

INTERNAL AUDIT REPORT

2017-09

Bradley Lake Operation and Maintenance Costs

Municipal Light and Power

October 12, 2017

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Municipality of Anchorage

Ethan Berkowitz, Mayor

Internal Audit Department

October 12, 2017

Honorable Mayor and Members of the Assembly:

I am pleased to present for your review **Internal Audit Report 2017-09, Bradley Lake Operation and Maintenance Costs, Municipal Light and Power**. A brief summary of the report is presented below.

In accordance with the 2017 Audit Plan, we have completed an audit of the Bradley Lake Operation and Maintenance Costs. The objective of this audit was to determine whether the charges by the Homer Electric Association during calendar year 2016 to Municipal Light and Power for the operation and maintenance of the Bradley Lake Hydroelectric Project complied with the applicable agreements. To accomplish our objective, our audit included a review of all charges to the Alaska Energy Authority by the Chugach Electric Association and the Homer Electric Association from January 1, 2016, to December 31, 2016.

Our audit revealed that the operation and maintenance expenditures made by the Homer Electric Association in fiscal year 2016 to the Bradley Lake Hydroelectric Project were in compliance with applicable agreements. However, hourly charges for flights using a Cessna airplane were charged to the Bradley Lake Hydroelectric Project, but many of the flights did not occur. Also, our review of Bradley Lake Hydroelectric Project expenditures revealed some questionable operation and maintenance expenditures. Finally, the Chugach Electric Association submitted their invoices to the Alaska Energy Authority from 2 to 27 days late because the Alaska Energy Authority did not enforce the time limit for billing of services.

There were three findings in connection with this audit. Management was responsive to the findings and recommendations.

Michael Chadwick, CIA, CICA
Director, Internal Audit



Municipality of Anchorage

Ethan Berkowitz, Mayor

Internal Audit Department

October 12, 2017

Internal Audit Report 2017-09 Bradley Lake Operation and Maintenance Costs Municipal Light and Power

Introduction. The Alaska Energy Authority (AEA) is a public corporation of the State of Alaska and a part of the Department of Commerce, Community and Economic Development. The AEA's mission is to reduce the cost of energy in Alaska. According to information provided by the AEA, the Bradley Lake Hydroelectric Project (Project) is located in South Central Alaska at the southern end of the Kenai Peninsula. The Project includes a 610-foot long, 125-foot high concrete-faced, rock-filled gravity dam, and a 3.5-mile long power tunnel. The 120-megawatt Project transmits its power to the State's main power grid via two parallel 20-mile transmission lines. The Project, which cost approximately \$328 million (including reserve fund balances), went into commercial operation in 1991. The Homer Electric Association (HEA) under contract with the AEA operates the Project. The Project serves Alaska's Railbelt from Homer to Fairbanks as well as the Delta Junction area. According to data provided by the AEA, in calendar year 2016 about \$2 million was paid to the HEA for Project operation and maintenance expenditures.

The AEA has entered into the following agreements to provide for the operation and maintenance of the Project:

The Power Sales Agreement, December 1987 - The Power Sales Agreement established the Bradley Lake Project Management Committee (BPMC). One of the BPMC's purposes is to arrange for the operation and maintenance of the Project and the scheduling, production and dispatch of Project power. In addition, the BPMC is responsible for budgeting annual Project costs and calculating each purchaser's required contribution to fund annual Project costs.

Master Maintenance and Operating Agreement, May 1994 - The Master Maintenance and Operating agreement with the BPMC established contract administration and budgeting procedures for Project maintenance and operation contracts. It also provides for the lease or other use of facilities and equipment in a manner consistent with the requirements of the Power Sales Agreement. This agreement authorizes the AEA to enter into any contracts necessary to perform operating or maintenance type services to the Project, subject to the approval of the BPMC.

Bradley Lake Dispatch Agreement, August 1996 - The AEA entered into an agreement with Chugach Electric Association (CEA) to provide all services necessary to dispatch the Project's electric power output.

Static Var Compensation System Agreement, August 1996 - The AEA entered into an agreement with CEA to operate and maintain the Static Var Compensation System facilities at the Soldotna Substation and Daves Creek facility.

Operation and Maintenance Agreement, July 2008 - The Operation and Maintenance Agreement for the Project was originally executed between the HEA and the AEA in February 1994 and amended in 1996, 1999, and 2008. The agreement provides for the operation and maintenance of the Project by the HEA. The HEA is to be reimbursed for costs associated with the operation, maintenance and repair of the Project as determined in advance through the submission of an annual budget based upon estimates and anticipated operation and maintenance costs. In August 1996, the agreement was amended to separate the operation and maintenance of the electric transmission line facilities from the Project. In June 1999, the agreement was amended to require the HEA to provide communication services in addition to the other services. In July 2008, the agreement was amended again thru June 2013 and automatically continues in successive five year terms thereafter unless terminated by either party.

Objective and Scope. The objective of this audit was to determine whether the charges by the HEA during calendar year 2016 to ML&P for the operation and maintenance of the Project complied with the

applicable agreements. Our audit included a review of all charges to the AEA by the CEA and the HEA from January 1, 2016, to December 31, 2016.

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. The audit was performed during the period of June through July 2017. The audit was requested by the Administration.

Overall Evaluation. Generally, the operation and maintenance expenditures made by the HEA in fiscal year 2016 to the Project were in compliance with applicable agreements. However, hourly charges for flights using a Cessna airplane were charged to the Project, but many of the flights did not occur. Also, our review of Project expenditures revealed some questionable operation and maintenance expenditures. Finally, the CEA submitted their invoices to the AEA from 2 to 27 days late because the AEA did not enforce the time limit for billing of services.

FINDINGS AND RECOMMENDATIONS

1. Aviation Services Contract Not Effectively Utilized.

- a. Finding.** Hourly charges for flights using a Cessna airplane were charged to the Project, but many of the flights did not occur. The contract guarantees a monthly \$21,000 payment for 35 aviation service hours. We found that out of 35 monthly hours, or 420 hours per year, only 230 hours (55%) were flown in 2016. Due to the 35-hour monthly guarantee, the HEA was liable for paying the remaining 190 (45%) un-flown hours. In 2016, the HEA billed the Project \$72,540 for 121 of the 190 un-flown hours.

- b. **Recommendation.** ML&P should request the HEA to reconsider the monthly guarantees contained in the aviation contract.

- c. **Management Comments.** Management stated, “ML&P management has discussed these issues with Homer Electric Association and Alaska Energy Authority management. We will bring these issues before the Bradley Project Management Committee for further discussion and resolution.”

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

2. **Questionable Expenditures.**

- a. **Finding.** Our review of Project expenditures revealed some questionable operation and maintenance expenditures. Some examples of questionable expenditures are found below.

Air Transportation – Charges for seven airplane flights appeared questionable. These flights appeared to be for family members. None of these airplane flights had a Project employee as a passenger and were made for transporting individuals to the Project who were not HEA employees. Per Project Site Work Rule #29, “Transportation for employee and dependants other than scheduled flights will be arranged and paid for by the employee.” The total charges for the questionable air transportation was \$2,100.

Food Purchases – Our review identified some questionable food purchases totaling \$304. Specifically, we identified \$155 of unexplained food purchases, a \$94 lunch purchase with no supporting documentation for a training session, and a Christmas food purchase for \$55. Per Project Site Work Rule #4, “Employees will be responsible for the purchase and preparation of their own food.”

Training Expenditure – Our review identified questionable training expenses totaling \$781 for a “Breaker Training” class in Texas. Section 5 (j) of the Agreement states that, the HEA is to “Prepare and conduct an annual training program that meets the minimum training standards established by the BPMC.” According to AEA staff, there is no training program nor has the BPMC established minimum standards. We reached out to HEA staff to determine if they had a training program in place, but the HEA did not respond to our request. As a result, we were not able to determine if the expenditures billed for HEA training were necessary or required.

- b. **Recommendation.** ML&P should bring the questionable costs to the BPMC for evaluation.

- c. **Management Comments.** Management stated, “ML&P management has discussed these issues with Homer Electric Association and Alaska Energy Authority management. We will bring these issues before the Bradley Project Management Committee for further discussion and resolution.”

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

3. **Untimely Invoicing.**

- a. **Finding.** The CEA submitted their invoices to the AEA from 2 to 27 days late because the AEA did not enforce the time limit for billing of services. Section 6(B) of the Static Var Compensation System Agreement requires invoices to be furnished to the AEA by the fifteenth of the month following the month in which the costs were incurred.

- b. **Recommendation.** ML&P should request that the AEA enforce contract requirements for timely billing.

- c. **Management Comments.** Management stated, “ML&P management has discussed these issues with Homer Electric Association and Alaska Energy Authority management. We will bring these issues before the Bradley Project Management Committee for further discussion and resolution.”

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

Discussion With Responsible Officials. The results of this audit were discussed with appropriate Municipal officials on August 2, 2017.

Audit Staff:
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