Anchorage Hydropower Utility



Anchorage Hydropower Utility Organizational Overview

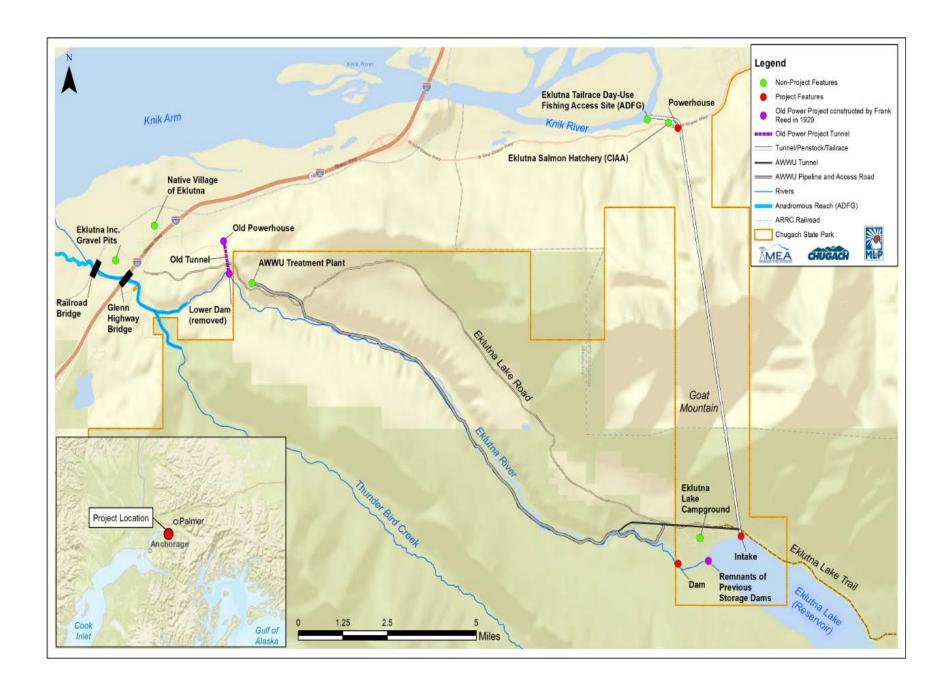
The Anchorage Hydropower Utility is an enterprise function of the Municipality of Anchorage (MOA).

The MOA is selling Municipal Light & Power (ML&P) and with the closing of the sale transaction to Chugach Electric Association, Inc. (CEA), the nature of the electric service provided by the MOA will immediately convert from the provision of retail electric service to a significant portion of Anchorage, through generation, transmission, and distribution facilities, to the far more limited provision of wholesale generation service through long-term contracts with two utility customers. MOA's ownership interest in the generation assets of the Eklutna Hydroelectric Project ("Eklutna Project") will not be transferred to CEA and will be retained by the MOA, as the Anchorage Hydropower Utility.

Anchorage Hydropower Utility is located approximately 30 miles northeast of Anchorage on the Old Glenn Highway. MOA, CEA, and Matanuska Electric Association, Inc. (MEA) share the project costs through a proportionate share of ownership. Under separate power purchase agreements (PPAs), for a term of 35 years, CEA will purchase its proportionate share (64.29%) of ML&P's share, and MEA will purchase its proportionate share (35.71%), of the Eklutna output. Through these PPAs, CEA and MEA have agreed to purchase the entire output of the MOA's Eklutna Project ownership interest.



Visit the Eklutna Project website at: https://www.eklutnahydro.com/background/



Anchorage Hydropower Utility Business Plan

Mission

Provide energy that is safe and reliable to meet purchase power agreement (PPA) requirements.

Services

Anchorage Hydropower owns 53.33% of the generation assets of the Eklutna Hydroelectric Project. Anchorage Hydropower sells all its electric output to Chugach Electric Association (CEA) and Matanuska Electric Association (MEA), pursuant to PPAs. Anchorage Hydropower is currently subject to economic regulation by the Regulatory Commission of Alaska (RCA).

Business Goals

- Provide electricity to satisfy the PPAs.
- Maintain \$3 million cash reserve in accordance with RCA Order U-19-020(39).
- Maintain 180 days of cash on hand to cover operating expenses.
- Maintain equity and earn net income at a level sufficient to continue to ensure the long-term financial stability of the utility.
- Operate the electrical system with optimum economic efficiency and strict adherence to environmental standards.

Strategies to Achieve Goals

- Implement industry best-practices and streamline business processes to ensure the financial and operational integrity of the utility.
- Contract with an individual with knowledge of the Railbelt generation and transmission system and prudent utility practice to advise on power plant operations.
- Work collaboratively as owners of the Eklutna Hydropower Project to implement predictive maintenance program to reduce or eliminate outages and interruptions

Performance Measures to Track Progress in Achieving Goals

1. Maintain positive Net Income

About Anchorage Hydropower Utility

History

In 1929, the privately owned, Anchorage Power & Light Company (AP&L) began supplying electricity from a hydroelectric power plant on the Eklutna River, 30 miles northeast of Anchorage. In 1943, the city acquired the Eklutna plant from AP&L. In 1955, the U.S. Bureau of Reclamation completed construction of a new, larger plant on the Eklutna River. The city contracted for 16,000 kilowatts of generating capacity from that plant and "little" Eklutna was transferred to the federal government. In 1997, Municipal Light & Power (ML&P), Chugach Electric Association, Inc. (CEA), and Matanuska Electric Association, Inc. (MEA) jointly took ownership of the Eklutna Hydroelectric Plant. In 2020, through the sale of ML&P, the Municipality of Anchorage (MOA) retained its ownership interest in the generation assets of the Eklutna Hydroelectric Project (Eklutna Project). ML&P, CEA, and MEA each own an undivided interest in the Eklutna Project in the following percentages: ML&P, 53.33 percent; Chugach, 30 percent; and MEA, 16.67 percent.

Facilities & Equipment

The 40-megawatt (MW) Eklutna Project is in Southcentral Alaska approximately 30 miles northeast of downtown Anchorage near the Native Village of Eklutna. The U.S. Bureau of Reclamation (USBR) constructed the project in 1955, which included rehabilitation of an existing dam at the outlet of Eklutna Lake.

The rehabilitated dam was damaged in the 1964 earthquake, at which point a new and taller embankment dam was constructed just downstream. The new dam is an earth and rockfill structure 815 feet long and 41 feet high with a rectangular concrete spillway that runs through the dam. Eklutna Lake, approximately 7 miles long and 1 mile wide, is located within Chugach State Park and provides almost 90 percent of the domestic water supply for the MOA. The intake structure for the Eklutna Project is located 36 feet below the natural lake level. From there, water is diverted north into a 4.6-mile-long tunnel through Goat Mountain and then into a 1,370-foot-long penstock before reaching the powerhouse located on Old Glenn Highway. The tailrace flows under the highway and then discharges into the Knik River. The powerhouse contains two generating units.

Services

The Eklutna Project has 40 megawatts of generation capacity and produces approximately 130,000 kilowatt-hours of electricity per year.

In 2018, the project produced 177,438 megawatt hours (MWh) of clean energy. This is enough energy to power more than 24,600 residential homes for an entire year. Eklutna hydroelectric power is the lowest cost renewable energy in Southcentral Alaska.

Regulation

The utility is regulated by the Regulatory Commission of Alaska (RCA) and subject to abide by the rules and regulations in the utility's tariff, if any, or in special contracts with customers.

Under sections 13.11(a) and 16.04.B. of the Anchorage Municipal Charter, the revenue received from CEA under the power purchase agreement must be distributed in the MOA Trust Fund. The new section 26.10.068 provides that revenue received from CEA must be distributed to the MOA trust fund. It also provides that additional revenue may be distributed to the general

government budget, subject to the requirement that the utility maintain sufficient reserves to meet anticipated capital and operating expenses and as required by the RCA.

The RCA requires that the MOA maintain a reserve fund of not less than \$3,000,000 to support the MOA's share of anticipated operations. If for any reason these reserves are not met, the utility is prohibited from paying a dividend to general government and depositing CEA's payments to the trust.

Source: Eklutna Hydro. Accessed September 29, 2020. https://www.eklutnahydro.com/background/

Anchorage Hydropower Utility Highlights and Future Events

The 1991 Fish & Wildlife Agreement (Agreement) gives deadlines for specific milestones in the consultation, program development, and implementation processes. These deadlines, listed below, are all relative to the date on which ownership of the project was officially transferred from the federal government to the three local utilities (October 2, 1997). This date is referred to as the Transaction.

Before the Governor issues the final Fish & Wildlife Program, the Agreement requires the owners to develop study plans, conduct the necessary studies, prepare study reports, develop a draft Fish & Wildlife Program, engage the public, and to consult with agencies and interested parties multiple times throughout the process. In order to allow adequate time to meet these requirements, the owners have initiated the consultation process early.

- 2022 Initiate the consultation process no later than 25 years after the transaction date
- 2024 Issuance of the Final Program by the Governor at least 3 years prior to implementation
- 2027 Begin implementation of the Program no later than 30 years after the transaction
- 2032 Complete implementation of the Program no later than 35 years after the transaction



The planned schedule for providing the Governor with a Proposed Fish & Wildlife Program is shown below.

2019 – Initiate consultation process, develop a website, gather existing information, conduct site reconnaissance, and develop a long-term plan.

2020 – Retain technical experts, develop study plans in consultation with state and federal agencies and any interested parties, and submit study plan schedule to the Governor for approval.

2021–2022 – Conduct studies as described in the study plans (assuming 2 years of studies), develop a draft Summary of Results, and distribute to stakeholders for review and comment.

2023–2024 – Develop a draft Program, distribute to stakeholders for review and comment, conduct public meetings, resolve any disagreements, and submit proposal to the Governor.

Source: Eklutna Hydro. Accessed September 29,2020. https://www.eklutnahydro.com/project-schedule/

Anchorage Hydropower Utility External Impacts

Fish & Wildlife Agreement in 1991 with the United States Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and the State of Alaska (the State). The 1991 Agreement requires the utilities to examine, and quantify if possible, the impacts to fish and wildlife from the Eklutna Hydroelectric Project, examine proposals for the protection, mitigation and enhancement of fish and wildlife affected by the hydroelectric development, consider the impacts of any protection, mitigation, or enhancement (PME) measures on other environmental resources and beneficial public uses as well as available means to mitigate those impacts, and then to develop and propose a Fish & Wildlife Program to the Governor. The Governor will review the proposal and issue a final Fish & Wildlife Program giving equal consideration to:

- the purposes of efficient and economical power production
- the protection, mitigation of damage to, and enhancement of fish and wildlife
- the protection of recreation opportunities,
- municipal water supplies
- the preservation of other aspects of environmental quality
- other beneficial public uses
- · requirements of State law

Throughout this process, the owners are required to consult with the USFWS, the NMFS, State resource agencies including the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Environmental Conservation (ADEC) and the Alaska Department of Natural Resources (ADNR), and any other interested parties. The USFWS, NMFS, and the State agreed that this process obviates the need for the owners to obtain a license for the project from the Federal Energy Regulatory Commission (FERC). The Native Village of Eklutna and Anchorage Water & Wastewater Utility are also included in the process.

Source: Eklutna Hydro. Accessed September 29, 2020. https://www.eklutnahydro.com/background/

Anchorage Hydropower Utility 8 Year Summary

(\$ in thousands)

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
|---|----------|----------|-------|-------|-------|-------|--|--|
| Financial Overview | Approved | Forecast | | | | | | |
| Revenues | 4,807 | 4,854 | 4,902 | 4,950 | 4,999 | 5,049 | | |
| Expenses and Transfers (1) | 3,093 | 3,945 | 4,030 | 4,114 | 3,703 | 4,794 | | |
| Net Income(Loss) | 1,714 | 909 | 872 | 836 | 1,296 | 255 | | |
| Charges by/to Other Departments | 35 | 36 | 37 | 38 | 39 | 40 | | |
| Municipal Enterprise/Utility Service Assessment | - | - | - | - | - | - | | |
| Dividend to General Government | - | 757 | 1,178 | 1,166 | 1,150 | 1,133 | | |
| Transfers to General Government ⁽²⁾ | 35 | 793 | 1,215 | 1,204 | 1,189 | 1,173 | | |
| Operating Cash | 515 | 533 | 551 | 572 | 592 | 592 | | |
| Construction Cash Pool | 1,075 | 872 | 724 | 786 | 780 | 1,300 | | |
| Restricted Cash | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | | |
| Total Cash | 4,590 | 4,405 | 4,275 | 4,358 | 4,372 | 4,892 | | |
| Net Position (Equity) 12/31 | 992 | 455 | 447 | 446 | 442 | 918 | | |
| Capital Assets Beginning Balance | - | - | - | - | - | - | | |
| Asset Additions Placed in Service | - | - | - | - | - | - | | |
| Assets Retired | - | - | - | - | - | - | | |
| Change Depreciation (Increase)/Decrease | - | - | - | - | - | - | | |
| Net Capital Assets (12/31) | - | - | - | - | - | - | | |
| Equity Funding Available for Capital | - | 732 | 1,702 | 2,162 | 2,573 | 3,431 | | |

⁽¹⁾ Expenses shown include all transfers to General Government and all non-cash items: depreciation (including depreciation on assets purchased with grant funds) and amortization activities.

⁽²⁾ Included in total expenses calculated in Net Income.

Anchorage Hydropower Statement of Revenues and Expenses

| | | 2021 Approved |
|--|-----------------------------|---------------------------------------|
| Operating Revenue | | |
| Wholesale Power Sales CEA | | 2,514,561 |
| Wholesale Power Sales MEA | | 1,833,402 |
| Water Diversion Payment MEA | | 398,687 |
| Reimbursed Costs | | - |
| | Total Operating Revenue | 4,746,650 |
| Non Operating Revenue | | |
| Investment Income | | 60,000 |
| Other Income | | 10 |
| | Total Non Operating Revenue | 60,010 |
| | Total Revenue | 4,806,660 |
| Operating Expense | - | |
| Total Labor | | - |
| Overallia a | | 400 700 |
| Supplies | | 160,760 |
| Travel | | - |
| Contractual/Other Services | | 150,000 |
| Equipment/Furnishings | | - |
| Contributions to Other Funds | | 2,514,561 |
| Dividend to General Government | - | <u> </u> |
| Manageable Direct Cost Total | | 2,825,321 |
| Municipal Enterprise/Utility Service Assessment | | - |
| Depreciation/Amortization | _ | 232,612 |
| Non-Manageable Direct Cost Total | | 232,612 |
| Charges by/to Other Departments | | 34,954 |
| Intradepartmental Overheads | | - |
| | Total Operating Expense | 3,092,887 |
| Non Operating Expense | | |
| Then operating Expenses | Total Non Operating Expense | _ |
| | Total Expense | 3,092,887 |
| | Net Income (Loss) | 1,713,773 |
| Appropriation: | ` ` ` | · · · · · · · · · · · · · · · · · · · |
| Total Expense | | 3,092,887 |
| Less: Non Cash Items | | |
| Depreciation/Amortization | | 232,612 |
| Total Non-Cash | _ | 232,612 |
| Amount to be Appropriated (Function Cost/Cash Expe | nse) | 2,860,275 |
| •••• | = | |

Anchorage Hydropower Utility Reconciliation from 2020 Revised Budget to 2021 Approved Budget

| | | | าร | | | |
|--|-----------|-------------------|----|--------|--|--|
| | | | ьт | l emp/ | | |
| | Expenses | FT | PT | Seas | | |
| 2020 Revised Budget (Appropriation) | 2,173,262 | - | - | - | | |
| Transfers by/to Other Departments | | | | | | |
| - Charges by Other Departments | (33,796) | - | - | - | | |
| Changes in Existing Programs/Funding for 2021 | | | | | | |
| - Contractual/Other Services | (352,325) | - | - | - | | |
| - Contributions to Other Funds | 912,374 | - | - | - | | |
| - Dividend to General Government | - | - | - | - | | |
| 2021 Continuation Level | 2,699,515 | - | - | - | | |
| 2021 Proposed Budget Changes | | | | | | |
| - Supplies | 160,760 | - | - | - | | |
| 2021 Approved Budget | 2,860,275 | - | - | - | | |
| 2021 Budget Adjustment for Accounting Transactions (Appropriation) | | | | | | |
| - Depreciation | - | - | - | - | | |
| 2021 Approved Budget (Appropriation) | 2,860,275 | - | - | - | | |
| | 2021 App | 2021 Approved FTE | | | | |
| | - | • | - | - | | |
| | | | | | | |

Anchorage Hydropower Utility 2021 Capital Improvement Budget

(\$ in thousands)

| | | | Gran | | | |
|-----------------|-------|------|-------|---------|--------|-------|
| Projects | | Debt | State | Federal | Equity | Total |
| Fish & Wildlife | | _ | - | - | 480 | 480 |
| Generation | | - | - | - | 228 | 228 |
| | Total | - | - | - | 708 | 708 |

Anchorage Hydropower Utility 2021 - 2026 Capital Improvement Program

(\$ in thousands)

| | | | Gran | | | |
|-----------------|-------|------|-------|---------|--------|-------|
| Projects | Year | Debt | State | Federal | Equity | Total |
| Plant | | | | | | |
| Fish & Wildlife | 2021 | - | - | - | 480 | 480 |
| | 2022 | - | - | - | 480 | 480 |
| | 2023 | - | - | - | 480 | 480 |
| | 2024 | - | - | - | 480 | 480 |
| | 2025 | - | - | - | 480 | 480 |
| | 2026 | - | - | - | 480 | 480 |
| | _ | - | - | - | 2,880 | 2,880 |
| Generation | 2021 | - | - | - | 228 | 228 |
| | 2022 | - | - | - | 244 | 244 |
| | 2023 | - | - | - | 261 | 261 |
| | 2024 | - | - | - | 280 | 280 |
| | 2025 | - | - | - | 300 | 300 |
| | 2026 | - | - | - | 300 | 300 |
| | | - | - | - | 1,613 | 1,613 |
| | Total | - | - | - | 4,493 | 4,493 |

Fish & Wildlife

End Date

 Project ID
 2021003
 Department
 Anchorage Hydropower Utility

Project Type New Start Date January 2021

District Community Council

Description

Fish and Wildlife costs are for the development of studies required by the agreement.

Version 2021 Approved

| | | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|-------------------------|--|------|------|------|------|------|------|-------|
| Revenue Sources | Fund | | | | | | | |
| Net Assets | 531200 - Anchorage Hydropower CIP | 480 | 480 | 480 | 480 | 480 | 480 | 2,880 |
| Total (\$ in thousands) | _ | 480 | 480 | 480 | 480 | 480 | 480 | 2,880 |

Generation

 Project ID
 2021002
 Department
 Anchorage Hydropower Utility

Project TypeMaintenanceStart DateJanuary 2021DistrictEnd Date

District Community Council

Description

Turbine maintenance that is based on historical operating experience and in accordance with the manufacturers recommended maintenance schedule based on the number of hours a unit runs.

Version 2021 Approved

| | | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|-------------------------|--|------|------|------|------|------|------|-------|
| Revenue Sources | Fund | | | | | | | |
| Net Assets | 531200 - Anchorage Hydropower CIP | 228 | 244 | 261 | 280 | 300 | 300 | 1,613 |
| Total (\$ in thousands) | _ | 228 | 244 | 261 | 280 | 300 | 300 | 1,613 |