

**ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT
2018 APPROVED BUDGET**

Date : 03/17/17



**ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT
2018 Budget Contents**

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**ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT
Overview of Budget Changes between FY17 Amended Budget and FY18 Approved Budget**

FY17 Amended Budgeted Utility Contributions	<u>19,543,371</u>
<i>From Schedule A</i>	
<u>REVENUES</u>	
Increase in projected Interest Earnings	<u>(90,000)</u>
	<u>(90,000)</u>
<u>EXPENSES</u>	
Decrease in O&M Operations	(560,723)
Decrease in R&C Fund Repayments	(469,476)
Increase in Non R&C Capital Projects	1,057,000
Decrease in Operating Reserve Fund Requirement	(26,614)
Increase in Debt Service	351,900
Increase in projected Arbitrage Transfer	<u>13,904</u>
	<u>365,991</u>
Net change in utility contributions	<u><u>275,991</u></u>
FY18 Approved Budgeted Utility Contributions	<u>19,819,362</u>

ALASKA ENERGY AUTHORITY
 BRADLEY LAKE HYDROELECTRIC PROJECT
 Budget Summary
 Schedule A

	<u>FY2015 ACTUALS</u>	<u>FY2016 ACTUALS</u>	<u>FY2017 AMENDED BUDGET</u>	<u>FY2018 APPROVED BUDGET</u>	<u>INC(DEC) FRM PY AMENDED BUDGET</u>
REVENUES, EXPENSES & CHANGES IN SURPLUS					
REVENUES					
UTILITY CONTRIBUTIONS	16,680,264	17,828,513	19,543,371	19,819,362	275,991
UTILITY CONTRIBUTIONS-Battle Creek	0	0	800,000	0	(800,000)
INTEREST INCOME	1,856,550	1,930,547	1,755,000	1,845,000	90,000
	<u>18,536,814</u>	<u>19,759,060</u>	<u>22,098,371</u>	<u>21,664,362</u>	<u>(434,009)</u>
EXPENSES					
OPERATIONS	3,977,749	4,273,634	5,154,110	4,593,387	(560,723)
RENEWALS/REPLACEMENTS (R&C FUND REPAYMENTS)	1,370,494	2,692,710	3,262,783	2,793,307	(469,476)
NON R&C FUND CAPITAL PURCHASES-SEE A1	254,039	26,444	250,000	1,307,000	1,057,000
NON R&C FUND CAPITAL PURCHASES-Battle Creek	0	0	800,000	0	(800,000)
TRANSFER TO (FROM) OPERATING RESERVE	160,366	(9,747)	(85,531)	(112,145)	(26,614)
DEBT SERVICE (net of Capital Reserve Reductions)	12,475,850	12,494,600	12,426,200	12,778,100	351,900
ARBITRAGE TRANSFER	298,316	281,419	290,809	304,713	13,904
	<u>18,536,814</u>	<u>19,759,060</u>	<u>22,098,371</u>	<u>21,664,362</u>	<u>(434,009)</u>
CURRENT YEAR					
SURPLUS (DEFICIT)	0	0	0	0	0
BEGINNING SURPLUS (DEFICIT)	0	0	0	0	0
ENDING SURPLUS (DEFICIT)	0	0	0	0	0
BALANCE SHEET					
ASSETS					
REVENUE FUND	431,911	385,309	0	0	0
OPERATING FUND	1,852,035	1,403,738	0	0	0
RECEIVABLE FROM R&C	20,212	1,055,961	0	0	0
OTHER RECEIVABLES	520,416	0	0	0	0
PREPAID EXPENSES	52,258	85,194	0	0	0
	<u>2,876,832</u>	<u>2,930,202</u>	<u>0</u>	<u>0</u>	<u>0</u>
LIABILITIES & SURPLUS					
LIABILITIES	1,462,367	809,828	0	0	0
PAYABLE TO UTILITIES O&M	1,394,253	1,064,413	0	0	0
PAYABLE TO UTILITIES R&C	20,212	1,055,961	0	0	0
	<u>2,876,832</u>	<u>2,930,202</u>	<u>0</u>	<u>0</u>	<u>0</u>
OTHER INFORMATION					
OPERATING RESERVE *	1,084,100	1,116,353	1,030,822	918,677	
MONTHLY CONTRIBUTIONS (FY18-accelerated over 6 months)	1,507,894	1,654,119	1,628,614	3,303,227	

* Required to be 20% of budgeted operating expense

ALASKA ENERGY AUTHORITY
 BRADLEY LAKE HYDROELECTRIC PROJECT
 Capital Purchases Not Funded by R&C Fund
 Schedule A-1

Capital Project Description	FY15 ACTUALS	FY16 ACTUALS	FY17 PROJECTED ACTUALS	FY18 APPROVED BUDGET	Comments
Replace Fish Water Valve Actuators	-	26,444	-	-	
DCS Security Interface for Data Access	141,703	-	-	-	
Lube Oil Purification System	47,723	-	-	-	
Replace 1998 Chevrolet Crew Cab Vehicle	32,306	-	-	-	
Replace 1990 Ford Single Cab Vehicle	32,306	-	-	-	
Replace/Automate Fish Water Valves & Actuators	-	-	25,000	225,000	Start in FY 2017 most of billing will be in FY2018 (\$250,000 total - \$25,000 FY17 and \$225,000 FY18)
Equipment storage shed (unheated bus barn)	-	-	-	100,000	Currently the heavy equipment is stored outside in the weather. The D Hittle report noted the deleterious effects of weather on the boom truck as well as the other equipment.
1 ton Flatbed with Plow	-	-	-	65,000	Heavier truck for snow removal and general hauling to the dam as existing pick up trucks are often too small for the loads. This replaces the curranty 1999 plow truck. It should be noted that the Boom truck is near end of life and this truck will replace the hauling function of the boom truck.
Battle Creek Bridge Repair Refurbishment (2)	-	-	-	182,000	These two bridges are decaying and if not repaired they will fail. Failure would be a very expensive proposition as the bridges would need to be completely removed.
Mobil Crane 40 to 50 tons (used)	-	-	-	100,000	Used to erect equipment building and assist in general construction like the bridge removal. This Crane is required for general Plant support as the Boom Truck is nearing end of life (See D Hittle report).
Replace Michigan Loader	-	-	-	350,000	Slated for replacement in 2020 in D Hittle report. Updated amount based on NC Machinery web site. This is a critical piece of plant equipment used extensively for snow removal and material handling the current loader is nearly 30 years old. It is difficult to get parts and materials for this equipment as Michigan is now owned by Volvo. We are seeing metal in the transmission oil and this indicates potential failure. We are currently changing oil often to extend the life of the loader.
Upgrade Crews Quarters Kitchen	-	-	-	90,000	The Crews Quarters kitchen is in sore need of repair and refurbish. The current kitchen is 30 years old and is not adequate to meet any health standards.
Replace 1988 Suburban Ambulance	-	-	-	65,000	The existing ambulance is 29 years old. Though called an ambulance it is a vehicle dedicated for transport of an injured individual with first aid supplies on board, backboard, stokes litter, splints, bandages, AED, oxygen and other first responder supplies. It is not possible to transport a person on a stretcher in a pickup truck in winter.
1/2 ton Pick up truck	-	-	-	35,000	Additional use truck for BLPP personnel
Upgrade Residence kitchens	-	-	-	75,000	The kitchens and bathrooms in the residences date from 1991 and are in poor to fair condition. They have seen 30 years of continuous use. This is to update all four kitchens in the residences.
Replace High Bay Lighting in Power Plant	-	-	-	20,000	Replace existing HID lighting with modern energy efficient light fixtures. Based on an energy cost at Bradley of \$.09 per KWh these fixtures will have a positive payback in 2 years. These fixtures will also reduce maintenance costs due to lack of the need to replace bulbs
Total Non R&C Capital Purchases paid for by all utilities	254,039	26,444	25,000	1,307,000	
Battle Creek Diversion	-	-	800,000	-	
Total Non R&C Capital Purchases paid for by HEA, CEA, GVEA, MEA, Seward	-	-	800,000	-	
Total Non R&C Capital Purchases	254,039	26,444	825,000	1,307,000	

**ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT**

Operations & Maintenance Budget

Schedule B

Summary Budget by Participant

HEA	3,052,652	HEA	3,365,387	HEA	3,209,154	HEA	2,704,303
CEA	553,000	CEA	408,098	CEA	190,187	CEA	183,499
AEA	1,814,850	AEA	1,808,280	AEA	1,754,770	AEA	1,705,585

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	Amended Budget	Actual	(Over) Under Budget to date	Amended Budget	Actual	(Over) Under Budget to date	Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	Approved Budget	
Summary by cost type											
Labor & Benefits	1,986,848	1,713,440	273,408	2,143,223	1,738,336	404,887	2,005,079	744,386	1,260,693	1,889,814	(115,265)
Travel	35,410	15,528	19,882	98,600	13,796	84,804	132,950	10,255	122,695	76,950	(56,000)
Training	38,731	26,569	12,162	38,731	10,819	27,912	49,300	1,619	47,681	49,300	-
Contractual	871,280	618,735	252,545	1,205,659	813,606	392,053	1,217,418	375,639	841,779	841,062	(376,356)
Supplies & Materials	435,919	224,296	211,623	275,760	95,952	179,808	229,358	29,114	200,244	183,345	(46,013)
Other Costs	593,797	225,712	368,085	451,846	375,357	76,489	381,744	111,062	270,682	387,818	6,074
Equipment & Machinery	30,130	23,711	6,419	33,130	6,051	27,079	11,500	850	10,650	7,000	(4,500)
Maintenance Projects	60,000	27,414	32,586	13,000	3,457	9,543	-	-	-	-	-
Administrative Costs	1,368,387	1,102,344	266,043	1,321,817	1,216,260	105,557	1,126,761	511,053	615,708	1,158,098	31,337
	5,420,502	3,977,749	1,442,753	5,581,766	4,273,634	1,308,131	5,154,110	1,783,977	3,370,134	4,593,387	(560,723)
FERC 535 - Operation Supervision & Engineering											
Operations Sup/Eng											
Bradley Lake Operating											
Labor & Benefits	291,632	282,780	8,852	304,235	321,664	(17,429)	299,649	130,170	169,479	265,587	(34,062)
Travel	8,610	12,894	(4,284)	9,500	9,281	219	10,450	8,496	1,954	10,450	-
Training	7,904	4,116	3,788	7,904	2,080	5,824	9,300	-	9,300	9,300	-
Contractual	1,445	-	1,445	1,445	-	1,445	1,400	-	1,400	1,000	(400)
Supplies & Materials	6,203	344	5,859	6,203	346	5,857	4,100	-	4,100	4,000	(100)
Bradley Lake Operating Total	315,794	300,134	15,660	329,287	333,371	(4,084)	324,899	138,666	186,233	290,337	(34,562)
FERC 535 - Operation Supervision & Engineering Total	315,794	300,134	15,660	329,287	333,371	(4,084)	324,899	138,666	186,233	290,337	(34,562)
FERC 537 - Hydraulic Expenses											
Hydraulic Expenses											
Bradley Lake Operating											
Labor & Benefits	95,056	76,200	18,856	95,273	81,677	13,596	92,746	33,446	59,300	94,453	1,707
Contractual	19,504	8,000	11,504	17,180	-	17,180	4,000	5,647	(1,647)	2,000	(2,000)
Supplies & Materials	2,608	-	2,608	2,608	1,277	1,331	2,900	179	2,721	2,000	(900)
Bradley Lake Operating Total	117,168	84,200	32,968	115,061	82,954	32,107	99,646	39,272	60,374	98,453	(1,193)
FERC 537 - Hydraulic Expenses Total	117,168	84,200	32,968	115,061	82,954	32,107	99,646	39,272	60,374	98,453	(1,193)

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	FY15 Amended Budget	Actual	(Over) Under Budget to date	FY16 Amended Budget	Actual	(Over) Under Budget to date	FY17 Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	FY18 Approved Budget	
FERC 538 - Electric Expenses											
Electric Expenses											
Bradley Lake Operating											
Labor & Benefits	224,000	234,351	(10,351)	257,107	215,440	41,667	242,940	98,375	144,564	232,294	(10,646)
Travel	-	-	-	-	-	-	7,000	1,759	5,241	7,000	-
Training	30,827	18,383	12,444	30,827	8,739	22,088	25,000	1,619	23,381	25,000	-
Contractual	21,342	14,055	7,287	3,342	1,400	1,942	2,000	1,400	600	2,000	-
Supplies & Materials	6,232	2,184	4,048	12,232	6,241	5,991	8,500	4,214	4,286	9,732	1,232
Bradley Lake Operating Total	282,401	268,973	13,428	303,508	231,820	71,688	285,440	107,367	178,072	276,026	(9,414)
FERC 538 - Electric Expenses Total	282,401	268,973	13,428	303,508	231,820	71,688	285,440	107,367	178,072	276,026	(9,414)
FERC 539 - Misc. Hydraulic Power Generation Expenses											
Misc Hydro Power Exp											
Bradley Lake Operating											
Labor & Benefits	192,000	114,373	77,627	189,473	158,532	30,941	178,991	73,876	105,116	179,530	539
Training	-	4,070	(4,070)	-	-	-	15,000	-	15,000	15,000	-
Contractual	239,571	142,752	96,819	315,249	285,812	29,437	297,048	95,836	201,212	287,525	(9,523)
Supplies & Materials	94,878	18,473	76,405	22,000	19,041	2,959	17,900	7,258	10,642	17,900	-
Bradley Lake Operating Total	526,449	279,668	246,781	526,722	463,385	63,337	508,939	176,970	331,969	499,955	(8,984)
BRADLEY CIRCUITS/RADIO TO BERNICE LK											
Other Costs	30,000	28,740	1,260	30,000	31,059	(1,059)	35,695	17,848	17,847	35,695	-
BRADLEY CIRCUITS/RADIO TO BERNICE LK Total	30,000	28,740	1,260	30,000	31,059	(1,059)	35,695	17,848	17,847	35,695	-
BRADLEY CIRCUITS BERNICE LK TO ANCH											
Other Costs	30,000	31,485	(1,485)	28,746	29,864	(1,118)	29,773	14,770	15,003	29,773	-
BRADLEY CIRCUITS BERNICE LK TO ANCH Total	30,000	31,485	(1,485)	28,746	29,864	(1,118)	29,773	14,770	15,003	29,773	-
FERC 539 - Misc. Hydraulic Power Generation Expenses Total	586,449	339,893	246,556	585,468	524,308	61,160	574,407	209,588	364,820	565,423	(8,984)
FERC 540 - Rents											
FERC Land Use Fee											
Bradley Lake Operating											
Other Costs	180,000	137,230	42,770	183,000	279,876	(96,876)	312,176	78,044	234,132	318,000	5,824
Bradley Lake Operating Total	180,000	137,230	42,770	183,000	279,876	(96,876)	312,176	78,044	234,132	318,000	5,824
FERC 540 - Rents Total	180,000	137,230	42,770	183,000	279,876	(96,876)	312,176	78,044	234,132	318,000	5,824

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	FY15 Amended Budget	Actual	(Over) Under Budget to date	FY16 Amended Budget	Actual	(Over) Under Budget to date	FY17 Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	FY18 Approved Budget	
FERC 541 - Maintenance Supervision & Engineering											
Maint Supervision/Eng											
Bradley Lake Operating											
Labor & Benefits	214,230	197,018	17,212	222,118	239,299	(17,181)	224,284	94,624	129,660	272,586	48,302
Bradley Lake Operating Total	214,230	197,018	17,212	222,118	239,299	(17,181)	224,284	94,624	129,660	272,586	48,302
FERC 541 - Maintenance Supervision & Engineering Total	214,230	197,018	17,212	222,118	239,299	(17,181)	224,284	94,624	129,660	272,586	48,302
FERC 542 - Maintenance of Structures											
Maintenance of Structures											
Bradley Lake Operating											
Labor & Benefits	96,200	75,264	20,936	95,273	89,890	5,383	92,746	33,368	59,378	94,453	1,707
Contractual	-	-	-	-	-	-	10,000	-	10,000	10,000	-
Supplies & Materials	64,273	10,009	54,264	61,273	23,398	37,875	53,713	398	53,315	53,713	-
Equipment & Machinery	8,500	10,769	(2,269)	11,500	6,051	5,449	11,500	850	10,650	7,000	(4,500)
Maintenance Projects	6,000	-	6,000	4,000	1,827	2,173	-	-	-	-	-
Bradley Lake Operating Total	174,973	96,042	78,931	172,046	121,166	50,880	167,959	34,616	133,343	165,166	(2,793)
FERC 542 - Maintenance of Structures Total	174,973	96,042	78,931	172,046	121,166	50,880	167,959	34,616	133,343	165,166	(2,793)
FERC 543 - Maintenance of Reservoirs, Dams & Waterways											
Maint Res, Dams, W Ways											
Bradley Lake Operating											
Labor & Benefits	49,950	42,309	7,641	51,276	42,848	8,428	50,409	49,440	969	50,610	201
Contractual	28,769	630	28,139	5,200	9,080	(3,880)	5,200	63,704	(58,504)	6,500	1,300
Bradley Lake Operating Total	78,719	42,939	35,780	56,476	51,928	4,548	55,609	113,144	(57,535)	57,110	1,501
BRADLEY NUKA REPAIR											
Contractual	-	-	-	-	-	-	15,000	409	14,591	15,000	-
Supplies & Materials	-	787	(787)	-	-	-	-	-	-	-	-
Equipment & Machinery	21,630	12,942	8,688	21,630	-	21,630	-	-	-	-	-
BRADLEY NUKA REPAIR Total	21,630	13,729	7,901	21,630	-	21,630	15,000	409	14,591	15,000	-
BRADLEY POWER TUNNEL MAINT (Dam)											
Contractual	56,000	43,131	12,869	20,000	3,673	16,327	15,000	311	14,689	15,000	-
BRADLEY POWER TUNNEL MAINT (Dam) Total	56,000	43,131	12,869	20,000	3,673	16,327	15,000	311	14,689	15,000	-
BRADLEY POWER TUNNEL DRAIN CLN/INSP (P/House)											
Maintenance Projects	9,000	-	9,000	9,000	1,557	-	-	-	-	-	-
BRADLEY POWER TUNNEL DRAIN CLN/INSP (P/House) Total	9,000	-	9,000	9,000	1,557	-	-	-	-	-	-
FERC 543 - Maintenance of Reservoirs, Dams & Waterways Total	165,349	99,799	65,550	107,106	57,158	49,948	85,609	113,864	(28,255)	87,110	1,501

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	FY15 Amended Budget	Actual	(Over) Under Budget to date	FY16 Amended Budget	Actual	(Over) Under Budget to date	FY17 Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	FY18 Approved Budget	
FERC 544 - Maintenance of Electric Plant											
Maintenance of Elec Plant											
Bradley Lake Operating											
Labor & Benefits	379,600	323,757	55,843	381,093	336,417	44,676	370,983	134,127	236,856	379,102	8,119
Travel	2,800	158	2,642	3,500	3,270	230	4,500	-	4,500	4,500	-
Contractual	61,849	33,765	28,084	91,443	69,651	21,792	79,000	10,607	68,393	70,000	(9,000)
Supplies & Materials	27,245	20,650	6,595	27,245	10,142	17,103	27,245	5,867	21,378	20,000	(7,245)
Maintenance Projects	25,000	25,000	-	-	-	-	-	-	-	-	-
Bradley Lake Operating Total	496,494	403,330	93,164	503,281	419,480	83,801	481,728	150,601	331,127	473,602	(8,126)
FERC 544 - Maintenance of Electric Plant Total	496,494	403,330	93,164	503,281	419,480	83,801	481,728	150,601	331,127	473,602	(8,126)
FERC 545 - Maintenance of Misc. Hydraulic Plant											
Maint of Misc Hydr Plant											
Bradley Lake Operating											
Labor & Benefits	95,680	78,186	17,494	95,273	94,653	620	92,746	33,825	58,921	94,453	1,707
Contractual	3,900	170	3,730	3,900	-	3,900	3,900	-	3,900	3,900	-
Supplies & Materials	71,281	40,220	31,061	43,000	28,044	14,956	43,000	6,626	36,374	35,000	(8,000)
Bradley Lake Operating Total	170,861	118,576	52,285	142,173	122,697	19,476	139,646	40,451	99,195	133,353	(6,293)
BRADLEY FISH WATER DSGN/MIDDLE FORK SHACK IMPR											
Contractual	30,900	-	30,900	24,900	-	24,900	20,000	-	20,000	-	(20,000)
BRADLEY FISH WATER DSGN/MIDDLE FORK SHACK IMPR Total	30,900	-	30,900	24,900	-	24,900	20,000	-	20,000	-	(20,000)
FERC 545 - Maintenance of Misc. Hydraulic Plant Total	201,761	118,576	83,185	167,073	122,697	44,376	159,646	40,451	119,195	133,353	(26,293)
FERC 556 - System Control & Load Dispatching											
System Cntl & Load Disp											
Bradley Lake Operating											
Labor & Benefits	48,000	19,514	28,486	49,000	10,478	38,522	49,502	17,812	31,689	20,618	(28,884)
Contractual	5,000	-	5,000	8,500	31	8,469	60,500	2,364	58,136	53,000	(7,500)
Supplies & Materials	6,199	2,297	3,902	6,199	4,090	2,109	6,000	1,850	4,150	6,000	-
Bradley Lake Operating Total	59,199	21,811	37,388	63,699	14,599	49,100	116,002	22,026	93,976	79,618	(36,384)
BRADLEY POWERHOUSE PC'S											
Contractual	30,500	3,201	27,299	50,000	37,261	12,739	-	-	-	-	-
BRADLEY POWERHOUSE PC'S Total	30,500	3,201	27,299	50,000	37,261	12,739	-	-	-	-	-
BRADLEY DISPATCH REGULATIONS											
Maintenance Projects	20,000	-	20,000	-	-	-	-	-	-	-	-
BRADLEY DISPATCH REGULATIONS Total	20,000	-	20,000	-	-	-	-	-	-	-	-

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	FY15 Amended Budget	Actual	(Over) Under Budget to date	FY16 Amended Budget	Actual	(Over) Under Budget to date	FY17 Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	FY18 Approved Budget	
Snow Measurement											
Bradley Lake Operating											
Contractual	11,000	10,000	1,000	10,000	10,000	-	10,000	5,000	5,000	10,000	AEA
Bradley Lake Operating Total	11,000	10,000	1,000	10,000	10,000	-	10,000	5,000	5,000	10,000	-
Seismic Service											
Bradley Lake Operating											
Contractual	60,000	64,477	(4,477)	62,000	60,370	1,630	60,370	35,255	25,115	62,000	AEA
Bradley Lake Operating Total	60,000	64,477	(4,477)	62,000	60,370	1,630	60,370	35,255	25,115	62,000	1,630
Streamgauging Serv											
Bradley Lake Operating											
Contractual	295,000	296,409	(1,409)	296,000	301,338	(5,338)	310,000	78,582	231,418	213,137	AEA
Bradley Lake Operating Total	295,000	296,409	(1,409)	296,000	301,338	(5,338)	310,000	78,582	231,418	213,137	(96,863)
Permits											
Bradley Lake Operating											
Other Costs	100	350	(250)	100	350	(250)	100	100	-	350	AEA
Bradley Lake Operating Total	100	350	(250)	100	350	(250)	100	100	-	350	250
FERC 556 - System Control & Load Dispatching Total	475,799	396,248	79,551	481,799	423,918	57,881	496,472	140,963	355,509	365,105	(131,367)
FERC 562 - Station Expenses											
Station Expenses											
CEA SVC/Substation Maintenance Contract											
Labor & Benefits	300,500	269,688	30,812	251,852	147,344	104,508	130,414	45,324	85,090	123,726	(6,688)
Travel	24,000	2,476	21,524	26,000	(31)	26,031	6,000	-	6,000	6,000	-
Contractual	6,500	2,145	4,355	6,500	1,244	5,256	4,000	3,447	554	4,000	-
Supplies & Materials	157,000	129,332	27,668	95,000	2,118	92,882	16,000	2,722	13,278	16,000	-
Other Costs	-	1,085	(1,085)	-	9,208	(9,208)	4,000	300	3,700	4,000	-
Maintenance Projects	-	2,414	(2,414)	-	73	(73)	-	-	-	-	-
CEA SVC/Substation Maintenance Contract Total	488,000	407,140	80,860	379,352	159,956	219,396	160,414	51,792	108,621	153,726	(6,688)
FERC 562 - Station Expenses Total	488,000	407,140	80,860	379,352	159,956	219,396	160,414	51,792	108,621	153,726	(6,688)

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	FY15 Amended Budget	Actual	(Over) Under Budget to date	FY16 Amended Budget	Actual	(Over) Under Budget to date	FY17 Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	FY18 Approved Budget	
FERC 571 - Maintenance of Overhead Lines											
Maint of OH Lines											
Bradley Lake Operating											
Labor & Benefits	-	-	-	146,320	94	146,226	179,671	-	179,671	82,402	(97,269)
Travel	-	-	-	54,600	1,276	53,324	95,000	-	95,000	49,000	(46,000)
Contractual	-	-	-	90,000	33,746	56,254	50,000	-	50,000	86,000	36,000
Supplies & Materials	-	-	-	-	1,255	(1,255)	50,000	-	50,000	19,000	(31,000)
Other Costs	353,697	26,822	326,875	-	-	-	-	-	-	-	-
Bradley Lake Operating Total	353,697	26,822	326,875	290,920	36,371	254,549	374,671	-	374,671	236,402	(138,269)
BRADLEY JUNCTION SWITCH REMOVAL											
Travel	-	-	-	-	-	-	5,000	-	5,000	-	(5,000)
Contractual	-	-	-	-	-	-	70,000	73,076	(3,076)	-	(70,000)
Other Costs	-	-	-	210,000	25,000	185,000	-	-	-	-	-
BRADLEY JUNCTION SWITCH REMOVAL Total	-	-	-	210,000	25,000	185,000	75,000	73,076	1,924	-	(75,000)
MARKER BALL REPLACEMENT											
Labor & Benefits	-	-	-	4,929	-	4,929	-	-	-	-	-
Travel	-	-	-	5,000	-	5,000	5,000	-	5,000	-	(5,000)
Contractual	-	-	-	200,000	-	200,000	200,000	-	200,000	-	(200,000)
MARKER BALL REPLACEMENT Total	-	-	-	209,929	-	209,929	205,000	-	205,000	-	(205,000)
FERC 571 - Maintenance of Overhead Lines Total	353,697	26,822	326,875	710,849	61,371	649,478	654,671	73,076	581,595	236,402	(418,269)
FERC 920 & 930 - Administrative Expense											
AEA Bradley Fixed Admin Fees											
Bradley Lake Operating											
Administrative Costs	200,000	200,000	-	200,000	200,000	-	200,000	100,000	100,000	200,000	-
Bradley Lake Operating Total	200,000	200,000	-	200,000	200,000	-	200,000	100,000	100,000	200,000	-
Operating Committee Exp-Audit											
Bradley Lake Operating											
Administrative Costs	116,250	15,500	100,750	116,250	101,530	14,720	16,494	16,500	(6)	16,800	306
Bradley Lake Operating Total	116,250	15,500	100,750	116,250	101,530	14,720	16,494	16,500	(6)	16,800	306
Operating Committee Exp-Legal											
Bradley Lake Operating											
Administrative Costs	25,000	22,110	2,890	25,000	77,719	(52,719)	25,000	16,524	8,476	25,000	-
Bradley Lake Operating Total	25,000	22,110	2,890	25,000	77,719	(52,719)	25,000	16,524	8,476	25,000	-

	FY15			FY16			FY17			FY18	Increase (Decrease) from PY
	FY15 Amended Budget	Actual	(Over) Under Budget to date	FY16 Amended Budget	Actual	(Over) Under Budget to date	FY17 Amended Budget	Actual @ 12/31/16	(Over) Under Budget to date	FY18 Approved Budget	
Operat Committee Exp-Arbitrage											
Bradley Lake Operating											
Administrative Costs	5,200	3,630	1,570	3,630	7,010	(3,380)	3,630	-	3,630	3,380	AEA (250)
Bradley Lake Operating Total	5,200	3,630	1,570	3,630	7,010	(3,380)	3,630	-	3,630	3,380	(250)
Trust & Account Fees											
Bradley Lake Operating											
Administrative Costs	12,300	11,918	382	12,300	11,918	382	12,000	5,959	6,041	11,918	AEA (82)
Bradley Lake Operating Total	12,300	11,918	382	12,300	11,918	382	12,000	5,959	6,041	11,918	(82)
Misc Admin											
Bradley Lake Operating											
Administrative Costs	-	-	-	-	8,375	(8,375)	-	-	-	10,000	AEA 10,000
Bradley Lake Operating Total	-	-	-	-	8,375	(8,375)	-	-	-	10,000	10,000
FERC 920 & 930 - Administrative Expense Total	358,750	253,158	105,592	357,180	406,552	(49,372)	257,124	138,983	118,141	267,098	9,974
FERC 924 & 925 - Insurance Premiums											
Insurance Premiums											
Bradley Lake Operating											
Administrative Costs	510,000	510,799	(799)	510,000	477,981	32,019	500,000	250,747	249,253	525,000	AEA 25,000
Administrative Costs	64,637	52,121	12,516	64,637	52,541	12,096	64,637	26,104	38,533	56,000	HEA (8,637)
Bradley Lake Operating Total	574,637	562,920	11,717	574,637	530,522	44,115	564,637	276,852	287,785	581,000	16,363
Risk Management											
Bradley Lake Operating											
Administrative Costs	35,000	30,000	5,000	-	-	-	-	-	-	-	CEA -
Bradley Lake Operating Total	35,000	30,000	5,000	-	-	-	-	-	-	-	-
FERC 924 & 925 - Insurance Premiums Total	609,637	592,920	16,717	574,637	530,522	44,115	564,637	276,852	287,785	581,000	16,363
FERC 928 - Regulatory Commission Expenses											
FERC Admin Fees											
Administrative Costs	250,000	150,519	99,481	210,000	182,885	27,115	180,000	-	180,000	185,000	AEA 5,000
Bradley Lake Operating Total	250,000	150,519	99,481	210,000	182,885	27,115	180,000	-	180,000	185,000	5,000
FERC Related Prof Services											
FERC Part 12 Inspection											
Administrative Costs	-	-	-	55,000	35,663	19,337	25,000	1,362	23,638	-	AEA (25,000)
Contractual Engineer-FERC license issues											
Administrative Costs	150,000	105,747	44,253	125,000	60,638	64,362	100,000	93,856	6,144	125,000	AEA 25,000
Bradley Lake Operating Total	150,000	105,747	44,253	180,000	96,301	83,699	125,000	95,218	29,782	125,000	-
FERC 928 - Regulatory Commission Expenses Total	400,000	256,266	143,734	390,000	279,186	110,814	305,000	95,218	209,782	310,000	5,000
Total Bradley Lake Budget	5,420,502	3,977,749	1,442,753	5,581,766	4,273,634	1,308,131	5,154,110	1,783,977	3,370,134	4,593,387	(560,723)

**ALASKA ENERGY AUTHORITY
BRADLEY LAKE HYDROELECTRIC PROJECT
Monthly Utility Contributions
Schedule C**

<u>POWER PURCHASER</u>	<u>PERCENT SHARE</u>	<u>FY2015 Amended BUDGET</u>	<u>FY2016 Amended BUDGET</u>	<u>FY2017 Amended BUDGET</u>	<u>FY2018 APPROVED BUDGET</u>	<u>FY2017 to FY2018 Change</u>
CHUGACH ELECTRIC	30.4%	5,500,800	6,034,236	5,941,176	6,025,086	83,910
MUNICIPALITY OF ANCHORAGE	25.9%	4,686,540	5,141,004	5,061,732	5,133,210	71,478
HOMER ELECTRIC	12.0%	2,171,364	2,381,928	2,345,208	2,378,328	33,120
MATANUSKA ELECTRIC	13.8%	2,497,068	2,739,216	2,696,988	2,735,076	38,088
GOLDEN VALLEY ELECTRIC	16.9%	3,058,008	3,354,552	3,302,832	3,349,470	46,638
CITY OF SEWARD	1.0%	180,948	198,492	195,432	198,192	2,760
Rounding			(5)	3		(3)
	100.0%	18,094,728	19,849,423	19,543,371	19,819,362	275,991

<u>POWER PURCHASER</u>	<u>PERCENT SHARE</u>	<u>FY2015 MONTHLY</u>	<u>FY2016 MONTHLY</u>	<u>FY2017 MONTHLY</u>	<u>FY2018 July 1 through December 1 ONLY</u>	<u>FY2018 Change</u>
CHUGACH ELECTRIC	30.4%	458,400	502,853	495,098	1,004,181	509,083
MUNICIPALITY OF ANCHORAGE	25.9%	390,545	428,417	421,811	855,535	433,724
HOMER ELECTRIC	12.0%	180,947	198,494	195,434	396,388	200,954
MATANUSKA ELECTRIC	13.8%	208,089	228,268	224,749	455,846	231,097
GOLDEN VALLEY ELECTRIC	16.9%	254,834	279,546	275,236	558,245	283,009
CITY OF SEWARD	1.0%	15,079	16,541	16,286	33,032	16,746
	100.0%	1,507,894	1,654,119	1,628,614	3,303,227	1,674,613

***In FY18 contributions will be paid evenly over the first six months, beginning July 1, 2017 and ending December 1, 2017.
No payments will be due from January 1, 2018 through June 30, 2018.
(These accelerated payments are due to the cash flow needs of the R&C fund to pay for the SVC replacement project with total estimated cost of \$8.7 million)**

ALASKA ENERGY AUTHORITY
 BRADLEY LAKE HYDROELECTRIC PROJECT
 R&C Fund Disbursements and Repayments
 Schedule D

Description	Actual	Actual	Actual	Actual	PROJECTED	PROJECTED	PROJECTED	PROJECTED
	Disburse	TO REPAY at 06/30/15	Disburse	TO REPAY at 06/30/16	& Actual @ 12/31/16 * Disburse	TO REPAY at 06/30/17	Disburse	TO REPAY at 06/30/18
R&C FUND PROJECTS								
Governor	627,738.80	4,052,070.14	0.00	4,052,070.14	0.00	4,052,070.14	0.00	4,052,070.14
Replace RFLS	0.00	251,092.69	0.00	251,092.69	0.00	251,092.69	0.00	251,092.69
Replace Runners	0.00	1,946,732.79	0.00	1,946,732.79	0.00	1,946,732.79	0.00	1,946,732.79
Replace cable from dam to power house	0.00	2,321,922.94	0.00	2,321,922.94	0.00	2,321,922.94	0.00	2,321,922.94
Replace power system stabilizer	0.00	619,205.10	0.00	619,205.10	0.00	619,205.10	0.00	619,205.10
Replace two RTUs	0.00	86,905.27	0.00	86,905.27	0.00	86,905.27	0.00	86,905.27
Culvert Repairs	0.00	675,966.79	0.00	675,966.79	0.00	675,966.79	0.00	675,966.79
Trans Towers Frost Jacking Repairs	0.00	887,596.62	0.00	887,596.62	0.00	887,596.62	0.00	887,596.62
Replace Plant and SCADA Controls	0.00	1,344,683.05	0.00	1,344,683.05	0.00	1,344,683.05	0.00	1,344,683.05
Vibration Monitoring System	0.00	490.00	0.00	490.00	0.00	490.00	0.00	490.00
Battle Creek Feasibility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fire Alarm System Replacement	0.00	0.00	0.00	0.00	0.00	0.00	350,000.00	350,000.00
Battle Creek Diversion	43,605.35	994,333.83	149,683.91	1,144,017.74	2,000.00	1,146,017.74	0.00	1,146,017.74
Replace Electro-Mechanical Relays	0.00	1,277,197.06	0.00	1,277,197.06	0.00	1,277,197.06	0.00	1,277,197.06
Fishwater Screen Debris Removal	21,929.45	21,929.45	290,306.98	312,236.43	0.00	312,236.43	0.00	312,236.43
Turbine Nozzle Repair	96,423.49	96,423.49	1,320,234.57	1,416,658.06	6,201.06	1,422,859.12	0.00	1,422,859.12
SVC replacement Daves Creek Soldotna	0.00	0.00	1,570,577.34	1,570,577.34	5,773,822.66	7,344,400.00	1,360,400.00	8,704,800.00
Spillway Raise	0.00	0.00	0.00	0.00	0.00	0.00	350,000.00	350,000.00
	789,697.09	14,576,549.22	3,330,802.80	17,907,352.02	5,782,023.72	23,689,375.74	2,060,400.00	25,749,775.74
Current Year R&C Repayment		(1,146,123.00)		(3,461,591.16)		(3,262,788.00)		(2,793,306.63)
Adjust bal to \$5 mill (won't be corrected until year end)		0.00		0.00		0.00		0.00
Less Interest in Fund Applied to Repayment		(244,582.41)		(287,080.93)		(361,777.62)		(143,000.00)
Net Transfer from Revenue Fund		(1,390,705.41)		(3,748,672.09)		(3,624,565.62)		(2,936,306.63)
Cumulative Prior Years R&C Repayments		(11,346,045.42)		(12,716,539.31)		(15,409,249.92)		(17,920,612.74)
Due back to Utilities		20,211.51		1,055,961.48		1,113,202.79		143,000.00
R&C Cumulative Interest (Retained) Applied As Part of Repayment		0.00		0.00		0.00		0.00
Net R&C Repayments		(11,325,833.91)		(11,660,577.83)		(14,296,047.12)		(17,777,612.74)
NET DUE TO R&C FUND		1,860,009.90		2,498,102.10		5,768,763.00		5,035,856.37
R&C FUND CASH FLOW PROJECTION								
Beginning Investment Balance		3,015,716.76		3,212,607.32		5,623,509.49		1,931,991.64
Disbursements-current year		(766,797.23)		(1,265,152.32)		(4,194,471.88)		(2,060,400.00)
Disbursements-prior year accrued		(177,276.20)		(22,899.86)		(2,065,650.48)		(1,587,551.84)
R&C Repayment to utilities		(179,788.03)		(20,211.52)		(1,055,961.11)		(1,113,202.79)
Net other cash inflow(outflow)		(69,953.03)		(29,506.22)		0.00		0.00
Current year interest earnings		244,582.41		287,080.93		361,777.62		143,000.00
Current year Participants Contributions to R&C		1,146,123.00		3,461,591.16		3,262,788.00		2,793,306.63
Ending Investment Balance		3,212,607.68		5,623,509.49		1,931,991.64		107,143.64
Accrued R&C Payable at year end-Due to Utilities		(20,211.51)		(1,055,961.11)		(1,113,202.79)		(143,000.00)
Accrued due from Revenue fund (debt service transfer)		69,953.03						
R&C payable back to Revenue fund		(99,459.25)						
Accrued R&C vendor Payable at year end		(22,899.85)		(2,065,650.48)		(1,587,551.84)		0.00
PROJECTED NET DUE + ENDING INVESTMENT BALANCE		5,000,000.00		5,000,000.00		5,000,000.00		5,000,000.00
REPAYMENT AMOUNT								
\$756,665.11 X 25% all 4 years								
\$1,455,830.05 X 25% all 4 years	4th yr	363,957.51						
\$1,401,948.53 X 25% all 4 years	3rd yr	350,487.13	4th yr	350,487.13				
\$1,834,499.92 X 25% yr 1 25% yr 2 50% yr 3	2nd yr	458,624.98	final yr	917,249.96				
\$789,697.09 X 25% yr 1 75% yr 2	1st yr	197,424.27	final yr	592,272.82				
\$3,330,802.80 X 25% yr 1 32% yr 2 25% yr 3 18% yr 4	1st yr		1st yr	832,700.70	2nd yr	1,065,856.90	3rd yr	832,700.70
\$5,782,023.72 x 25% all 4 years					1st yr	1,445,505.93	2nd yr	1,445,505.93
\$2,060,400 x 25% all 4 years							1st yr	515,100.00
		1,370,493.90		2,692,710.61		2,511,362.83		2,793,306.63

total repaid at 6/30/18	remaining to pay at 7/1/18	FY19	FY20	FY21
1,401,948.53	-			-
1,834,499.92	-			-
789,697.09	-			-
2,731,258.30	(599,544.50)	599,544.50		-
2,891,011.86	(2,891,011.86)	1,445,505.93	1,445,505.93	-
515,100.00	(1,545,300.00)	515,100.00	515,100.00	515,100.00
	(5,035,856.36)	2,560,150.43	1,960,605.93	515,100.00

*FY 17 projects reflect budgeted and actual numbers for different projects depending on which is higher (budgeted or actual), so the R&C repayment amount reflects a conservative amount