

**INTERTIE MANAGEMENT COMMITTEE (IMC)
REGULAR MEETING**

AGENDA

**Friday, July 26, 2019
9:00 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. APPROVAL OF PRIOR MINUTES – May 17, 2019
7. NEW BUSINESS
 - A. ELECTION OF OFFICERS
 - B. OPERATORS REPORT ML&P/GVEA
8. COMMITTEE REPORTS
 - A. OC REPORT Chair of OC
 - B. BUDGET REPORT AEA
9. MEMBERS COMMENTS
10. NEXT MEETING DATE – September 27, 2019
11. ADJOURNMENT

Alaska Intertie Management Committee
Friday, May 17, 2019
Alaska Energy Authority Board Room
813 West Northern Lights Boulevard, Anchorage, Alaska 99503

1. CALL TO ORDER

Chair Brian Hickey called the meeting of the Alaska Intertie Management Committee to order on May 17, 2019, at 9:03 a.m. A full quorum was established.

2. ROLL CALL FOR COMMITTEE MEMBERS

Members present: Brian Hickey (Chugach Electric Association); Leo Quiachon (Golden Valley Electric Association) (phone); Tony Izzo (Matanuska Electric Association); Jeff Warner (Anchorage Municipal Light & Power); and Kirk Warren (AEA).

3. PUBLIC ROLL CALL

Public present in Anchorage: Sunny Morrison (Accu-Type Depositions); Owen Berklund (AEA); Jocelyn Garner (AEA); David Lockard (AEA); Beazit Redzepi (sp) (AEA); Curtis Thayer (Arrived 9:20 a.m.) (AEA); Brandi White (AEA); Stefan Saldanha (Department of Law); Russ Thornton (Chugach Electric Association (CEA)); John Foutz (City of Seward); Dan Bishop (phone) (Golden Valley Electric Association (GVEA)); Cory Borgeson (phone) (GVEA); Peter Saravan (sp) (GVEA); Kirk Gibson (phone) (McDowell Rackner & Gibson PC); Ed Jenkin (Matanuska Electric Association (MEA)); Jay Layne (phone) (Regulatory Commission of Alaska (RCA)); and Bernie Smith (Public).

4. AGENDA APPROVAL

MOTION: Mr. Izzo made a motion to approve the agenda. Motion seconded by Mr. Warner. The motion was approved unanimously.

5. PUBLIC COMMENTS

None.

6. APPROVAL OF PRIOR MINUTES - March 22, 2019

MOTION: Mr. Warner made a motion to approve the March 22, 2019 minutes. Motion seconded by Mr. Izzo. The motion was approved unanimously.

7. NEW BUSINESS

7A. Approve FY20 Preliminary Operating Budget for Public Comment - Budget Subcommittee

Chair Hickey requested Jocelyn Garner, AEA Budget Subcommittee, to present the FY20 preliminary operating budget. Ms. Garner noted the preliminary budget is included in the member packet and will go out for the 30-day public comment period after today's approval. A meeting will be scheduled at the conclusion of the public comment period to approve the budget.

Ms. Garner described the line item under FERC 570 entitled GVEA - Healy, Teeland, Goldhill Dampers is listed in the budget at \$50,000. The Intertie Operating Committee (IOC) updated the project budget estimate to \$150,000, and recommends the amount be changed in the preliminary budget. GVEA issued a request for proposal (RFP) for repairs at all three sites and a contractor returned a proposal for the scope at \$150,000. Mr. Warner discussed the manufacturer is GE. He explained the airflow dampers are associated with the SVCs at all three sites.

Mr. Quiachon recognizes the line item is a necessary fix for the SVC. However, the scope of the work, including the actual value to the warranty, has not been delineated. He commented AEA has not followed through with the requested pursuit regarding the warranty issues with the manufacturer GE regarding the initial SVC damper repairs. GVEA recommends keeping the budget line item at \$50,000 until further clarification is received from GE regarding the warranty status. If additional funding is needed, the item can be addressed in the 2020/2021 budget.

Mr. Warren requested David Lockard, AEA and IOC, to comment. Mr. Lockard informed GE performed repairs on the installed SVC dampers during the warranty period. Additionally, a contractor was hired by GVEA to perform repairs independently of GE. The original warranty period and the warranty period after the GE repairs have expired. It appears there may be a common problem with the dampers that could be the basis of a claim. Mr. Lockard noted the claim would be decided within the legal process.

Mr. Warren agreed with Mr. Quiachon's recommendation to keep the budget line item at \$50,000 until further clarification can be sought. Kirk Gibson, McDowell Rackner & Gibson PC, agreed with Mr. Quiachon's recommendation. Mr. Gibson noted the amount is de minimis.

Ms. Garner highlighted another line item in the preliminary budget under FERC 571 entitled MEA - Equipment Repair and Replacement is stated at \$581,000. Previous discussion occurred within the Budget Subcommittee regarding the possibility of a lowered amount. However, the IOC recommends the budgeted amount remains. Chair Hickey requested Ed Jenkin, MEA and Chair of IOC, comment on the recommendation. Mr. Jenkin explained various warning marker balls that were in place at the time of installation are now missing. This is a recognized liability issue. The project to replace the warning marker balls is scheduled to begin next summer and could possibly slip into the next budget cycle.

Mr. Quiachon commented GVEA recognizes the safety hazard that is posed by the missing marker balls. GVEA recommends an overall study of the entire intertie be conducted prior

to moving forward in order to provide an economy of scale by addressing the whole project at once.

Chair Hickey requested clarity if the missing marker balls present safety problems or if this is general maintenance activity. He believes safety problems should be addressed immediately. Mr. Jenkin noted the Maintenance Subcommittee could conduct a full report of all locations and present the findings to members. Chair Hickey noted he will make an assignment for the Maintenance Subcommittee to provide an evaluation and prioritization of the known locations before the next committee meeting. Discussion and concurrence was reached regarding addressing safety issues immediately.

Ms. Garner recommended the language under administrative costs in FERC 566 be changed from Miscellaneous Studies to Miscellaneous System Studies, and to remove the listing of the actual prior budget studies. No comments were made.

Ms. Garner noted the LIDAR survey line item for \$300,000 is also up for discussion today. Mr. Warner explained the IMC assigned the IOC to determine the cost of the LIDAR survey. ML&P met with a potential bidder and received additional information from HEA regarding their LIDAR survey experience. Based on the information, the cost of \$300,000 was determined and is included in the preliminary budget. Who will administer the survey has not been decided.

Mr. Quiachon agrees LIDAR would add extreme value to the intertie. The issue is determining the appropriate budget line item under which the project oversight is placed. He noted the possibility of directly assigning one of the utilities to oversee the LIDAR survey versus AEA overseeing the survey.

Chair Hickey requested Ms. Garner provide members with the description of the uniform system accounts for FERC 566 and 571 before the next meeting. Ms. Garner noted the LIDAR survey is within the administrative costs because surveys are considered to be miscellaneous transmission expenses under the Intertie agreement. She will verify the budget classification is correct.

Ms. Garner reviewed the utilities' usage rate and capacity rate calculations shown on page two, entitled Alaska Intertie Fiscal Year 2020 Energy Projection. Ms. Garner described the minimum intertie transfer capability rights (MITCR) calculations for FY20.

MOTION: Mr. Izzo made motion to approve the amended FY20 Preliminary Operating Budget for the 30-day comment period. Motion seconded by Mr. Warner. The motion was approved without objection.

8. REPORTS

8A. Budget to Actual Report - Budget Subcommittee

Ms. Garner presented the Budget to Actual Report for the period July 1, 2018 through February 28, 2019. The actual revenues to-date was \$2.3 million. The actual expenses to-

date was \$570,000. The current surplus was \$1.7 million. The budget has been adjusted to collect less revenue. The refund will be minimized after the expense reports for March, April, May, and June are received. Any work completed in 2019 will be applied to the 2019 budget. The contractor for the repair tower 748 has updated its schedule and will mobilize next week. Foundation work should be complete by June 1.

8B. Operators Reports - ML&P / GVEA

Mr. Warner provided the Operators Report and highlighted the predicted significant delta between the first quarter of 2018 and the first quarter of 2019. The intertie trend usage has decreased and is more likely to be lower than higher going forward. Mr. Warner explained the manual trips listed in the report. There was an effort to coordinate a Railbelt stability testing for the oscillation study. Mr. Warner reviewed the first quarter reportable trips. He noted the formatting issue with the report of events will be corrected. There were no questions.

8C. Intertie Operating Committee Report

Mr. Jenkin provided the IOC Report and highlighted specific requests from the IMC. A review and discussion of the data exchanged by the utilities through ICCP is ongoing by the SCADA and Telecommunications Subcommittee. The final review of the Alaska Critical Infrastructure Protection (AkCIP) standards has been completed by the IOC and the recommendations will be presented at the upcoming Railbelt Utility Managers (RUM) meeting. Next steps will then be determined. Any changes will be reviewed by the IOC and brought before the IMC.

Chair Hickey requested additional information regarding the cyber security AkCIP standards. Mr. Jenkin noted the IOC reviewed the cyber security standards and provided recommendations and modifications. Chair Hickey asked John Foutz, City of Seward, to provide an update. Efforts are ongoing for the recommended cyber security AkCIP standards to be presented as a discussion item at an upcoming RUM meeting.

Mr. Jenkin commented the intertie usage projections are decreasing. The 10-year projections are being developed. Discussions continue regarding alternate means of value allocation. The current reserve allocations are similar to current usage amounts. The IOC will continue to monitor the Railbelt initiatives and consider those impacts for future recommendations.

9. COMMITTEE ASSIGNMENTS

Chair Hickey made assignments. The IOC will oversee the review of the damper issue related to the SVC and provide analysis regarding delaying the process. An update on the GE warranty will be given, as well as recommendations for immediate work.

The IOC will oversee the review of locations and prioritization of the marker ball issues on both the northern and southern parts of the line. Replacements that need to occur this year will be identified.

The IOC will evaluate the sequence of events that occurred on the intertie during the earthquake.

10. NEXT MEETING DATE - July 26, 2019

The next regular meeting will be scheduled after the 30-day notice period has expired and before the June 30, 2019 deadline. Members will be notified.

11. ADJOURNMENT

There being no further business of the AIMC, the meeting adjourned at 9:56 a.m.

Brian Hickey, Chairman

Secretary



Service with Energy

IOC ANNUAL RELIABILITY REPORT

07/08/2019

01/01/2019 TO 12/31/2019

PART 2: EVENT SUMMARY

Event Num	Date/Time	Duration	Description	Freq extreme	Intertie opened	Kenai opened	Unit Line Trip	BESS	Silos	Load Shed	Comments
1,00	01/04/2019 01:14:37	0.6	HLP ST2 Trip	59.70			X	0.0	0.0	0.0	
1,00	01/19/2019 12:05:22	0.7	HLP ST2 Trip	59.55			X	9.6	0.0	0.0	
1,01	01/17/2019 01:52:11	1.7	SPP Unit #13 trip - bleed valve issue	59.85			X	0.0	0.0	0.0	
1,01	01/29/2019 08:41:31	2.0	Plant 2A Tripped - Operator Error	58.96			X	24.8	0.0	68.6	Frequency dropped to 1st Stage Load Shed
1,01	01/17/2019 01:16:02	4.0	Nikiski Steam Turbine Trip - High Back Pressure	59.85			X	0.0	0.0	0.0	
1,01	02/01/2019 12:15:25	0.3	Stability Testing - ML&P Opened Douglas 138-B1 VIA SCADA	60.24	X		X	0.0	0.0	0.0	
1,01	02/01/2019 12:29:39	1.5	Stability Testing - Opened Hope Bkr 252	59.80		X	X	0.0	0.0	0.0	
1,01	02/01/2019 12:41:21	0.1	Stability Testing - ML&P Opened Douglas 138-B1 VIA SCADA	60.45	X		X	0.0	0.0	0.0	
1,01	02/24/2019 04:09:51	0.8	HLP ST2 Trip	59.57			X	0.0	0.0	0.0	
1,01	02/27/2019 09:49:58	1.3	Plant 2A Unit 11 STG Trip, DCS Card Failure	59.79			X	0.0	0.0	0.0	
1,01	03/07/2019 05:26:19	1.0	HCP ST2 Trip	59.31			X	0.0	0.0	0.0	
1,02	03/04/2019 14:18:59	0.8	69kV CHS-SSS Trip - Car vs Pole	60.27			X	0.0	0.0	9.0	
1,02	03/17/2019 23:46:08	1.3	HLP ST2 Trip	59.53			X	0.0	0.0	0.0	
1,02	05/27/2019 06:01:01	0.7	HLP ST2 Trip	59.79			X	0.0	0.0	0.0	
1,02	05/14/2019 13:21:50	1.8	Nikiski Combustion Turbine Trip (Exhaust Frame Fan Motor Failure)	59.77			X	2.1	0.0	0.0	
1,02	06/11/2019 14:47:27	1.3	FKS 138kV Line Trip	60.22			X	0.0	0.0	0.0	

* has sub event

Event Num	Date/Time	Duration	Description	Freq extreme	Intertie opened	Kenai opened	Unit Line Trip Trip	BESS	Silos	Load Shed	Comments
1,021	06/22/2019 14:12:12	5.4	HEA SCADA Fail Over to Backup (loss of set point to Soldotna CT)	59.85			X	0.0	0.0	0.0	
1,021	06/25/2019 13:17:25	1.1	69 kV GHS-FWS-SSS Trip (DOT crane line contact)	60.26			X	0.0	0.0	19.1	
Average Duration		1.47									

Intertie Management Committee Meeting

IOC Report

July 26, 2019

1. Dispatch Subcommittee

The Dispatch Subcommittee has completed the revisions to the Intertie Agreement, Exhibit E and the exhibit has been submitted to the engineers for redraw. It is anticipated that the IOC will vote to incorporate the changes at the next meeting and the documents forward to the IMC.

2. Machine Ratings Subcommittee

The membership roster had been updated with the Chugach representative as the temporary chair until officers are elected at the committee's first meeting. The IOC requested that the committee meet and begin the process of reviewing the machine data for the equipment installed over the last few years.

3. Maintenance Activity

GVEA has performed additional line clearing and MEA has corrected the rolled conductor bundle between structures 264 and 265. GVEA has also awarded a contract to Holiday Parks to improve reverse air flow dampers on the SVC's. The budget for the switch replacement project at Cantwell needs to be revised to include back-up power alternatives. GVEA is reviewing options.

4. System Studies Subcommittee

The committee reported that generation testing, modeling and tuning in the Railbelt continues.

Mr. Thornton, project manager for the oscillation study, reported benchmarking models were prepared and provided to PTI for the System Oscillation Study. PTI returned with a series of questions and items in need of clarification which were addressed as of their July 11, 2019 meeting. The next step is for PTI to proceed with benchmarking simulations and then refine the models to match the oscillations observed. Once completed, a linearized model will be created and analyzed.

Alaska Intertie FY19 Status Report for the Period July 1, 2018 through May 31, 2019

	Effective 1/1/19 Approved Amended FY19 Budget	Budget % 07/01/18 05/31/19	ACTUALS @ 5/31/19	(OVER) UNDER Budget to Date	
REVENUES					
GVEA	1,858,132	1,703,288	1,845,612	(142,325)	
ML&P	146,246	134,059	139,267	(5,208)	
CEA	166,406	152,539	159,427	(6,888)	
MEA	247,625	226,990	240,306	(13,316)	
INTEREST / CAPITAL CREDITS		-	29,320	(29,320)	
TOTAL REVENUES	2,418,409	2,216,875	2,413,932	(197,057)	
EXPENSES					
FERC 562 - Station Operation Expenses					
GVEA - Substation Electricity Usage	8,000	7,333	6,843	491	Per GVEA
	8,000	7,333	6,843	491	
FERC 566 - Miscellaneous Transmission Expense					
Private Line Telephone Service for AKI SCADA (GVEA)	60,000	55,000	32,330	22,670	Per GVEA
Cell Phone Comm. Svc for Weather Monitoring (Verizon)	20,000	18,333	11,020	7,313	Per AEA
SLMS Support and Intertie Ground Patrol	60,000	55,000	70,091	(15,091)	Per AEA
	140,000	128,333	113,441	14,892	
FERC 567 - Transmission Expenses - Rents					
Rents - Alaska Railroad	700	642	700	(58)	Fixed
MEA - Talkeetna Storage	7,200	6,600	6,600	-	Fixed
	7,900	7,242	7,300	(58)	
FERC 569 Maintenance of Structures					
MEA - Maintenance of Structures	-	-	-	-	Per MEA
	-	-	-	-	
FERC 570 - Maintenance of Station Equipment					
GVEA - Healy, Cantwell, Goldhill	63,812	58,494	10,908	47,587	Per GVEA
GVEA - SCADA Maintenance Healy, Cantwell, Gold Hill	10,000	9,167	1,790	7,377	Per GVEA
GVEA - Healy SVC Fire Alarm Panel Replacement	10,000	9,167	-	9,167	Per GVEA
GVEA - Gold Hill SVC Fire Alarm Panel Replacement	10,000	9,167	-	9,167	Per GVEA
GVEA - Perform Maintenance, repaint Reactors Healy SVC Yard	10,000	9,167	19,820	(10,653)	Per GVEA
GVEA - SVC Intertie Trust Fund Eligible Expenses	38,000	34,833	3,891	(30,943)	
SVC ALASKA INTERTIE TRUST FUND	(38,000)	(34,833)	(3,891)	30,943	
CEA - Teeland Substation	96,000	88,000	67,495	20,505	Per CEA
MEA - Douglas Substation	45,000	41,250	91	41,159	Per MEA
GVEA - Douglas Substation OOS relaying and communications	3,000	2,750	-	2,750	Per GVEA
CEA - Telecomm Support (Douglas Substation Communications)	55,000	50,417	2,125	48,291	Per CEA
	302,812	277,578	102,229	175,349	
FERC 571 - Maintenance of Overhead Lines					
GVEA - Northern Maintenance	171,538	157,243	129,195	28,048	Per GVEA
GVEA - Northern ROW Clearing	90,000	82,500	76,907	5,593	Per GVEA
GVEA - Re-level Structures & Adjust Guys	26,000	23,833	-	23,833	Per GVEA
GVEA - Repair Tower 748	750,000	687,500	1,099	686,401	Per GVEA
GVEA - Repair Tower 692	200,000	18,333	-	18,333	Per GVEA
MEA - Special Patrols [Incl Helicopter Inspections]	25,000	22,917	4,571	18,346	Per MEA
MEA - Southern Maint (Incl Ground and Climbing Inspect)	125,000	114,583	177,484	(62,901)	Per MEA
MEA - Southern ROW Clearing	125,000	114,583	2,625	111,958	Per MEA
MEA - Equipment Repair and Replacement	200,000	183,333	-	183,333	Per MEA
	1,532,538	1,404,827	391,881	1,012,945	
FERC 924 - Property Insurance					
AK Intertie - Insurance	33,048	30,294	20,126	10,168	Per AEA (Gen Liab/ Commercial Umbrella) & MEA (includes Aviation)
	33,048	30,294	20,126	10,168	
Intertie Operating Costs Total	2,024,298	1,855,607	641,820	1,213,787	
FERC 570 - Maintenance of Station Equipment					
MEA - Replace Protective Relay Schemes Douglas	-	-	6,324	(6,324)	Per MEA
	-	-	6,324	(6,324)	
Intertie Cost of Improvements Total	-	-	6,324	(6,324)	
FERC 920 - AEA Administrative Costs					
Personal Services, Travel and Other Costs	45,000	41,250	52,144	(10,894)	Per AEA
	45,000	41,250	52,144	(10,894)	
FERC 920 - IMC Administrative Costs					
IMC Administrative Costs (Audit, meetings, legal)	40,000	36,667	16,951	19,716	Per IMC Chair
	40,000	36,667	16,951	19,716	
FERC 566 - Miscellaneous Transmission Expense					
Misc Studies: System Reserves Study, PSS/E maint, AGC Study	250,000	229,167	20,719	208,448	per IOC
	250,000	229,167	20,719	208,448	
Intertie Administration Costs Total	335,000	307,083	89,814	217,269	
TOTAL EXPENSE	2,359,298	2,162,690	737,958	1,424,732	
SURPLUS (SHORTAGE)	59,111	54,185	1,675,974	1,621,789	

Alaska Intertie FY19 Status Report for the Period July 1, 2018 through May 31, 2019

Amended Budgeted Usage (January thru June)

MONTH	GVEA MWH	MEA MWH	CEA MWH	ML&P MWH	TOTAL MWH
Jul	39,260	2,123	-	-	41,383
Aug	22,824	1,972	-	-	24,796
Sep	12,120	1,931	-	-	14,051
Oct	33,235	1,589	-	-	34,824
Nov	15,846	1,233	-	-	17,079
Dec	22,635	1,511	-	-	24,146
Jan	23,225	2,130	-	-	25,355
Feb	24,270	1,767	-	-	26,037
Mar	12,114	1,756	-	-	13,870
Apr	30,321	1,659	-	-	31,980
May	28,830	1,937	-	-	30,767
Jun					-
TOTAL	264,680	19,608	-	-	284,288

Actual Usage to Date

MONTH	GVEA MWH	MEA MWH	CEA MWH	ML&P MWH	TOTAL MWH
Jul	39,260	2,123	-	-	41,383
Aug	22,824	1,972	-	-	24,796
Sep	12,120	1,931	-	-	14,051
Oct	33,235	1,589	-	-	34,824
Nov	15,846	1,233	-	-	17,079
Dec	22,635	1,511	-	-	24,146
Jan	19,505	2,112	-	-	21,617
Feb	12,571	1,836	-	-	14,407
Mar	8,936	1,903	-	-	10,839
Apr	33,981	1,789	-	-	35,770
May	31,380	2,033	-	-	33,413
Jun					-
TOTAL	252,293	20,032	-	-	272,325

INTERTIE PROJECTED ENERGY USAGE TO DATE (MWH) 284,288

INTERTIE ACTUAL ENERGY USAGE TO DATE (MWH) 272,325

Budgeted Operating Costs for the period Jul 18-May 19 \$ 1,855,607
(based on amended budget)

Actual Operating Costs for the period Jul 18-May 19 \$ 641,820

Budgeted Usage Revenue for the period Jul 18-May 19 \$ 3,013,453
(budgeted rate x projected usage)

Actual (Billed) Usage Revenue for the period Jul 18-May 19 \$ 1,656,557
Actual (Billed) Usage Revenue for the period Jan 19-May 19 \$ 27,851

Actual (Billed) Usage Revenue for the period Jul 18-May 19 \$ 1,684,408
(budgeted rate x actual usage)

Estimated Budgeted Energy Rate per MWH \$ 5.45
(based on to date budgeted costs and usage)

Projected Actual Energy Rate per MWH \$ 1.97
(based on to date actual costs and usage)

Annual Budgeted Energy Rate (Billed Rate) (thru 12/31/2018) \$ 10.60
(based on minimum contract value)

Annual Budgeted Energy Rate (Billed Rate) (eff 01/01/2019) \$ 0.24

ITF ALASKA INTERTIE TRUST FUND

Key Bank Trust Acct No. 0696488.22

Status Report as of May 31, 2019

BEGINNING BALANCE AS OF 07/01/2018	\$	37,582.48
INTEREST	\$	734.55
DISBURSEMENTS	\$	(3,890.50)
ENDING BALANCE AS OF 05/31/2019	\$	<u>34,426.53</u>

History:

The ITF Alaska Intertie SVCs Fund was setup to account for a trust account that AIDEA is custodian of for the benefit of the Utilities involved in the Alaska Intertie Project. This Trust Account is for the purpose of paying for expenses related to the Static Var System. The account is held at Key Bank. Any disbursements will be requested by the operating committee or the Utilities. No trust fee is charged to the account as AIDEA/AEA has a blanket trust fee agreement with Key Bank for all accounts held by Key Bank. This trust fund will last as long as the Intertie Mangement Committee (IMC) requires it.

Also see, Memorandum of Understanding Between AEA and Intertie Opearting Committee "Utility Participants" - Dated 07/12/1990