

**BRADLEY LAKE PROJECT MANAGEMENT COMMITTEE (BPMC)
REGULAR MEETING**

**AGENDA
Friday, July 26, 2019
10:00 a.m.**

**Alaska Energy Authority Board Room
813 W Northern Lights Blvd, Anchorage**

To participate dial 1-888-585-9008 and use code 134-503-899#

1. CALL TO ORDER
2. ROLL CALL FOR COMMITTEE MEMBERS
3. PUBLIC ROLL CALL
4. PUBLIC COMMENTS
5. AGENDA APPROVAL
6. PRIOR MINUTES – May 17, 2019
7. NEW BUSINESS
 - A. Election of Officers
 - B. Motion to Approve BCPU Legal Expenses
 - C. Bradley FY2019 Budget Motion Budget Subcommittee
 - D. Bradley FY2020 Budget Motion and Amendment Budget Subcommittee
 - E. Battle Creek Project Update AEA
 - F. CEA/ML&P Merger Issues (Respecting Bradley) Kirk Gibson
8. COMMITTEE ASSIGNMENTS
 - A. Budget to Actual Budget Subcommittee
 - B. Operators Report HEA
 - C. O&D Report Pete Sarauer
9. EXECUTIVE SESSION – Battle Creek
10. MEMBERS COMMENTS
11. NEXT MEETING DATE – September 27, 2019
12. ADJOURNMENT

BRADLEY LAKE PROJECT MANAGEMENT COMMITTEE MEETING
REGULAR MEETING
May 17, 2019

1. CALL TO ORDER

Chair Izzo called the regular meeting of the Bradley Lake Hydroelectric Project Management Committee to order at 10:09 a.m. A quorum was established.

2. ROLL CALL FOR COMMITTEE MEMBERS

Cory Borgeson (phone) (Golden Valley Electric Association [GVEA]); Tony Izzo (Matanuska Electric Association [MEA]); Bryan Carey (Alaska Energy Authority [AEA]); Lee Thibert (Chugach Electric Association [CEA]); Anna Henderson (Anchorage Municipal Light & Power [ML&P]); John Foutz (City of Seward); and Bob Day (Homer Electric Association [HEA]).

3. PUBLIC ROLL CALL

Ashton Compton, Jocelyn Garner, Curtis Thayer, Kirk Warren, Brandi White (AEA); Brian Hickey, Russell Thornton (CEA); Stefan Saldanha (Department of Law); Ron Rebenitsch (Energy Engineering); Peter Sarauer, Leo Quiachon (phone) (GVEA), Emily Hutchinson (phone), Larry Jorgenson, Alan Owens (HEA); Kirk Gibson (phone) (McDowell Rackner Gibson, PC); David Pease, Tony Zellers (MEA); Jeff Warner, Molly Morrison (phone) (ML&P); Bernie Smith (Public); and Sunny Morrison (Accu-Type Depositions).

4. PUBLIC COMMENTS

None.

5. AGENDA APPROVAL

MOTION: Mr. Thibert made a motion to approve the agenda, including the friendly amendment to move Item 8 after Item 11. Motion to approve the agenda including the friendly amendment seconded by Mr. Foutz.

Motion passed unanimously to approve the agenda, including the friendly amendment to move Item 8 after Item 11.

6. PRIOR MINUTES - March 15, 2019 and March 22, 2019

MOTION: Mr. Thibert made a motion to approve the Minutes of March 15, 2019 and March 22, 2019. Motion seconded by Mr. Foutz.

The motion passed with no objection.

7. NEW BUSINESS

A. Battle Creek Project Update

Mr. Carey provided the Battle Creek project update. There is approximately three to four feet of snow by the diversion dam at Wall 2. The snow will be moved before the blasting occurs. The contractor should be at the diversion site in about two weeks. The stream flows at that elevation are still low water. There have been four budget change-orders to-date. The net effect is close to \$15,000. Orion updated the schedule this spring through requests for change and indicated the new completion timeframe is late 2020. The project will be substantially complete this year. Orion asserts the extended completion timeframe is due to AEA delays. AEA has compiled a response letter and additional information can be discussed during executive session. The requests for change are not currently claims.

Mr. Carey described pictures of the project and discussed the contractor's efficient process of drilling, blasting, and rock removal. Mr. Carey noted Orion has been in discussion with the supplier of the pipe for about three weeks regarding commercial terms. Once the commercial terms are finalized and production begins at the factory, the lead time could be approximately three months before the pipe is delivered to the project site.

There were no questions.

Chair Izzo inserted congratulations to Ms. Henderson and welcomed her as the new BPMC representative for ML&P. Jeff Warner will remain the alternative representative. Members were provided a copy of the ML&P designation letter.

9. OPERATORS REPORT

Mr. Day reviewed the provided Operator Report. The unit statistics generated through May 14th, 2019, are almost equal to the unit statistics generated in April. This is due to both units being down during the first part of April, and Unit 2 returning to service during late April. The plant is running well.

Mr. Day discussed the issue regarding the cracks in the mechanical dividers. A temporary repair has been implemented and both units are back in service. The plan is to inspect each unit within approximately six months to ensure the repairs are stable. Issues were also discovered with pole connections and replacements and repairs were made. The pieces will be examined during the unit inspection. ABB has provided a proposal to repair the pole pieces, but the pieces cannot be repaired onsite and will have to be shipped outside at a hefty expense.

Mr. Day noted the average lake levels have been substantially higher than the historical average for this time of year by about 25 feet. He complimented the utilities on their efforts to reduce the lake levels and their anticipation of the needed storage room. Snow is in the high country and inflows are expected soon.

Mr. Day advised Emerson will replace the DCS system and upgrade the computers in the beginning of June. The fish water automation will be finalized thereafter. Mr. Day informed bridge repairs are still needed. He noted Orion has to build a temporary bridge at the

diversion for construction. The plan is to discuss with Orion the possibility of repurposing/reusing their bridge materials to complete the project's bridge repairs.

Mr. Day highlighted an error on page two under Operations, Maintenance, and Inspections. The second sentence in Item 2) should read, "Capacity factor for the partial month of May for Unit 1 was 47.6% and for Unit 2 was 20.1%."

Mr. Day reported issues with a nuisance bear. Precautions have been implemented. Attempts to scare the bear off have been unsuccessful. Alaska Department of Fish and Game has been notified. Mr. Day showed the listing of repair items and descriptions for the Unit 2 repair. Approximately \$100,000 worth of repair items are not listed because of the lag in accounting. The Committee authorized \$950,000 for generator and turbine repair, including a possible wedging system replacement. After inspection of the unit, the wedging system was deemed stable, but additional substantial problems were uncovered with regards to pole pieces, exciter connections, and divider plates. The original budgeted amount seems to be adequate for the necessary repairs. With the approval of the Committee, the work will continue under the original budget.

Mr. Foutz expressed appreciation to Mr. Day and the crews for identifying the issues and taking a proactive solution.

10. COMMITTEE REPORTS

A. Budget to Actual Report

Jocelyn Garner of AEA reviewed the provided Budget to Actual Expense Report dated July 1, 2018 through February 28, 2019. The second page shows the capital purchases. The bridge repair budgeted amount is available for use this year and next year. The operations and maintenance report is shown on pages three through six, and includes the approved budget amendment line item of indirect costs. The budget is approximately \$700,000 under budget to-date. The crews quarters upgrade will not occur this year. The FERC admin fee will not be received and expensed until July.

Ms. Garner discussed the R&C fund disbursement and repayments Schedule D. The fire alarm system replacement will undergo partial completion during this budget cycle. There were no Battle Creek capital purchases during the fiscal year. The administrative actual costs are inline with the budgeted amounts.

B. Bradley O&D Report

Pete Sarauer, GVEA, presented the O&D Report and noted Mr. Day reviewed many of the listed items during the operators report. Discussions are ongoing regarding KPI's and creating a presentation for the BPMC. HEA is scheduled to hire a trainee. The Bradley Lake flight manifests are supplied in the operators report. The operator is to provide a list of any individuals not associated with the Bradley project.

Mr. Sarauer noted the lake levels are unusually high for this time of the year. The O&D Committee is scheduled to meet later today to develop a plan to expedite lake level reduction before the inflows. There were no questions.

11. COMMITTEE ASSIGNMENTS

Mr. Borgeson previously gave an assignment to Kirk Gibson, McDowell Rackner Gibson, PC, to review the transfer in reference to the ML&P acquisition by CEA and analyze the Bradley agreements to determine the process the BPMC should undergo. Mr. Gibson is scheduled to present his report at the next BPMC meeting.

MOTION: Mr. Foutz made a motion to go into Executive Session to discuss confidential matters related to Battle Creek. Motion seconded by Mr. Carey.

The motion passed with no objection.

8. EXECUTIVE SESSION: 10:51 a.m.

A. Battle Creek

The Committee reconvened its regular meeting at 12:03 p.m.

12. MEMBERS COMMENTS

Mr. Day expressed appreciation to the BPMC for their support addressing the repairs.

Mr. Thibert welcomed Ms. Henderson to the Committee. He complimented Mr. Day and the crew for their outstanding job. He expressed appreciation to Chair Izzo for chairing the meeting.

Mr. Carey welcomed Ms. Henderson to the Committee and encouraged her to complete a Bradley Lake site visit.

Mr. Foutz expressed appreciation to Mr. Carey and Ron Rebenitsch, Energy Engineering, for their proactive efforts in addressing the issues. He welcomed Ms. Henderson to the Committee.

Mr. Borgeson thanked Chair Izzo for chairing the meeting and expressed appreciation for the diligent work and efforts shown.

Ms. Henderson commented she looks forward to working with the Committee and appreciates the work thus far.

Chair Izzo echoed the previous comments of appreciation.

Curtis Thayer, AEA Executive Director, expressed appreciation to Mr. Carey and Mr. Rebenitsch. He informed the AEA Board is scheduled to visit Bradley Lake in July.

13. NEXT MEETING DATE - July 26, 2019

Chair Izzo informed a work session meeting will likely be scheduled before the next regular meeting. The next regular meeting is scheduled for July 26, 2019.

14. ADJOURNMENT

There being no further business for the committee, the meeting adjourned at 12:08 p.m.

BY: _____

Tony Izzo, Chair

Attest: _____

Alaska Energy Authority, Secretary

DRAFT

Bradley Lake Project Management Committee Meeting

Friday, July 26, 2019

Agenda Item: 7B

MOTION: Move that the Bradley Lake Project Management Committee (BPMC) approve splitting McDowell Rackner & Gibson legal services between BPMC operating costs and Battle Creek Participating Utilities administrative costs. FY19 legal expenses to be paid for by the Battle Creek Participating Utilities is \$17,115. FY20 legal services will be split between BPMC operating costs and BCPU administrative costs as well, FY20 budget amendment will be needed if costs exceed \$50,000.

Move: _____

Second: _____

Bradley Lake Project Management Committee Meeting

Friday, July 26, 2019

Agenda Item: 7C

MOTION: Move that the Bradley Lake Project Management Committee (BPMC) approve the payment for the services of the claim consulting firm to be paid for out of the Battle Creek Revenue Fund. The costs are considered FY19 Battle Creek Construction costs. Total estimated FY19 costs is \$150,000.

Move: _____

Second: _____

Bradley Lake Project Management Committee Meeting

Friday, July 26, 2019

Agenda Item: 7D

MOTION: Move that the Bradley Lake Project Management Committee approve the first amendment of the fiscal year 2020 Bradley Lake Hydroelectric Project budget as presented. This budget amendment increases the Battle Creek Participating Utilities annual contributions by \$425,000 to pay for claim consulting firm services.

Move: _____

Second: _____

West Fork Upper Battle Creek Update

July 26, 2019

Events:

Contractor reached the diversion site in late June and has been blasting features to prepare for diverting creek and foundation work.

Drilling and blasting on an intermittent basis continues on Walls 2 & 3.

HDPE pipe is being manufactured and the first shipment is in route to Seattle. Contractor estimated time at Bradley is late August. Will take substantial time to off load & transport up mountain.

Schedule:

Contractor July schedule (data date July 15, 2019). Contractor schedule has diversion dam and pipeline as critical paths. Walls are not critical. HDPE pipe shows as installed this fall. Schedule shows substantial completion July 2020 (same as contract).

Schedule is achievable if there is good weather in the fall and they do some amount of double shifting.

Budget:

Little change in budget. Increases in rock excavation quantities (expected) balance out with reductions in MSE wall areas.

Photo 1: Constructing temporary bridge at diversion site



Photo 2: Wall 2 and Staging Area 3 pipe bedding



Photo 3: Drilling on other side of diversion



**BRADLEY LAKE PURCHASERS' PERCENTAGE SHARES
OF
PROJECT CAPACITY AND ANNUAL PROJECT COSTS**

PURCHASER	ORIGINAL % SHARE	CURRENT % SHARE	POST-MERGER % SHARE
Alaska Electric Generation and Transmission Cooperative, Inc.	25.5	—	—
Homer Electric Association	—	12.0	12.0
Matanuska Electric Association	—	13.8	13.8
Chugach Electric Association	30.4	30.4	56.3
Golden Valley Electric Association	16.9	16.9	16.9
Municipality of Anchorage d/b/a Municipal Power & Light	25.9	25.9	—
City of Seward d/b/a Seward Electric System	1.0	1.0	1.0

Note: Under the BPMC Bylaws, most votes of significance to the Project and Purchasers requires the affirmative vote of at least 4 representatives of the Purchasers, whose percentage shares of Project capacity are greater than 51% (plus the affirmative vote of the representative of the Authority, e.g., for issues involving Project economic considerations and Project viability.)

**Bradley Lake
Budget to Actual
Expense Report**

07/01/2018 to 05/31/2019

ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT
Schedule A-1
Expenses for the period 07/01/18 through 05/31/19

CAPITAL PURCHASES NOT FUNDED BY R&C FUND	FY18 BUDGET	FY18 ACTUALS	FY19 BUDGET	FY19 ACTUALS
Replace/Automate Fish Water Valve Actuators	225,000	361,430	-	364
Equipment storage shed (unheated bus barn)	100,000	67,539	-	-
1 ton Flatbed with Plow	65,000	57,016	-	-
Battle Creek Bridge Repair Refurbishment (2)	182,000	-	200,000	-
Mobil Crane 40 to 50 tons (used)	100,000	88,875	-	-
Replace Michigan Loader	350,000	263,306	-	-
Upgrade Crews Quarters and Residents Kitchen	165,000	1,850	-	-
Replace 1988 Suburban Ambulance	65,000	59,430	-	5,350
1/2 ton Pick up truck	35,000	34,693	-	-
Replace High Bay Lighting in Power Plant	20,000	19,920	-	-
Turbine Nozzle Repair	-	-	60,000	-
Tire Machine	-	-	12,500	15,246

Total Non R&C Capital Purchases	<u>1,307,000</u>	<u>954,059</u>	<u>272,500</u>	<u>20,960</u>
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ALASKA ENERGY AUTHORITY
BRADLEY LAKE OPERATIONS & MAINTENANCE
SCHEDULE B
BUDGET TO ACTUAL EXPENSES
FOR THE PERIOD 07/01/2018 THROUGH 05/31/2019

	FY19 Approved Budget	FY 19						FY 18	
		BUDGET % 07/01/2018 - 05/31/2019	HEA Actual	CEA Actual	AEA Actual	Total Actual	(Over) Under Budget to Date	FY18 Approved Budget	FY18 Actual
Summary by expense type									
Default	-	-	-	-	-	-	-	-	-
Labor & Benefits	1,572,497	1,441,456	1,187,701	38,509	-	1,226,210	215,246	1,889,814	1,578,236
Travel	33,950	31,121	22,986	1,632	-	24,619	6,502	76,950	16,114
Training	49,300	45,192	19,388	-	-	19,388	25,804	49,300	14,046
Contractual	1,033,216	947,114	341,816	-	224,659	566,475	380,639	841,062	659,773
Supplies & Materials	204,345	187,315	136,684	670	-	137,354	49,961	183,345	152,799
Other Costs	69,818	64,000	32,721	27,164	(35,039)	24,846	39,154	387,818	276,370
Equipment, Furniture and Machinery	7,000	6,417	6,612	-	-	6,612	(195)	7,000	25,562
Maintenance Projects	-	-	-	-	-	-	-	-	3,381
Administrative Costs	1,233,537	1,130,742	16,791	-	998,056	1,014,847	115,895	1,158,098	1,259,441
Indirect Costs	583,803	535,153	487,099	-	-	487,099	48,054	-	-
	4,787,466	4,388,510	2,251,799	67,975	1,187,675	3,507,449	881,061	4,593,387	3,985,722
FERC 535 - Operation Supervision & Engineering									
Operations Sup/Eng									
Bradley Lake Operating									
Labor & Benefits	189,074	173,318	173,823	-	-	173,823	(505)	265,587	262,431
Travel	10,450	9,579	10,807	-	-	10,807	(1,228)	10,450	2,271
Training	9,300	8,525	2,736	-	-	2,736	5,789	9,300	3,452
Contractual	1,000	917	257	-	-	257	660	1,000	121
Supplies & Materials	4,000	3,667	2,076	-	-	2,076	1,591	4,000	3,210
Indirect Costs	77,849	71,362	63,055	-	-	63,055	8,307	-	-
Bradley Lake Operating Total	291,673	267,368	252,756	-	-	252,756	14,612	290,337	271,485
FERC 535 - Operation Supervision & Engineering Total	291,673	267,368	252,756	-	-	252,756	14,612	290,337	271,485
FERC 537 - Hydraulic Expenses									
Hydraulic Expenses									
Bradley Lake Operating									
Labor & Benefits	88,714	81,321	67,408	-	-	67,408	13,913	94,453	69,032
Contractual	2,000	1,833	11,524	-	-	11,524	(9,691)	2,000	-
Supplies & Materials	2,000	1,833	1,747	-	-	1,747	86	2,000	976
Indirect Costs	41,515	38,055	35,787	-	-	35,787	2,268	-	-
Bradley Lake Operating Total	134,229	123,042	116,467	-	-	116,467	6,575	98,453	70,008
FERC 537 - Hydraulic Expenses Total	134,229	123,042	116,467	-	-	116,467	6,575	98,453	70,008
FERC 538 - Electric Expenses									
Electric Expenses									
Bradley Lake Operating									
Labor & Benefits	224,811	206,077	195,557	-	-	195,557	10,520	232,294	202,969
Travel	7,000	6,417	3,783	-	-	3,783	2,634	7,000	6,877
Training	25,000	22,917	12,406	-	-	12,406	10,511	25,000	231
Contractual	2,000	1,833	-	-	-	-	1,833	2,000	1,400
Supplies & Materials	9,732	8,921	4,503	-	-	4,503	4,418	9,732	5,513
Indirect Costs	102,222	93,704	92,822	-	-	92,822	882	-	-
Bradley Lake Operating Total	370,765	339,869	309,072	-	-	309,072	30,797	276,026	216,990
FERC 538 - Electric Expenses Total	370,765	339,869	309,072	-	-	309,072	30,797	276,026	216,990
FERC 539 - Misc. Hydraulic Power Generation Expenses									
Misc Hydro Power Exp									
Bradley Lake Operating									
Labor & Benefits	168,044	154,040	111,126	-	-	111,126	42,914	179,530	172,689
Training	15,000	13,750	4,245	-	-	4,245	9,505	15,000	10,363
Contractual	287,525	263,565	128,892	-	-	128,892	134,673	287,525	212,841
Supplies & Materials	17,900	16,408	26,943	-	-	26,943	(10,535)	17,900	18,271
Indirect Costs	41,515	38,055	35,640	-	-	35,640	2,415	-	-
Bradley Lake Operating Total	529,984	485,818	306,847	-	-	306,847	178,971	499,955	414,164
BRADLEY CIRCUITS/RADIO TO BERNICE LK									
Other Costs	35,695	32,720	32,721	-	-	32,721	(1)	35,695	35,696
BRADLEY CIRCUITS/RADIO TO BERNICE LK Total	35,695	32,720	32,721	-	-	32,721	(1)	35,695	35,696
BRADLEY CIRCUITS BERNICE LK TO ANCH									
Other Costs	29,773	27,292	-	27,064	-	27,064	228	29,773	29,728
BRADLEY CIRCUITS BERNICE LK TO ANCH Total	29,773	27,292	-	27,064	-	27,064	228	29,773	29,728
FERC 539 - Misc. Hydraulic Power Generation Expenses Total	595,452	545,830	339,568	27,064	-	366,632	179,198	565,423	479,587
FERC 540 - Rents									
FERC Land Use Fee									
Bradley Lake Operating									
Other Costs	-	-	-	-	(35,289)	(35,289)	35,289	318,000	202,079
Bradley Lake Operating Total	-	-	-	-	(35,289)	(35,289)	35,289	318,000	202,079
FERC 540 - Rents Total	-	-	-	-	(35,289)	(35,289)	35,289	318,000	202,079
FERC 541 - Maintenance Supervision & Engineering									
Maint Supervision/Eng									
Bradley Lake Operating									
Labor & Benefits	195,817	179,499	171,952	-	-	171,952	7,547	272,586	263,101
Indirect Costs	77,849	71,362	63,055	-	-	63,055	8,307	-	-
Bradley Lake Operating Total	273,666	250,861	235,007	-	-	235,007	15,854	272,586	263,101
FERC 541 - Maintenance Supervision & Engineering Total	273,666	250,861	235,007	-	-	235,007	15,854	272,586	263,101

ALASKA ENERGY AUTHORITY
BRADLEY LAKE OPERATIONS & MAINTENANCE
SCHEDULE B
BUDGET TO ACTUAL EXPENSES
FOR THE PERIOD 07/01/2018 THROUGH 05/31/2019

	FY19 Approved Budget	FY 19						FY 18	
		BUDGET % 07/01/2018 - 05/31/2019	HEA Actual	CEA Actual	AEA Actual	Total Actual	(Over) Under Budget to Date	FY18 Approved Budget	FY18 Actual
FERC 542 - Maintenance of Structures									
Maintenance of Structures									
Bradley Lake Operating									
Labor & Benefits	85,438	78,318	64,042	-	-	64,042	14,276	94,453	70,197
Contractual	10,000	9,167	-	-	-	-	9,167	10,000	-
Supplies & Materials	53,713	49,237	41,271	-	-	41,271	7,966	53,713	57,919
Equipment, Furniture and Machinery	7,000	6,417	6,612	-	-	6,612	(195)	7,000	8,513
Maintenance Projects	-	-	-	-	-	-	-	-	2,581
Indirect Costs	37,066	33,977	31,777	-	-	31,777	2,200	-	-
Bradley Lake Operating Total	193,217	177,116	143,702	-	-	143,702	33,414	165,166	139,209
BRADLEY UPGRADE CREWS QTRS/RESIDENCE KITCHEN									
Contractual	165,000	151,250	-	-	-	-	151,250	-	-
BRADLEY UPGRADE CREWS QTRS/RESIDENCE KITCHEN Total	165,000	151,250	-	-	-	-	151,250	-	-
FERC 542 - Maintenance of Structures Total	358,217	328,366	143,702	-	-	143,702	184,664	165,166	139,209
FERC 543 - Maintenance of Reservoirs, Dams & Waterways									
Maint Res, Dams, W/Ways									
Bradley Lake Operating									
Labor & Benefits	45,552	41,756	4,722	-	-	4,722	37,034	50,610	9,314
Contractual	6,500	5,958	7,600	-	-	7,600	(1,642)	6,500	-
Indirect Costs	19,932	18,271	87	-	-	87	18,184	-	-
Bradley Lake Operating Total	71,984	65,985	12,410	-	-	12,410	53,575	57,110	9,314
BRADLEY NUKA REPAIR									
Contractual	15,000	13,750	-	-	-	-	13,750	15,000	-
BRADLEY NUKA REPAIR Total	15,000	13,750	-	-	-	-	13,750	15,000	-
BRADLEY POWER TUNNEL MAINT (Dam)									
Contractual	15,000	13,750	-	-	-	-	13,750	15,000	-
BRADLEY POWER TUNNEL MAINT (Dam) Total	15,000	13,750	-	-	-	-	13,750	15,000	-
FERC 543 - Maintenance of Reservoirs, Dams & Waterways Total	101,984	93,485	12,410	-	-	12,410	81,075	87,110	9,314
FERC 544 - Maintenance of Electric Plant									
Maintenance of Elec Plant									
Bradley Lake Operating									
Labor & Benefits	342,265	313,743	267,953	-	-	267,953	45,790	379,102	291,662
Travel	4,500	4,125	216	-	-	216	3,909	4,500	-
Contractual	70,000	64,167	69,475	-	-	69,475	(5,308)	70,000	59,793
Supplies & Materials	20,000	18,333	15,975	-	-	15,975	2,358	20,000	12,743
Indirect Costs	148,789	136,390	131,392	-	-	131,392	4,998	-	-
Bradley Lake Operating Total	585,554	536,758	485,012	-	-	485,012	51,746	473,602	364,198
BRADLEY REPLACE LIGHTING IN POWER PLANT									
Supplies & Materials	30,000	27,500	-	-	-	-	27,500	-	-
BRADLEY REPLACE LIGHTING IN POWER PLANT Total	30,000	27,500	-	-	-	-	27,500	-	-
FERC 544 - Maintenance of Electric Plant Total	615,554	564,258	485,012	-	-	485,012	79,246	473,602	364,198
FERC 545 - Maintenance of Misc. Hydraulic Plant									
Maint of Misc Hydr Plant									
Bradley Lake Operating									
Labor & Benefits	85,438	78,318	66,677	-	-	66,677	11,641	94,453	86,833
Contractual	3,900	3,575	-	-	-	-	3,575	3,900	2,009
Supplies & Materials	35,000	32,083	32,487	-	-	32,487	(404)	35,000	49,502
Indirect Costs	37,066	33,977	33,482	-	-	33,482	495	-	-
Bradley Lake Operating Total	161,404	147,953	132,646	-	-	132,646	15,307	133,353	138,344
BRADLEY FISH WATER DSGN/MIDDLE FORK SHACK IMPR									
Supplies & Materials	-	-	-	-	-	-	-	-	1,345
BRADLEY FISH WATER DSGN/MIDDLE FORK SHACK IMPR Total	-	-	-	-	-	-	-	-	1,345
FERC 545 - Maintenance of Misc. Hydraulic Plant Total	161,404	147,953	132,646	-	-	132,646	15,307	133,353	139,689
FERC 556 - System Control & Load Dispatching									
System Cntl & Load Disp									
Bradley Lake Operating									
Labor & Benefits	21,506	19,714	19,047	-	-	19,047	667	20,618	34,363
Contractual	53,000	48,583	44,623	-	-	44,623	3,960	53,000	35,618
Supplies & Materials	6,000	5,500	613	-	-	613	4,887	6,000	642
Equipment, Furniture and Machinery	-	-	-	-	-	-	-	-	16,254
Bradley Lake Operating Total	80,506	73,797	64,283	-	-	64,283	9,514	79,618	86,878
BRADLEY EMERSON ANTIVIRUS UPGRADE									
Contractual	40,000	36,667	41,740	-	-	41,740	(5,073)	-	-
BRADLEY EMERSON ANTIVIRUS UPGRADE Total	40,000	36,667	41,740	-	-	41,740	(5,073)	-	-
Snow Measurement									
Bradley Lake Operating									
Contractual	12,000	11,000	-	-	10,000	10,000	1,000	10,000	10,000
Bradley Lake Operating Total	12,000	11,000	-	-	10,000	10,000	1,000	10,000	10,000
Seismic Service									
Bradley Lake Operating									
Contractual	62,000	56,833	-	-	59,940	59,940	(3,107)	62,000	61,285
Bradley Lake Operating Total	62,000	56,833	-	-	59,940	59,940	(3,107)	62,000	61,285

ALASKA ENERGY AUTHORITY
BRADLEY LAKE OPERATIONS & MAINTENANCE
SCHEDULE B
BUDGET TO ACTUAL EXPENSES
FOR THE PERIOD 07/01/2018 THROUGH 05/31/2019

	FY19 Approved Budget	FY 19						FY 18	
		BUDGET % 07/01/2018 - 05/31/2019	HEA Actual	CEA Actual	AEA Actual	Total Actual	(Over) Under Budget to Date	FY18 Approved Budget	FY18 Actual
Streamguaging Serv									
Bradley Lake Operating									
Contractual	206,291	189,100	-	-	154,718	154,718	34,382	213,137	213,137
Bradley Lake Operating Total	206,291	189,100	-	-	154,718	154,718	34,382	213,137	213,137
Permits									
Bradley Lake Operating									
Other Costs	350	321	-	-	250	250	71	350	250
Bradley Lake Operating Total	350	321	-	-	250	250	71	350	250
FERC 556 - System Control & Load Dispatching Total	401,147	367,718	106,023	-	224,909	330,931	36,787	365,105	371,550
FERC 562 - Station Expenses									
Station Expenses									
Bradley Lake Operating									
Labor & Benefits	94,718	86,825	40,504	38,509	-	79,013	7,812	123,726	112,738
Travel	2,000	1,833	-	1,632	-	1,632	201	6,000	1,701
Contractual	32,000	29,333	26,858	-	-	26,858	2,475	4,000	7,440
Supplies & Materials	21,000	19,250	11,069	670	-	11,739	7,511	16,000	2,678
Other Costs	4,000	3,667	-	100	-	100	3,567	4,000	8,618
Equipment, Furniture and Machinery	-	-	-	-	-	-	-	-	795
Maintenance Projects	-	-	-	-	-	-	-	-	800
Bradley Lake Operating Total	153,718	140,908	78,431	40,911	-	119,342	21,566	153,726	134,770
FERC 562 - Station Expenses Total	153,718	140,908	78,431	40,911	-	119,342	21,566	153,726	134,770
FERC 571 - Maintenance of Overhead Lines									
Maint of OH Lines									
Bradley Lake Operating									
Labor & Benefits	31,120	28,527	4,889	-	-	4,889	23,638	82,402	2,907
Travel	10,000	9,167	8,180	-	-	8,180	987	49,000	5,265
Contractual	50,000	45,833	10,846	-	-	10,846	34,987	86,000	56,046
Supplies & Materials	5,000	4,583	-	-	-	-	4,583	19,000	-
Bradley Lake Operating Total	96,120	88,110	23,915	-	-	23,915	64,195	236,402	64,218
BRADLEY MARKER BALL REPLACEMENT									
Contractual	-	-	-	-	-	-	-	-	83
BRADLEY MARKER BALL REPLACEMENT Total	-	-	-	-	-	-	-	-	83
FERC 571 - Maintenance of Overhead Lines Total	96,120	88,110	23,915	-	-	23,915	64,195	236,402	64,301
FERC 920 & 930 - Administrative Expense									
AEA Bradley Fixed Admin Fees									
Bradley Lake Operating									
Administrative Costs	200,000	183,333	-	-	183,333	183,333	(0)	200,000	200,000
Bradley Lake Operating Total	200,000	183,333	-	-	183,333	183,333	(0)	200,000	200,000
Operating Committee Exp-Audit									
Bradley Lake Operating									
Administrative Costs	16,500	15,125	-	-	19,900	19,900	(4,775)	16,800	16,800
Bradley Lake Operating Total	16,500	15,125	-	-	19,900	19,900	(4,775)	16,800	16,800
Operating Committee Exp-Legal									
Bradley Lake Operating									
Administrative Costs	25,000	22,917	-	-	132,348	132,348	(109,431)	25,000	115,610
Bradley Lake Operating Total	25,000	22,917	-	-	132,348	132,348	(109,431)	25,000	115,610
Operat Committee Exp-Arbitrage									
Bradley Lake Operating									
Administrative Costs	2,935	2,690	-	-	-	-	2,690	3,380	2,535
Bradley Lake Operating Total	2,935	2,690	-	-	-	-	2,690	3,380	2,535
Trust & Account Fees									
Bradley Lake Operating									
Administrative Costs	11,918	10,925	-	-	11,918	11,918	(993)	11,918	11,918
Bradley Lake Operating Total	11,918	10,925	-	-	11,918	11,918	(993)	11,918	11,918
Misc Admin									
Bradley Lake Operating									
Administrative Costs	10,350	9,488	-	-	11,646	11,646	(2,158)	10,000	10,350
Bradley Lake Operating Total	10,350	9,488	-	-	11,646	11,646	(2,158)	10,000	10,350
FERC 920 & 930 - Administrative Expense Total	266,703	244,478	-	-	359,145	359,145	(114,667)	267,098	357,213
FERC 924 & 925 - Insurance Premiums									
Insurance Premiums									
Bradley Lake Operating									
Administrative Costs	656,834	602,098	16,791	-	550,794	567,585	34,513	581,000	624,705
Bradley Lake Operating Total	656,834	602,098	16,791	-	550,794	567,585	34,513	581,000	624,705
FERC 924 & 925 - Insurance Premiums Total	656,834	602,098	16,791	-	550,794	567,585	34,513	581,000	624,705

**ALASKA ENERGY AUTHORITY
BRADLEY LAKE OPERATIONS & MAINTENANCE
SCHEDULE B
BUDGET TO ACTUAL EXPENSES
FOR THE PERIOD 07/01/2018 THROUGH 05/31/2019**

	FY19 Approved Budget	FY 19						FY 18	
		BUDGET % 07/01/2018 - 05/31/2019	HEA Actual	CEA Actual	AEA Actual	Total Actual	(Over) Under Budget to Date	FY18 Approved Budget	FY18 Actual
FERC 928 - Regulatory Commission Expenses									
FERC Admin Fees									
Bradley Lake Operating									
Administrative Costs	185,000	169,583	-	-	-	-	169,583	185,000	176,523
Bradley Lake Operating Total	185,000	169,583	-	-	-	-	169,583	185,000	176,523
FERC Related Prof Services									
BRADLEY CONTRACTUAL ENGINEER-FERC LICENSE ISSUES									
Administrative Costs	125,000	114,583	-	-	88,117	88,117	26,466	125,000	100,999
BRADLEY CONTRACTUAL ENGINEER-FERC LICENSE ISSUES	125,000	114,583	-	-	88,117	88,117	26,466	125,000	100,999
FERC 928 - Regulatory Commission Expenses Total	310,000	284,166	-	-	88,117	88,117	196,049	310,000	277,522
Total Bradley Lake Budget	4,787,466	4,388,510	2,251,799	67,975	1,187,675	3,507,449	881,061	4,593,387	3,985,722

BRADLEY LAKE
R&C FUND DISBURSEMENTS AND REPAYMENTS
SCHEDULE D
Expenses for the Period 07/1/18 through 05/31/19

Description	Actual @ 6/30/18 Expense	Actual TO REPAY 6/30/2018	Actual @05/31/19 Expense	Actual TO REPAY @6/30/19	Budget FY19
R&C FUND PROJECTS					
Governor	0.00	4,052,070.14	0.00	4,052,070.14	0.00
Replace RFLS	0.00	251,092.69	0.00	251,092.69	0.00
Replace Runners	0.00	1,946,732.79	0.00	1,946,732.79	0.00
Replace cable from dam to power house	0.00	2,321,922.94	0.00	2,321,922.94	0.00
Replace power system stabilizer	0.00	619,205.10	0.00	619,205.10	0.00
Replace two RTUs	0.00	86,905.27	0.00	86,905.27	0.00
Culvert Repairs	0.00	675,966.79	0.00	675,966.79	0.00
Tower Repair for Jack Frost Heaves	0.00	887,596.62	0.00	887,596.62	0.00
Replace Plant and SCADA Controls	0.00	1,344,683.05	0.00	1,344,683.05	0.00
Vibration Monitoring System	0.00	490.00	0.00	490.00	0.00
Fire Alarm System Replacement	0.00	0.00	0.00	0.00	250,000.00
Battle Creek Diversion	0.00	1,170,000.00	0.00	1,170,000.00	0.00
Bradley Replace Electro-Mechanical Relays	0.00	1,277,197.06	0.00	1,277,197.06	0.00
Fishwater Screen Debris Removal	0.00	312,236.43	0.00	312,236.43	0.00
Turbine Nozzel Repair	0.00	1,428,861.07	0.00	1,428,861.07	0.00
SVC replacement Daves Creek Soldotna	1,341,405.96	8,517,991.11	0.00	8,517,991.11	0.00
Equipment Storage Shed	0.00	0.00	504,776.41	504,776.41	500,000.00
Emerson Operating System Upgrade	0.00	0.00	560,398.50	560,398.50	700,000.00
Generator #2 Replacement	0.00	0.00	560,771.03	560,771.03	0.00
	1,341,405.96	24,892,951.06	1,625,945.94	26,518,897.00	1,450,000.00
Current Year R&C Repayment		(2,793,306.00)		(2,517,229.00)	
Adjust to balance to \$5million		0.00		0.00	
Interest in Fund Applied to Repayment		(226,781.00)		(117,137.19)	
Net Transfer from Revenue Fund		(3,020,087.00)		(2,634,366.19)	
Cumulative Prior Years R&C Repayments		(17,886,155.09)		(20,465,255.55)	
Due Back to Utilities		440,986.54		(118,064.56)	
Adjust Due to R&C Actual		0.00		0.00	
		(17,445,168.55)		(20,583,320.11)	
NET DUE TO R&C FUND		4,427,695.51		3,301,210.71	
R&C FUND CASH FLOW PROJECTION					
Beginning Investment Balance		3,219,624.39		1,013,291.03	
Disbursements-current year -Accrual		(1,341,405.96)		(999,608.45)	
Disbursements-prior year accrued		(2,737,351.03)		0.00	
Utilities' R&C Refund		(1,147,663.37)		(440,986.54)	
Net other cash inflow(outflow)		0.00		0.00	
Current year interest earnings		226,781.00		117,137.19	
Participants Contributions to R&C Fund		2,793,306.00		2,517,229.00	
Ending Investment Balance		1,013,291.03		2,207,062.23	
Accrued Due to Utilities		(440,986.54)		118,064.56	
R&C payable back to the revenue fund		0.00		0.00	
Accrued R&C vendor Payable at Year End		0.00		(626,337.49)	
PROJECTED NET DUE + ENDING INVESTMENT BALANCE		5,000,000.00		5,000,000.00	
\$3,330,802.80 x 25% yr 1 32% yr 2 25% yr 3 18% yr4	3rd yr	832,700.70	4th	599,544.50	599,544.50
\$5,644,193.08 x 25% all 4 years	2nd yr	1,411,048.27	3rd	1,411,048.27	1,411,048.27
\$1,341,405.96 x 25% all 4 years	1st yr	335,351.49	2nd	335,351.49	372,974.87
\$1,625,945.94 x 25% all 4 years			1st	406,486.49	362,500.00
		2,579,100.46		2,752,430.75	2,746,067.64

ALASKA ENERGY AUTHORITY
 BRADLEY LAKE HYDROELECTRIC PROJECT
 Battle Creek Capital Purchases
 Schedule E
 Expenses for the period 07/01/18 through 05/31/19

Battle Creek Capital Purchases	FY18 Amended Budget	FY18 Actuals	FY19 Approved Budget	FY19 Actuals
Used 2007 Chevrolet Silverado	8,800	8,800	-	-
Used 2006 Chevrolet Silverado	7,700	7,700	-	-
Total capital revenue fund purchases	16,500	16,500	-	-

ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT
Battle Creek Administrative Costs
Schedule F
Expenses for the period 07/01/18 through 05/31/19

Run Date: 07/24/19

Summary By Expense Type		FY 19					FY 18	
	FY19 Approved Budget	Budget % 07/01/18 - 05/31/19	HEA Actual	AEA Actual	Total Actual	(Over) Under Budget to Date	FY18 Approved Budget	Total Actual
Summary By Expense Type								
Administrative Costs	\$ 453,988	\$ 416,156	\$ 270,259	\$ 170,413	\$ 440,671	\$ (24,516)	\$ 43,800	\$ 137,456
	\$ 453,988	\$ 416,156	\$ 270,259	\$ 170,413	\$ 440,671	\$ (24,516)	\$ 43,800	\$ 137,456
FERC 920 & 930 - Administrative Expense								
AEA Bradley Fixed Admin Fees								
Administrative Costs	\$ 176,193	\$ 161,510	\$ 7,421	\$ 154,000	\$ 161,421	\$ 89	\$ 22,000	\$ 25,525
AEA Bradley Fixed Admin Fees Total	\$ 176,193	\$ 161,510	\$ 7,421	\$ 154,000	\$ 161,421	\$ 89	\$ 22,000	\$ 25,525
Operating Committee Exp-Legal								
Administrative Costs	\$ 15,000	\$ 13,750	\$ -	\$ 12,247	\$ 12,247	\$ 1,503	\$ 15,000	\$ 17,082
Operating Committee Exp-Legal Total	\$ 15,000	\$ 13,750	\$ -	\$ 12,247	\$ 12,247	\$ 1,503	\$ 15,000	\$ 17,082
Operat Committee Exp-Arbitrage								
Administrative Costs	\$ 2,000	\$ 1,833	\$ -	\$ -	\$ -	\$ 1,833	\$ 2,000	\$ 2,180
Operat Committee Exp-Arbitrage Total	\$ 2,000	\$ 1,833	\$ -	\$ -	\$ -	\$ 1,833	\$ 2,000	\$ 2,180
Trust & Account Fees								
Administrative Costs	\$ 6,550	\$ 6,004	\$ -	\$ 4,083	\$ 4,083	\$ 1,921	\$ 4,300	\$ 1,197
Trust & Account Fees Total	\$ 6,550	\$ 6,004	\$ -	\$ 4,083	\$ 4,083	\$ 1,921	\$ 4,300	\$ 1,197
Operat Committee Exp-Other								
Administrative Costs	\$ -	\$ -	\$ -	\$ 83	\$ 83	\$ (83)	\$ 500	\$ 2,276
Operat Committee Exp-Other Total	\$ -	\$ -	\$ -	\$ 83	\$ 83	\$ (83)	\$ 500	\$ 2,276
Professional consultants								
Administrative Costs	\$ 254,245	\$ 233,058	\$ 262,838	\$ -	\$ 262,838	\$ (29,780)	\$ -	\$ 89,196
Professional consultants Total	\$ 254,245	\$ 233,058	\$ 262,838	\$ -	\$ 262,838	\$ (29,780)	\$ -	\$ 89,196
FERC 920 & 930 - Administrative Expense Total	\$ 453,988	\$ 416,156	\$ 270,259	\$ 170,413	\$ 440,671	\$ (24,516)	\$ 43,800	\$ 137,456

Bradley Lake Operator Report

BPMC

July 26, 2019

Unit Statistics:

*as of July 23, 2019

Generation	Unit 1 (MWhrs)	Unit 2 (MWhrs)	Total (MWhrs)
June 2019	24,491	18,928	43,419

Hydraulics	Avg. Lake Level (ft.)	Usage (ac ft.)	Fish water (CFS)
June 2019	1147.4'	43,625	493.5

Generation	Unit 1 (MWhrs)	Unit 2 (MWhrs)	Total (MWhrs)
July 2019*	15,116	9,644	24,760

Hydraulics	Avg. Lake Level (ft.)	Usage (ac ft.)	Fish water (CFS)
July 2019*	1,164.5'	24,508	2,792

Lake Level – **1,169.7'** as of July 23, 2019

Capital Projects:

- 1) **Swan Lake Fire** – The fire is being managed by an inter-agency fire management team. In order to meet their goals of protecting fire personnel, local citizens, infrastructure, and the 115 kV transmission line, an outage was taken on the Sterling to Quartz segment. This outage allowed fire personnel access to work around the line and structures to enhance fire breaks and back-burn critical areas of fuel adjacent to Right of Way. Due to these efforts the fire crews were able to control the fire and prevent damage to the transmission line and structures. This outage also curtailed transmission of Bradley power to the Northern utilities. The outage impacted the ability for Bradley to generate and has resulted in threateningly high levels at the lake.
- 2) **Due to high lake levels** – It is likely that we will spill due to the fire outage and the high inflows from the warm river, then it rained very hard.
- 3) **Mechanical Divider issue** – I have received an email from the proposed supplier for the new dividers that increases the cost of the steel by \$19,144.00. This is likely due to steel tariffs. We will be approaching the second highest bidder to see if they can hold their price (currently about \$6,000 more than the previous low bidder).

- 4) **ABB fix on the pole connection** – I have the poles on the Homer side of the bay and we are preparing to ship them to ABB for repair.
- 5) **Fish Water Control Automation** – Seems to be working well at this point.
- 6) **Invasive Weeds** – A follow up inspection was held on June 25th, we received high marks for our efforts.
- 7) **Fire System Replacement** – Walkthroughs by contractors proposing are scheduled for July 29 through 31.
- 8) **Bridge repair** – One of the older bridges has developed a large hole (see attached Picture). We will need to make repairs soon. This could be a safety hazard.
- 9) **Locked Gate installed on Battle Creek Bridge** -In light of the damaged bridge and the fact that someone (possibly not of Bradley or ORION) has been making “brodies” in the Martin River, we have installed a gate at Battle Creek to prevent access from either side.
- 10) **AEA Board of Directors** – Visited Bradley on July 11th.
- 11) **SPCC Annual training** - Completed July 15th.
- 12) **Bradley O&D Meeting** – Held at Bradley July 16th.

Operations, Maintenance, and Inspections:

- 1) **ARECA Insurance Inspection** - The inspector was at Bradley July 9th.
- 2) **June Unit availability** –Unit 1 - **97%**, Unit 2 - **72.9%**. Capacity factor for June for Unit 1 was **54%** and for Unit 2 **42%**
- 3) **July Unit availability** –Unit 1 - **100%**, Unit 2 – **45.8%** (Island) Capacity factor for July for Unit 1 was **43.7%** and for Unit 2 - **27.7%**
- 4) **Safety meeting** – Meeting was held on June 17th and then on July 8th.
- 5) **New Trainee** – we have a new trainee that started June 17th.
- 6) **Additional New Trainee** – we need to hire the sixth person immediately.



Martin River Slough Bridge damage

Bradley O&D Report to the BPMC

Friday July 26, 2019

1. Bradley Lake KPI's – continued discussion and work on developing Bradley Lake KPI's
2. Bradley Lake Staffing requirements – Bradley O&D Committee unanimously approves hiring 2nd Operator Trainee in anticipation of impending operator retirements