Alaska Intertie FY22 Proposed Budget - Draft V5

FERC 920 - AEA Administrative Costs Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal) FERC 566 - Miscellaneous Transmission Expense Misc Studies: System Reserves Study, PSS/E maint, AGC Study LIDAR study (complete lidar, vegetation, PLS CADD file with drawings, structure/foundation movement, infrared, and imaging) Intertie Administration Costs Tot	99,383 99,383 22,364 22,364 15,680 15,680	85,139 85,139 18,211 18,211 20,719 20,719 124,069	101,058 101,058 11,533 11,533 69,023 69,023 181,614	103,738 103,738 9,996 9,996 68,978 226,125 295,103 408,836 1,992,198	90,000 90,000 40,000 40,000 290,000 300,000 590,000 720,000 2,727,385	100,000 100,000 17,500 17,500 200,000 - 200,000 317,500	Per AEA Per IMC Chair per IOC per IOC
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal) FERC 566 - Miscellaneous Transmission Expense Misc Studies: System Reserves Study, PSS/E maint, AGC Study LIDAR study (complete lidar, vegetation, PLS CADD file with drawings, structure/foundation movement, infrared, and imaging) Intertie Administration Costs Tot	99,383 99,383 22,364 22,364 15,680 15,680	85,139 18,211 18,211 20,719 20,719 124,069	101,058 11,533 11,533 69,023 69,023	103,738 9,996 9,996 68,978 226,125 295,103 408,836	90,000 40,000 40,000 290,000 300,000 590,000 720,000	100,000 17,500 17,500 200,000 - 200,000 317,500	Per IMC Chair per IOC
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal) FERC 566 - Miscellaneous Transmission Expense Misc Studies: System Reserves Study, PSS/E maint, AGC Study LIDAR study (complete lidar, vegetation, PLS CADD file with drawings, structure/foundation movement, infrared, and imaging)	99,383 99,383 22,364 22,364 15,680	85,139 18,211 18,211 20,719	101,058 11,533 11,533 69,023	9,996 9,996 68,978 226,125 295,103	90,000 40,000 40,000 290,000 300,000	100,000 17,500 17,500 200,000	Per IMC Chair per IOC
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal) FERC 566 - Miscellaneous Transmission Expense Misc Studies: System Reserves Study, PSS/E maint, AGC Study LIDAR study (complete lidar, vegetation, PLS CADD file with drawings,	99,383 99,383 22,364 22,364 15,680	85,139 18,211 18,211 20,719	101,058 11,533 11,533 69,023	103,738 9,996 9,996 68,978 226,125	90,000 40,000 40,000 290,000 300,000	17,500 17,500 200,000	Per IMC Chair per IOC
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal) FERC 566 - Miscellaneous Transmission Expense Misc Studies: System Reserves Study, PSS/E maint, AGC Study LIDAR study (complete lidar, vegetation, PLS CADD file with drawings,	99,383 99,383 22,364 22,364	85,139 18,211 18,211	101,058 11,533 11,533	103,738 9,996 9,996 68,978	90,000 40,000 40,000 290,000	100,000 17,500 17,500	Per IMC Chair per IOC
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal) FERC 566 - Miscellaneous Transmission Expense	99,383 99,383 22,364 22,364	85,139 18,211 18,211	101,058 11,533 11,533	9,996 9,996	90,000 40,000 40,000	100,000 17,500 17,500	Per IMC Chair
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs IMC Administrative Costs (Audit, meetings, legal)	99,383 99,383 22,364	85,139 18,211	101,058 11,533	103,738 9,996	90,000 40,000	100,000 17,500	
Personal Services, Travel and Other Costs FERC 920 - IMC Administrative Costs	99,383 99,383	85,139	101,058	103,738	90,000	100,000	
Personal Services, Travel and Other Costs	99,383						Per AEA
		85.139	101.058	103.738	90.000	100.000	Per AEA
	ui 043,302.00						
Intertie Cost of Improvements Tot	al 843,382.08	6,324	-	-	-	-	
	843,382	6,324	-	-	·	-	
MEA - Replace Protective Relay Schemes Douglas	843,382	6,324	-	-	-	-	Per MEA
FERC 570 - Maintenance of Station Equipment	,,	,,	,	,,	,,	,,	
Intertie Operating Costs Tot		1,484,052	781,413	1,583,361	2,007,385	1,992,890	
	35,466	33,909	36,253	21,369	44,000	35,650	Aviation)
AK Intertie - Insurance	35,466	33,909	36,253	21,369	44,000	35,650	Umbrella) & MEA (includes
FERC 924 - Property Insurance							Per AEA (Gen Liab/Commercial
MEA - Equipment Repair and Replacement	771,108	1,187,634	278,383	1,064,736	1,398,485	1,146,000	. C. WILM 137 WIGINET DOIS FAA dil
MEA - Southern ROW Clearing	39,184	76,703	38,023 16,521	228,413 771,942	125,000 850,000	150,000 640,000	Per MEA Clearing from structure : Per MEA 137 Marker Balls FAA an
MEA - Southern Maint (Incl Ground and Climbing Inspect)	187,283	181,802	97,175	12,601	160,485	200,000	Per MEA structures 70-129
GVEA - Repair Tower 748 MEA - Special Patrols [Incl Helicopter Inspections]	486,740	677,877 4,571		-	3,000	5,000	Per GVEA Per MEA Patrols and Contractor II
GVEA - Northern ROW Clearing	15,321	99,382	89,493	36,721	130,000	73,000	Per GVEA
GVEA - Northern Maintenance GVEA - Northern Maintenance	42,580	147,299	37,171	15,059	130,000	78,000	Per GVEA
FERC 571 - Maintenance of Overhead Lines	362,057	123,305	337,598	389,445	384,000	665,340	
CEA - Telecomm Support (Douglas, Teeland, Anc-Fbks Leased Circuits)	31,403	2,125	-	-	10,000	-	Per CEA
MEA - Douglas Substation Breaker Replacement GVEA - Douglas Substation OOS relaying and communications	119,645 610		-	-	50,000	-	Per MEA Per GVEA
MEA - Douglas Substation 138 kV Bus Repair & BKR Inspections					75,000		Per MEA
CEA - Teeland Substation MEA - Douglas Substation	70,882 72,440	82,890 91	113,849 96	115,680 18,667	90,000 4,000	85,000	Per CEA Per MEA
GVEA - Cantwell Standby Generator Replacement				29,016	75,000		Per GVEA
GVEA - Perform Maintenance, repaint Reactors Gold Hill SVC Yard GVEA - Cantwell RTU, Recloser, & Transformer Protection replacement	-	-	-	-	-	80,000	Per GVEA Per GVEA
GVEA - Perform Maintenance, repaint Reactors Healy SVC Yard	6,785	19,820	60,414	127,717	10,000	- 80 000	Per GVEA
GVEA - Replace Battery Goldhill SVC	3,272		-	-	-	-	Per GVEA
GVEA - Cantwell Install Breakers or Load Break Switches GVEA - Cantwell 4S2 Switch Repair	- 3,778		-	-	-	266,000	Per GVEA Per GVEA
GVEA - Gold Hill SVC Cooling	-	-	-	-	-	65,000	Per GVEA
GVEA - Healy SVC Fire Alarm Panel Replacement	-	1,697	-	-	-	90,000	Per GVEA
GVEA - Healy, Teeland, Goldhill Dampers GVEA - Healy and Goldhill Digital Fault Recorders	-	-	59,016	-	-	90,000	Per GVEA Per IOC
GVEA - SCADA Maintenance Healy, Cantwell, Gold Hill	6,265	1,790	-	-	5,000	5,000	Per GVEA
FERC 570 - Maintenance of Station Equipment GVEA - Perform Maintenance - Healy, Cantwell, Goldhill	46,976	14,892	104,224	98,366	65,000	74,340	Per GVEA
FFDC F7O. Malakanana of Challes Faults	-			-	-	-	
MEA - Maintenance of Structures	-	-	-	-	-	-	I GI WILA
FERC 569 Maintenance of Structures		-	-	-	-	-	Per MEA
	7,900	7,900	7,900	6,100	7,900	7,900	
MEA - Talkeetna Storage PSSE key replacement	7,200	7,200	7,200	5,400	7,200	7,200	Fixed
Rents - Alaska Railroad	700	700	700	700	700	700	Fixed
FERC 567 - Transmission Expenses - Rents	118,618	124,105	111,603	94,248	165,000	130,000	
Misc Studies as needed (Cyber Security Study)	-	-	-	-	-	-	
SLMS Support and Intertie Ground Patrol	59,073	79,290	87,863	81,183	100,000	100,000	Per AEA
Private Line Telephone Service for AKI SCADA (GVEA) Cell Phone Comm. Svc for Weather Monitoring (Verizon)	47,810 11,736	32,793 12,022	11,718 12,022	4,167 8,898	50,000 15,000	18,000 12,000	Per GVEA Per AEA
FERC 566 - Miscellaneous Transmission Expense	·				•		
GVEA - Substation Electricity Usage	7,624 7,624	7,199 7,199	9,675 9,675	7,462 7,462	8,000 8,000	8,000 8,000	Per GVEA
FERC 562 - Station Operation Expenses	7.624	7 100	0.675	7.462	0.000	0.000	Dev CMEA
EXPENSES	2,760,783	2,449,301	2,313,001	2,091,630	2,170,346	2,290,710	
INTEREST TOTAL REVENUI	6,636 ES 2,760,783	32,412 2,449,361	16,611 2,515,661	259 2,091,650	2,170,546	2,290,710	
MEA	350,920	247,774	448,478	352,061	434,064	361,596	
ML&P CEA	285,075 298,554	146,246 166,406	237,938 258,090	101,217 240,065	231,217 250,065	225,259	FY22 - CEA combined with ML&P
GVEA	1,819,599	1,856,523	1,554,543	1,398,049	1,255,200	1,703,854	
<u>REVENUES</u>	Actual	Actual	Actual	@ 03/31/21	Budget	Budget	
	FY18	FY19	FY20	ACTUALS @ 03/31/21	FY21	FY22	
				FY21	Approved	Proposed	

5/14/2021

ALASKA INTERTIE FISCAL YEAR 2022 ENERGY PROJECTION

	True up to				
	Contract	GVEA	MEA	CEA	TOTAL
MONTH	Value	MWH	MWH	MWH	MWH
Jul	1,620	11,050	1,795	0	14,465
Aug	1,620	8,973	2,008	0	12,601
Sep	1,620	13,749	1,952	0	17,321
Oct	1,621	28,741	1,821	0	32,183
Nov	1,621	10,171	1,786	0	13,578
Dec	1,621	8,962	2,048	0	12,631
Jan	1,621	12,043	2,395	0	16,059
Feb	1,621	8,513	2,070	0	12,204
Mar	1,621	5,617	2,168	0	9,406
Apr	1,621	12,448	1,798	0	15,867
May	1,621	9,247	1,966	0	12,834
Jun	1,621	32,274	1,940	0	35,835
TOTAL	19,449	161,788	23,747	0	204,984

	USAGE			CAPACITY	·	ADMIN	CASH FLOW
GVEA	MEA	CEA	GVEA	MEA	CEA	GVEA MEA CEA	TOTALS
						,	
\$97,903	\$15,904	\$0	\$164,580	\$45,365	\$119,426	\$26,459	\$469,637
\$79,501	\$17,791	\$0				\$26,459	\$123,751
\$121,816	\$17,295	\$0				\$26,459	\$165,570
\$254,645	\$16,134	\$0				\$26,459	\$297,238
\$90,115	\$15,824	\$0				\$26,458	\$132,397
\$79,403	\$18,145	\$0				\$26,458	\$124,006
\$106,701	\$21,220	\$0				\$26,458	\$154,379
\$75,425	\$18,340	\$0				\$26,458	\$120,223
\$49,767	\$19,208	\$0				\$26,458	\$95,433
\$110,289	\$15,930	\$0				\$26,458	\$152,677
\$81,928	\$17,419	\$0				\$26,458	\$125,805
\$285,948	\$17,188	\$0				\$26,458	\$329,594
\$1,433,441	\$210,398	\$0	\$164,580	\$45,365	\$119,426	\$317,500	\$2,290,710
	Total Energy:	\$1,643,839	Tot	tal Capacity:	\$329,371		

TOTAL INTERTIE PROJECTED ENERGY USAGE 204,984 MWH Usage estimate reduced by 1/12 of Total for rate calculations 187,902 MWH

Section 7.2.2 MINIMUM USAGE CONTRACT VALUE 204,984 MWH

UTILITY FY 22

 MEA
 27.50%
 21.50 MW

 CEA
 72.50%
 56.60 MW

 GVEA
 100.00%
 78.00 MW

 156.1
 156.1

Usage Rate per KWH \$ 0.00886 Capacity Rate \$2.11

MINIMUM INTERTIE TRANSFER CAPABILITY RIGHTS (MITCR) DETERMINATION FOR FISCAL YEAR 2022

Annual System Demand

	18-19	19-20	20-21	3 YR AVG.						
SOUTHERN UTILITY PARTICIPANTS (MW)										
							DRAFT	APPROVED	APPROVED	APPROVED
CEA	375.4	364.5	366.0	368.6 MW			6/30/2022	6/30/2021	6/30/2020	6/30/2019
MEA	137.0	137.0	145.0	139.7 MW		UNITS	FY22	FY21	FY20	FY19
					USAGE	KWH	187,902,000	187,902,000	187,902,000	297,441,000
					BUDGET	\$	1,992,890	2,007,385	2,168,391	2,024,298
					MITCR	KW	156,100	156,000	156,000	156,100
TOTAL				508.3 MW	_					
					ENERGY (A)	\$.000/KWH	\$0.00886	\$0.00892	\$0.00964	\$0.00568
NORTHERN UTILITY PARTICIPANTS (MW)										
					CAPACITY (B)	\$/KW	\$2.11	\$2.12	\$2.29	\$2.14
GVEA	200	191	204	198.3 MW	<i>0.1</i>	Ψ	Ψ=	4	Ψ=.=0	Ψ=
TOTAL				198.3 MW						

MITCR DETERMINATION

		FY 22	<u>KWH</u>	CAP RATE	CAP CHARGES
MEA	27.50%	21.50 MW	21,500	\$2.11	45,365.00
CEA	72.50%	56.60 MW	56,600	\$2.11	119,426.00
GVEA	100.00%	78.00 MW	78,000	\$2.11	164,580.00
		156.10 MW	156,100	_	329,371.00

⁽A) See Section 7.2.5 AK Intertie Agreement

⁽B) See Section 7.2.6 AK Intertie Agreement