

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

AGENDA

**Friday, January 24, 2020
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 – [November 22, 2019](#)
7. NEW BUSINESS – [Operators Report](#) ML&P/GVEA
8. OLD BUSINESS
9. COMMITTEE REPORTS
 - A. [OC Report](#) ML&P
 - B. [Budget to Actual](#) Budget Subcommittee
10. COMMITTEE ASSIGNMENTS
11. MEMBERS COMMENTS
12. NEXT MEETING DATE - March 27, 2020
13. ADJOURNMENT

IMC/BPMC 2020 Schedule

January 24, 2020	BPMC review draft FY21 budget
March 27, 2020	BPMC approve FY21 budget
May 29, 2020	IMC review FY21 budget
June 30, 2020	IMC/AEA approve FY21 budget
July 24, 2020	Annual Meeting/elections
September 25, 2020	
December 12, 2020	IMC approve FY20 refund & BPMC approve FY20 audit/refund

**ALASKA INTERTIE MANAGEMENT COMMITTEE
REGULAR MEETING**

Alaska Energy Authority Board Room, Anchorage Alaska
Friday, November 22, 2019

1. CALL TO ORDER

Chair Anna Henderson called the meeting of the Alaska Intertie Management Committee to order on November 22, 2019, at 9:00 a.m. A quorum was established.

2. ROLL CALL FOR COMMITTEE MEMBERS

Members present: Anna Henderson (Municipal Light & Power (ML&P)); Tony Izzo (Matanuska Electric Association (MEA)); Brian Hickey (Chugach Electric Association (CEA)); Cory Borgeson (Golden Valley Electric Association (GVEA)); and Kirk Warren (Alaska Energy Authority (AEA)).

3. PUBLIC ROLL CALL

Public present in Anchorage: Ladonna Lindley (Accu-Type Depositions); Ashton Doyle (AEA); Jocelyn Garner (AEA); David Lockard (AEA); Beazit Redzepi (AEA); Stefan Saldanha (Department of Law); Russell Thornton (CEA); Bob Day (Homer Electric Association (HEA) Bradley Lake Hydro); Larry Jorgensen (HEA); Kirk Gibson (McDowell Rackner & Gibson PC); Ed Jenkin (MEA); David Pease (MEA); Jeff Warner (ML&P); Bernie Smith (Public); Christina Hunter (RCA) (phone); and John Foutz (City of Seward).

4. PUBLIC COMMENTS

None.

5. AGENDA APPROVAL

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

6. APPROVAL OF PRIOR MINUTES - September 27, 2019

MOTION: Mr. Izzo made a motion to approve the September 27, 2019 minutes. Motion seconded by Mr. Warren. The motion was approved unanimously.

7. NEW BUSINESS

7A. FY19 IMC Refund

Jocelyn Garner, AEA and Budget Subcommittee Chair, noted the FY19 IMC refund handout is included in the member packet. She described the process by which the Budget Subcommittee calculates and determines the annual excess revenues or the revenue deficiencies. The calculation is reported to the IOC. It is the responsibility of the IOC to grant AEA the authority to provide any annual refund to the participants and users. Ms. Garner noted there were two calculations for the refund shared with both the Budget Subcommittee and the IOC. The Budget Subcommittee requested both calculations be reported to the IMC. The Budget Subcommittee recommended the historical calculation be utilized for the refund to remain consistent with previous precedent. The IOC agreed with using the historical calculation and recommended both calculations be presented to the IMC. Additionally, the IOC recommended a legal review of the agreement language be conducted to ensure the calculation is within compliance. Ms. Garner reviewed the calculations and the processes.

MOTION: Mr. Borgeson made a motion to approve the refund determination based on historical calculations, pursuant to legal review and direction. Motion seconded by Mr. Hickey.

Mr. Warren verified the IOC agreed with the Budget Subcommittee's recommendation to use the historical calculation for the refund, and to conduct a legal review of the agreement language. Ms. Garner agreed.

Chair Henderson asked Mr. Gibson if she assigns IMC legal review or if the IOC assigns legal review. Mr. Gibson explained it is possible for the Chair to assign the legal review to both Mr. Gibson and to the IOC. Mr. Gibson will report findings and directions to the IMC and AEA.

Mr. Borgeson inquired if this topic was a discussion at a previous IMC meeting. Ms. Garner remembers discussing this topic in a previous Budget Subcommittee, but not an IMC meeting. The historical calculation was the only calculation presented to the IMC last year.

A roll call vote was taken, and the motion was approved unanimously.

7B. Operators Report

Jeff Warner, ML&P, reviewed the Operators Report. The usage is reflected per the budget year for the time period of July through October. Usage has been down during this period. Bradley Lake has been out of service during this time period, which contributed to the decreased usage. Mr. Warner discussed a recent trip on the Intertie. This is the only trip that has occurred during 2019. It was determined to be a single phase fault. The Relay Protection Subcommittee is researching the reason for the trip and the solution for prevention.

Mr. Warner gave a general overview of the provided Quarterly Report. He informed the Committee of an item not included within the Quarterly Report that occurred on

November 20th at Substation 15 near Northern Lights. ML&P received SCADA alarms in the morning and the operator proceeded to view the camera output and determined the cameras had been damaged by an intrusion. No copper was missing. Various valves had been closed and breakers had gone stiff. The high voltage protection was damaged and disabled. Wires and fiber within the communication cabinet were cut and damaged. The LTC cabinet at the transformer was opened and breakers were turned off. The sudden pressure and nitrogen were valved out. ML&P is working with law enforcement regarding the issue and additional information will be reported as released.

Mr. Borgeson expressed appreciation for the report. He believes the cameras should be motion sensitive.

Mr. Hickey inquired as to the IOC status of the critical infrastructure protection standard for physical security. Mr. Warner requested Ed Jenkin, MEA and Chair of IOC, address the question. Chair Henderson invited Mr. Jenkin to comment. Mr. Jenkin believes the critical infrastructure protection standard for physical security has been moved out of the IOC, but he will confirm.

Mr. Hickey suggested the IOC be assigned to review the standards in light of the recent incident.

Mr. Borgeson commented the six utilities have filed cyber and physical security standards with the Regulatory Commission of Alaska (RCA). He reiterated the request for the IOC to review the standards to ensure adequate coverage of the physical security issues related to the recent break-in. Mr. Jenkin will confirm the approved standards included physical security. Mr. Warner affirmed the approved standards included physical security.

Mr. Warren requested additional information regarding the status of the IMC review and approval of the cyber and physical security standards. Mr. Warner noted he is unaware of the status. Mr. Jenkin informed he does not recall the IMC process or AEA's adoption of standards. Mr. Warren does not believe AEA has the ability to unilaterally decide on Intertie standards.

Mr. Hickey believes the cyber and physical security standards were passed off to the Railbelt Utility Manager Group and approved.

8. COMMITTEE REPORTS

8A. OC Report

Mr. Jenkin reviewed the IOC Report. Mr. Jenkin provided a written IOC Report to members. He highlighted the IOC action revising language of the presently adopted Intertie Agreement. The revisions reflect actual operations concerning boundaries for maintenance and control. The revisions will be brought forth at the next IOC meeting with an action request.

Mr. Jenkin noted Item 4, concerning the ability to increase visibility and spin calculation accounting, is still progressing. Release of necessary final information for review is being resolved at a subcommittee level.

Mr. Jenkin informed the status of the modeling updates will be reviewed in subcommittee.

8B. Budget to Actual Report

Ms. Garner presented the Budget to Actual Report for the months of July and August. The current calculated refund is approximately \$701,000. The operating refund is not likely to continue to increase at the previous rate. The September and October reduced Intertie usage is not shown on the report. Ms. Garner reviewed the cash balance within the Alaska Intertie Trust Fund for the remaining of the fiscal year.

Mr. Borgeson commented the Intertie usage has decreased during the fiscal year. He suggested the IOC is asked to review and propose a revised budget to reflect the reduced usage and to reduce some of the planned expenses that will not get accomplished this year. The IOC would make their proposed budget revisions to the Budget Subcommittee, who would then review and bring a possible budget modification before the IMC.

9. COMMITTEE ASSIGNMENTS

Chair Henderson assigned the IOC to review the cyber and physical security standards in front of the RCA and to make a recommendation to the IMC regarding any necessary comments or modifications, in light of the recent security breaches.

Chair Henderson assigned the IOC and the Budget Subcommittee to review the budget to determine whether any mid-year budget adjustments are necessary, in light of the decline in usage.

Chair Henderson assigned Mr. Gibson to carry forth the motion adopted by the Committee today.

10. MEMBERS COMMENTS

Mr. Borgeson expressed appreciation for the work presented today.

Mr. Hickey echoed appreciation for the work and detailed reports.

Chair Henderson expressed appreciation for participation.

11. NEXT MEETING DATE - January 24, 2020

The next regular meeting is scheduled for January 24, 2020.

12. ADJOURNMENT

There being no further business of the AIMC, the meeting adjourned at 9:51 a.m.

BY: _____
Anna Henderson, Chair

Attest: _____
Alaska Energy Authority, Secretary

DRAFT

Alaska Intertie Operator Report to the IMC

January 24, 2020

1. Alaska Intertie FY20 usage report

a. MWh usage – Measured at Douglas Substation

	GVEA	MEA	Total
i. July – December FY20	67,117	11,585	78,702
ii. July – December FY19	145,920	10,359	156,279
iii. Delta - FY20 to FY19	-117%	11%	-98%

2. Alaska Intertie trips since November 22 IMC meeting

a. December 9 – C phase ground fault

- i. MEA crews cleared tree from line on December 11. Line returned to service at 11:49 pm.

3. IOC quarterly Reliability Report

a. See attached

b. Load shed events

- i. Event 1,059 – December 10 4:40 am, SPP unit 11 tripped at 34 MW's
 - 1. South central islanded
 - a. Alaska tie open due to December 9 trip
 - b. Kenai tie open – S/Q line repair
 - 2. ML&P shed 8.2 MW's
 - 3. Chugach shed 8.6 MW's
 - 4. MEA shed 8.3 MW's

4. Intertie Maintenance

- a. MEA crews report 138kV disconnect switch TD 101 damaged on December 26. The line was switched out and placed under clearance on December 27 to facilitate repairs. While performing their work, crews found damage to disconnect TD 100. Jumpers were installed on both disconnect switches and the line was returned to service December 28 at 1:43 am.



Service with Energy

IOC QUARTERLY RELIABILITY REPORT

01/22/2020

10/01/2019 TO 12/31/2019

PART 2: EVENT SUMMARY

Event Num	Date/Time	Duration	Description	Freq extreme	Intertie opened	Kenai opened	Unit Line Trip Trip	BESS	Silos	Load Shed	Comments
1,046	10/01/2019 07:28:37	1.3	HLP ST2 Trip	59.19			X	0.0	0.0	0.0	
1,048	10/03/2019 10:08:40	0.1	SPP Unit 10 Tripped	59.71			X	0.0	0.0	0.0	
1,049	10/03/2019 11:10:32	0.1	Beluga Unit 1 Tripped	59.76			X	19.6	0.0	0.0	
1,050	10/12/2019 18:41:29	0.2	SPP Unit 12 tripped during testing.	59.03			X	18.4	0.0	0.0	
1,051	10/10/2019 07:38:10	0.9	Douglas 138-B1/ Teeland 538 Tripped A Phase to Ground Approximately 71 Miles North of Douglas	60.32	X		X	13.2	0.0	0.0	Closed Douglas 138-B1 at Approximately 08:34 All Utilities Reported A Phase to Ground Due to Possible Weather Event
1,052	10/15/2019 13:37:06	1.1	Unit 3 (Plant 1) Tripped Due to Gas Valve Issue	59.89			X	0.0	0.0	0.0	
1,054	10/09/2019 07:47:02	0.7	Soldotna CT trip (PILOT 3 GP1 High Pressure Trip during burner mode change)	58.20			X	0.0	0.0	26.8	
1,055	11/19/2019 20:51:31	0.7	HLP ST2 Trip	59.70			X	0.0	0.0	0.0	
1,056	11/27/2019 08:56:24	1.4	Unit 11 Trip Breaker Inadvertently Opened, Operator Error	59.86			X	0.0	0.0	0.0	
1,057	11/27/2019 13:29:48	2.2	Internal Communication Error at EGS	59.66			X	4.5	0.0	0.0	
1,058	11/21/2019 06:33:06	0.1	69 kV line Trip causing HLV SVS and HLP ST2 Trip	59.83			X	20.1	0.0	30.6	
1,059	12/10/2019 04:40:13	0.1	SPP Unit #11 tripped due to IGV controls. Anchorage islanded at the time.	58.90	X		X	0.0	0.0	25.1	
1,060	12/17/2019 10:29:36	2.2	HLP ST1 Trip	59.87			X	0.0	0.0	0.0	
1,061	12/28/2019 15:21:16	0.4	HLP ST2 Trip	59.63			X	0.0	0.0	0.0	
Average Duration		0.82									

* has sub event



Service with Energy

IOC QUARTERLY RELIABILITY REPORT

01/22/2020

01/01/2020 TO 03/31/2020

PART 2: EVENT SUMMARY

Event Num	Date/Time	Duration	Description	Freq extreme	Intertie opened	Kenai opened	Unit Line Trip Trip	BESS	Silos	Load Shed	Comments
1,062	01/03/2020 02:46:40	2.0	NPC GT3 & ST4 Trip	59.26			X	0.0	0.0	0.0	
1,063	01/04/2020 11:05:06	3.8	HLP ST2 Trip	59.81			X	0.0	0.0	0.0	
1,064	01/12/2020 01:55:32	1.3	HLP ST1 Trip	59.89			X	0.0	0.0	0.0	
1,065	01/12/2020 02:54:27	0.7	NPC GT3 & ST4 Trip	59.75			X	0.0	0.0	0.0	
Average Duration		1.95									

Intertie Management Committee Meeting
IOC Report
January 24, 2020

1. Revision of the Alaska Intertie Agreement

As the Alaska Intertie Agreement will need to be undated if ML&P is acquired by Chugach Electric, the IMC chair has requested that the IOC defer their request to amend the Alaska Intertie Agreement to reflect actual practices with respect to maintenance and control boundaries until a ruling on the acquisition has been made.

2. Dispatch Subcommittee

The Dispatch Subcommittee will call a joint meeting with the SCADA and Telecommunications Subcommittee to finalize plans to increase system visibility at each utility's dispatch center through the sharing of additional unit and transmission line information through ICCP.

3. Spinning Reserve Allocation

The committee discussed that if ML&P and CEA merge into one load balancing area following the acquisition, then there will be a significant impact in the spinning reserve calculation. HEA indicated that they will allocate their spinning reserve requirement based upon a load-ratio-share calculation. Mr. Jenkin advised that we need to have a conversation on how to allocate the spin going forward prior to the acquisition date of May 29th. Mr. Warner advised that it isn't really an IMC or IOC issue and advised that it should go to RUM to form a committee to address the issue. The IOC agreed with this position.

4. System Studies Subcommittee

The preliminary report on Phase 1 of the oscillation study is in review right now. Three modes of oscillation, .6 hertz, .8 hertz, .9 hertz, have been confirmed. Phase 2 has been given the go-ahead, which is to recommend settings of existing damping equipment on the Railbelt. The recommendations will include settings for the 3 SVC's on the Intertie, as well as, rotating machines across the Railbelt.

5. Election of Officers

The IOC elected Jeff Warner from AML&P to serve as chair of the IOC for the next two-year term. The new vice-chair will be Dan Bishop from GVEA.

Alaska Intertie FY20 Status Report for the Period July 1, 2019 through November 30, 2019

	Effective 7/1/19 Approved FY20 Budget	Budget % 07/01/19 11/30/19	ACTUALS @ 11/30/19	(OVER) UNDER Budget to Date	
REVENUES					
GVEA	1,709,506	712,294	797,324	(85,030)	
ML&P	237,938	99,141	131,626	(32,485)	
CEA	258,090	107,538	151,778	(44,240)	
MEA	438,503	182,710	216,392	(33,683)	
INTEREST / CAPITAL CREDITS		-	11,554	(11,554)	
TOTAL REVENUES	2,644,037	1,101,682	1,308,674	(206,992)	
EXPENSES					
FERC 562 - Station Operation Expenses					
GVEA - Substation Electricity Usage	8,000	3,333	2,699	634	Per GVEA
	8,000	3,333	2,699	634	
FERC 566 - Miscellaneous Transmission Expense					
Private Line Telephone Service for AKI SCADA (GVEA)	60,000	25,000	2,315	22,685	Per GVEA
Cell Phone Comm. Svc for Weather Monitoring (Verizon)	15,000	6,250	5,009	1,241	Per AEA
SLMS Support and Intertie Ground Patrol	100,000	41,667	16,681	24,985	Per AEA
	175,000	72,917	24,005	48,911	
FERC 567 - Transmission Expenses - Rents					
Rents - Alaska Railroad	700	292	700	(408)	Fixed
MEA - Talkeetna Storage	7,200	3,000	3,000	-	Fixed
	7,900	3,292	3,700	(408)	
FERC 569 Maintenance of Structures					
MEA - Maintenance of Structures	250,000	104,167	-	104,167	Per MEA
	250,000	104,167	-	104,167	
FERC 570 - Maintenance of Station Equipment					
GVEA - Healy, Cantwell, Goldhill	63,812	26,588	50,119	(23,530)	Per GVEA
GVEA - Healy, Teeland, Goldhill Dampers	200,000	83,333	31,907	51,426	Per GVEA
GVEA - SCADA Maintenance Healy, Cantwell, Goldhill	10,000	4,167	-	4,167	Per GVEA
GVEA - Healy SVC Fire Alarm Panel Replacement	15,000	6,250	-	6,250	Per GVEA
GVEA - Cantwell 4S2 Switch Repair	50,000	20,833	-	20,833	Per GVEA
GVEA - Perform Maintenance, repaint Reactors Healy SVC Yard	10,000	4,167	29,081	(24,914)	Per GVEA
CEA - Teeland Substation	96,000	40,000	93,087	(53,087)	Per CEA
MEA - Douglas Substation	5,000	2,083	53	2,030	Per MEA
CEA - Telecomm Support (Douglas Substation Communications)	5,000	2,083	-	2,083	Per CEA
	454,812	189,505	204,246	(14,741)	
FERC 571 - Maintenance of Overhead Lines					
GVEA - Northern Maintenance	125,000	52,083	22,975	29,108	Per GVEA
GVEA - Northern ROW Clearing	75,000	31,250	87,097	(55,847)	Per GVEA
MEA - Special Patrols [Incl Helicopter Inspections]	25,000	10,417	-	10,417	Per MEA
MEA - Southern Maint (Incl Ground and Climbing Inspect)	340,000	141,667	-	141,667	Per MEA
MEA - Southern ROW Clearing	125,000	52,083	2,316	49,768	Per MEA
MEA - Equipment Repair and Replacement	539,818	224,924	16,521	208,403	Per MEA
	1,229,818	512,424	128,909	383,515	
FERC 924 - Property Insurance					
AK Intertie - Insurance	42,861	17,859	10,563	7,296	Per AEA (Gen Liab/ Commercial Umbrella) & MEA (includes Aviation)
	42,861	17,859	10,563	7,296	
Intertie Operating Costs Total	2,168,391	903,496	374,122	529,374	
FERC 920 - AEA Administrative Costs					
Personal Services, Travel and Other Costs	89,000	37,083	26,276	10,807	Per AEA
	89,000	37,083	26,276	10,807	
FERC 920 - IMC Administrative Costs					
IMC Administrative Costs (Audit, meetings, legal)	40,000	16,667	4,916	11,751	Per IMC Chair
	40,000	16,667	4,916	11,751	
FERC 566 - Miscellaneous Transmission Expense					
Misc. System Studies	300,000	125,000	12,854	112,146	per IOC
LIDAR Survey	300,000	125,000	-	125,000	per IOC
	600,000	250,000	12,854	237,146	
Intertie Administration Costs Total	729,000	303,750	44,046	259,704	
TOTAL EXPENSE	2,897,391	1,207,246	418,168	789,078	
SURPLUS (SHORTAGE)	(253,354)	(105,564)	890,506	996,070	

Alaska Intertie FY20 Status Report for the Period July 1, 2019 through November 30, 2019

Budgeted Usage

MONTH	GVEA MWH	MEA MWH	CEA MWH	ML&P MWH	TOTAL MWH
Jul	8,750	2,080	-	-	10,830
Aug	6,300	1,949	-	-	8,249
Sep	7,500	1,895	-	-	9,395
Oct	10,500	1,548	-	-	12,048
Nov	10,500	1,238			11,738
Dec					-
Jan					-
Feb					-
Mar					-
Apr					-
May					-
Jun					-
TOTAL	43,550	8,710	-	-	52,260

INTERTIE PROJECTED ENERGY USAGE TO DATE (MWH) 52,260

Budgeted Operating Costs for the period Jul 19-Nov 19 \$ 903,496
(based on amended budget)

Budgeted Usage Revenue for the period Jul 19-Nov 19 \$ 503,786
(budgeted rate x projected usage)

Estimated Budgeted Energy Rate per MWH \$ 14.44
(based on to date budgeted costs and usage)

Annual Budgeted Energy Rate (Billed Rate) \$ 9.64
(based on minimum contract value)

Actual Usage to Date

MONTH	GVEA MWH	MEA MWH	CEA MWH	ML&P MWH	TOTAL MWH
Jul	14,996	2,164	-	-	17,160
Aug	17,753	2,039	-	-	19,792
Sep	3,638	1,956	-	-	5,594
Oct	10,207	1,752			11,959
Nov	9,686	1,774			11,460
Dec					-
Jan					-
Feb					-
Mar					-
Apr					-
May					-
Jun					-
TOTAL	56,280	9,685	-	-	65,965

INTERTIE ACTUAL ENERGY USAGE TO DATE (MWH) 65,965

Actual Operating Costs for the period Jul 19-Nov 19 \$ 374,122

Actual (Billed) Usage Revenue for the period Jul 19-Nov 19 \$ 635,903
(budgeted rate x actual usage)

Projected Actual Energy Rate per MWH \$ 4.74
(based on to date actual costs and usage)

ITF ALASKA INTERTIE TRUST FUND

Key Bank Trust Acct No. 0696488.22

Status Report as of November 30, 2019

BEGINNING BALANCE AS OF 07/01/2019	\$	20,762.78
INTEREST		51.37
DISBURSEMENTS		(20,384.00)
ENDING BALANCE AS OF 11/30/2019	\$	430.15

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