INTERNAL AUDIT REPORT

2025-04

Anchorage Hydropower Utility Power Purchases Agreements and Payment in Lieu of Taxes Agreement

Anchorage Hydropower Utility

September 3, 2025

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September 3, 2025

Honorable Mayor and Members of the Assembly:

I am pleased to present for your review the Internal Audit Report 2025-04, Anchorage Hydropower Utility Power Purchases Agreements and Payment in Lieu of Taxes Agreement, Anchorage Hydropower Utility. A summary of the report is presented below.

In accordance with the 2025 Audit Plan, we performed an audit of the Anchorage Hydropower Utility Power Purchases Agreements and Payment in Lieu of Taxes Agreement. The objective of this audit was to determine the accuracy of the revenues to Anchorage Hydropower Utility in compliance with the Power Purchasing Agreements and any other pertinent contracts with other utilities. Specifically, we reviewed the Chugach Electric Association and Matanuska Electric Association Power Purchasing Agreement payments between 2020 and this date and we also reviewed the Chugach Electric Association estimated Payment in Lieu of Taxes calculations between 2021 and 2025.

Overall, our audit found that Anchorage Hydropower Utility generally complied with the Power Purchasing Agreements and other pertinent contracts with our utilities. However, we identified some improvements were needed. Specifically, our review revealed that Anchorage Hydropower Utility did not have adequate resources to perform its essential tasks, and Matanuska Electric Association did not adhere to certain provisions of its Power Purchasing Agreement with the Municipality of Anchorage.

There were two findings in connection with this audit. Management comments were generally responsive to each audit finding and recommendation. Specifically, management agreed with the finding and recomendation on the first finding, and Management agreed with the audit finding but disagreed with the recommendation of the second finding. However, after reviewing management's rationales for their disagreement, we determined their disagreement has merit and management's response supported the reasoning.

Alden P. Thern

Alden Thern

Director, Internal Audit

September 3, 2025

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Introduction. The Eklutna Hydroelectric Project (Eklutna Project) has 40 megawatts of generation capacity and produces approximately 130,000 kilowatt-hours of electricity per year. 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 on the Old Glenn Highway. 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 and Power (ML&P), Chugach Electric Association (CEA), and Matanuska Electric Association, Inc. (MEA) jointly took ownership of the Eklutna Project.

The Anchorage Hydropower Utility (AHU) is an enterprise function of the Municipality of Anchorage (MOA) that was created when the MOA sold its electric utility, ML&P, to CEA. In April 2018, voters of Anchorage approved the sale, followed by further approvals from the CEA Board of Directors and Regulatory Commission of Alaska (RCA). The sale was finalized in October 2020. In 2020, through the sale of ML&P, the MOA retained its ownership interest in the generation assets of the Eklutna Project, and MOA, CEA, and MEA each own an undivided interest in the Eklutna Project in the following percentages: MOA, 53.33 percent; CEA, 30 percent; and MEA, 16.67 percent. Municipality of Anchorage, CEA, and 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. It should be noted that on its order approving the sale of ML&P to CEA, the RCA made it clear that the PPA between MOA and CEA is to establish a secured deferred payment mechanism for a portion of the transaction price that had been negotiated between the MOA and CEA. In contrast, the RCA also stated that "We find that unlike the Eklutna PPA, the MEA PPA is a wholesale power agreement between public utilities. ..." The Municipality of Anchorage and CEA also agreed to a separate Payments in Lieu of Taxes (PILT) agreement to require CEA to make PILT payments to the MOA over the next 50 years for the former assets of the ML&P.

In 2021, the AHU produced 142,979 megawatt hours (MWh) of clean energy. This was enough energy to power more than 24,600 residential homes for an entire year. Power produced by the AHU is the lowest cost renewable energy in Southcentral Alaska.

Objective and Scope. The objective of this audit was to determine the accuracy of the revenues to AHU in compliances with the PPAs and any other pertinent contracts with other utilities. Specifically, we reviewed CEA and MEA's PPA payments between 2020 and to this date and also reviewed CEA's estimated PILT calculations between 2021 and 2025.

We conducted this performance audit in accordance with generally accepted government auditing standards, except for the requirement of an external quality control review. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Overall Evaluation. Overall, our audit found that AHU generally complied with the PPAs and other pertinent contracts with our utilities. However, we identified some improvements were needed. Specifically, our review revealed that AHU did not have adequate resources to perform its essential tasks, and MEA did not adhere to certain provisions of its PPA with the MOA.

FINDINGS AND RECOMMENDATIONS

1. AHU Did Not Have Adequate Resources to Perform its Essential Functions.

a. **Finding.** Our review revealed that AHU did not have adequate resources to perform its essential tasks. Specifically, since its creation in late 2020, AHU did not have any staff until its Director was appointed in July 2024, and even, as of this day, the Director position remains the sole employee of AHU to this date. As a result, AHU has not been able to comply with certain PPA requirements, such as preparing and sending invoices to MEA for its power sold to MEA. In the absence of invoicing, MEA has been self-invoicing based on the honor system, leaving AHU without internal controls to validate billing and payments.

b. **Recommendation.** The Director of AHU should work with the HR Department and the Office of Management and Budget (OMB) to secure sufficient resources to perform its essential tasks.

c. **Management Comments**. Management stated, "Management concurs with the findings and recommendation to secure sufficient resources to perform its essential tasks. As of August 4, 2025, AHU has tripled its staff size to three. In addition to the AHU Director, there is now an Engineering Director and an Executive Assistant. Being fully staffed will allow us to better comply with Power Purchase Agreement (PPA) requirements, such as preparing and sending invoices and establishing internal administrative controls for better oversight of the normal operations functions of AHU."

d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

2. MEA Did Not Fully Comply with Power Purchase Agreement Requirements.

a. **Finding.** Matanuska Electric Association did not adhere to certain provisions of its PPA with MOA. Specifically, MEA did not measure the power delivered to the delivery point nor provide copies of all facility metering calibration test results. The Power Purchase Agreement between the MOA and the MEA requires MEA (Purchaser) to provide the MOA (Seller) copies of all facility metering calibration results. Specifically, it states that "Section 5.3 Facility Metering. The Facility Metering used to measure Power delivered to the Delivery Point under this PPA shall be located at the Delivery Point, or as close thereto as is reasonably possible. Section 5.4 Facility Metering Testing. Purchaser will provide to Seller copies of all Facility Metering calibration test results."

Instead, MEA has measured the power delivered by tracking the amount of water flowing through the power generation facility and then converted the water volume (in Acre-foot) into power generated (in MWh) by applying the facility's power generation efficiency factor. However, we did not find any evidence that the use of this methodology was agreed upon between the MOA and MEA. When we inquired if there was such agreement, the MEA management stated that "there were several Teams meetings / phone calls while this process was being set-up so I unfortunately don't have any specific documentation that I can provide." This response left us wondering whom the MEA management had spoken with, since there hadn't been dedicated staff for the AHU (as we stated in the Finding 1 of this report), and if such agreement was reached, why the there was no amendment made to the original PPA. In addition, according to a study provided by CEA in 2022, they disputed the accuracy of the efficiency factor used to convert the water volume into the MWh, used by MEA for the billings. Specifically, MEA had used an efficiency factor of 0.65 MWh/acre-ft of water to convert the water volume into the amount of power generated. However, the report recommended a different (higher value) efficiency factor be used, which would result in more power generated per the volume of water. Translating this discrepancy may have resulted in underpayment to the MOA for the power sold to MEA.

b. **Recommendation.** The Director of AHU should collaborate with the Legal Department to enforce PPA compliance by MEA. In addition, the Director should work with other departments to establish proper invoicing processes and oversight mechanisms.

c. **Management Comments.** Management stated, "Management concurs with the findings, however, after careful consideration, we disagree with the recommendation to collaborate with the Legal Department to enforce PPA compliance due to the reasons below.

Per the "Eklutna Power Purchase Agreement dated as of September 16, 2019, between the Municipality of Anchorage and Matanuska Electric Association, Inc" Power sold to the MoA is defined as "Energy, Capacity, Environmental Attributes, and Ancillary Services (collectively, the "Power") that is available from the Facility and attributable to the MEA Portion". Electric power (watts) is not what is sold but the basis of the sales price given prorate shares of the energy source (water).

The MoA compensation for "Power" is not constrained only to "watts" as per a "traditional" PPA but a combination of items (inclusive of Capacity). The intent of the PPA is for the MoA to be paid for its' share of water production capacity per the share that was allocated to the MoA in the August 2, 1989 Eklutna Purchase Agreement and subsequently modified through the sale of ML&P. The MoA share is sold to MEA, per Exhibit C, Contract Price, "equal to 85% of the MEA Avoided Cost Rate effective on January 1 of the first year of the Term. The Contract Price will escalate at the rate of one percent (1 %) on January 1 of each year of the Term thereafter; provided, however, that the Contract Price will reset on January I of every third year during the Term to 85% of the then effective MEA Avoided Cost Rate."

The methodology for determining the equivalent amount of "Power" sold is a function of the MoA share of water converted into electric rate "the MEA Avoided Cost Rate via the variable of 0.65 MWH per acre-feet of water."

This last conversion factor is reasonable considering that it is variable in nature with a seasonal and functional oscillation around the value. The Eklutna Hydroelectric Project, Hydropower Operations Modeling Study Report (DRAFT) dated February 2022 discusses the variable nature of this number and that in certain circumstances the variable could be as high as 0.68, but possibly lower as well. Currently the Plant is operating under 0.65.

The MoA is concurrently producing studies regarding Pumped Storage Hydroelectric production in which 0.65 is the assumed and fixed variable. As such, we believe we are materially compliant with the PPA and are receiving fair compensation for the MoA's share of electric power production."

d. **Evaluation of Management Comments.** Management agreed with the audit finding but disagreed with the recommendation. However, after reviewing management's rationales for the disagreement, we determined their disagreement has merit and management's response supported the reasoning.

Discussion With Responsible Officials. The results of this audit were discussed with appropriate Municipal officials on July 21, 2025.

Audit Staff:
Scott Lee