patronage Capital	\$ 345,060,581	\$ -	\$ 345,060,581
Fuel and Purchased Power Expense	102,741,756	-	102,741,756
Power Production Expense	36,919,666	-	36,919,666
Transmission Expense	11,473,532	-	11,473,532
Distribution Expense	28,908,401	-	28,908,401
Customer Expense	11,510,953	-	11,510,953
Administrative, General & Other	45,736,436	-	45,736,436
Depreciation and Amortization Expense	61,413,835	-	61,413,835
Interest Expense, Net	38,424,734	-	38,424,734
Total Cost of Electric Service	\$ 337,129,313	\$ -	\$ 337,129,313
Patronage Capital & Operating Margins	\$ 7,931,268	\$ -	\$ 7,931,268
Non-Operating Margins - Interest	291,144	-	291,144
Allowance for Funds Used During Construction	301,074	-	301,074
Non-Operating Margins - Other	(145,180)	-	(145,180)
Patronage Capital or Margins	\$ 8,378,306	\$ -	\$ 8,378,306
MFI/I	1.20		1.20
TIER	1.21		1.21

CHUGACH ELECTRIC ASSOCIATION, INC.
OPERATING BUDGET STATUS REPORT
2nd QUARTER 2022

CATEGORY	2022 Q1 AMENDED BUDGET	2022 Q2 BUDGET REVISIONS	2022 Q2 AMENDED BUDGET
Operating Revenue and Patronage Capital	\$ 345,060,581	\$ -	\$ 345,060,581
Fuel and Purchased Power Expense	102,741,756	-	102,741,756
Power Production Expense	36,526,615	393,051	36,919,666
Transmission Expense	11,473,532	-	11,473,532
Distribution Expense	28,908,401	-	28,908,401
Customer Expense	11,510,953	-	11,510,953
Administrative, General & Other	46,129,487	(393,051)	45,736,436
Depreciation and Amortization Expense	61,413,835	-	61,413,835
Interest Expense, Net	38,424,734	-	38,424,734
Total Cost of Electric Service	\$ 337,129,313	\$ -	\$ 337,129,313
Patronage Capital & Operating Margins	\$ 7,931,268	\$ -	\$ 7,931,268
Non-Operating Margins - Interest	291,144	-	291,144
Allowance for Funds Used During Construction	301,074	-	301,074
Non-Operating Margins - Other	(145,180)	-	(145,180)
Patronage Capital or Margins	\$ 8,378,306	\$ -	\$ 8,378,306
MFI/I	1.20		1.20
TIER	1.21		1.21

CHUGACH ELECTRIC ASSOCIATION, INC.
OPERATING BUDGET STATUS REPORT
1st QUARTER 2022

CATEGORY	2022 APPROVED BUDGET	2022 Q1 BUDGET REVISIONS	2022 Q1 AMENDED BUDGET
Operating Revenue and Patronage Capital	\$ 353,756,696	\$ (8,696,115)	\$ 345,060,581
Fuel and Purchased Power Expense	105,281,462	(2,539,706)	102,741,756
Power Production Expense	36,526,615	-	36,526,615
Transmission Expense	11,473,532	-	11,473,532
Distribution Expense	28,908,401	-	28,908,401
Customer Expense	11,510,953	-	11,510,953
Administrative, General & Other	52,462,820	(6,333,333)	46,129,487
Depreciation and Amortization Expense	61,413,835	-	61,413,835
Interest Expense, Net	38,424,734	-	38,424,734
Total Cost of Electric Service	\$ 346,002,352	\$ (8,873,039)	\$ 337,129,313
Patronage Capital & Operating Margins	\$ 7,754,344	\$ 176,924	\$ 7,931,268
Non-Operating Margins - Interest	291,144	-	291,144
Allowance for Funds Used During Construction	301,074	-	301,074
Non-Operating Margins - Other	(145,180)	-	(145,180)
Patronage Capital or Margins	\$ 8,201,382	\$ 176,924	\$ 8,378,306
MFI/I	1.20		1.20
TIER	1.20		1.21

**Year End 2022
Financial
Information
March 29, 2023**

Chugach Electric Association

Year End 2022 Financial Information

MWH Sales

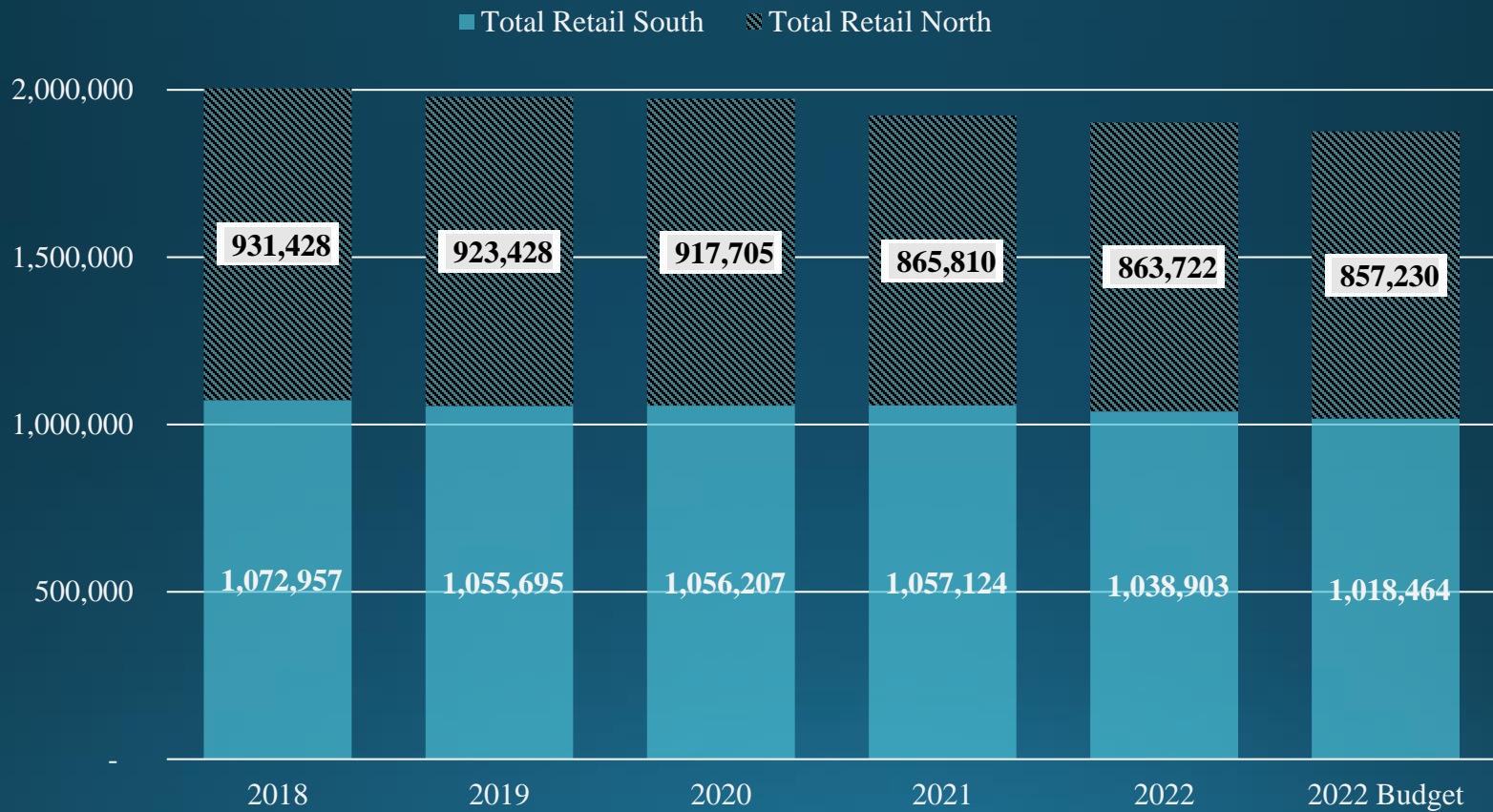
Statement of Operations

Balance Sheet

Statement of Cash Flows

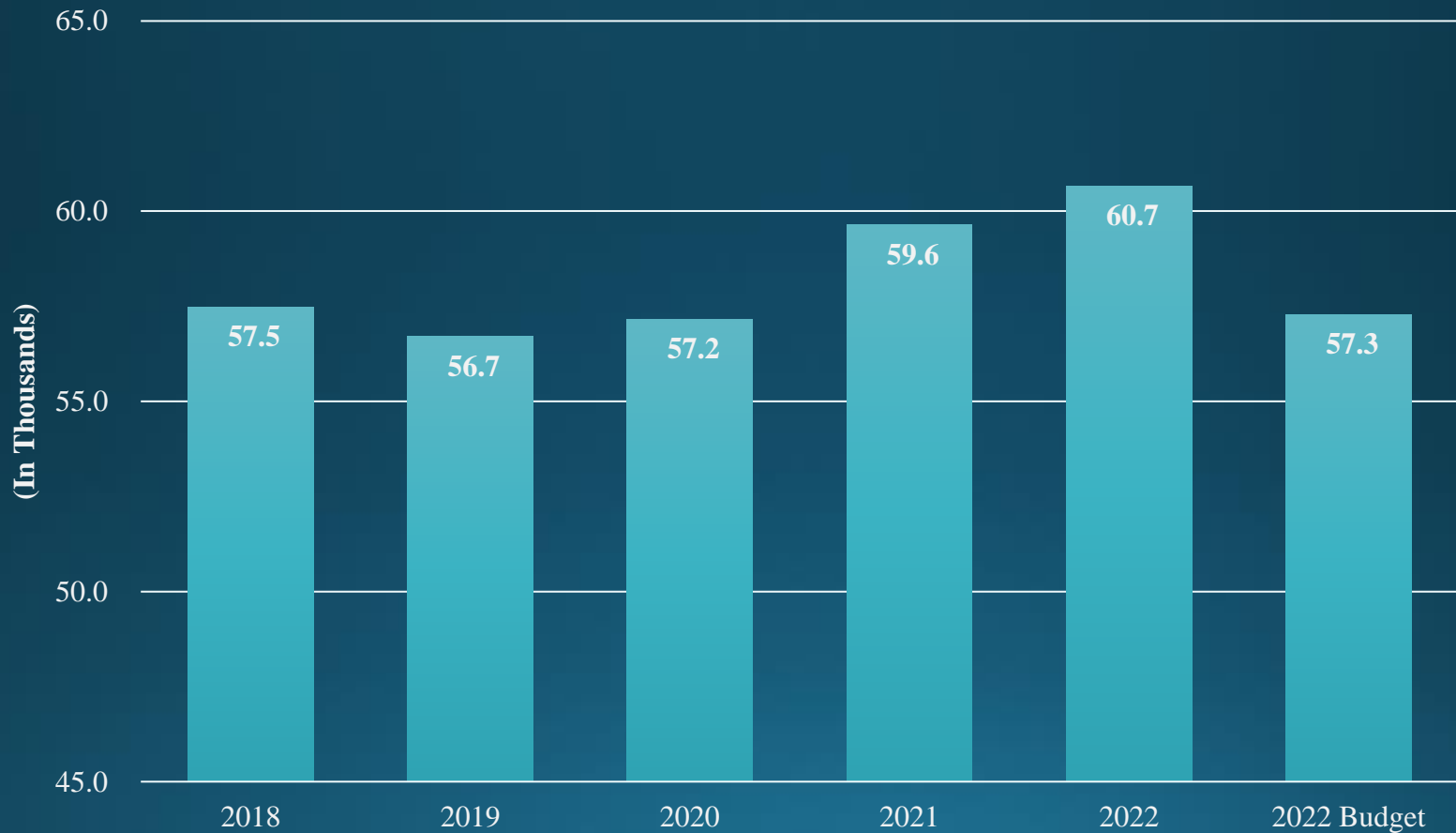
Year End 2022 Financial Information

Retail MWh Sales Comparison



Year End 2022 Financial Information

5 Year Seward MWh Sales Comparison



Year End 2022 Financial Information

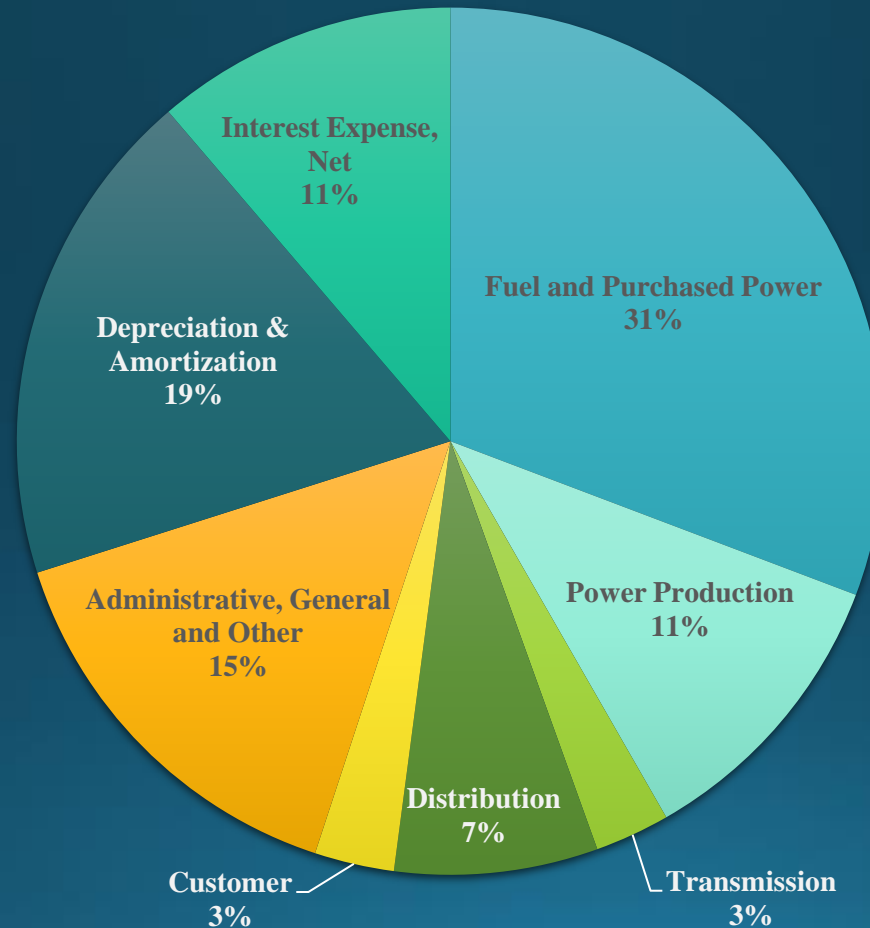
Comparative Statement of Operations

CATEGORY	ACTUAL	BUDGET ¹	VARIANCE
Operating Revenue & Patronage Capital	\$ 354,418,746	\$ 345,060,581	\$ 9,358,165
Fuel and Purchased Power	\$ 106,742,983	\$ 102,741,756	\$ 4,001,227
Power Production	\$ 37,961,076	\$ 36,919,666	\$ 1,041,410
Transmission	\$ 9,690,024	\$ 11,473,532	\$ (1,783,508)
Distribution	\$ 26,319,170	\$ 28,908,401	\$ (2,589,231)
Customer	\$ 10,298,655	\$ 11,510,953	\$ (1,212,298)
Administrative, General and Other	\$ 52,203,530	\$ 45,736,435	\$ 6,467,095
Depreciation & Amortization	\$ 64,660,942	\$ 61,413,835	\$ 3,247,107
Interest Expense, Net	\$ 39,086,015	\$ 38,424,735	\$ 661,280
Total Cost of Electric Service	\$ 346,962,395	\$ 337,129,313	\$ 9,833,082
Patronage Capital & Operating Margins	\$ 7,456,351	\$ 7,931,268	\$ (474,917)
Non-Operating Margins - Interest	\$ 639,406	\$ 291,144	\$ 348,262
Allowance for Funds Used During Construction	\$ 96,433	\$ 301,074	\$ (204,641)
Non-Operating Margins - Other	\$ (68,453)	\$ (145,180)	\$ 76,727
Patronage Capital or Margins	\$ 8,123,737	\$ 8,378,306	\$ (254,569)
MFI/I	1.20	1.20	
TIER	1.20	1.21	

¹Amended budget

Year End 2022 Financial Information

Total Operating and Interest Expense



Year End 2022 Financial Information

Comparative Balance Sheet, Assets & Other Debits

ASSETS & OTHER DEBITS	12/31/2022	12/31/2021	CHANGE
Electric Plant in Service	2,109,990,748	2,085,567,712	24,423,036
Construction Work in Progress	52,721,736	34,253,304	18,468,432
Total Utility Plant	\$ 2,162,712,484	\$ 2,119,821,016	42,891,468
Accum. Prov. for Depreciation/Amortization	(702,820,630)	(640,729,478)	(62,091,152)
Net Utility Plant	\$ 1,459,891,854	\$ 1,479,091,538	(19,199,684)
Nonutility Property - Net	76,889	76,889	0
Financing & Operating Lease Right-of-Use Assets	4,048,789	4,126,967	(78,178)
Investment in Assoc. Organizations	6,993,487	7,280,936	(287,449)
Special Funds	26,275,805	43,016,636	(16,740,831)
Restricted Cash Equivalents & Other	30,000	64,310	(34,310)
Long-term Prepayments	305,854	291,846	14,008
Total Other Property & Investments	\$ 37,730,824	\$ 54,857,584	(17,126,760)
Cash & Restricted Cash	15,854,739	37,590,723	(21,735,984)
Special Deposits and Marketable Securities	58,300	58,300	0
Accounts Receivable - Net	50,243,472	47,186,182	3,057,290
Fuel cost under-recovery	1,579,375	0	1,579,375
BRU capital surcharge under-recovery	18,845,238	0	18,845,238
Materials and Supplies, Fuel Stock	68,199,774	59,371,225	8,828,549
Prepayments	6,239,353	4,917,095	1,322,258
Other Current & Accrued Assets	379,412	942,497	(563,085)
Total Current & Accrued Assets	\$ 161,399,663	\$ 150,066,022	11,333,641
Deferred Debits	108,557,249	112,348,138	(3,790,889)
Total Assets & Other Debits	\$ 1,767,579,590	\$ 1,796,363,282	\$ (28,783,692)

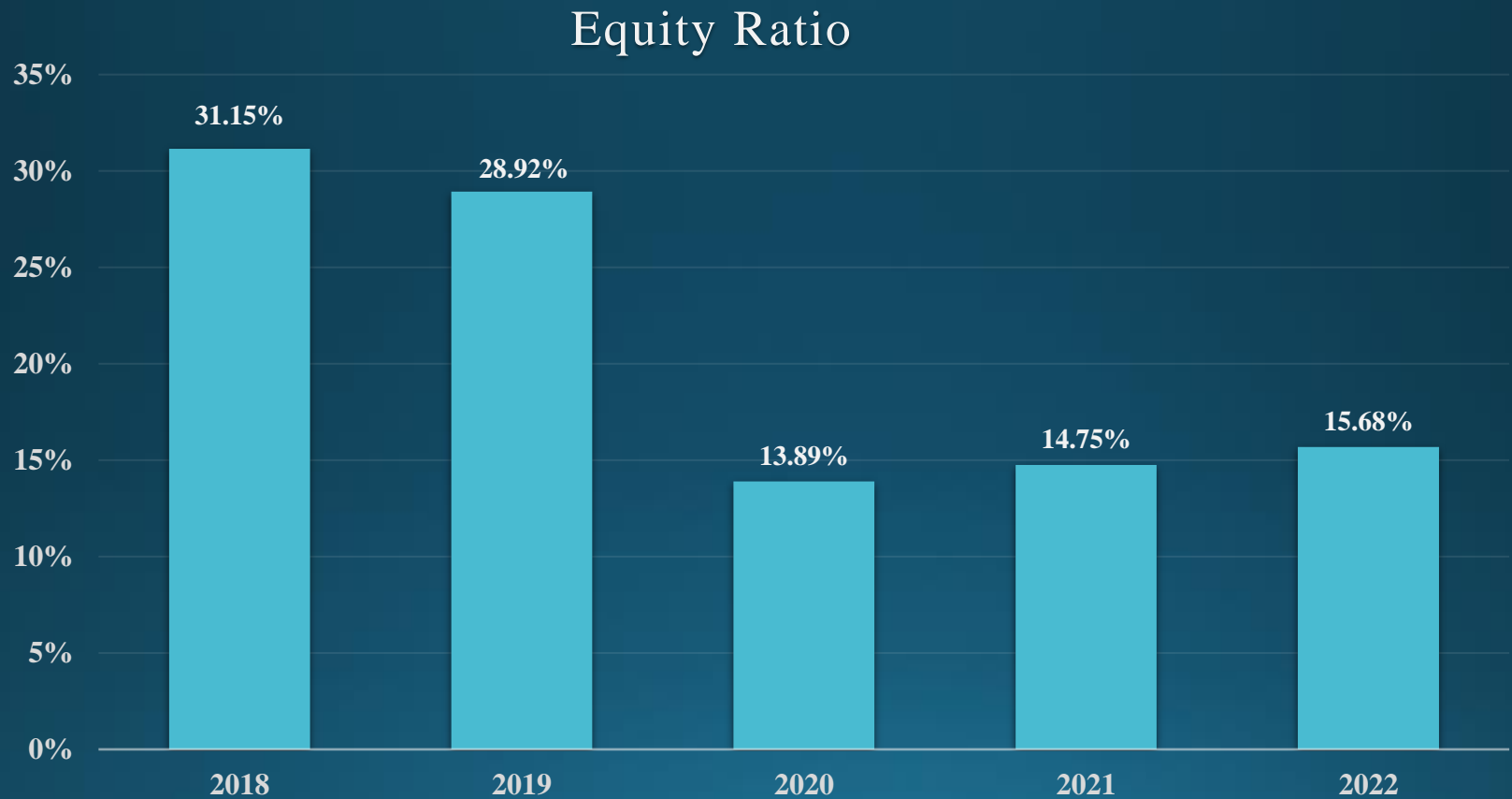
Year End 2022 Financial Information

Comparative Balance Sheet, Liabilities & Other Credits

LIABILITIES & OTHER CREDITS	12/31/2022	12/31/2021	CHANGE
Memberships	1,986,171	1,949,262	36,909
Pat. Capital, Margins & Equities	210,349,305	204,051,676	6,297,629
Total Margins & Equities	\$ 212,335,476	\$ 206,000,938	\$ 6,334,538
Long-Term Debt - Bonds	1,128,549,996	1,173,366,663	(44,816,667)
Long-Term Debt - Other	18,924,000	23,028,000	(4,104,000)
Unamortized Debt Issuance Costs	(5,960,113)	(6,072,373)	112,260
Operating Lease Liabilities	3,583,801	3,835,282	(251,481)
Finance Lease Liabilities	203,786	13,667	190,119
Total Long-Term Debt	\$ 1,145,301,470	\$ 1,194,171,239	\$ (48,869,769)
Notes Payable	94,178,851	64,473,838	29,705,013
Accounts Payable	26,356,140	14,878,065	11,478,075
Consumer Deposits	4,874,798	5,663,067	(788,269)
Other Current & Accrued Liabilities	53,272,014	52,236,502	1,035,512
Total Current & Accrued Liabilities	\$ 178,681,803	\$ 137,251,472	\$ 41,430,331
Deferred Compensation	1,387,476	2,115,229	(727,753)
Other Liabilities, Non-Current	658,627	741,387	(82,760)
Deferred Liabilities	9,639,703	24,724,119	(15,084,416)
BRU Regulatory Liability	96,612,203	107,364,906	(10,752,703)
Cost of Removal Obligation	122,962,832	123,993,992	(1,031,160)
Total Liabilities & Other Credits	\$ 1,767,579,590	\$ 1,796,363,282	\$ (28,783,692)

Year End 2022 Financial Information

5 Year Equity Ratio



Year End 2022 Financial Information Statements of Cash Flows

	December 31, 2022	December 31, 2021
1. Cash flows from operating activities:		
Assignable margins	\$ 8,123,737	\$ 9,578,479
Adjustments to reconcile assignment margins to net cash provided (used) by operating activities:		
Depreciation and amortization	77,318,519	73,698,606
Allowance for funds used during construction	(96,433)	(112,157)
Other non-cash charges	1,550,965	550,697
(Increase) decrease in assets	(21,984,505)	(2,331,422)
Increase (decrease) in liabilities	(21,072,152)	(15,608,087)
Net cash provided by operating activities:	<u>\$ 43,840,131</u>	<u>\$ 65,776,116</u>
2. Cash flows from investing activities:		
Return of capital from investment in associated organizations	288,329	317,218
Investment in special funds	0	(22,860,509)
Proceeds from capital grants	238,604	2,773,224
Extension and replacement of plant	(57,245,659)	(43,877,430)
Net cash used in investing activities:	<u>\$ (56,718,726)</u>	<u>\$ (63,648,442)</u>
3. Cash flows from financing activities:		
Payments for debt issue costs	0	(136,354)
Net increase (decrease) in short-term obligations	23,000,000	12,000,000
Net increase (decrease) in long-term obligations	(42,192,667)	(41,964,667)
Net increase (decrease) in consumer adv/retired patronage/other	10,300,968	5,171,962
Net cash (used in) financing activities:	<u>\$ (8,891,700)</u>	<u>\$ (24,929,059)</u>
Net change in cash, cash equivalents & restricted cash	<u>\$ (21,770,294)</u>	<u>\$ (22,801,385)</u>
4. <u>Cash, cash equivalents & restricted cash at beginning of period</u>	<u>\$ 37,655,033</u>	<u>\$ 60,456,418</u>
5. <u>Cash, cash equivalents and restricted cash at end of period</u>	<u>\$ 15,884,739</u>	<u>\$ 37,655,033</u>

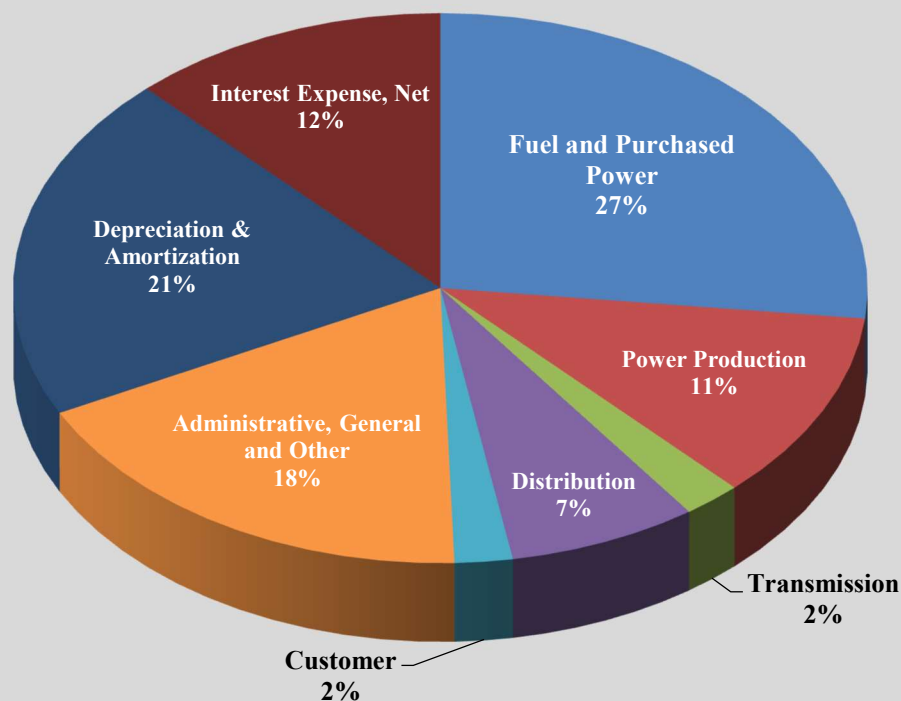
Questions?

COMPARATIVE FINANCIAL REPORT STATEMENT OF OPERATIONS 2022 MTD ACTUAL TO BUDGET

CATEGORY	ACTUAL	BUDGET ¹	VARIANCE
Operating Revenue & Patronage Capital	\$ 31,299,842	\$ 31,802,988	\$ (503,146)
Fuel and Purchased Power	7,344,113	6,666,108	678,005
Power Production	3,058,225	3,067,312	(9,087)
Transmission	602,281	971,704	(369,423)
Distribution	1,966,882	2,579,075	(612,193)
Customer	601,195	980,400	(379,205)
Administrative, General and Other	4,944,196	(2,004,222)	6,948,418
Depreciation & Amortization	5,602,471	5,155,281	447,190
Interest Expense, Net	3,314,503	3,162,361	152,142
Total Cost of Electric Service	\$ 27,433,866	\$ 20,578,019	\$ 6,855,847
Patronage Capital & Operating Margins	\$ 3,865,976	\$ 11,224,969	\$ (7,358,993)
Non-Operating Margins - Interest	85,991	24,262	61,729
Allowance for Funds Used During Construction	11,154	30,913	(19,759)
Non-Operating Margins - Other	(9,607)	(12,098)	2,491
Patronage Capital or Margins	\$ 3,953,514	\$ 11,268,046	\$ (7,314,532)

¹Amended budget

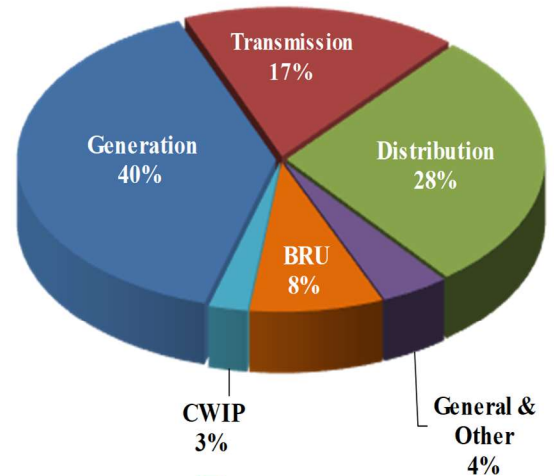
Total Cost of Electric Service (MTD Actual)



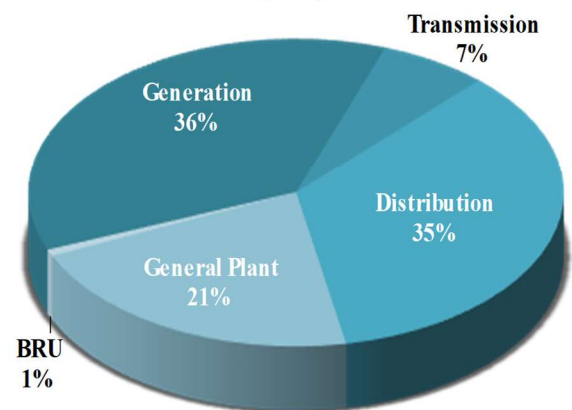
BALANCE SHEET

ASSETS & OTHER DEBITS	12/31/2022	12/31/2021
Electric Plant in Service	2,109,990,748	2,085,567,712
Construction Work in Progress	52,721,736	34,253,304
Total Utility Plant	\$ 2,162,712,484	\$ 2,119,821,016
Accum. Prov. for Depreciation/Amortization	(702,820,630)	(640,729,478)
Net Utility Plant	\$ 1,459,891,854	\$ 1,479,091,538
Nonutility Property - Net	76,889	76,889
Financing & Operating Lease ROU Assets	4,048,789	4,126,967
Investment in Assoc. Organizations	6,993,487	7,280,936
Special Funds	26,275,805	43,016,636
Restricted Cash Equivalents & Other	30,000	64,310
Long-term Prepayments	305,854	291,846
Total Other Property & Investments	\$ 37,730,824	\$ 54,857,584
Cash & Restricted Cash	15,854,739	37,590,723
Special Deposits and Marketable Securities	58,300	58,300
Accounts Receivable - Net	50,243,472	47,186,182
Materials and Supplies, Fuel Stock	68,199,774	59,371,225
Prepayments	6,239,353	4,917,095
Other Current & Accrued Assets	20,804,025	942,497
Total Current & Accrued Assets	\$ 161,399,663	\$ 150,066,022
Deferred Debits	108,557,249	112,348,138
Total Assets & Other Debits	\$ 1,767,579,590	\$ 1,796,363,282
LIABILITIES & OTHER CREDITS	12/31/2022	12/31/2021
Memberships	1,986,171	1,949,262
Pat. Capital, Margins & Equities	210,349,305	204,051,676
Total Margins & Equities	\$ 212,335,476	\$ 206,000,938
Long-Term Debt - Bonds	1,128,549,996	1,173,366,663
Long-Term Debt - Other	18,924,000	23,028,000
Unamortized Debt Issuance Costs	(5,960,113)	(6,072,373)
Operating Lease Liabilities	3,583,801	3,835,282
Finance Lease Liabilities	203,786	13,667
Total Long-Term Debt	\$ 1,145,301,470	\$ 1,194,171,239
Notes Payable	94,178,851	64,473,838
Accounts Payable	26,356,140	14,878,065
Consumer Deposits	4,874,798	5,663,067
Other Current & Accrued Liabilities	53,272,014	52,236,502
Total Current & Accrued Liabilities	\$ 178,681,803	\$ 137,251,472
Deferred Compensation	1,387,476	2,115,229
Other Liabilities, Non-Current	658,627	741,387
Deferred Liabilities	9,639,703	24,724,119
BRU Regulatory Liability	96,612,203	107,364,906
Cost of Removal Obligation	122,962,832	123,993,992
Total Liabilities & Other Credits	\$ 1,767,579,590	\$ 1,796,363,282

→ **Total Utility Plant**
\$2,162,712,484



↓ **Construction Work in Progress**
\$52,721,736



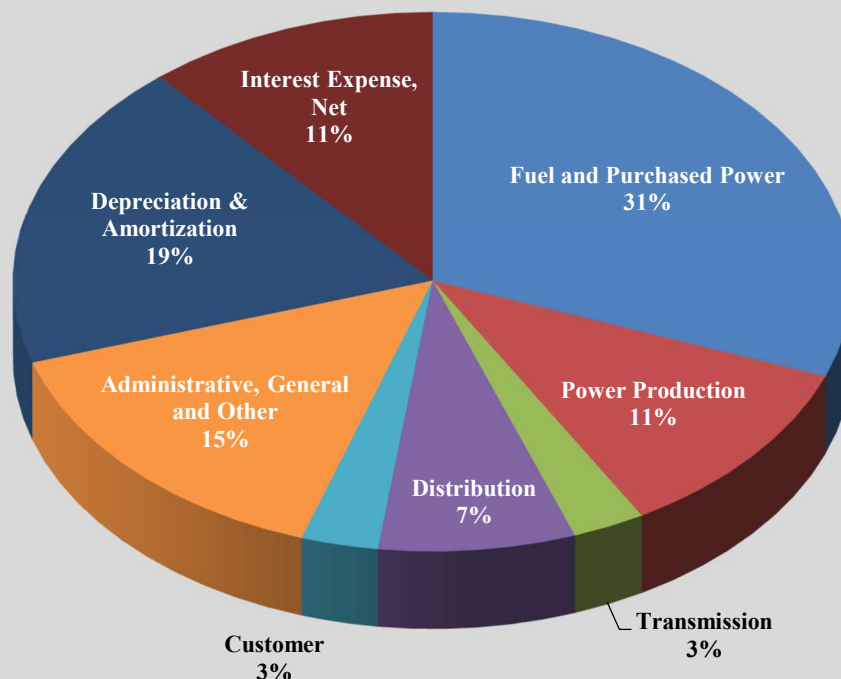
COMPARATIVE FINANCIAL REPORT STATEMENT OF OPERATIONS 2022 YTD ACTUAL TO BUDGET

CATEGORY	ACTUAL	BUDGET ¹	VARIANCE
Operating Revenue & Patronage Capital	\$ 354,418,746	\$ 345,060,581	\$ 9,358,165
Fuel and Purchased Power	106,742,983	102,741,756	4,001,227
Power Production	37,961,076	36,919,666	1,041,410
Transmission	9,690,024	11,473,532	(1,783,508)
Distribution	26,319,170	28,908,401	(2,589,231)
Customer	10,298,655	11,510,953	(1,212,298)
Administrative, General and Other	52,203,530	45,736,435	6,467,095
Depreciation & Amortization	64,660,942	61,413,835	3,247,107
Interest Expense, Net	39,086,015	38,424,735	661,280
Total Cost of Electric Service	\$ 346,962,395	\$ 337,129,313	\$ 9,833,082
Patronage Capital & Operating Margins	\$ 7,456,351	\$ 7,931,268	\$ (474,917)
Non-Operating Margins - Interest	639,406	291,144	348,262
Allowance for Funds Used During Const.	96,433	301,074	(204,641)
Non-Operating Margins - Other	(68,453)	(145,180)	76,727
Patronage Capital or Margins	\$ 8,123,737	\$ 8,378,306	\$ (254,569)
MFI/I	1.20	1.20	
TIER	1.20	1.21	

¹Amended budget

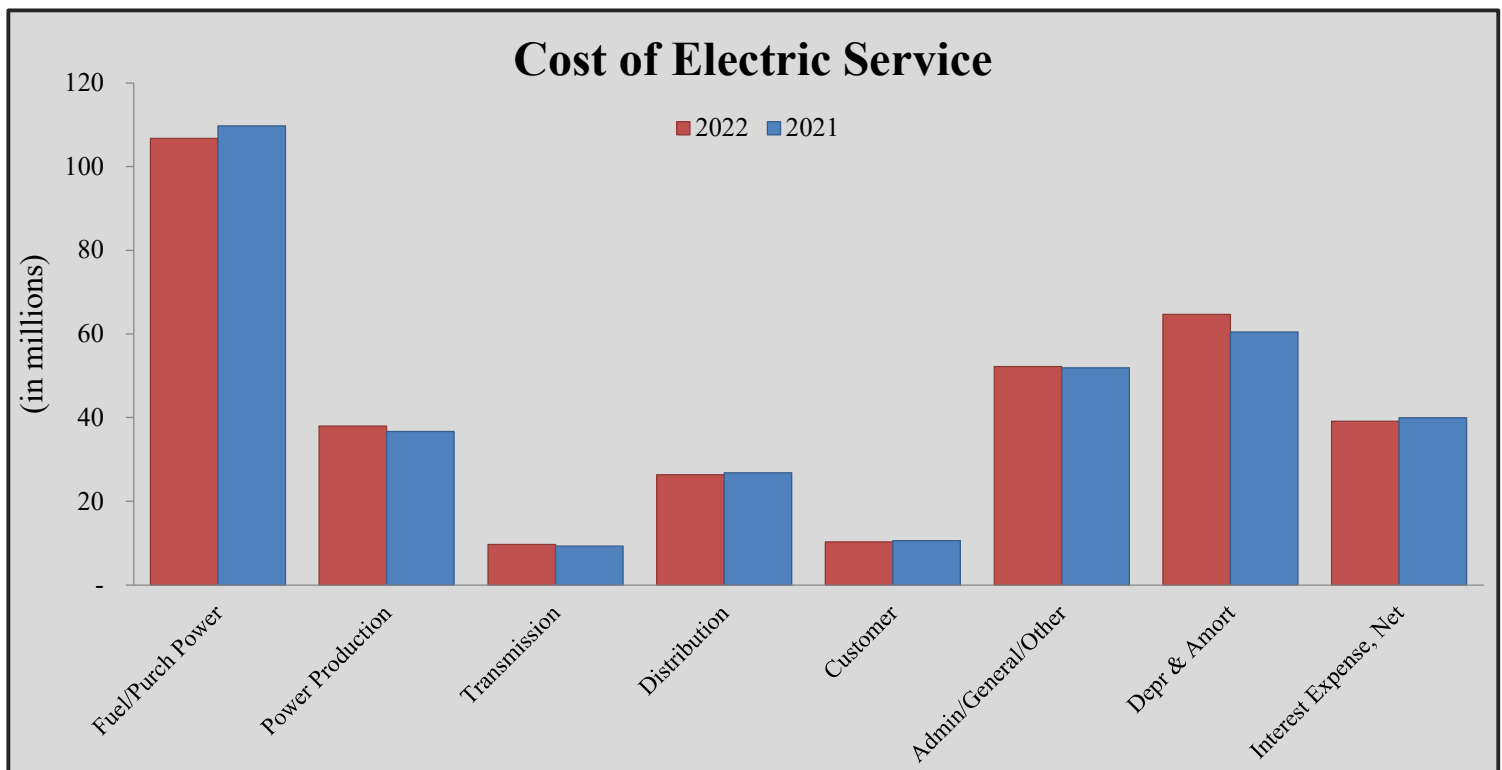
COMPARATIVE FINANCIAL REPORT

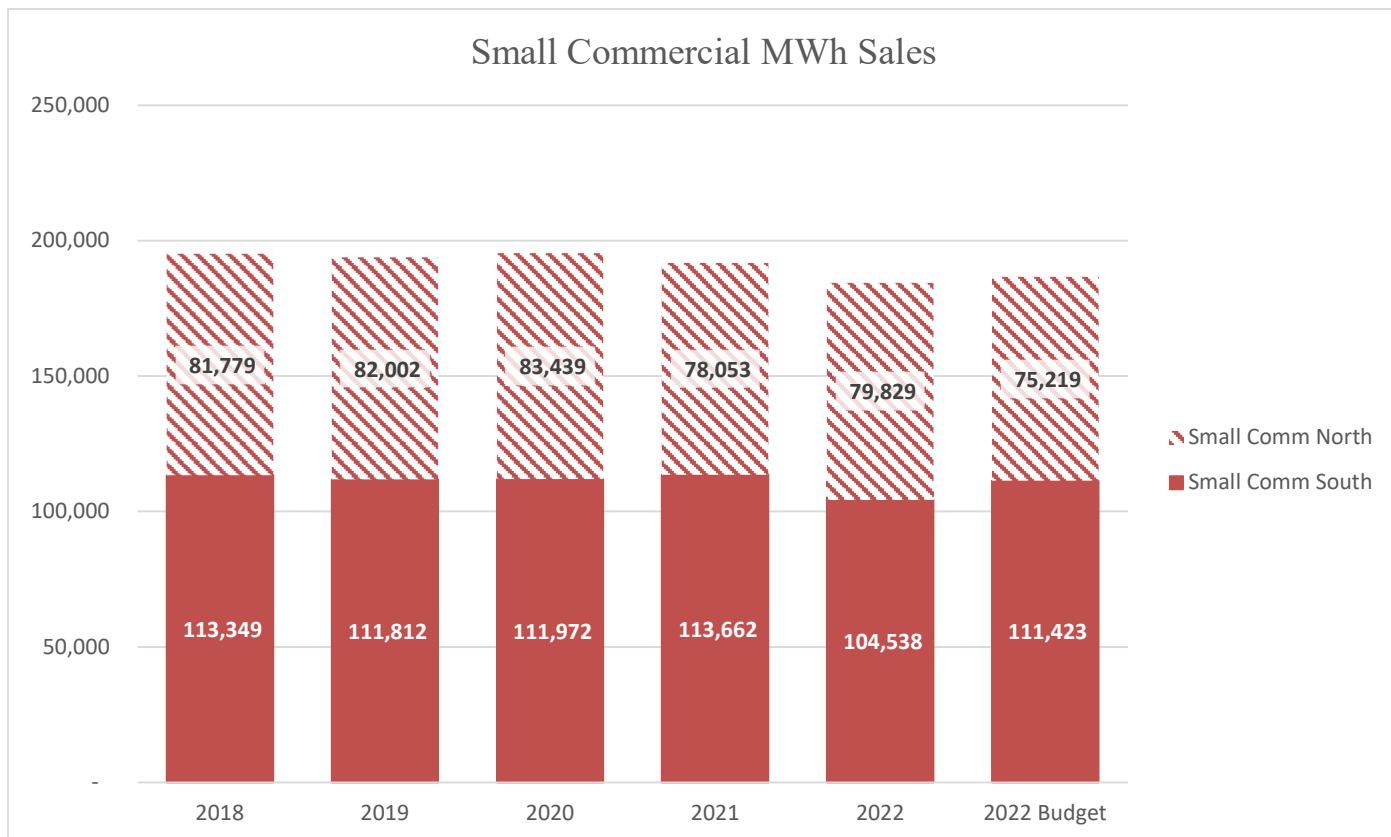
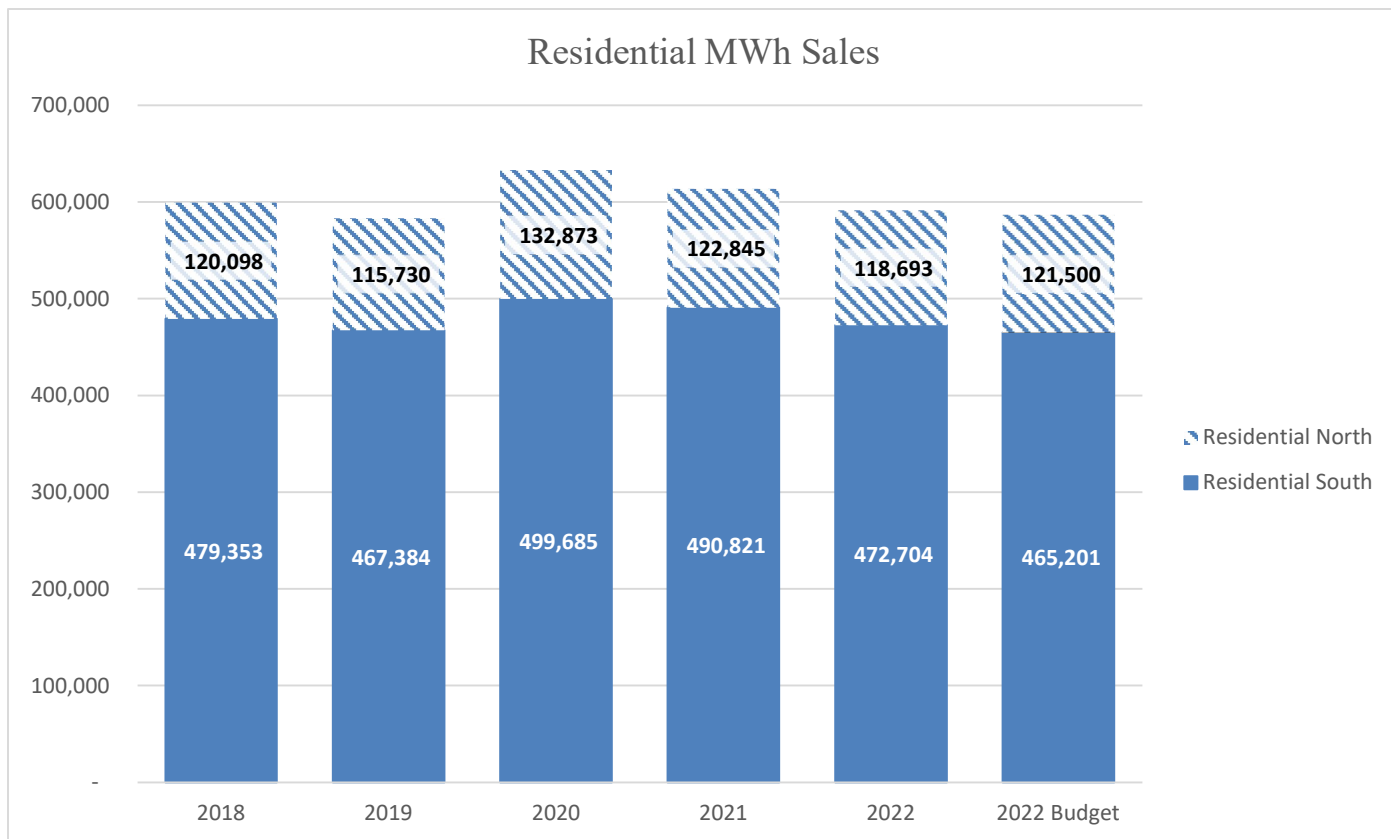
Total Cost of Electric Service (YTD Actual)

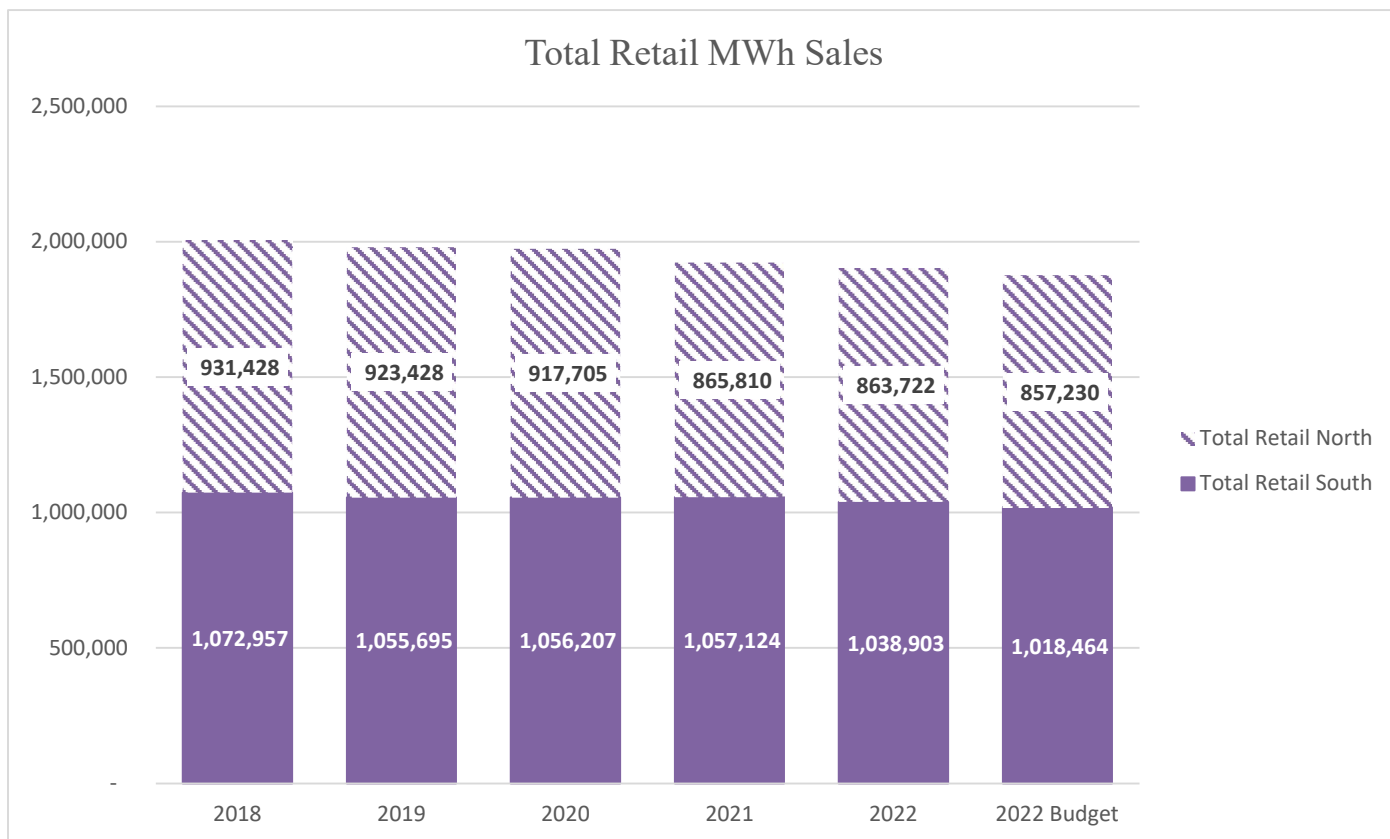
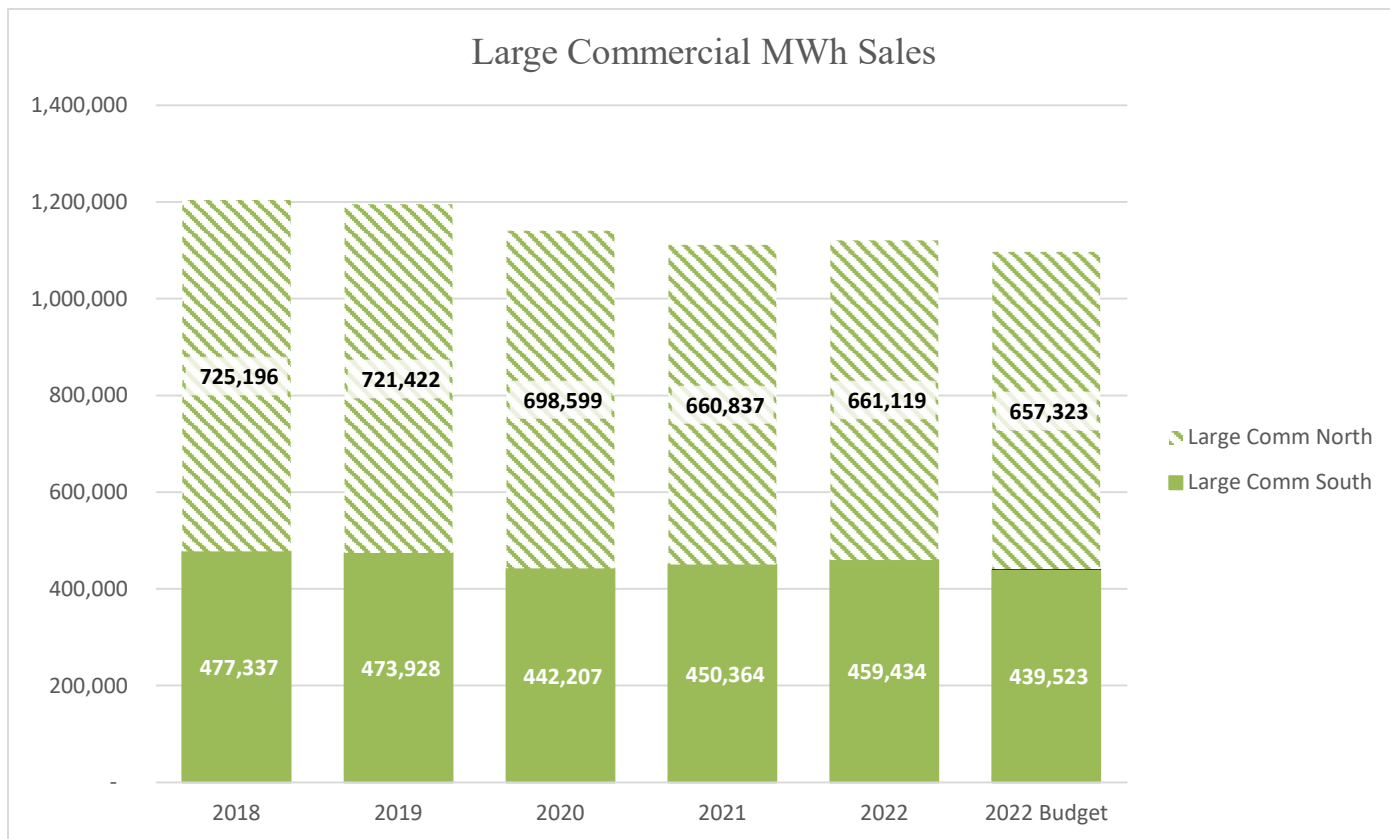


STATEMENT OF OPERATIONS CURRENT TO PRIOR YEAR

CATEGORY	2022 YTD ACTUAL	2021 YTD ACTUAL
Operating Revenue & Patronage Capital	\$ 354,418,746	\$ 354,458,456
Fuel and Purchased Power	106,742,983	109,690,886
Power Production	37,961,076	36,640,560
Transmission	9,690,024	9,313,578
Distribution	26,319,170	26,798,579
Customer	10,298,655	10,554,469
Administrative, General and Other	52,203,530	51,871,897
Depreciation & Amortization	64,660,942	60,465,653
Interest Expense, Net	39,086,015	39,984,494
Total Cost of Electric Service	\$ 346,962,395	\$ 345,320,116
Patronage Capital & Operating Margins	\$ 7,456,351	\$ 9,138,340
Non-Operating Margins - Interest	639,406	294,670
Allowance for Funds Used During Construction	96,433	112,157
Non-Operating Margins - Other	(68,453)	33,312
Patronage Capital or Margins	\$ 8,123,737	\$ 9,578,479
MFI/I	1.20	1.22
TIER	1.20	1.23

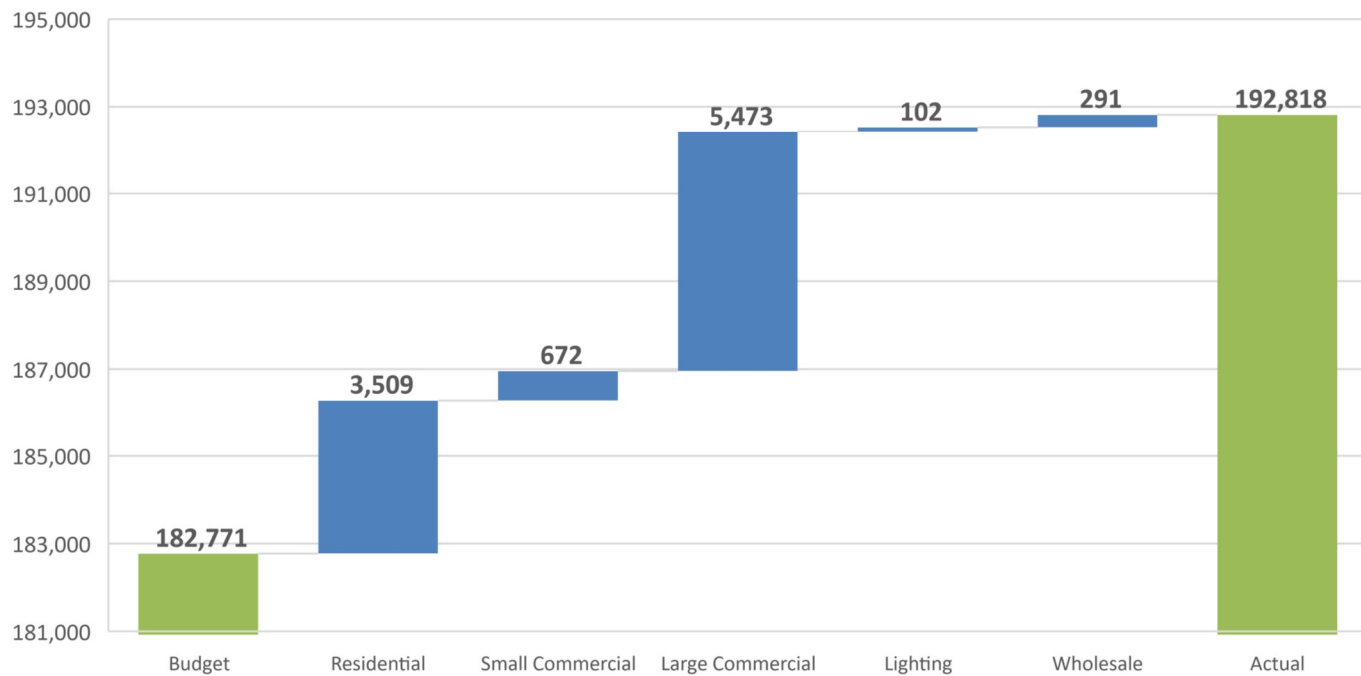






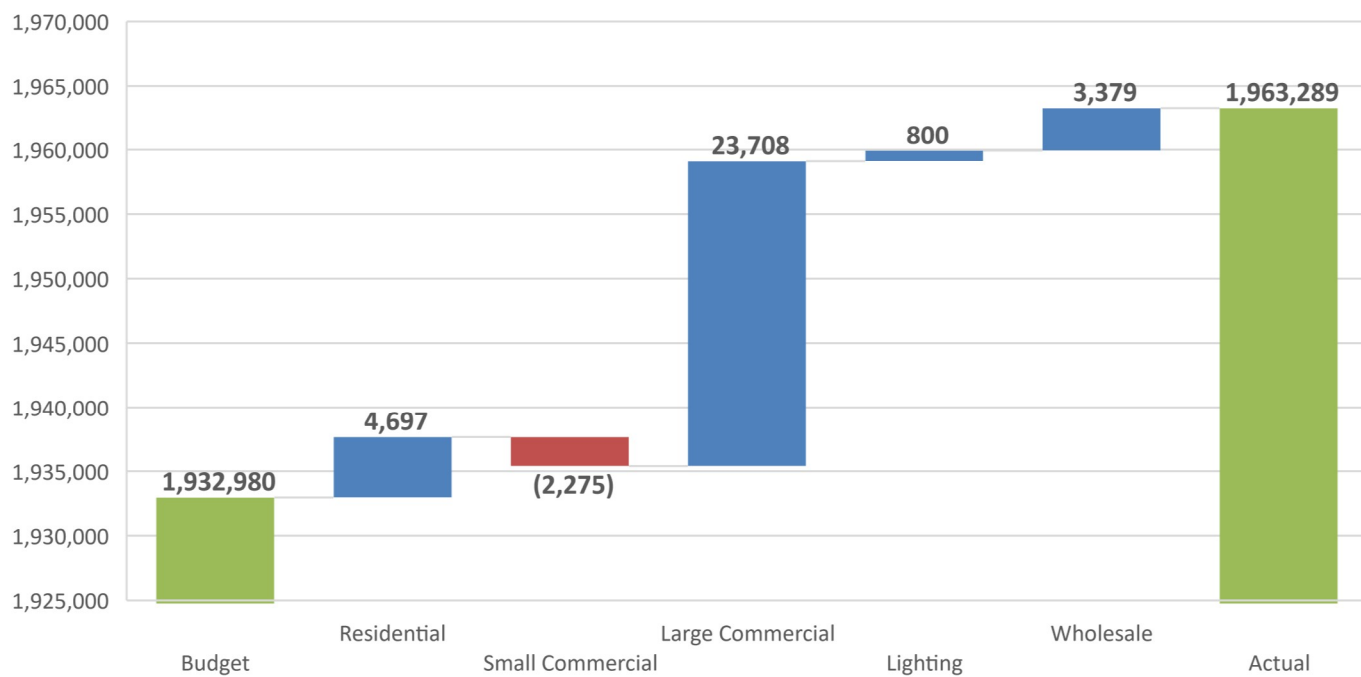
Firm MWh Sales (MTD)

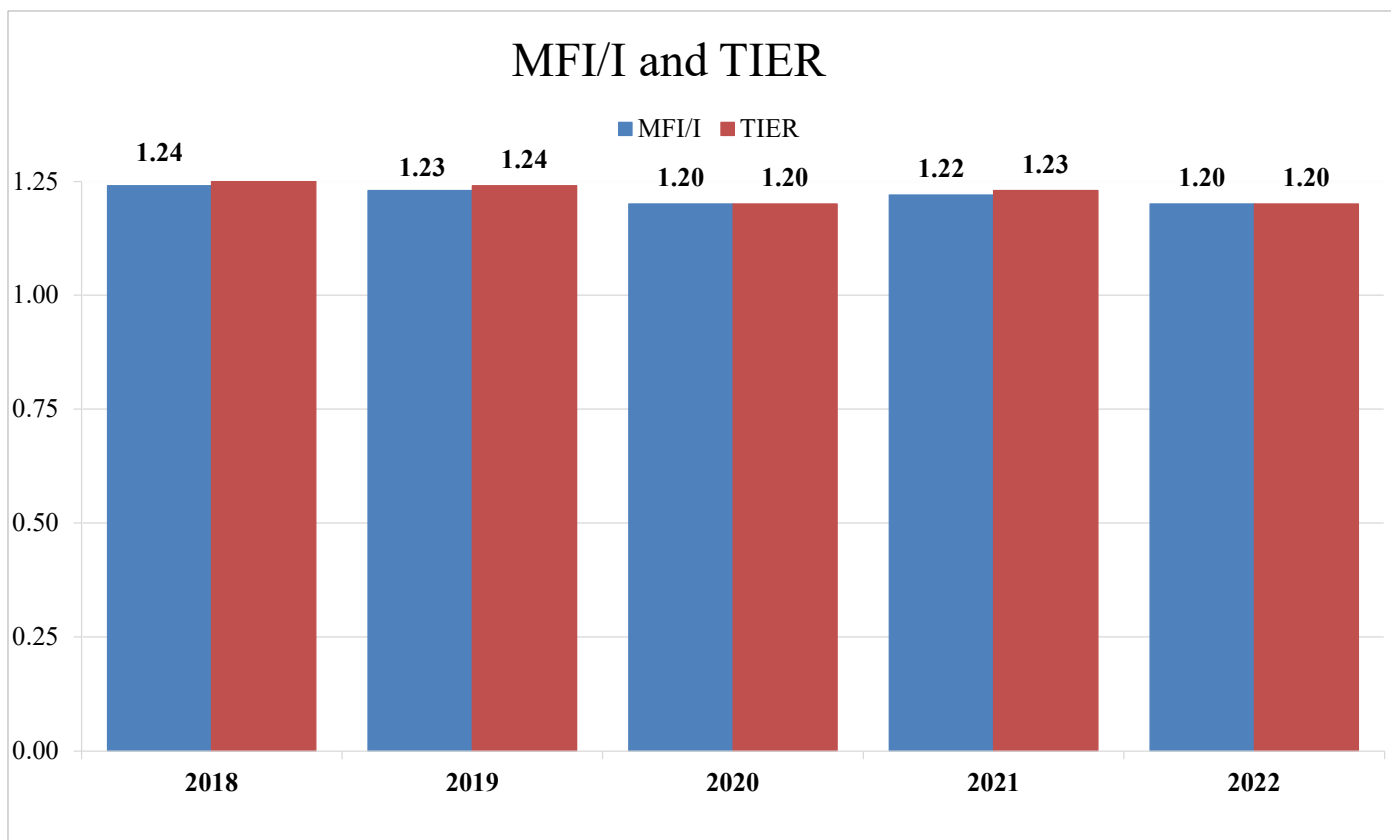
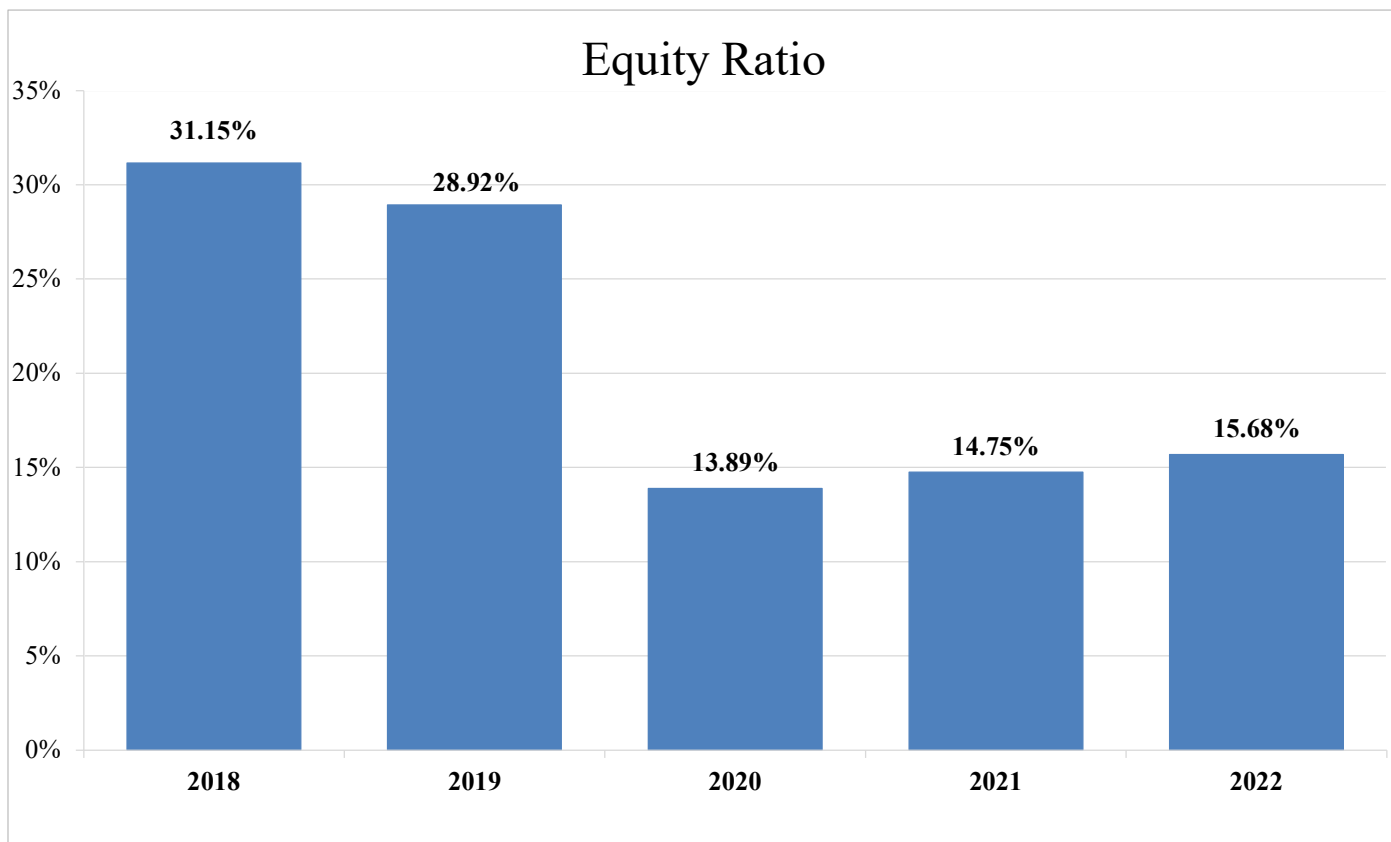
■ Increase ■ Decrease ■ Total



Firm MWh Sales (YTD)

■ Increase ■ Decrease ■ Total





ENERGY SALES (kWh)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Retail Energy Sales	1,902,624,567	1,875,695,029
Wholesale Energy Sales	<u>60,664,111</u>	<u>57,284,948</u>
Total Firm Energy Sales	1,963,288,678	1,932,979,977
Economy Energy/Capacity	181,930,000	152,235,703
Power Pool Sales	<u>197,259,000</u>	<u>159,000,000</u>
Total Energy Sales	2,342,477,678	2,244,215,680

Firm energy sales totaled 1,963,288,678 kWh, which was a 1.6% favorable variance compared to budget. While the total of retail energy sales was above budget, lower small commercial sales were offset by higher residential and large commercial sales. Wholesale and economy energy and capacity sales were both over budget by 5.9% and 19.5%, respectively. The favorable variance related to economy sales was due to higher than anticipated sales to GVEA as well as unanticipated sales to HEA. Power pool sales to MEA totaled 197,259,000 kWh, which was over budget by 24.1%.

ENERGY REVENUE (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Retail Revenue	\$ 322.1	\$ 319.3
Wholesale Revenue	<u>5.1</u>	<u>5.6</u>
Total Firm Revenue	327.2	324.9
Economy Energy/Capacity Revenue	17.5	13.4
Power Pool Revenue	2.2	1.7
Other Operating Revenue	<u>7.5</u>	<u>5.1</u>
Total Revenue	\$ 354.4	\$ 345.1

Revenue from firm sales was over budget at \$327.2 million compared to a budget of \$324.9 million, due primarily to higher residential and large commercial sales, which was somewhat offset by lower small commercial sales. Wholesale revenue was below budget by \$0.5 million, or 9.9%, due primarily to a lower allocation of wholesale fuel and purchased power expense recovered in revenue than budgeted, which was somewhat offset by higher base rate sales revenue. Economy energy and capacity revenue was over budget by 30.9%, due primarily to higher than anticipated sales to GVEA. Power pool revenue with MEA was over budget at \$2.2 million compared to a budget of \$1.7 million. Other operating revenue includes late fees, pole rental, wheeling, microwave, BRU royalties, grants, AWWU revenue, miscellaneous services, and other electric revenue. Other operating revenue totaled \$7.5 million compared to \$5.1 million in the budget, due primarily to higher revenue from gas exchange and wheeling with GVEA.

FUEL AND PURCHASED POWER (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Fuel	\$ 83.5	\$ 83.6
Purchased Power	<u>23.2</u>	<u>19.1</u>
Total	\$ 106.7	\$ 102.7

Fuel expense includes fuel, storage, transportation, and BRU operating costs. Fuel expense was on par with budget at \$83.5 million compared to \$83.6 million in the budget.

Fuel purchased or withdrawn from inventory for production was 7,073,805 Mcf at an average effective price of \$8.72 per Mcf compared to 7,555,545 Mcf budgeted at an average effective price of \$8.58 per Mcf.

Purchased power expense represents energy purchased from Bradley Lake, Fire Island, Eklutna, MEA through power pooling and other utilities as needed, as well as costs associated with dispatching. Purchased power expense was \$23.2 million compared to \$19.1 million in the budget. This unfavorable variance was caused primarily by higher energy purchases and costs from Bradley Lake, higher energy purchases from Fire Island, and Eklutna and certain costs associated with MEA power pooling, which was somewhat offset by lower system control and dispatch labor.

Energy purchased was 305,450 MWh at an average effective price of 5.87 cents per kWh compared to 228,549 MWh budgeted at an average effective price of 5.62 cents per kWh.

POWER PRODUCTION (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Power Production	\$ 38.0	\$ 36.9

Power production expense was \$38.0 million compared to \$36.9 million in the budget. Higher cost of materials at the Sullivan and Nikkels plants, additional warehouse costs allocated to this financial category, the amortization of acquired ML&P regulatory assets, as well as higher maintenance expense at SPP, was somewhat offset by lower labor costs.

TRANSMISSION OPERATIONS AND MAINTENANCE (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Transmission	\$ 9.7	\$ 11.5

Transmission operations and maintenance expense was \$9.7 million compared to \$11.5 million in the budget. This favorable variance was due primarily to lower labor and warehouse costs allocated to this financial category.

DISTRIBUTION OPERATIONS AND MAINTENANCE (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Distribution	\$ 26.3	\$ 28.9

Distribution operations and maintenance expense was \$26.3 million compared to \$28.9 million in the budget. This favorable variance was due primarily to lower labor and information services costs allocated to this financial category.

CONSUMER ACCOUNTS / CUSTOMER INFORMATION (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Consumer/Customer Information	\$ 10.3	\$ 11.5

Consumer accounts and customer information expense was \$10.3 million compared to \$11.5 million in the budget. This favorable variance was due primarily to lower labor costs.

ADMINISTRATIVE, GENERAL AND OTHER (in millions)

	<u>2022 Actual</u>	<u>2022 Budget</u>
Administrative, General and Other	\$ 52.2	\$ 45.7

Administrative, general, and other expense includes tax, donations, other deductions associated with preliminary survey and investigation charges of projects, and obsolete inventory write-offs that are not attributable to operating or maintenance accounts. Administrative, general, and other expense was over budget by \$6.5 million. The favorable variances in labor, information services costs allocated to this financial category, and PILT expense, were offset by unfavorable variances in acquisition related amortizations and professional services, due primarily to higher than anticipated costs related to legal and regulatory matters and snow removal.

SUMMARY

Depreciation, interest, and interest during construction expense totaled \$103.7 million compared to \$99.8 million in the budget. The unfavorable variance was due primarily to higher than anticipated depreciation expense related to BRU and higher interest expense driven by an increase in short-term interest rates.

All the foregoing expenses resulted in total cost of electric service of \$347.0 million compared to \$337.1 million in the budget.

Non-operating margins include allowance for funds used during construction (AFUDC), capital credit and patronage capital allocations, extraordinary items, and interest and dividend income. Non-operating margins totaled \$667 thousand compared to \$447 thousand in the budget due primarily to higher non-operating interest income, which was offset by lower AFUDC.

The net result of revenue and expenses was margins of \$8.1 million compared to a projected margins of \$8.4 million in the budget. This resulted in an MFI/I of 1.20, a TIER of 1.20, and an equity-to-total capitalization ratio of 15.68%.

Capital Credits Retirement Methods



Chugach Electric
Board of Directors
**Audit and Finance
Committee**

Date Presented:
March 29, 2023

Board Policy 304

Association's guide for retiring capital credits.

Board Policy 304.II.C.3

"The Association shall generally retire capital credits with the goals of...
... (3) retiring capital credits using a method approved by the Board;"

Chugach Current Retirement Process

Retirement Process

Each time a retirement is completed, the Board approves a Capital Credit Retirement Resolution, which is written specifically for that retirement instance.

The resolution identifies the retirement amount and method.

Note: Retirement is different than Allocation. Allocations are given to members annually and represent the equity the member has in Chugach; however, it is not payable until a retirement.

Retirement Method

Traditionally, Chugach has chosen a First-in, First-out (FIFO) retirement method.



Retirement Methods

First-in, First-out (FIFO)



Hybrid Approach
Last-in, First-out & First-in, First-out
(LIFO/FIFO)



Percentage of Total Allocated
Capital Credits (%) and (%/FIFO)



Last-in, First-out (LIFO)

Chugach Retirement Options

01

FIFO

Traditional Retirement Method

Retires in order allocated

02

LIFO/FIFO

Hybrid Option

Combines FIFO and LIFO

03

LIFO

Not common, yet still an option

Retires in reverse of order
allocated

Retirement Comparison

	FIFO	LIFO/FIFO	LIFO
Pros	<ul style="list-style-type: none"> • Most favorable to long-term members • Easiest to administer • Benefits cooperatives with low growth and low member turnover • Opportunity to get whole years off the books with one retirement 	<ul style="list-style-type: none"> • Recognizes both long- and short-term members • Can select best suited amount for long and short term members (does not need to be 50/50) 	<ul style="list-style-type: none"> • Favorable to new members • Benefits cooperatives with fast growing or transient membership • Minimizes the difficulty of finding former members to make retirements
Cons	<ul style="list-style-type: none"> • Significant delay (30+ years) between allocation and retirement • Not favorable to new members • Does not build loyalty with new members • Does not educate new members about the benefits of cooperative ownership 	<ul style="list-style-type: none"> • Additional administrative requirements to maintain records • May exclude a portion of members that are not on the extremes of long or short term. 	<ul style="list-style-type: none"> • Not favorable to long-term members • Some long-term capital credits are never repaid • Potential to create public relations difficulties with long-term members

Retirement method does not impact equity

EXAMPLE

Retirement Amount: \$5 Million

	1991	1992	1993-2019	2020	2021	Total
FIFO	✓	✓				\$5 M
LIFO/FIFO*	✓				✓	\$5 M
LIFO					✓	\$5 M

*LIFO/FIFO can be split between retirement periods as determined by the Board

Member Impact

NRECA and NRUCFC's Capital Credit Task Force recommends:

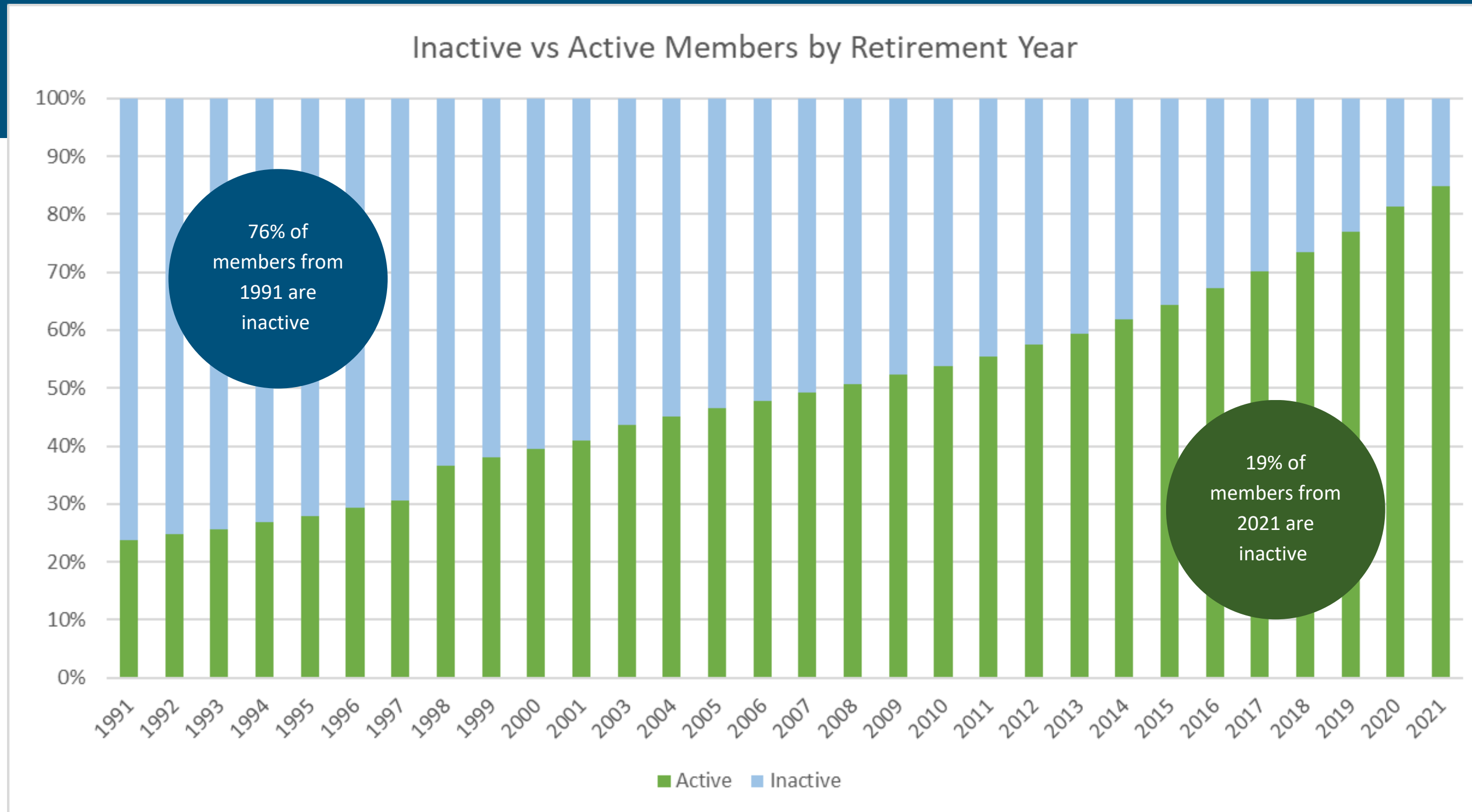
“

“that each cooperative choose a retirement method that will help the cooperative achieve its goals, recognizing the effect of the tenure and age of its members has on the perception of the value of membership in the cooperative.”

”



Inactive vs. Active Member Impact



Recommended Action

Flexibility

Clarity

Direction

Impact

Value

Capital Credit Retirement Methods: The Association shall retire capital credits under a first-in, first-out (“FIFO”), a last-in, first-out (“LIFO”), or a combination FIFO/LIFO methodology based on factors, including but not limited to, cooperative goals, retirement amount, rotation periods, membership tenure, and/or general economic conditions within our service territory.

BOARD POLICY: 304

CAPITAL CREDIT POLICY

I. OBJECTIVE

The objective of this Capital Credits Policy ("Policy") is to state the general policy of the Association for allocating and retiring capital credits.

II. CONTENT

The Association shall allocate and retire capital credits in a manner that: (1) is consistent with state and federal law; (2) is consistent with operating on a cooperative basis under federal tax law; (3) is fair and reasonable to the Association's patrons and former patrons; (4) provides the Association with sufficient equity and capital to operate effectively and efficiently; and (5) protects the Association's financial condition. Subject to law, the Association's Articles of Incorporation and Bylaws; the allocation method and retirement of capital credits are at the sole discretion of the Association's Board of Directors ("Board"), subject to section III. D., below.

The Association shall allocate and retire capital credits according to the manner, method, timing, and amount approved by the Board.

A. Patronage Earning Allocations: All margins received by the Association shall, insofar as permitted by law and approved by the Board, be allocated to members on a patronage basis (as may be defined by specific agreements) in accordance with Article VII of the Bylaws. Any amount so allocated shall be included as part of the capital credited to the accounts of members, as herein provided.

B. Patronage Loss Allocations: For each good or service provided by the Association on a cooperative basis, the Association shall offset patronage losses with the Association's patronage non-operating earnings from providing the good or service during the next succeeding fiscal year(s).

C. General Capital Credits Retirements: The Association shall generally retire capital credits with the goals of: (1) remaining in compliance with Indenture and debt agreement requirements; (2) maintaining or progressing toward an equity target level established by the Board; (3) retiring capital credits using a method approved by the Board; and (4) communicating and promoting cooperative principles.

D. Capital Credit Retirement Methods: The Association shall retire capital credits under a first-in, first-out ("FIFO"), a last-in, first-out ("LIFO"), or a combination FIFO/LIFO methodology based on factors, including but not limited to, cooperative goals, retirement amount, rotation periods, membership tenure, and/or general economic conditions within our service territory.

Next Steps

- Review Board Policy 304 changes
- Move to Governance Committee for further discussion



CHUGACH ELECTRIC BELUGA RIVER ARO INVESTMENT FUND

QUARTERLY REVIEW
for the period ending December 31, 2022

Agenda

- 1. Portfolio Review*
- 2. Market Review*
- 3. Appendix*

Audit & Finance Committee Meeting
March 29, 2023

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Account Summary as of December 31, 2022

Chugach Electric Beluga River ARO Investment Fund

Account Inception		October 2020
Initial Contribution		\$ 17,175,687
Subsequent Contributions		\$ 3,482,279
Withdrawals <i>Does not include custodial or management fees</i>		\$ 0
Current Market Value <i>December 31, 2022</i>		\$ 20,116,204
Annualized Account Return* <i>Inception – December 31, 2022</i>		-0.91%
Strategic Asset Allocation	Risk Assets	52%
	Risk Control	27%
	Alternatives	21%

*Performance is gross of management fees, net of internal fund fees, and annualized for periods greater than one year.

Portfolio Review

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Account Summary as of December 31, 2022

Chugach Electric Beluga River ARO Investment Fund

Contributions to Date*	\$ 20,657,966
Current Market Value	\$ 20,116,204
Anticipated Contributions**	\$31,352,215
Total Liability <i>Due 2034</i>	\$ 79,101,308
Funded Status***	65.07%

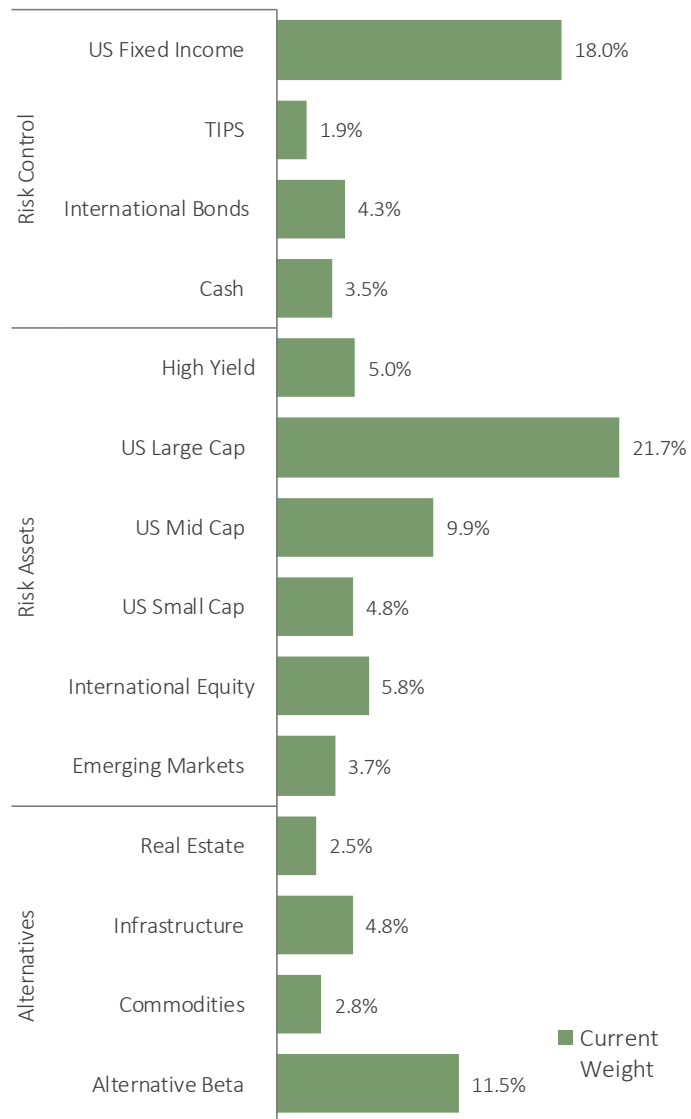
*Contributions to Date calculated as the initial contribution plus subsequent deposits.

** Anticipated Contributions based on 2022 Reserve Study prepared by Ryder Scott.

***Funded Status calculated as current market value plus anticipated contributions of approximately \$31.35MM divided by the ARO liability of \$79.10MM.

Asset Allocation as of December 31, 2022

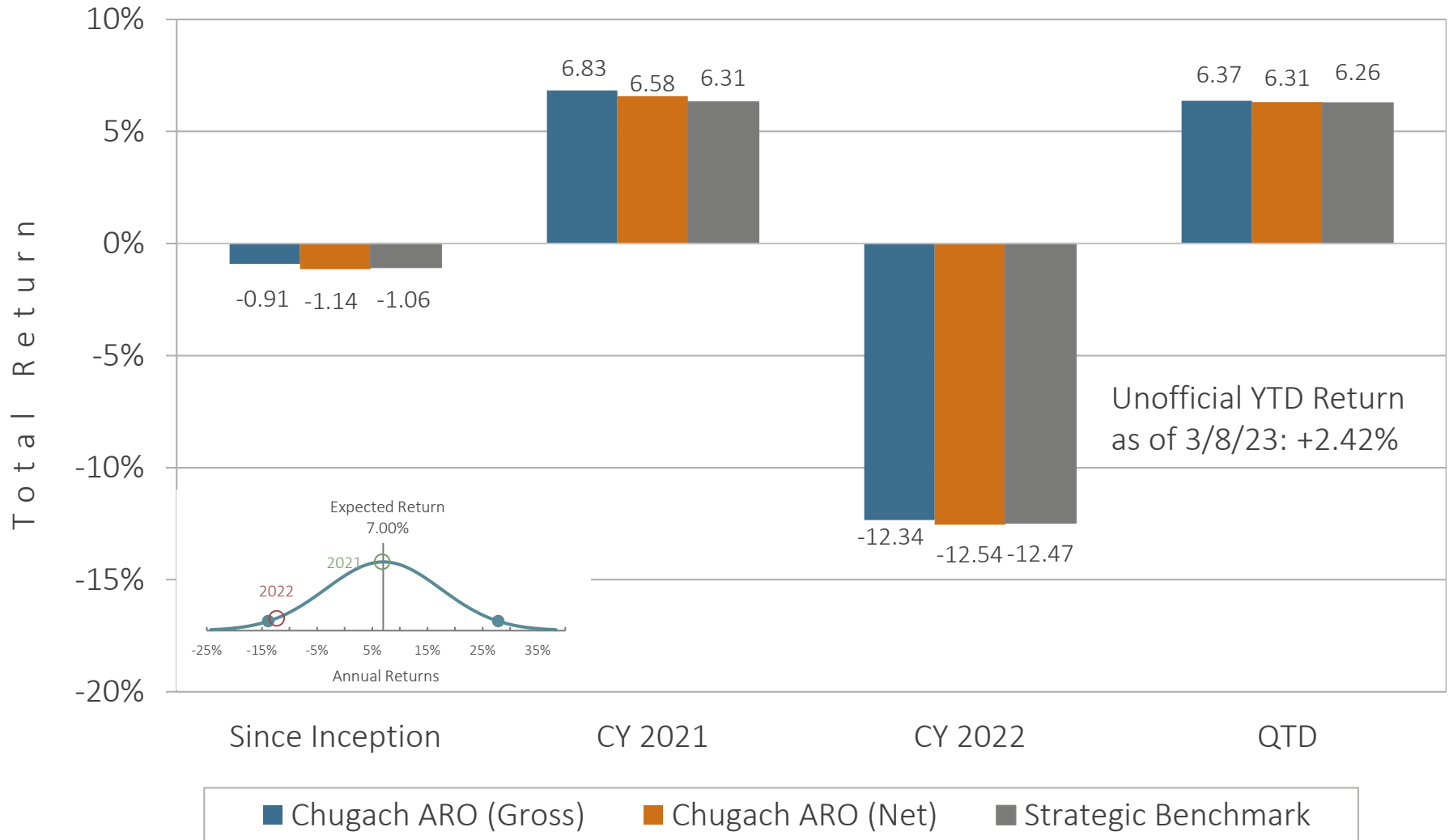
Chugach Electric Beluga River ARO Investment Fund



Asset Class	Strategic Weight	Overweight / Underweight	Range
Risk Control	27%	0.6%	
US Fixed Income	18%	0.0%	8 - 28%
TIPS	2%	-0.1%	0 - 10%
International Bonds	5%	-0.7%	0 - 10%
Cash	2%	1.5%	0 - 10%
Risk Assets	52%	-1.2%	
High Yield	5%	0.0%	0 - 10%
US Large Cap	22%	-0.3%	12 - 32%
US Mid Cap	10%	-0.1%	5 - 15%
US Small Cap	5%	-0.2%	0 - 10%
International Equity	6%	-0.2%	0 - 12%
Emerging Markets	4%	-0.3%	0 - 8%
Alternatives	21%	0.6%	
Real Estate	3%	-0.5%	0 - 6%
Infrastructure	5%	-0.2%	0 - 10%
Commodities	3%	-0.2%	0 - 6%
Alternative Beta	10%	1.5%	0 - 15%

Account Performance as of December 31, 2022

Chugach Electric Beluga River ARO Investment Fund



Expected risk and return data from Windham Portfolio Advisor. Performance is gross of management fees, net of internal fund fees, and annualized for periods greater than one year. Inception performance begins on October 31, 2020.

- Actively managed U.S. Fixed Income return for the 4th quarter was **1.63%** vs. **1.87%** for the benchmark.
- Fixed income performance can be decomposed into three primary sources of return: **sector allocation, interest rate changes, and security selection.**
 - An underweight allocation to duration within Treasuries contributed to relative underperformance.
 - An overweight to Agency securities also contributed to relative underperformance, this was due to a negative allocation and security selection effect.
 - An overweight position to BBB rated Corporate securities was a relative contributor to outperformance. This was driven by tightening credit spreads particularly in the BBB sector.

U.S. Fixed Income Summary Statistics as of December 31, 2022

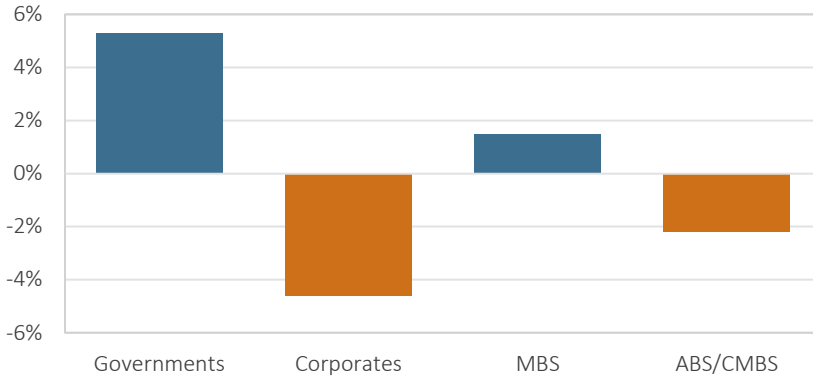
	ARO Investment Fund	Bloomberg Aggregate
Market Value	\$ 3,621,271	—
Yield to Maturity	4.71%	4.67%
Effective Duration	5.76	6.17

Source: Bloomberg and Axys

U.S. Fixed Income Positioning as of December 31, 2022

Chugach Electric Beluga River ARO Investment Fund

Sector Under/Overweight

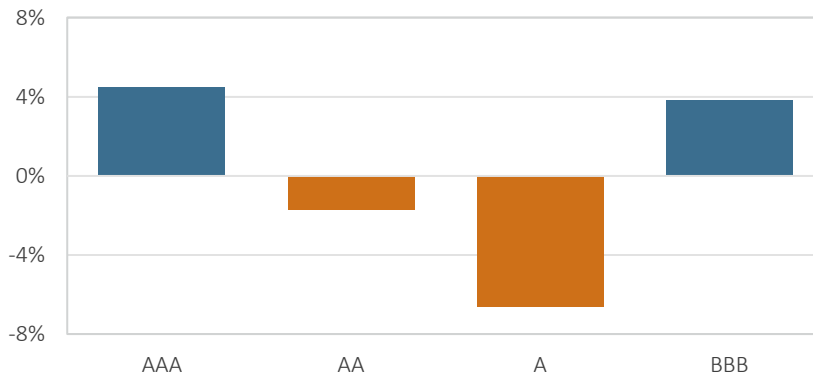


Bond Sector Comparison

	Chugach	Bloomberg Agg
Governments*	50.5%	45.2%
Corporates	20.4%	25.0%
MBS	29.1%	27.6%
ABS/CMBS	0.0%	2.2%
Total	100%	100%

* Includes Municipal Debt

Quality Under/Overweight



Credit Quality Comparison

	Chugach	Bloomberg Agg
AAA	79.0%	74.5%
AA	0.0%	1.7%
A	4.2%	10.8%
BBB	16.8%	13.0%
Total	100%	100%

Source: Bloomberg

Market Review

APCM 2023 Views

Portfolio Review

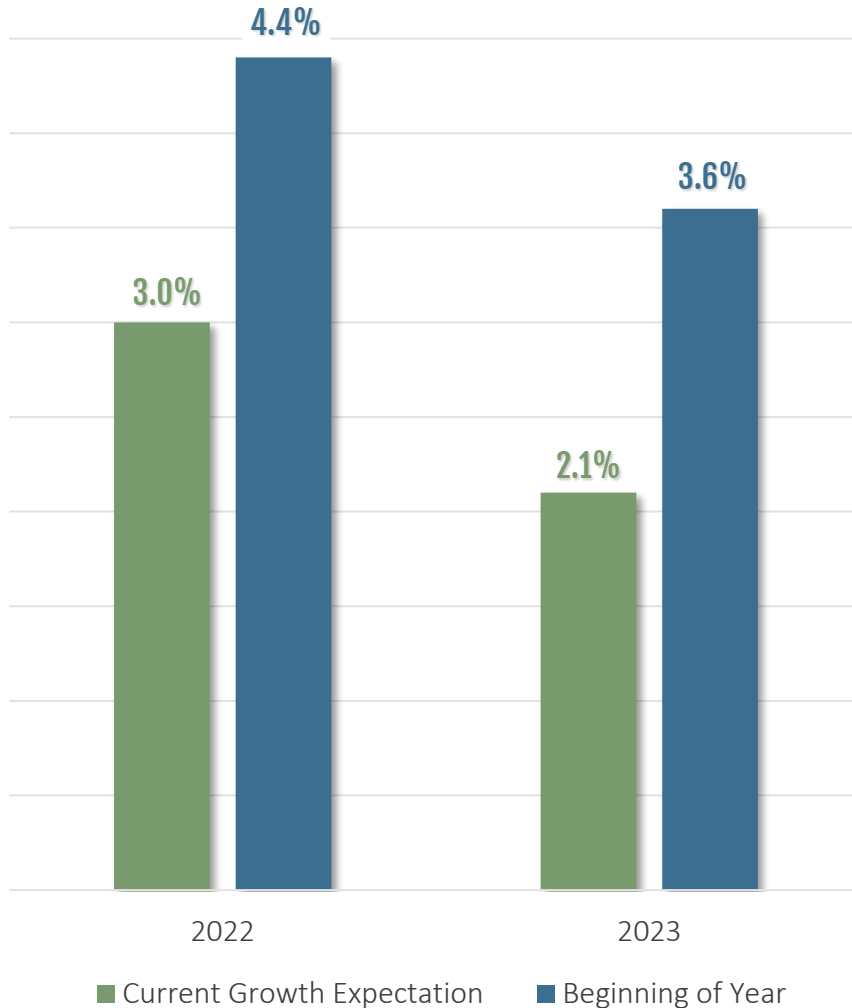
Market Review

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For APCM's full 2023 outlook, please see the short presentation linked above.

2022 Recap and Looking Forward

Global GDP Growth Forecasts



2022

- ❖ In 2022, inflation forced central banks into the **fastest pace of interest rate hikes** seen in decades leading to **negative returns for both stocks and bonds** simultaneously.
- ❖ As **three major peaks materialize**: peak inflation, peak rates, and peak valuations - a more sustainable recovery in most major asset classes will ensue.

2023

- ❖ In 2023, much is dependent on the path of **inflation, interest rates, and the resulting economic growth.**
- ❖ The world is transitioning from an inflationary period to a slow growth or even recessionary period.
- ❖ **Investors will need to be nimble** and appropriately respond to developing market conditions.

Data: Bloomberg Consensus Economic Forecasts

Searching for the Summit



Signs of Peak Inflation

Policy changes have long and variable lags on economies.

Improvements in supply chain dynamics easing global inflation.

Excess demand and geopolitical tensions causing above-target inflation.

Inflation may be near peak, but core inflation has historically eased over time.

Finding Peak Rates

Slower growth and inflation above target increases risk of policy mistake.

But Slower growth and inflation suggest approaching end of rate hiking cycle.

Bad news for economy could be good news for market as it indicates peak rates.

Stabilization of rates and clearer ascent if incoming data shows no hard landing.

Hints of Peak Valuations

Higher interest rates make bonds more attractive.

Equity valuations have improved suggesting stronger returns once uncertainties fade.

Initially smooth ascent towards peak valuations as lower rates support returns.

Impact of slower economic growth on corporate earnings must be assessed before reaching peak valuations.

The Descent: Potential Paths Ahead

Scenario 1

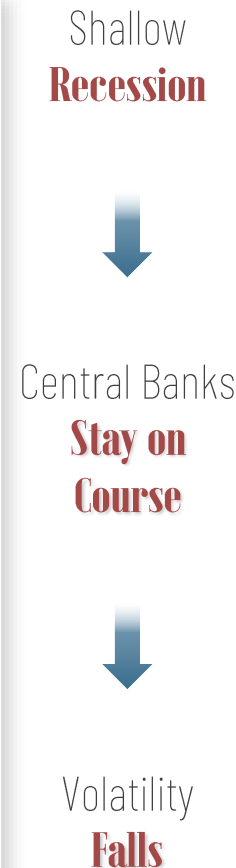
Scenario 2

Scenario 3

- ❖ The most **difficult descent** would occur if inflation stayed higher for longer, forcing central banks to **increase rates more than anticipated**.
- ❖ This route could give rise to a **severe recession**, which would be **painful for equity investors** as valuations are pushed even lower.
- ❖ Interest rates would decline, and **bond prices increase**, which would allow for a painful, but **ultimately successful descent**.



- ❖ A **less challenging route** would ensue should a **shallow recession** with easing inflationary pressures occur.
- ❖ This environment would allow **central banks to stay on course**, lessening market volatility and uncertainty.
- ❖ The shallow recession would cause **lower interest rates, strong bond returns and a floor for the stock market**.



- ❖ The **ideal route** would call for central bankers delivering a **soft economic landing**.
- ❖ **Avoiding an economic recession** will require inflation moderation via **precise monetary policy** decisions.
- ❖ In this route, there would be minimal earnings impact, providing **support for equity valuations**. As rates peak and begin rolling over, **bond prices would rise**.



2023 Portfolio Positioning



At Target Weight



At Target Weight



At Target Weight

U.S. Fixed Income	Under	Target	Over	U.S. Large Cap <i>Cash Flow / Balance Sheet Tilt</i>	Under	Target	Over	REITs	Under	Target	Over
TIPS	Under	Target	Over	U.S. Mid Cap	Under	Target	Over	Infrastructure	Under	Target	Over
International Bonds	Under	Target	Over	U.S. Small Cap <i>Cash Flow / Balance Sheet Tilt</i>	Under	Target	Over	Commodities <i>Natural Resource Equity Tilt</i>	Under	Target	Over
Cash	Under	Target	Over	International Equity	Under	Target	Over	Alternative Beta <i>Low Equity Correlation Tilt</i>	Under	Target	Over
				Emerging Markets	Under	Target	Over				
				U.S. High Yield	Under	Target	Over				

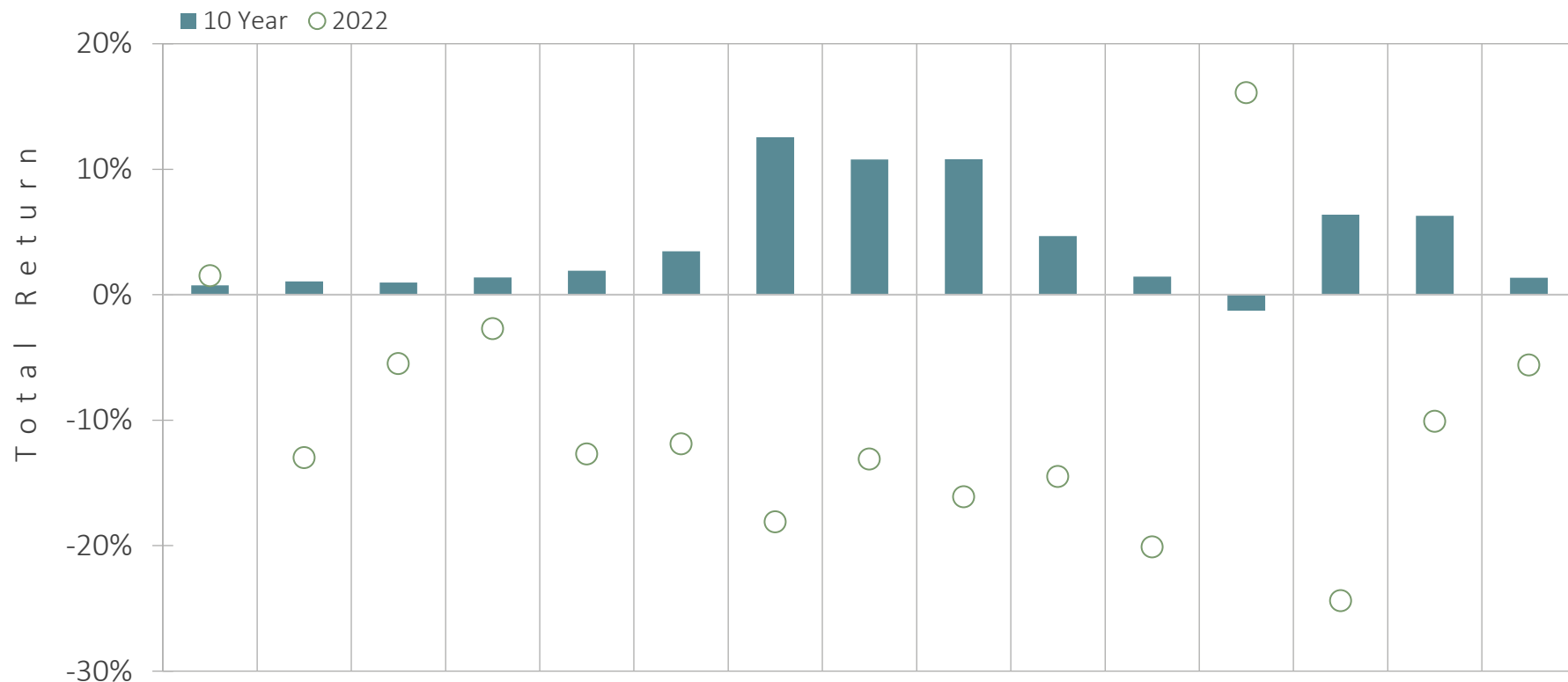
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Asset Class Returns *as of December 31, 2022*



	RISK CONTROL						RISK ASSETS					ALTERNATIVES			
	FIXED INCOME						EQUITIES					ALTERNATIVES			
	Cash	U.S. Fixed Income	1-5 Gov. Credit	TIPS	Intl. Fixed Income	HY Fixed Income	U.S. Large Cap	U.S. Mid Cap	U.S. Small Cap	Dev. Ex-U.S.	Emerging Markets	Comm.	Real Estate	Infra.	Alt. Beta
2022	1.5	-13.0	-5.5	-2.7	-12.7	-11.9	-18.1	-13.1	-16.1	-14.5	-20.1	16.1	-24.4	-10.1	-5.6
3 Year	0.7	-2.7	-0.7	2.5	-3.6	-0.8	7.7	7.2	5.8	0.9	-2.7	12.6	0.0	0.2	0.7
5 Year	1.2	0.0	0.8	2.6	0.0	1.8	9.4	6.7	5.9	1.5	-1.4	6.4	3.7	3.1	0.8
10 Year	0.7	1.1	1.0	1.4	1.9	3.5	12.6	10.8	10.8	4.7	1.4	-1.3	6.4	6.3	1.3

Data: Bloomberg. Asset class performance is represented by the stated index return. Returns annualized for periods greater than one year.

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC

December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
AGENCIES									
125,000	FEDERAL HOME LOAN BANK 0.600% Due 08-27-25	99.90	124,875	90.14	112,679	0.56	750	258	4.58
125,000	FHLB 1.625% Due 03-12-27	104.27	130,335	90.40	112,995	0.56	2,031	615	4.14
125,000	FEDERAL FARM CREDIT BANK 2.125% Due 03-05-35	103.99	129,987	76.42	95,530	0.47	2,656	856	4.69
	Accrued Interest				1,729	0.01			
			385,197		322,933	1.61		1,729	
ALTERNATIVE BETA									
115,504	BLCKRCK SYST MULTI-STR-INST	10.49	1,211,269	9.66	1,115,773	5.55	NA		
37,988	CORE ALTERNATIVE ETF	30.39	1,154,529	31.58	1,199,661	5.96	NA		
			2,365,798		2,315,434	11.51			
CORPORATE BONDS									
25,000	KELLOGG CO 2.750% Due 03-01-23	100.17	25,043	99.61	24,904	0.12	687	229	4.95
25,000	MORGAN STANLEY IND FINANCIAL SRV 3.875% Due 04-29-24	100.03	25,008	98.45	24,612	0.12	969	167	5.08
25,000	HCP INC 3.400% Due 02-01-25	102.12	25,529	96.21	24,052	0.12	850	354	5.34
25,000	CITIGROUP INC 3.700% Due 01-12-26	97.05	24,263	96.19	24,048	0.12	925	434	5.07
30,000	DARDEN RESTAURANTS INC 3.850% Due 05-01-27	110.59	33,176	95.37	28,612	0.14	1,155	192	5.05
25,000	CAPITAL ONE FINANCIAL CO 3.650% Due 05-11-27	110.46	27,616	94.08	23,520	0.12	912	127	5.18
20,000	CANADIAN NATL RESOURCES 3.850% Due 06-01-27	109.11	21,822	94.17	18,835	0.09	770	64	5.34
25,000	SOUTHWEST AIRLINES CO 5.125% Due 06-15-27	117.61	29,403	98.74	24,684	0.12	1,281	57	5.44
25,000	BORGWARNER INC 2.650% Due 07-01-27	107.15	26,787	88.96	22,239	0.11	662	331	5.45
25,000	ENBRIDGE INC 3.700% Due 07-15-27	109.79	27,448	93.61	23,402	0.12	925	427	5.30
20,000	NATIONAL RETAIL PROP INC 4.300% Due 10-15-28	113.05	22,609	92.77	18,555	0.09	860	182	5.78
20,000	ESSEX PORTFOLIO LP 4.000% Due 03-01-29	111.75	22,350	91.13	18,226	0.09	800	267	5.72

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC

December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
25,000	CABOT CORP 4.000% Due 07-01-29	109.16	27,289	89.45	22,363	0.11	1,000	500	5.98
25,000	INTEL CORP 3.900% Due 03-25-30	113.48	28,371	93.64	23,409	0.12	975	260	4.95
25,000	CITIZENS FINANCIAL GROUP 3.250% Due 04-30-30	106.85	26,713	86.81	21,702	0.11	812	138	5.46
20,000	KIMCO REALTY CORP 3.200% Due 04-01-32	99.17	19,834	82.72	16,543	0.08	640	160	5.62
20,000	CVS HEALTH CORP 4.875% Due 07-20-35	120.76	24,151	94.97	18,993	0.09	975	436	5.43
25,000	ORACLE CORP 3.850% Due 07-15-36	104.24	26,061	81.77	20,443	0.10	962	444	5.81
25,000	BANK OF AMERICA NA 6.000% Due 10-15-36	127.62	31,905	102.16	25,541	0.13	1,500	317	5.77
30,000	JPMORGAN CHASE & CO 6.400% Due 05-15-38	123.61	37,084	108.02	32,406	0.16	1,920	245	5.61
25,000	DOMINION ENERGY INC 7.000% Due 06-15-38	145.11	36,278	107.11	26,778	0.13	1,750	78	6.27
25,000	SOUTHERN COPPER CORP 5.250% Due 11-08-42	123.17	30,793	95.42	23,854	0.12	1,312	193	5.63
25,000	VIACOMCBS INC 5.850% Due 09-01-43	128.78	32,194	83.04	20,760	0.10	1,462	487	7.47
25,000	PHILLIPS 66 4.875% Due 11-15-44	119.70	29,925	91.37	22,842	0.11	1,219	156	5.56
25,000	ENTERPRISE PRODUCTS OPER 5.100% Due 02-15-45	120.79	30,198	89.87	22,467	0.11	1,275	482	5.93
25,000	CARDINAL HEALTH 4.900% Due 09-15-45	111.47	27,867	84.42	21,105	0.10	1,225	361	6.18
25,000	Sysco Corporation 4.450% Due 03-15-48	120.54	30,134	81.99	20,496	0.10	1,112	328	5.82
25,000	AT&T INC 4.550% Due 03-09-49	92.65	23,163	82.00	20,499	0.10	1,137	354	5.91
25,000	ESSENTIAL UTILITIES INC 4.276% Due 05-01-49	115.73	28,933	80.55	20,139	0.10	1,069	178	5.71
45,000	TELUS CORP 4.300% Due 06-15-49	121.45	54,654	81.74	36,785	0.18	1,935	86	5.63
25,000	MAGELLAN MIDSTREAM PARTN 3.950% Due 03-01-50	109.07	27,267	73.18	18,294	0.09	987	329	5.95
25,000	VERIZON COMMUNICATIONS 4.000% Due 03-22-50	109.34	27,334	78.24	19,559	0.10	1,000	275	5.56

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC

December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
	Accrued Interest				8,637	0.04			
			911,208		739,306	3.68		8,637	
COMMODITIES									
3,814	FLEXSHARES GLOBAL UPSTREAM N	41.94	159,968	43.47	165,795	0.82	NA		
6,329	INVESCO OPTIMUM YIELD DIVERSIFIED COMMODIT	17.03	107,812	14.78	93,543	0.47	NA		
5,681	ISHARES BB ROLL SELECT COMMODITY ETF	56.91	323,331	54.51	309,671	1.54	NA		
			591,111		569,009	2.83			
DOMESTIC MID CAP EQUITY FUNDS/ETF									
8,235	ISHARES CORE S&P MIDCAP 400 ETF	265.65	2,187,627	241.89	1,991,964	9.90	NA		
EMERGING MARKET FUNDS/ETF									
15,754	ISHARES ETF CORE MSCI EMERGING MKTS	60.39	951,374	46.70	735,712	3.66	NA		
DOMESTIC FIXED INCOME FUNDS/ETF									
8,072	VANGUARD SHORT-TERM TIPS ETF	49.70	401,216	46.71	377,043	1.87			
FNMA & FHLMC									
18,459	FNMA POOL MA3588 3.500% Due 02-01-34	101.48	18,733	96.17	17,752	0.09	646	54	4.69
26,444	FR SB8503 Mtge 2.000% Due 08-01-35	102.81	27,188	89.20	23,588	0.12	529	9	4.73
23,857	FR SB8116 Mtge 2.500% Due 08-01-36	104.27	24,874	91.52	21,834	0.11	596	10	4.45
41,651	FNCL POOL 995373 4.500% Due 02-01-39	106.72	44,449	98.98	41,226	0.20	1,874	156	4.78
26,867	FN MA4475 Mtge 2.500% Due 11-01-41	103.58	27,829	87.70	23,562	0.12	672	11	4.76
24,585	FG G60661 4.000% Due 07-01-46	103.41	25,424	95.83	23,559	0.12	983	82	4.71
39,962	FNCL POOL AS7949 4.000% Due 09-01-46	105.20	42,042	95.61	38,208	0.19	1,598	133	4.77
51,426	FN AS8483 3.000% Due 12-01-46	102.95	52,944	89.81	46,187	0.23	1,543	129	4.64
64,115	FNCL POOL BM2001 3.500% Due 12-01-46	103.03	66,058	92.86	59,539	0.30	2,244	187	4.73
31,252	FG G61893 3.000% Due 07-01-47	101.14	31,608	89.54	27,984	0.14	938	78	4.64

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC
December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
60,200	FGLMC POOL Q51967 3.500% Due 11-01-47	97.84	58,897	92.75	55,833	0.28	2,107	176	4.71
33,200	FNMA POOL MA3210 3.500% Due 12-01-47	99.05	32,886	92.49	30,706	0.15	1,162	97	4.70
27,384	FN MA3305 3.500% Due 03-01-48	103.02	28,210	92.50	25,329	0.13	958	80	4.69
6,916	FANNIE MAE POOL MA3384 4.000% Due 06-01-48	102.03	7,056	95.55	6,608	0.03	277	23	4.77
17,729	FNMA POOL MA3496 4.500% Due 10-01-48	103.57	18,362	97.94	17,364	0.09	798	66	4.88
27,746	FN MA3834 3.000% Due 11-01-49	101.90	28,273	88.38	24,523	0.12	832	69	4.65
29,985	FN MA3871 3.000% Due 12-01-49	101.91	30,557	88.49	26,534	0.13	900	75	4.65
52,660	FANNIE MAE POOL 2.500% Due 05-01-50	104.98	55,285	85.96	45,269	0.23	1,316	110	4.61
26,368	FR RA4518 3.500% Due 02-01-51	91.20	24,048	91.50	24,127	0.12	923	77	4.71
20,530	FR SD8129 2.500% Due 02-01-51	84.93	17,436	85.14	17,480	0.09	513	43	4.57
107,681	FR QC4235 Mtge 2.500% Due 07-01-51	102.31	110,171	84.88	91,400	0.45	2,692	45	4.55
99,588	FN MA4398 2.000% Due 08-01-51	78.81	78,488	81.61	81,271	0.40	1,992	33	4.44
27,545	FANNIE MAE POOL CB1783 2.500% Due 10-01-51	92.13	25,376	84.91	23,388	0.12	689	57	4.55
103,407	FN MA4492 2.000% Due 12-01-51	78.73	81,409	81.53	84,307	0.42	2,068	34	4.44
19,054	FANNIE MAE POOL FS0822 2.000% Due 03-01-52	88.61	16,884	81.91	15,607	0.08	381	32	4.58
9,720	FN CB3918 4.500% Due 06-01-52	96.58	9,387	96.44	9,374	0.05	437	36	5.01
124,003	FR SD1883 4.000% Due 06-01-52	93.84	116,369	93.87	116,397	0.58	4,960	83	4.87
19,536	FR QE9566 5.000% Due 09-01-52	98.78	19,298	98.62	19,266	0.10	977	81	5.28
	Accrued Interest				2,067	0.01			
			1,119,541		1,040,289	5.17		2,067	
INTERNATIONAL FIXED INCOME FUNDS/ETF									
18,170	VANGUARD TOTAL INTL BOND ETF	56.83	1,032,605	47.43	861,803	4.28	NA		

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC

December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
HIGH YIELD FIXED INCOME									
1,545	SPDR PORTFOLIO HIGH YIELD BO	24.32	37,576	22.34	34,515	0.17			
187,139	VANGUARD HI YLD CORP-ADM	5.82	1,089,348	5.15	963,766	4.79	0		
			1,126,923		998,281	4.96			
INTERNATIONAL EQUITY FUNDS/ETF									
3,163	ISHARES EDGE MSCI MIN VOL EAFE ETF	67.24	212,670	63.58	201,119	1.00	NA		
15,605	ISHARES ETF CORE MSCI EAFE	66.20	1,033,097	61.64	961,892	4.78	NA		
			1,245,767		1,163,012	5.78			
MUNICIPAL BONDS									
30,000	SAN FRANCISCO CALIF CITY & CNTY ARPTS COMMN INTL ARPT REV 3.345% Due 05-01-51 Accrued Interest	100.00	30,000	67.79	20,338	0.10	1,003	167	5.63
					167	0.00			
			30,000		20,506	0.10		167	
DOMESTIC LARGE CAP EQUITY FUNDS/ETF									
3,479	INVESCO S&P 500 LOW VOLATILITY	65.60	228,220	63.90	222,308	1.11	NA		
10,813	SPDR S&P 500 ETF	352.86	3,815,440	382.43	4,135,216	20.56	NA		
			4,043,660		4,357,524	21.66			
REAL ESTATE & INFRASTRUCTURE									
19,040	FLEXSHAR STX GLOBAL BROAD INF ETF	59.16	1,126,487	50.41	959,806	4.77	NA		
6,157	JPMORGAN BETABUILDERS MSCI US REIT ETF	79.92	492,092	81.60	502,411	2.50	NA		
			1,618,579		1,462,218	7.27			
DOMESTIC SMALL CAP EQUITY FUNDS/ETF									
10,200	ISHARES S&P SMALLCAP 600 INDEX ETF	105.02	1,071,154	94.64	965,328	4.80	NA		
U.S. TREASURY									
100,000	US TREASURY NOTE 0.125% Due 01-31-23	99.91	99,906	99.70	99,699	0.50	125	52	3.71
100,000	US TREASURY NOTES 1.500% Due 03-31-23	97.03	97,027	99.30	99,297	0.49	1,500	385	4.37
45,000	US TREASURY NOTES 2.875% Due 09-30-23	99.54	44,794	98.76	44,441	0.22	1,294	331	4.58

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC
December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
95,000	US TREASURY NOTES 0.250% Due 09-30-23	96.80	91,964	96.68	91,842	0.46	237	61	4.83
30,000	US TREASURY NOTES 0.250% Due 11-15-23	99.56	29,868	96.16	28,847	0.14	75	10	4.80
100,000	US TREASURY NOTES 0.125% Due 01-15-24	99.70	99,695	95.35	95,349	0.47	125	58	4.76
20,000	US TREASURY NOTE 0.875% Due 01-31-24	96.98	19,396	95.95	19,190	0.10	175	73	4.75
25,000	US TREASURY NOTE 3.000% Due 06-30-24	99.79	24,946	97.61	24,401	0.12	750	2	4.67
55,000	US TREASURY NOTES 2.250% Due 10-31-24	100.12	55,064	96.05	52,826	0.26	1,237	212	4.52
100,000	US TREASURY NOTES 2.125% Due 11-30-24	98.37	98,367	95.72	95,723	0.48	2,125	187	4.48
85,000	US TREASURY NOTE 1.125% Due 01-15-25	99.41	84,495	93.58	79,545	0.40	956	442	4.45
70,000	US TREASURY NOTE 2.875% Due 06-15-25	99.22	69,456	96.65	67,656	0.34	2,012	94	4.33
120,000	US TREASURY NOTES 0.375% Due 11-30-25	93.25	111,901	89.44	107,334	0.53	450	40	4.26
15,000	US TREASURY NOTES 0.875% Due 09-30-26	99.53	14,929	88.79	13,319	0.07	131	34	4.13
55,000	US TREASURY NOTES 2.250% Due 02-15-27	96.96	53,328	93.06	51,182	0.25	1,237	467	4.10
50,000	US TREASURY NOTES 2.250% Due 08-15-27	94.35	47,177	92.50	46,252	0.23	1,125	425	4.04
30,000	US TREASURY NOTES 3.875% Due 11-30-27	99.64	29,891	99.45	29,836	0.15	1,162	102	4.00
84,000	US TREASURY NOTES 2.875% Due 04-30-29	94.73	79,575	93.66	78,671	0.39	2,415	414	4.02
20,000	US TREASURY NOTE 3.250% Due 06-30-29	100.53	20,105	95.69	19,139	0.10	650	2	4.01
30,000	US TREASURY NOTES 3.875% Due 11-30-29	99.62	29,886	99.33	29,798	0.15	1,162	102	3.99
15,000	US TREASURY NOTES 0.625% Due 05-15-30	82.33	12,349	79.14	11,872	0.06	94	12	3.91
75,000	US TREASURY NOTE 0.625% Due 08-15-30	84.59	63,445	78.71	59,036	0.29	469	177	3.88
40,000	US TREASURY NOTE 1.375% Due 11-15-31	94.75	37,900	81.39	32,556	0.16	550	71	3.87

Portfolio Appraisal

CHUGACH ELECTRIC ASSOCIATION INC

December 31, 2022



Quantity	Security	Average Cost	Total Average Cost	Price	Market Value	Pct. Assets	Annual Income	Accrued Interest	Yield to Maturity
10,000	US TREASURY NOTE 2.375% Due 02-15-42	100.48	10,048	76.35	7,635	0.04	237	90	4.18
60,000	US TREASURY NOTE 3.250% Due 05-15-42	96.98	58,189	87.67	52,603	0.26	1,950	253	4.18
23,000	US TREASURY NOTES 2.750% Due 08-15-42	99.91	22,980	80.40	18,492	0.09	632	239	4.23
30,000	US TREASURY NOTES 2.750% Due 08-15-47	102.09	30,626	78.02	23,406	0.12	825	312	4.19
45,000	US TREASURY NOTES 2.250% Due 08-15-49	102.04	45,918	70.30	31,634	0.16	1,012	382	4.09
20,000	US TREASURY NOTE 1.875% Due 11-15-51	95.26	19,052	63.34	12,667	0.06	375	49	4.04
35,000	US TREASURY NOTE 2.250% Due 02-15-52	80.16	28,056	69.54	24,339	0.12	787	297	4.04
55,000	US TREASURY NOTE 2.875% Due 05-15-52	94.12	51,765	80.12	44,069	0.22	1,581	205	4.04
	Accrued Interest				5,579	0.03			
			1,582,101		1,498,237	7.45		5,579	
CASH AND CASH EQUIVALENTS									
	ALLSPRING GOV MONEY MARKET FD INS CL #1751		673,478		673,478	3.35			
	CASH RECEIVABLE		700		700	0.00	NA		
	DIVIDEND ACCRUAL		23,429		23,429	0.12			
			697,607		697,607	3.47			
TOTAL PORTFOLIO			21,361,469		20,116,204	100	104,575	18,179	



PERFORMANCE HISTORY

GROSS OF FEES

CHUGACH ELECTRIC ASSOCIATION INC

Time Period	Percent Return																
	Per Period																
Total Account	Blend	Fixed Income	BLOOMBERG AGG BENCH	Domestic Large Cap Equity	S&P 500 LARGE CAPS BENCH	Domestic Mid Cap Equity	S&P 400 MIDCAP BENCH	Domestic Small Cap Equity	S & P 600 SMALL CAPS BENCH	Int'l Equity	MSCI EAFE Index	Emerging Market Equity	MSCI EMERGING MARKET BENCH	Real Estate	S&P US REIT BENCH	Diversified Alternatives	
12-31-21 to 01-31-22	-3.43	-3.39	-1.95	-2.15	-3.94	-5.17	-7.26	-7.21	-7.34	-7.27	-4.25	-4.83	-0.35	-1.89	-3.90	-6.92	5.52
01-31-22 to 02-28-22	-1.14	-1.03	-0.97	-1.12	-2.39	-2.99	1.21	1.11	1.37	1.40	-3.08	-1.77	-3.94	-2.99	-1.69	-3.18	6.55
02-28-22 to 03-31-22	0.88	0.91	-2.12	-2.78	2.29	3.71	1.30	1.38	0.32	0.37	0.05	0.64	-2.94	-2.26	4.55	6.54	7.90
03-31-22 to 04-30-22	-5.12	-5.01	-3.27	-3.79	-6.19	-8.72	-7.13	-7.11	-7.67	-7.81	-6.69	-6.47	-6.83	-5.56	-5.01	-4.43	0.30
04-30-22 to 05-31-22	0.65	0.32	0.42	0.64	0.58	0.18	0.77	0.75	1.87	1.86	1.14	0.75	0.63	0.44	-0.63	-6.15	4.30
05-31-22 to 06-30-22	-5.59	-5.93	-2.49	-1.57	-5.95	-8.25	-9.62	-9.62	-8.46	-8.55	-8.16	-9.28	-5.55	-6.65	-6.74	-7.33	-11.48
06-30-22 to 07-31-22	5.29	5.63	2.92	2.44	6.79	9.22	10.93	10.85	9.94	10.01	5.01	4.98	0.00	-0.25	5.83	8.97	0.37
07-31-22 to 08-31-22	-3.08	-2.97	-2.82	-2.83	-3.00	-4.08	-3.17	-3.10	-4.32	-4.39	-6.08	-4.75	-1.22	0.42	-4.64	-5.94	-0.49
08-31-22 to 09-30-22	-6.97	-7.08	-3.79	-4.32	-7.42	-9.21	-9.21	-9.19	-9.83	-9.88	-9.31	-9.35	-11.31	-11.72	-11.49	-12.16	-7.29
09-30-22 to 10-31-22	4.46	4.23	-0.22	-1.30	6.55	8.10	10.61	10.52	12.31	12.37	5.23	5.38	-1.47	-3.10	5.43	4.92	4.70
10-31-22 to 11-30-22	5.06	5.03	3.00	3.68	4.48	5.59	5.99	6.12	4.04	4.17	12.59	11.26	14.71	14.83	7.60	5.76	4.95
11-30-22 to 12-31-22	-3.08	-2.93	-0.84	-0.45	-4.13	-5.76	-5.46	-5.54	-6.66	-6.71	-1.49	0.08	-2.50	-1.41	-4.08	-5.14	-3.13
Date to Date																	
12-31-21 to 12-31-22	-12.34	-12.47	-11.72	-13.01	-12.89	-18.11	-13.06	-13.06	-16.08	-16.10	-16.01	-14.45	-20.57	-20.09	-15.48	-24.36	10.72

Disclosures

Important Assumptions

IMPORTANT: The projections or other information generated by Alaska Permanent Capital Management Company (APCM) regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. There can be no assurance that the projected or simulated results will be achieved or sustained. The charts and data only present a range of possible outcomes. Actual results will vary over time, and such results may be better or worse than the simulated scenarios. Clients should be aware that the potential for loss (or gain) may be greater than that demonstrated in the simulations. Please note that the analysis does not take into consideration all asset classes, and other asset classes not considered may have characteristics similar or superior to those being analyzed.

Important Legal Information

These calculations are designed to be informational and educational only, and when used alone, do not constitute investment advice. APCM encourages investors to review their investment strategy periodically as financial circumstances do change.

Model results are provided as a rough approximation of future financial performance. Actual results could produce different outcomes (either better or worse) than those illustrated by the model, since it is not possible to anticipate every possible combination of financial market returns. APCM is not responsible for the consequences of any decisions or actions taken in reliance upon or as a result of the information provided by the results of the model.

Other Influences on Rates of Return

Investment management fees: Returns are presented gross of management fees and include the reinvestment of all income. Actual returns will be reduced by investment advisory fees and other expenses that may be incurred in the management of the account. The collection of fees produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 1.00% annual investment advisory fee would be \$10,416 in the first year, and cumulative effects of \$59,816 over five years and \$143,430 over ten years. Actual investment advisory fees incurred by clients may vary.

Taxes: Unless noted otherwise, model results have not been adjusted for any state or federal taxes or penalties.

Inflation: Unless noted otherwise, model results do not adjust any inputs or outcomes for inflation. Inflation is assumed to be constant over the investment horizon.

Limitations Inherent in Model Results

Limitations include but are not restricted to the following:

Model results do not represent actual trading and may not reflect the impact that material economic and market factors might have had on APCM's decision making if the actual client money were being managed.

Extreme market movements may occur more frequently than represented in the model.

Some asset classes have relatively limited histories. While future results for all asset classes in the model may materially differ from those assumed in APCM's calculations, the future results for asset classes with limited histories may diverge to a greater extent than the future results of asset classes with longer track records.

Market crises can cause asset classes to perform similarly over time; reducing the accuracy of the projected portfolio volatility and returns. The model is based on the long-term behavior of the asset classes and therefore is less reliable for short-term periods. This means that the model does not reflect the average periods of "bull" and "bear" markets, which can be longer than those modeled.

The model represent APCM's best view of the next 7-10 years, but is unlikely to reflect actual investment returns worldwide over this period.

Chugach Electric Association, Inc.
Anchorage, Alaska

Summary of Executive Session Topics for
Audit & Finance Committee Meeting on March 29, 2023
Agenda Item VIII.

- A. Discussion regarding financial matters concerning CEA's BRU ARO Investment Strategy (AS 10.25.175(c)(1))
- B. Review of CEA's Independent Audit Results for 2022 with Auditors. (AS 10.25.175(c)(1))
- C. Discussion with Auditors regarding financial matters to do with CEA's Independent Audit. (AS 10.25.175(c)(1))
- D. Discussion regarding financial matters concerning year-end reports. (AS 10.25.175(c)(1))