

Regular Board Meeting AGENDA

(To be held Electronically¹)

May 13, 2021 SEAPA BOARD MEETING

Time	Event
9 AM	Meeting Starts
10:30 AM	15-Minute Break
12 Noon	Lunch
1 PM	Meeting Resumes
2:30 PM	15-Minute Break
5 PM	Meeting Adjourns

For telephonic participation dial:

1.888.475.4499² Meeting ID No. 961 6185 4900

1. Call to Order

- A. Roll Call
- B. Communications/Lay on the Table Items
- C. Disclosure of Conflicts of Interest
- 2. Approval of the Agenda
- 3. Persons to be Heard

4. **Review and Approve Minutes**

- A. February 26, 2021 Minutes of Regular Board Meeting
- B. March 31, 2021 Minutes of Special Board Meeting

5. Financial Reports

- A. CEO Financial Memo
- B. Controller Memo
- C. kWh Graph
- D. Fund Graph
- E. Grant Summary
- F. Financial Statements
- G. Disbursements

6. Old Business

- A. SEAPA Quarterly Update Re Operations Plan
- B. Update Re Wholesale Power Rate

¹ Due to recommendations from the Center for Disease Control and its social distancing guidelines, this meeting of the Board of Directors of the Southeast Alaska Power Agency will be held electronically.

² In the event of a failure with Zoom connectivity, the meeting shall continue by telephonic participation by dialing 1.800.315.6338 (Code 73272#).

7. New Business

- A. Consideration and Approval of Contract Award Re Revised Vank Island Transmission Line Brushing Project
- B. Consideration and Approval of Second Revision to Digital Communication Device Policy
- C. Discussion and Consideration/Approval of Authorizing Resolution and Indenture Re Submarine Cable Financing from Alaska Municipal Bond Bank
- D. Consideration and Approval of 2nd Amendment to Lease & Easement Documents for Tyee, Swan and Terror Lakes and Solomon Gulch Hydro Projects and Agreement Re Reclamation Reserve Account Payment
- E. Executive Session Re Discussions Relating to Potential Interconnection with Metlakatla

8. CEO Report

9. Staff Reports

- A. Operations Manager (Hammer)
- B. Power System Specialist (Schofield)
- C. Director of Engineering and Technical Services (Siedman)

10. Next Meeting Dates

- **11.** Director Comments
- 12. Adjourn

Southeast Alaska Power Agency Meeting Minutes

Location: Held Electronically¹

Date: February 26, 2021

Time:

9:00 a.m. AKST

Agenda Items

1) Call to Order

A. Roll Call.

Chairperson Lynn called the regular meeting to order at 9:00 a.m. AKST on February 26, 2021. The following directors and alternates were present, thus establishing a quorum of the board:

Directors	Present Electronically (E) In Person (IP)	Alternates	Present Electronically (E) In Person (IP)	Representing	Community
Bob Sivertsen	E	Doug Ward	E	Swan Lake	Ketchikan
Karl Amylon	E	Jeremy Bynum	Е	Swan Lake	Ketchikan
Cliff Skillings	E	Dick Coose	E	Swan Lake	Ketchikan
Stephen Prysunka	Е	Mike Ottesen	E	Tyee Lake	Wrangell
Bob Lynn	E	Karl Hagerman	E	Tyee Lake	Petersburg

The following SEAPA staff and counsel were present for all or part of the meeting:

Staff	Present Electronically (E) In Person (IP)	Staff/Counsel	Present Electronically (E) In Person (IP)
Trey Acteson, CEO	E	Joel Paisner, SEAPA Counsel	E
Clay Hammer, Operations Mgr.	E	Kay Key, Controller	E
Ed Schofield, Power Sys. Sp.		Sharon Thompson, EA/CA	E
Robert Siedman, Dir. Eng & TS	E	Marcy Hornecker, Admin. Asst.	E

B. Communications/Lay on the Table Items - None

C. Disclosure of Conflicts of Interest - None

2) Approval of the Agenda

otion	M/S (Sivertsen/Prysunka) to approve the agenda, as amended, to include a call from Deven Mitchell of the Alaska Bond Bank under Agenda Item 8, Financial Reports. The motion was approved unanimously by polled vote'.	✓ / 2

3) Introduction of Board Members

Board members exchanged introductions.

4) Election of Officers

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A. Chairperson

¹ The meeting was held electronically via Zoom due to recommendations from the Center for Disease Control and its social distancing guidelines. An audio recording of this meeting is available on SEAPA's website at <u>www.seapahydro.org</u>



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Action

21-865

Motion M/S (Prysunka/Amylon) to nominate Bob Sivertsen as Chairperson. The motion was approved unanimously by polled vote'. ▲ Action 21-866

Following the motion, the gavel passed from Chairperson Lynn to the newly elected Chair, Bob Sivertsen.

B. Vice Chairperson

	M/S	(Sivertsen/Lynn)	to	nominate	Steve	Prysunka	as	Vice		Actio
> Motion	Chair	person. The motio	n wa	as approved	unanim	iously by po	lled v	ote'.	-	21-86

C. Secretary-Treasurer

	M/S (Prysunka/Lynn) to nominate Karl Amylon as Secretary-	Action
> Motion	Treasurer. The motion was approved unanimously by polled vote'.	21-868

5) Persons to be Heard - None.

6) Introduction to SEAPA

SEAPA Counsel, Joel Paisner, provided a very thorough introduction to SEAPA to orient new board members and responded to questions and comments. Agency staff were directed to post the Powerpoint Slides on SEAPA's website. Following the presentation, SEAPA's CEO, Trey Acteson, introduced SEAPA staff and provided the highlights of his role in the Agency and participation in legislative and regulatory organizations.

7) Review and Approve Minutes



8) Financial Reports

Mr. Acteson summarized highlights of his financial cover letter provided in the board packet and announced that Deven Mitchell of the Alaska Bond Bank had joined the meeting. He provided a brief introduction of Mr. Mitchell's role with the Alaska Bond Bank. Mr. Mitchell opened his discussion with a brief history of the Bond Bank and outlined the benefits it offers including its ability to obtain competitive rates, reduce administrative tasks, and provide options for access to capital markets. He described how the Bond Bank works and discussed current rates noting that rates are up but still low on a historical basis, that the yield curve is steep, and noted greater volatility in the current market. Mr. Acteson thanked Mr. Mitchell for his summary and noted that Mr. Mitchell was pivotal in SEAPA's access to the bank. Mr. Mitchell discussed the timing of the next round of bonding and the tax-exempt status of SEAPA's bonds. Mr. Acteson noted that refinancing the Agency's existing bonds was not favorable to the Agency at this time, but the timing of the next round of bonding is beneficial if SEAPA elects to pursue that funding for the Submarine Cable Replacement Project. Mr. Mitchell fielded various questions from the directors and SEAPA counsel.

Mr. Acteson concluded the summary of his financial cover letter and fielded questions from directors.

The meeting recessed at 10:44 a.m. and resumed at 11:00 a.m.

The Chair requested a motion on the financial statements.



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≻ Motion	M/S (Lynn/Amylon) to accept year-to-date financial statements through December 2020 and disbursements for December 2020 and January 2021 totaling \$1,674,884.06, as presented.	✓	Action
	Following Mr. Acteson's overview of the financial statements and brief additional discussion, the motion was approved unanimously by polled vote.		21-870

9) Old Business

A. Legal Update: Roadless Rule

Mr. Paisner provided a brief history of the Roadless Rule and explained SEAPA's current procedural posture. He fielded various questions and comments on the topic and summarized the complexity of the litigation. He advised that staff is not asking any current direction from the board at this time because the current Tongass exemption has been stayed and SEAPA is an Amicus, commonly known as a 'friend of the court', in support of the position of the U.S. Forest Service. The position SEAPA is in has been a low-cost way to monitor what is going on with the litigation, affords an opportunity to review the pleadings, and serves to independently raise the flag on SEAPA's behalf to use the Tongass for SEAPA's facilities.

The meeting recessed for lunch at noon and resumed at 1:00 p.m.

A roll call was taken, and the Chair asked Doug Ward, a new board member, to introduce himself as he was not available for that opportunity earlier in the meeting. Following the introduction, the Chair directed the meeting to continue with New Business under the Agenda.

10) New Business

A. Consideration and Approval of Contract Award Re Swan-Bailey Transmission Line Brushing Project



B. Consideration and Approval of Swan Lake-Bailey Substations Transformer Refurbishment Project

> Motion	M/S (Prysunka/Lynn) to authorize staff to enter into a Contract with Specialty Engineering, Inc. for SEAPA's Swan-Bailey Substations Transformer Refurbishing Contract for the firm-fixed price of \$234,700 plus a ten percent (10%) contingency of \$23,470 in the event of Change Orders for the total not-to-exceed value of \$258,170. The	~	Action 21-872
	Change Orders for the total not-to-exceed value of \$258,170. The motion was approved unanimously by polled vote.		

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Consideration and Approval of R&R Capital Budget Adjustments

≻ Motion	M/S (Lynn/Amylon) to increase the FY2021 R&R Capital Budget by \$2,002.290. Following Mr. Acteson's explanation of the reasons for the requested budget adjustments which were necessary for the Agency's RR Station Service Switchgear Project at Swan Lake, the Submarine Cable Replacement Project, Flashboard De-icing at Swan Lake, and Swan Lake and Bailey Transformer Refurbishment, the motion was approved unanimously by polled vote.	*	Action 21-873



D. Operations Plan Quarterly Update

Mr. Siedman reported that exceptional inflows increased lake levels in January 2021 due to a wet weather system and explained how the Agency's management of the extreme inflows resulted in higher lake levels at Tyee and prevention of spill at Swan Lake. Maximum utilization and optimized output of the water was then realized in February when the additional water stored at Tyee was sent back to Swan Lake (and subsequently Ketchikan). Optimizing output also produced a second result which was meeting the peak energy demands of SEAPA's three member communities at the highest level the Agency had on record. Spill prevention techniques, higher inflows, and efficient operations contributed to the record high water levels at both lakes in February, which also prevented the need to generate diesel. Mr. Siedman presented charts on the guide curves and photos of the snowpack for both Tyee and Swan Lakes. He fielded questions and expressed optimism for a healthy water cycle in 2021.

11) CEO Report

Mr. Acteson reported there were no recordable or lost time incidents since his last report and provided a Covid-19 update. He reported on his meetings with the National Hydropower Association, FERC issues, and several bills in the State legislature. He explained the Alaska Department of Natural Resources (ADNR) Reclamation Fund for the benefit of new board members and reported that SEAPA is working with ADNR to continue its annual Reclamation Contingency Fund contribution of \$37,500 as it is the lowest cost option after other funding options that were explored proved to be much more costly for the Agency. Mr. Acteson provided an update on SEAPA's efforts towards a five-year review of its Renewal, Replacement, and Risk Reserve Plan (4R Plan). A component of the plan is securing estimates to replace submarine cables in the event of failure to de-risk SEAPA's exposure. He solicited the board's consideration of purchasing a spare cable long enough to span the longest submarine cable crossing as a potential de-risking strategy. Discussion followed on the risk of a spare cable becoming obsolete and that cable with the latest technology should be considered. The board reached a consensus with the showing of three hands that staff do a feasibility study on this de-risking strategy. Mr. Acteson closed his report with an update on personnel resignation, retirement, recruitment and hiring.

12) Staff Reports

A. Power System Specialist (Schofield)

Mr. Acteson provided a brief overview of Mr. Schofield's report in his absence covering Swan Lake operations, Bailey Substation Security Fence repairs, the Swan Lake Spillway Recovery Davit Project, status of the purchase of an equipment trailer, an update on the Swan Lake four-plex, stationary winch, marine dock inspection and repairs, and the SEAPA headquarters project. He closed with the safety training that occurred in December 2020 and January 2021.

B. Director of Engineering and Technical Services (Siedman)

Mr. Siedman reported that bids were in the solicitation process for SEAPA's Swan-Bailey Transformer Refurbishment Project and provided an update on the Swan Lake Station Service Switchgear Project noting the project was on schedule with installation estimated for completion in late June 2021. He reported that after a lengthy negotiation process, a final contract for SEAPA's Submarine Cable Replacement Project was signed by SEAPA and Sumitomo Electric. The negotiations resulted in a savings of \$2,240,765 (excluding contingency) to the Agency from the original bid amount. He presented the final schedule showing the current progress of cable manufacturing and estimates of delivery dates. He was pleased to report that the cable will be manufactured with no joint.

Mr. Siedman continued his report explaining the necessity of removing and replacing an outdated Orion device that presented a security risk and discussed efforts between SEAPA and KPU to exchange SCADA points to transition to an RTAC HQ Circuit. He closed his report advising that although new Tyee and Swan Lake Exciter Carbon Dust Collectors were procured and delivered to the respective sites, that installation will be delayed until Spring 2021 as sequential single unit outages are necessary to perform the work. He fielded director questions and comments.



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C. Operations Manager (Hammer)

Mr. Hammer briefed the board on the Tyee Cooling Water Pump Project, Vegetation Management Plan, Tyee Plant PRV Valves, and Cleveland Peninsula Helipad Project. He announced that at one time there was a Tyee Lake emergency access trail to the high elevation Gatehouse by foot but after an emergency shelter was built at the Gatehouse, the trail was no longer maintained, and the trailhead was lost. It was recently re-discovered, so staff reflagged it to an elevation of 750'. He advised the remainder of the trail will eventually be reflagged as time allows. He advised there were communication challenges at Tyee because of current snow/icing conditions at Burnett Peak, and reported that long-time employee, Brent Mill, was retiring from Tyee after 16 years of much appreciated service. Mr. Mills will be missed. He closed his report with a list of items accomplished by the Tyee Lake crew and safety training that had taken place during the last quarter.

13) Next Meeting Dates

There were no comments on the upcoming meeting dates proposed in the board packet. Mr. Acteson announced that SEAPA may have to call a special board meeting at the end of March or early April for some SEAPA business that was not ready for board consideration at this meeting.

14) Director Comments

Directors exchanged various comments.

15) Adjourn

The Chair requested a motion to adjourn.

	M/S	(Prysunka/Lynn)	to	adjourn	the	meeting.	There	were	no	,	Action
lotion	objec	tions to the motion	n.							•	21-874

The meeting adjourned at 3:04 p.m.

Signed:

Attest:

Secretary/Treasurer

Chairperson



Southeast Alaska Power Agency Special Meeting Minutes

Location:	stronically
LOCATION.	llonicaliv

Date: March 31, 2021

Time: 3:00 p.m. AKDT

Agenda Items

1) Call to Order

A. Roll Call.

Chairperson Sivertsen called the special meeting to order at 3:00 p.m. AKDT on March 31, 2021. The following directors and alternates were present, thus establishing a quorum of the board:

Directors	Present Electronically (E) In Person (IP)	Alternates	Present Electronically (E) In Person (IP)	Repres	enting
Bob Sivertsen	E	Doug Ward	E	Swan Lake	Ketchikan
Karl Amylon	E	Jeremy Bynum	E	Swan Lake	Ketchikan
Cliff Skillings	E	Dick Coose	E	Swan Lake	Ketchikan
Stephen Prysunka	E	Mike Ottesen		Tyee Lake	Wrangell
Bob Lynn	E	Karl Hagerman	E	Tyee Lake	Petersburg

The following SEAPA staff and counsel were present for all or part of the meeting:

Staff	Present Electronically (E) Telephonically (T) In Person (IP)	Staff/Counsel	Present Electronically (E) Telephonically (T) In Person (IP)
Trey Acteson, CEO	Е	Joel Paisner, SEAPA Counsel	E
Clay Hammer, Operations Mgr.		Kay Key, Controller	E
Ed Schofield, Power Sys. Sp.	Т	Sharon Thompson, EA/CA	E
Robert Siedman, Dir. Eng & TS	Ē	Marcy Hornecker, Admin. Asst.	E

2) Approval of the Agenda

> Motion	M/S (Prysunka/Skillings) to approve the agenda as presented. Motion approved unanimously by polled vote.	 ✓ Action 21-875
> Motion	approved unanimously by polled vote.	

3) New Business

A. Consideration and Approval of Resolution #2021-075 Re CEO Authorizations to pursue Financing Options Re Submarine Cable Replacement Project, and Resolution #2021-076 Naming Certifier and Administrator for USDA RUS Data Submittal Purposes

¹ The meeting was held electronically due to recommendations from the Center for Disease Control and its social distancing guidelines.



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M/S (Prysunka/Amylon) to adopt Resolution #2021-075 granting the Southeast Alaska Power Agency's (SEAPA) CEO, Trey Acteson, authorization to pursue both Alaska Municipal Bond Bank and U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) Electric Program financing options on a parallel path, and further move to adopt a Secretary's Certificate (Resolution #2021-076) naming SEAPA's CEO, Trey Acteson, as a certifier and SEAPA's Controller, Kay Key, as an administrator on behalf of SEAPA for submittal of any and all data required by the USDA RUS RD Apply Intake System.

Following a discussion of the pros and cons of the two financing options, the motion was approved unanimously by polled vote.

B. Consideration and Approval of Sole Source Contract Re STCS-HMI-Historian Upgrade, R&R Capital Project No. 19331

 M/S (Prysunka/Skillings) to authorize staff to enter into a sole source contract with Segrity, LLC for programming/engineering, testing and commissioning services for SEAPA's STCS-HMI-Historian Modernization Project (R&R19331) for \$79,200 plus a ten percent (10%) contingency of \$7,920 for a total not-to-exceed value of \$87,120. Mr. Siedman presented a SEAPA Network One Line Diagram which 				
aided in his explanation of the project and purpose for the sole source request, after which the motion was approved unanimously by polled vote.	≻ Motion	contract with Segrity, LLC for programming/engineering, testing and commissioning services for SEAPA's STCS-HMI-Historian Modernization Project (R&R19331) for \$79,200 plus a ten percent (10%) contingency of \$7,920 for a total not-to-exceed value of \$87,120. Mr. Siedman presented a SEAPA Network One Line Diagram which aided in his explanation of the project and purpose for the sole source request, after which the motion was approved unanimously by polled	✓	

C. Consideration and Approval of Sole Source Contract Re Architectural Services

	M/S (Lynn/Amylon) to authorize staff to enter into a sole source contract with Welsh Whiteley Architects, LLC for design, bidding, and construction-phase services for SEAPA's Office and Warehouse Headquarters (R&R19326) for \$193,692 plus a ten percent (10%) contingency of \$19,369 for a total not-to-exceed value of \$213,061.	
≻ Motion	Mr. Acteson elaborated that Welsh Whiteley Architects has been developing the design for the SEAPA office for over a year and together with their selected subcontractors are well-qualified to be considered for the design, bidding, and construction-phase services. Following brief discussion, the motion was approved unanimously by polled vote.	✓ Action 21-878

Executive Session Re Update on Hydrosite Investigations and Discussions Re Sole Sourcing Contracts Related to Hydrosite Investigations

 M/S (Sivertsen/Prysunka) to recess into Executive Session to be conducted pursuant to SEAPA's Bylaws consistent with Alaska Statute 44.62.310 for discussions to consider sole-sourcing contracts for hydrosite field investigations to develop site definition documents and aerial mapping of potential hydrosites as the discussions will include matters, the immediate knowledge of which would clearly have an adverse effect upon the finances of the public agency. The motion was approved unanimously by polled vote.



D.

≻ Motion

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Action

21-876

The meeting recessed at 4:03 p.m. for the executive session. The meeting resumed into regular session at 4:45 p.m. The Chair requested a roll call. A roll call was taken, and all directors were present except Mr. Ward and Mr. Ottesen.

The Chair announced that discussions during the executive session resulted in the following motions:

> Motion	M/S (Prysunka/Amylon) to authorize staff to enter into a sole source contract with McMillen LLC to develop new Site Definition Documents by conducting hydrosite investigations at a new potential hydropower site for \$129,484 plus a twenty percent (20%) contingency of \$25,896 for the total not-to-exceed value of \$155,380. The motion was approved unanimously by polled vote.	
≻ Motion	M/S (Amylon/Lynn) to authorize staff to enter into a sole source contract with Quantum Spatial, Inc. for Lidar and Digital Imagery for SEAPA's hydrosite investigations for the lump-sum value of \$92,266 plus a 20% contingency of \$18,453 for weather, ground transportation or other factors for the total not-to-exceed value of \$110,719. The motion was approved unanimously by polled vote.	

4) Adjourn

Chairperson Sivertsen requested a motion to adjourn.

Motion M/S (Prysunka/Lynn) to adjourn the meeting. The Chair declared the meeting adjourned after no objections were heard.

The meeting adjourned at 4:49 p.m.

Signed:

Attest:

Secretary/Treasurer

Chairperson



Minutes of March 31, 2021 SEAPA Special Meeting | 3



SOUTHEAST ALASKA POWER AGENCY CEO FINANCIAL COVER MEMO

DATE:May 7, 2021TO:SEAPA Board of DirectorsFROM:Trey Acteson, Chief Executive OfficerSUBJECT:CEO Financial Cover Letter

SEAPA's financial position is currently stable. Favorable reservoir levels and a robust snowpack will continue to support sales well into the summer months.

REVENUE & EXPENSES: Revenue from 2021 Q1 sales was \$3,867,270 actual vs. \$3,356,594 budget. This is trending above average and mostly driven by cooler weather. Going forward, sales to Ketchikan may moderate as snowmelt and precipitation recharges their reservoirs. Total Operating Expense for Q1 was 12.6% under budget at \$1,353,455 actual vs. \$1,549,410 budget.

Revenue year-to-date through April brought us 15.3% above budget with actual sales of \$4,848,957 compared to budget of \$4,204,483.

RENEWAL & REPLACEMENT PROJECTS: R&R expenditures for Q1 were \$1,495,756 actual vs. \$17,563,027 total annual budget. SEAPA's team has advanced several R&R projects to the execution phase and expenditures will accelerate significantly over the next couple of months.

STIKINE SUBMARINE CABLE REPLACEMENT FUNDING: SEAPA has pursued parallel funding paths through the Alaska Municipal Bond Bank (AMBB) and Rural Utilities Service (RUS). AMBB unanimously approved SEAPA's request for up to \$14MM in bonding and final Board action will be required under New Business. The RUS application process was cumbersome as expected. Good progress was made in the initial core application which better positions SEAPA in the future. SEAPA also successfully obtained the important RUS eligibility determination. However, the required project-specific environmental review was not well supported through the RUS Washington D.C. office. Any future applications will require earlier engagement and substantial professional services support to navigate this bottleneck. Although RUS lending and subsequent reporting requirements are onerous, they still offer the lowest cost financing available and should be considered for future SEAPA borrowing needs.

SUBMARINE CABLE CAPITAL FUNDING REQUEST: SEAPA has made a formal request to the Alaska Legislature for \$2.55MM to offset the cost of debt service for approximately three years. The intent is to delay a necessary rate increase associated with the submarine cable replacement while allowing time for our region to economically recover from the devastating impacts of the pandemic and decline in fisheries. The request leaves the door open for up to \$14MM if significant critical infrastructure money becomes available. The legislative process will take a few months to play out and it is my recommendation that we defer a rate increase decision until we know more. This item has been included under Old Business for further discussion.

GRANTS: SEAPA has one open grant, the FY13 DCCED, with an open balance at the end of Q1 totaling \$334,954. SEAPA successfully secured a one-year grant extension to June 30, 2022.



SOUTHEAST ALASKA POWER AGENCY CONTROLLER MEMO

Date:	May 4, 2021	From:	Кау Кеу
To:	Trey Acteson	Subject:	FINANCIAL STATEMENTS

SUGGESTED MOTION

I move to accept year-to-date financial statements through March 2021 and disbursements for February, March and April 2021 totaling \$2,488,728.20 as presented.

Financial Statements in this board packet include:

- kWh Graphs/kWh Revenue Summary (Apr 2021)
- Fund Allocation Graph (Apr 2021)
- **Grant Summary** (Quarterly through March 2021)
- Year-to-Date Financial Statements through March 2021
 - ✓ Financial Overview
 - ✓ Statement of Financial Position Year-to-date with prior year comparison
 - ✓ Statement of Activities Summary of year-to-date expenses by FERC code, compared to budget and prior year
 - ✓ Statement of Activities Line-item detail of actual expenses compared to budget by location
 - ✓ R&R Summary
- Disbursements for February, March, and April 2021

MWh Sales Year-to-Year Comparison



FIRM POWER SALES (kWh / MWh)

	2021 kWh HYDROPOWER SALES	CURRENT MONTH		YTD		
	2021 KWII HTDROFOWER SALES	Actual	Budget	Actual	Budget	
	Ketchikan Power Purchases	7,077,184	6,233,912	38,238,063	32,189,796	
0004	Petersburg Power Purchases	4,226,757	3,229,376	19,069,753	15,587,513	
2021	Wrangell Power Purchases	3,132,630	3,005,660	15,560,750	14,053,307	
	Total Power Purchases	14,436,571	12,468,948	72,868,566	61,830,616	





FIRM POWER SALES (kWh / MWh)

APR Actual Budget Actual Budget Ketchikan Power Purchases 7,077,184 6,233,912 38,238,063 32,189,79 2021 Petersburg Power Purchases 4,226,757 3,229,376 19,069,753 15,587,51 Wrangell Power Purchases 3,132,630 3,005,660 15,560,750 14,053,302		2021 kWh HYDROPOWER SALES	CURRENT MONTH		YTD		
Petersburg Power Purchases 7,077,184 6,233,912 38,238,063 32,189,79 Wrangell Power Purchases 4,226,757 3,229,376 19,069,753 15,587,51 Wrangell Power Purchases 3,132,630 3,005,660 15,560,750 14,053,30	٨DD		Actual	Budget	Actual	Budget	
2021 Wrangell Power Purchases 3,132,630 3,005,660 15,560,750 14,053,30	AFR	Ketchikan Power Purchases	7,077,184	6,233,912	38,238,063	32,189,796	
	0004	Petersburg Power Purchases	4,226,757	3,229,376	19,069,753	15,587,513	
	2021	Wrangell Power Purchases	3,132,630	3,005,660	15,560,750	14,053,307	
Total Power Purchases 14,436,571 12,468,948 72,868,566 61,830,61		Total Power Purchases	14,436,571	12,468,948	72,868,566	61,830,616	





FIRM POWER SALES (kWh / MWh)

	2021 kWh HYDROPOWER SALES	CURRENT	CURRENT MONTH		YTD		
APR	2021 KWII HTDROFOWER SALES	Actual	Budget	Actual	Budget		
	Ketchikan Power Purchases	7,077,184	6,233,912	38,238,063	32,189,796		
0004	Petersburg Power Purchases	4,226,757	3,229,376	19,069,753	15,587,513		
2021	Wrangell Power Purchases	3,132,630	3,005,660	15,560,750	14,053,307		
	Total Power Purchases	14,436,571	12,468,948	72,868,566	61,830,616		



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APRIL 2021 kWh Revenue Summary

The most recent kWh sales figures, through April 2021, are summarized below:

OPERATING REVENUE

FIRM kWh SALES	JAN-APR 2021	Budget	Prior Year
Ketchikan	\$2,504,445	\$2,188,906	\$2,100,474
Petersburg	\$1,295,337	\$1,059,952	\$1,025,552
Wrangell	\$1,049,175	\$955,625	\$839,290
Total Revenue	\$4,848,957	\$4,204,483	\$3,965,316

MWH TREND

Year-to-Date MWH SALES			MWH Tho		Thousa	nds
Year	MWH	-	20	40	60	80
Apr-21	71,308	Apr-21				
Apr-20	72,869	Apr-20				-
Apr-19	35,646	Apr-19 Apr-18				_
Apr-18	71,773	Apr-18 Apr-17				
Apr-17	71,097	· ·]	I			I

2019 drought.

APR 2021

Operations, Capital and Insurance	<u>ce Funds</u>	
Revenue Fund	\$ 4,978,636	20
Checking	829	
Dedicated R&R Projects Fund	4,663,758	
New Generation Fund	1,888,385	
Rate Stabilization Fund	2,003,067	15 New Generation \$1.89
Self Insured Risk Fund	6,918,026 *	(Su \$1.65
Total Operations, Capital	20,452,702	Self Insured
and Insurance Funds		Self Insured
<u>Trustee Funds</u>		10 Risk \$6.918
2015 Series Bond Interest	\$ 203,271	
2015 Series Bond Reserve	205,320	BUNNER Rate Stabilizatin \$2.00
2019 Series Bond Interest	2	Rate Stabilizatn
2019 Series Bond Principal	441	
2019 Series Bond Reserve	1,264,233	Dedicated R&R \$4,664 Revenue \$4,979 Restricted \$4,029
Total Trustee Funds	1,673,267	R&R Revenue \$4.664 \$4.979 Restricted
Other Restricted Funds		L \$4.064 \$4.039
STI - USFS CD	\$ 21,638	0
DNR Reclamation Fund	1,343,472	Dedicated Operating Restricted
Required R&R Fund	1,000,667	FUND TYPE
Total Other Restricted Funds	2,365,777	
Total Agency Funds	\$ 24,491,745	

The Self-Insured Fund displays the March balance.

Since this is an investment fund, monthly statements are not available until later in the month.

RR20349 - Submarine Cable Funding:

Prior to bonding or establishing another financial instrument to fund the Submarine Cable replacement project, expenditures will be paid from the Self Insured Risk Fund, the Rate Stabilization Fund, the Dedicated R&R Fund, and then the Revenue Fund, respectively. This project has a total budget of \$13,154,593 and is scheduled for completion in 2021. The first three milestone payments, totaling \$1.393M, were funded by the Self-Insured Risk Fund and paid in February 2021.

Dedicated Funds

New Generation = Project feasibility funding (hydro, wind, geothermal) Self-Insured Risk = Coverage for uninsured transmission lines, submarine cables and insurance deductibles.

Rate Stabilization Fund = Reserve Fund governed by the Rate Stabilization Fund Policy.

Dedicated R&R = Funds Renewal & Replacement projects approved by the SEAPA Board in the budget.

Operating Funds

Revenue Fund & Commercial Checking: All SEAPA income is deposited to the Revenue Fund as required by Bond Indentures and transferred to checking as needed to cover expenditures.

Restricted Funds (Legally or contractually restricted)

All Trustee Funds: Bond Interest, Principal, Reserve and Escrow accounts

R&R = \$1,000,000 minimum balance required by bond indenture

DNR = Alaska DNR Reclamation Agreement (50% SEAPA and 50% held in trust for Copper Valley and Kodiak)

USFS = USFS Land Remediation Certificate of Deposit

SOUTHEAST ALASKA POWER AGENCY **GRANT SUMMARY MARCH 2021**

AK DC	QUARTERLY BILLING				
Grant Billing	Grant Budget	Billing thru 2021	Open Balance	Mar-21	FY21
1 - Hydro Storage	578,000	578,000	0	-	-
2 - G&T Site Evaluation	2,109,092	1,774,138	334,954	1,779	1,779
3 - Stability / Interconnectiv	0	0	0	-	-
4 - Load Balance Model	9,181	9,181	0	-	-
5 - Project Mgmt	255,712	255,712	0	-	-
6 - Business Analysis / PSA	48,015	48,015	0		-
Total FY13 AK DCCED	3,000,000	2,665,046	334,954	1,779	1,779

TERM: JUL 2013 - JUN 2022

The grant term has been formally extended through June 2022.



MARCH 2021 YTD FINANCIAL OVERVIEW

OPERATING REVENUE

FIRM kWh SALES	JAN-MAR 2021	Budget	Prior Year
Ketchikan	\$2,023,197	\$1,765,000	\$2,100,474
Petersburg	\$1,007,917	\$840,354	\$1,025,552
Wrangell	\$836,156	\$751,240	\$839,290
Total Revenue	\$3,867,270	\$3,356,594	\$3,965,316

OPERATING EXPENSES

	JAN-MAR 2021	Budget	Prior Year
Hydro Facilities	\$574,091	\$620,020	\$574,702
Transmission	\$51,098	\$79,110	\$165,580
G&A	\$728,266	\$850,280	\$735,176
Total Ops Exp	\$1,353,455	\$1,549,410	\$1,475,458

MWH TREND

Year-to-Date MWH SALES			M	IWH	Thousa	inds
Year	MWH	-	20	40	60	80
Mar-21	56,872	Mar-21				
Mar-20	58,313	Mar-20				
Mar-19	25,025	Mar-19 Mar-18				
Mar-18	57,581	Mar-18 Mar-17				
Mar-17	57,845					

2019 drought.

Southeast Alaska	Power Agency

Statement of Financial Position	Year To Date	Prior Year To Date
as of March 31, 2021	03/31/21	03/31/20
Assets		
Current Assets		
Agency Funds		
Operating & Reserve Funds	19,493,530	19,621,271
Restricted Trustee Funds	2,442,914	2,431,437
Restricted Other Funds	2,290,709	2,212,256
Total Agency Funds	24,227,153	24,264,964
Accounts Receivable		
1100-001 - Accounts Receivable	2,678,203	2,253,312
1100-002 - Grants Receivable	1,779	14,867
1100-003 - Other Misc Receivable	5,800	5,800
Total Accounts Receivable	2,685,781	2,273,978
Other Current Assets		
Accrued Interest Receivable		
1200-102 - Accrued Interest Receivable	14,958	40,767
Total Accrued Interest Receivable	14,958	40,767
Prepaid Fees		
1200-201 - Prepaid FERC Fees	35,319	29,061
1200-202 - Prepaid Insurance	328,147	275,550
1200-204 - Prepaid USFS Land Use Fees	80,845	79,190
1200-206 - Prepaid Admin Group Ben	10,223	10,214
1200-207 - Prepaid Admin Retirement	15,143	57,036
Total Prepaid Fees	469,677	451,050
Inventory Assets		
1200-300 - Inventory Spares-Stores	248,876	207,474
1200-301 - Inventory SWL Winding Replace	890,405	890,405
1200-302 - Inventory Flashboard Kickers	439,456	439,456
Total Inventory Assets	1,578,737	1,537,335
Total Other Current Assets	2,063,372	2,029,152
Total Current Assets	28,976,307	28,568,094
Capital Assets		
1300-100 - Swan Lake Capital Assets	33,636,420	32,614,772
1300-200 - Tyee Lake Capital Assets	32,778,455	32,705,407
1300-300 - Swan-Tyee Intertie Capital Assets	115,093,787	114,974,970
1300-400 - Ketchikan Capital Assets	1,402,705	1,379,333
Total Capital Assets	182,911,368	181,674,482
R&R WIP Capital Projects		
1320-100 - WIP Swan Lake	482,606	481,487
1320-200 - WIP Tyee Lake	1,847,730	127,049
1320-300 - WIP Swan-Tyee Intertie	799	1,810
1320-400 - WIP Ketchikan	88,159	71,503
Total R&R WIP Capital Projects	2,419,294	681,848
Accumulated Depreciation	(57,847,994)	(53,499,608)
Total Capital Assets	127,482,668	128,856,723
Other Assets		
Deferred Assets		
1830-004 - Tyee Marine Access	-	6,975
1830-006 - New Generation Integration	7,021	4,505
1830-007 - 2019 Bond Gain on 2009 Refund	71,884	94,584
1830-008 - Submarine Cable Stikine Strait		95,888
Total Deferred Assets	78,905	201,952
Fotal Assets	156,537,880	157,626,769

Southeast	Alaska	Power	Agency
Journeuse	Alusku	I OWCI	Agency

Southeast Alaska Power Agency		
Statement of Financial Position	Year To Date	Prior Year To Date
as of March 31, 2021	03/31/21	03/31/20
Liabilities and Net Position		
Liabilities		
Current Liabilities		
Accounts Payable		
2100-001 - Accounts Payable General	99,456	97,249
Total Accounts Payable	99,456	96,716
Other Current Liabilities		
2100-301 - Other Current Liabilities	71,369	18,510
2100-304 - Reserve Interest Payable	234,956	221,052
2100-340 - Wages Payable	144,030	121,556
2100-341 - PTO Payable	239,132	212,430
2100-350 - Other Payroll Liabilities	25,758	52,585
Total Other Current Liabilities	715,244	573,549
Total Current Liabilities	814,700	723,382
Long Term Liabilities		
2200-001 - PERS Unfunded Liability WRG	716,467	817,743
2200-002 - DNR Fund CVEA KEA Liability	634,220	595,235
2200-202 - Series 2015 Bonds	10,295,000	10,295,000
2200-203 - Series 2019 Bonds	3,475,000	4,245,000
2200-302 - 2015 Bond Issuance Premium	669,876	724,934
2200-303 - 2019 Bond Issuance Premium	252,614	361,918
Total Long Term Liabilities	16,043,177	17,039,830
Total Liabilities	16,857,877	17,763,212
Net Position		
3100-001 - Net Investment Capital Assets	112,548,453	114,172,481
3100-002 - Restricted for Debt Service	1,466,438	1,469,099
3100-003 - Restricted by External Agreement	1,290,078	1,212,104
3100-004 - Unrestricted	23,211,318	21,653,769
Total Net Position	138,516,287	138,507,454
Net Income	1,163,716	1,356,103
Total Net Position	139,680,003	139,863,557
Total Liabilities and Net Position	156,537,880	157,626,769

Southeast Alaska Power Agency					
Statement of Activities - YTD Budget	YTD	YTD	VARIANCE	YTD	ANNUAL
as of March 31, 2021	FY21	BUDGET	% of Budget	FY20	FY21 Budget
OPERATING REVENUE					
400 - Hydro Facility Revenues	3,867,270	3,356,594	15.21 %	3,965,316	11,367,356
454 - Rent-Electric Property	4,896	3,000	63.18 %	4,896	3,000
Total Operating Revenue	3,872,166	3,359,594	15.25 %	3,970,211	11,370,356
OPERATING EXPENSE	· ·				
HYDRO FACILITY O&M					
535 - Operations Supervision	7,493	13,300	(43.7) %	12,536	90,900
537 - Hydraulic Expense	-	-	0.0 %	-	10,000
538 - Electric Expenses	8,862	11,200	(20.9) %	6,135	79,000
539 - Operations Misc Expense	75,397	106,830	(29.4) %	81,996	419,900
540 - Rents	44,808	47,790	(6.2) %	41,127	186,250
541 - Hydro Power Station Maintenance	5,205	9,400	(44.6) %	2,899	39,500
543 - Dams Reservoirs Waterways	1,618	3,385	(52.2) %	27	29,250
544 - Electric Plant Wages-Benefits	402,474	392,300	2.6 %	410,120	1,540,000
545 - Nonproduction Plant Maintenance	17,651	19,915	(11.4) %	4,523	54,900
561 - Control System Maintenance	10,584	15,900	(33.4) %	15,339	64,000
Total Hydro Facility Expense	574,091	620,020	(7.4) %	574,702	2,513,700
TRANSMISSION O&M					,,
562 - Substation Expense	6,587	7,345	(10.3) %	9,820	73,800
564 - XMSN Submarine Cable Expense	260	540	(51.9) %	71,500	3,200
571 - XMSN Overhead Lines Expense	44,250	71,225	(37.9) %	84,260	1,287,650
Total Transmission Expense	51,098	79,110	(35.4) %	165,580	1,364,650
GENERAL & ADMIN EXPENSE	,		(0011)/11		
920 - Admin Wages-Benefits	413,022	458,400	(9.9) %	396,824	1,832,000
921 - Office Expenses	31,242	45,830	(31.8) %	43,189	222,400
923 - Professional Services	41,730	91,700	(54.5) %	67,063	404,750
924 - Insurance	140,635	149,625	(6.0) %	118,093	598,500
928 - Regulatory Commission Expense	25,077	28,300	(11.4) %	11,900	113,500
930 - General Expense	56,358	56,025	0.6 %	78,325	120,700
931 - Admin Rent	20,204	20,400	(<u>1.0</u>) %	19,782	81,600
Total G&A Expense	728,266	850,280	(14.3) %	735,176	3,373,450
Total Operating Expense	1,353,455	1,549,410	(12.6) %	1,475,458	7,251,800
NET OPERATING REVENUE/(EXPENSE)	2,518,711	1,810,184	39.1 %	2,494,753	4,118,556
NONOPERATING INCOME					
941 - Grant Income	1,779				
942 - Interest Income Misc	20,738				
944 - Gain/(Loss) Investments	(30,132)				
946 - Misc Nonoperating Income	2,916				
Total Nonoperating Income	(4,699)				
NONOPERATING EXPENSE					
952 - Bond Interest Expense	137,339				
953 - Depreciation Expense	1,211,180				
954 - Grant Expense	1,779				
-					
Total Nonoperating Expense NET NONOPERATING INCOME/(EXPENSE)	<u> </u>				

Southeast Alaska Power Agency	All Locati	ons	0No Location		1Swan Lake		2Tyee Lake		3Swan-Tyee Intertie	
Statement of Activities	01/01/21 th	rough	01/01/21 through		01/01/21 through		01/01/21 through		01/01/21 through	
YTD Budget	YTD M	1ar 31	YTD N	lar 31	YTD Mar 31		YTD Mar 31		YTD Mar 31	
as of March 31, 2021	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
OPERATING REVENUE			•		1		•			
400 - Hydro Facility Revenues										
4000-401 Hydropower Sales Ketchikan	2,023,197	1,765,000	2,023,197	1,765,000	-	-	-	-	-	-
4000-402 Hydropower Sales Petersburg	1,007,917	840,354	1,007,917	840,354	-	-	-	-	-	-
4000-403 Hydropower Sales Wrangell	836,156	751,240	836,156	751,240		-		-	-	-
Total 400 - Hydro Facility Revenues	3,867,270	3,356,594	3,867,270	3,356,594	-	-	-	-	-	-
454 - Rent-Electric Property										
4540-451 Rent Electric Property	4,896	3,000	4,896	3,000	-	-	-	-	-	-
Total 454 - Rent-Electric Property	4,896	3,000	4,896	3,000		-		-	-	-
Total OPERATING REVENUE	3,872,166	3,359,594	3,872,166	3,359,594	-	-	-	-	-	-
OPERATING EXPENSES	•	-	-	-						
535 - Operations Supervision										
0310 Contractor	-	3,750	-	-	-	3,000	-	750	-	-
0390 Software	2,611	3,000	-	-	1,306	1,500	1,306	1,500	-	-
0610 Office Equipment	4,351	5,950	-	-	2,154	3,900	2,198	2,050	-	-
0730 Office Supplies	530	600	-	-	188	300	342	300	-	-
Total 535 - Operations Supervision	7,493	13,300	-	-	3,647	8,700	3,845	4,600	-	-
538 - Electric Expenses						,		·		
0310 Contractor	-	6,000	-	-	-	3,000	-	3,000	-	-
0740 Operating Supplies	1,204	2,600	-	-	1,080	1,300	124	1,300	-	-
0800 Materials-Minor Equip	7,658	2,600	-	-	7,110	1,300	548	1,300	-	-
Total 538 - Electric Expenses	8,862	11,200	-	-	8,190	5,600	672	5,600		-
539 - Operations Misc Expense										
0300 Communication Services	29,148	25,900	-	-	5,049	5,500	24,100	20,400	-	-
0310 Contractor	800	900	-	-	800	300	-	600	-	-
0320 Flights	18,050	25,500	-	-	3,120	9,000	14,930	16,500	-	-
0373 Rent-Other	190	300	-	-	190	300	-	-	-	-
0401 Training-Pro-Tech	-	3,750	-	-	-	1,875	-	1,875	-	-
0402 Training-Safety	6,187	18,900	-	-	3,301	8,700	2,886	10,200	-	-
0410 Transport-Other	-	5,900	-	-	-	3,400	-	2,500	-	-
0420 Utilities	244	300	-	-	244	300	-	-	-	-
0600 Phones, Radios, Video	1,716	1,260	-	-	754	260	962	1,000	-	-
0710 Food, Meals	815	760	-	-	-	260	815	500	-	-
0740 Operating Supplies	704	1,125	-	-	515	375	189	750	-	-
0750 Safety	1,286	2,800	-	-	896	1,400	390	1,400	-	-
0800 Materials-Minor Equip	5,624	6,310	-	-	-	260	5,624	6,050	-	-
0810 Rolling Stock Maint	6,911	3,175	-	-	(2)	1,300	6,912	1,875	-	-
0811 Marine Vessel Maint	110	650	-	-	110	650	-	-	-	-
0820 Fuels and Oils	158	6,750	-	-	-	3,750	158	3,000	-	-
0830 Fuels and Oils - Marine	3,455	2,550		-	982	1,300	2,473	1,250		-
Total 539 - Operations Misc Expense	75,397	106,830	-	-	15,959	38,930	59,439	67,900	128 pages.	-

Southeast Alaska Power Agency	All Locatio	ons	0No Locat	0No Location		Lake	2Tyee L	ake	3Swan-Tyee Intertie			
Statement of Activities	01/01/21 th	rough	01/01/21 thr	01/01/21 through		01/01/21 through		01/01/21 through		hrough 01/01/21 through		hrough
YTD Budget	YTD M	ar 31	YTD Ma	ar 31	YTD N	lar 31	YTD N	1ar 31	YTD Mar 31			
as of March 31, 2021	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget		
540 - Rents							-					
0010 Other Regulatory	-	6,000	-	-	-	-	-	-	-	6,000		
0030 FERC Land Use	17,659	14,490	-	-	3,795	3,150	13,865	11,340	-	-		
0050 USFS Land Use	27,148	27,300		-		-	7,208	7,550	19,940	19,750		
Total 540 - Rents	44,808	47,790	-	-	3,795	3,150	21,073	18,890	19,940	25,750		
541 - Hydro Power Station Maint.												
0310 Contractor	-	1,000	-	-	-	700	-	300	-	-		
0740 Operating Supplies	575	2,400	-	-	198	1,200	376	1,200	-	-		
0800 Materials-Minor Equip	2,374	2,400	-	-	716	1,200	1,658	1,200	-	-		
0850 Tools	2,256	3,600		-	225	1,500	2,031	2,100		-		
Total 541 - Hydro Power Station Maint.	5,205	9,400	-	-	1,139	4,600	4,066	4,800	-	-		
543 - Dams Reservoirs Waterways												
0310 Contractor	-	750	-	-	-	750	-	-	-	-		
0330 Helicopters	-	1,000	-	-	-	-	-	1,000	-	-		
0740 Operating Supplies	-	795	-	-	-	300	-	495	-	-		
0800 Materials-Minor Equip	1,618	420	-	-	1,618	300	-	120	-	-		
0820 Fuels and Oils	-	60	-	-	-	-	-	60	-	-		
0850 Tools	-	360		-		240		120	-	-		
Total 543 - Dams Reservoirs Waterways	1,618	3,385	-	-	1,618	1,590	-	1,795	-	-		
544 - Electric Plant Wages-Benefits												
0110 Wages / PTO	246,927	256,800	-	-	128,438	125,900	118,488	130,900	-	-		
0120 OT	49,395	33,900	-	-	13,082	19,500	36,313	14,400	-	-		
0140 Taxes	26,473	18,000	-	-	11,538	10,300	14,935	7,700	-	-		
0150 H&W	45,212	50,100	-	-	23,486	25,300	21,726	24,800	-	-		
0160 Retirement	31,366	33,500	-	-	15,639	17,000	15,727	16,500	-	-		
0180 Moving Expense	3,102	-		-	3,102	-		-		-		
Total 544 - Electric Plant Wages-Benefits	402,474	392,300	-	-	195,286	198,000	207,188	194,300	-	-		
545 - Nonproduction Plant Maintenance												
0310 Contractor	11,294	9,750	-	-	11,294	9,650	-	100	-	-		
0373 Rent-Other	963	990	-	-	963	990	-	-	-	-		
0730 Office Supplies	16	-	-	-	-	-	16	-	-	-		
0740 Operating Supplies	2,721	2,485	-	-	799	610	1,922	1,875	-	-		
0800 Materials-Minor Equip	1,139	4,500	-	-	543	2,000	596	2,500	-	-		
0810 Rolling Stock Maint	75	120	-	-	-	-	75	120	-	-		
0820 Fuels and Oils	46	-	-	-	-	-	46	-	-	-		
0840 Furnishings	1,113	1,875	-	-	-	1,500	1,113	375	-	-		
0850 Tools	284	195		-		75	284	120		-		
Total 545 - Nonproduction Plant Maint.	17,651	19,915	-	-	13,599	14,825	4,052	5,090	-	-		

Southeast Alaska Power Agency	All Locati	ions	0No Loo	ation	1Swan	Lake	2Tyee	e Lake	3Swan-Tye	e Intertie
Statement of Activities	01/01/21 th	nrough	01/01/21 t	hrough	01/01/21 through		01/01/21 through		01/01/21 through	
YTD Budget	YTD N	/lar 31	YTD	Mar 31	YTD M	Mar 31	YTD	Mar 31	YTD	Mar 31
as of March 31, 2021	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
561 - Control System Maintenance										
0310 Contractor	10,584	15,000	-	-	959	7,500	9,626	7,500	-	-
0390 Software		900		-		450		450		-
Total 561 - Control System Maint.	10,584	15,900	-	-	959	7,950	9,626	7,950	-	-
562 - Substation Expense										
0300 Communication Services	1,428	375	-	-	-	-	1,428	375	-	-
0310 Contractor	-	2,000	-	-	-	-	-	2,000	-	-
0320 Flights	1,300	900	-	-	-	-	1,300	900	-	-
0360 Lodging	-	120	-	-	-	-	-	120	-	-
0373 Rent-Other	-	120	-	-	-	-	-	120	-	-
0420 Utilities	3,744	3,000	-	-	-	-	3,744	3,000	-	-
0710 Food, Meals	-	60	-	-	-	-	-	60	-	-
0740 Operating Supplies	115	450	-	-	-	50	115	400	-	-
0800 Materials-Minor Equip	-	200	-	-	-	-	-	200	-	-
0820 Fuels and Oils	-	60	-	-	-	-	-	60	-	-
0850 Tools		60		-		-		60		-
Total 562 - Substation Expense	6,587	7,345	-	-	-	50	6,587	7,295	-	-
564 - XMSN Submarine Cable Expense										
0360 Lodging	260	-	-	-	-	-	260	-	-	-
0740 Operating Supplies	-	240	-	-	-	-	-	240	-	-
0800 Materials-Minor Equip	-	300	-	-	-	-	-	300	-	-
Total 564 - XMSN Submarine Cable Exp.	260	540	-	-	-	-	260	540	-	-
571 - XMSN Overhead Lines Expense										
0110 Wages / PTO	24,367	22,500	24,367	22,500	-	-	-	-	-	-
0120 OT	40	200	40	200	-	-	-	-	-	-
0140 Taxes	1,868	1,900	1,868	1,900	-	-	-	-	-	-
0150 H&W	5,432	4,200	5,432	4,200	-	-	-	-	-	-
0160 Retirement	3,487	2,700	3,487	2,700	-	-	-	-	-	-
0300 Communication Services	385	420	385	420	-	-	-	-	-	-
0310 Contractor	6,106	37,500	-	-	6,106	12,500	-	12,500	-	12,500
0373 Rent-Other	-	375	-	375	-	-	-	-	-	-
0420 Utilities	439	280	439	280	-	-	-	-	-	-
0710 Food, Meals	15	250	15	250	-	-	-	-	-	-
0740 Operating Supplies	258	-	258	-	-	-	-	-	-	-
0800 Materials-Minor Equip	-	250	-	250	-	-	-	-	-	-
0811 Marine Vessel Maint	931	500	931	500	-	-	-	-	-	-
0820 Fuels and Oils	924	150	924	150		-		-	-	-
Total 571 - XMSN Overhead Lines Exp.	44,250	71,225	38,145	33,725	6,106	12,500	-	12,500	-	12,500

Southeast Alaska Power Agency	All Locations		0No Location		1Swan Lake		2Tyee Lake		3Swan-Tyee Intertie		
Statement of Activities	01/01/21 thr	ough	01/01/21 th	rough	01/01/21	01/01/21 through 01,		01/01/21 through		01/01/21 through	
YTD Budget	YTD M	ar 31	YTD N	lar 31	YTD	Mar 31	YTD	Mar 31	YTD	Mar 31	
as of March 31, 2021	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	
920 - Admin Wages-Benefits			•								
0110 Wages / PTO	239,184	261,000	239,184	261,000	-	-	-	-	-	-	
0120 OT	236	500	236	500	-	-	-	-	-	-	
0140 Taxes	20,166	19,350	20,166	19,350	-	-	-	-	-	-	
0150 H&W	55,708	65,900	55,708	65,900	-	-	-	-	-	-	
0160 Retirement	97,727	111,650	97,727	111,650	-		-		-	-	
Total 920 - Admin Wages-Benefits	413,022	458,400	413,022	458,400	-	-	-	-	-	-	
921 - Office Expenses											
0300 Communication Services	7,049	8,600	7,049	8,600	-	-	-	-	-	-	
0310 Contractor	10,527	22,850	10,527	22,850	-	-	-	-	-	-	
0350 Licenses-Permits	10	40	10	40	-	-	-	-	-	-	
0390 Software	2,466	1,075	2,466	1,075	-	-	-	-	-	-	
0420 Utilities	2,504	2,800	2,504	2,800	-	-	-	-	-	-	
0600 Phones, Radios, Video	720	-	720	-	-	-	-	-	-	-	
0610 Office Equipment	5,421	5,000	5,421	5,000	-	-	-	-	-	-	
0710 Food, Meals	416	400	416	400	-	-	-	-	-	-	
0730 Office Supplies	1,726	2,900	1,726	2,900	-	-	-	-	-	-	
0810 Rolling Stock Maint	211	1,875	211	1,875	-	-	-	-	-	-	
0820 Fuels and Oils	193	290	193	290	-	-		-		-	
Total 921 - Office Expenses	31,242	45,830	31,242	45,830	-	-	-	-	-	-	
923 - Professional Services											
0920 Banking-Trustee-Investment	10,289	6,300	10,289	6,300	-	-	-	-	-	-	
0930 Legal	17,135	31,400	17,135	31,400	-	-	-	-	-	-	
0940 Legislative	12,000	12,000	12,000	12,000	-	-	-	-	-	-	
0950 Other Professional Services	2,306	42,000	2,306	42,000	-	-		-		-	
Total 923 - Professional Services	41,730	91,700	41,730	91,700	-	-	-	-	-	-	
924 - Insurance											
0960 Insurance	140,635	149,625	140,635	149,625	-	-		-			
Total 924 - Insurance	140,635	149,625	140,635	149,625	-	-	-	-	-	-	

Southeast Alaska Power Agency	All Loca	tions	0No Lo	cation	1Swan	Lake	2Туее	e Lake	3Swan-Tye	e Intertie
Statement of Activities	01/01/21 through									
YTD Budget	YTD	Mar 31	YTD	Mar 31	YTD I	Mar 31	YTD	Mar 31	YTD	Mar 31
as of March 31, 2021	Actual	Budget								
928 - Regulatory Commission Expense										
0010 Other Regulatory	-	4,200	-	-	-	-	-	4,200	-	-
0020 FERC Admin	15,252	15,180	-	-	8,001	7,980	7,251	7,200	-	-
0040 FERC Other	9,675	6,870	-	-	9,675	6,870	-	-	-	-
0060 AK Agency	150	175	-	-	50	25	100	75	-	75
0310 Contractor		1,875		-		1,875				-
Total 928 - Regulatory Commission Exp.	25,077	28,300	-	-	17,726	16,750	7,351	11,475	-	75
930 - General Expense										
0200 Advertising-Public Relations	4,760	7,500	4,760	7,500	-	-	-	-	-	-
0210 Association Dues	37,499	36,400	37,499	36,400	-	-	-	-	-	-
0220 Board Meeting Expense	1,056	1,000	1,056	1,000	-	-	-	-	-	-
0230 Professional Development	983	4,000	983	4,000	-	-	-	-	-	-
0240 Travel Expense (Admin)	2,682	3,750	2,682	3,750	-	-	-	-	-	-
0250 Non-Travel Incidental	528	375	528	375	-	-	-	-	-	-
0260 Recruitment	8,849	3,000	8,849	3,000		-		-		-
Total 930 - General Expense	56,358	56,025	56,358	56,025	-	-	-	-	-	-
931 - Admin Rent										
0371 Rent-Office Space	15,629	15,750	15,629	15,750	-	-	-	-	-	-
0372 Rent-Apartment	4,575	4,650	4,575	4,650		-	-	-	-	-
Total 931 - Admin Rent	20,204	20,400	20,204	20,400	-	-	-	-		-
Total Operating Expenses	1,353,455	1,549,410	741,334	855,705	268,022	312,645	324,159	342,735	19,940	38,325
NET OPERATING REVENUE/(EXPENSE)	2,518,711	1,810,184	3,130,832	2,503,889	(268,022)	(312,645)	(324,159)	(342,735)	(19,940)	(38,325)

Southeast Alaska Power Agency	All Loca	tions	0No L	ocation	1Swa	an Lake	2Tye	e Lake	3Swan-Ty	ee Intertie
Statement of Activities	01/01/21	through	01/01/21	through	01/01/2	1 through	01/01/21	L through	01/01/21	through
YTD Budget	YTD	Mar 31	YTD	Mar 31	YTD	Mar 31	YTD	Mar 31	YTD	Mar 31
as of March 31, 2021	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
NONOPERATING INCOME					-	-				
941 - Grant Income										
5410 Grant Income	1,779									
Total 941 - Grant Income	1,779									
942 - Interest Income Misc										
5010 Interest Earned Misc	1,308									
5030 Interest Investment Income	19,429									
Total 942 - Interest Income Misc	20,738									
944 - Gain/(Loss) Investments										
5200 Realized Gain/(Loss) on Invest	46,321									
5210 Unrealized Gain/(Loss) Investmt	(76 <i>,</i> 453)									
Total 944 - Gain/(Loss) Investments	(30,132)									
946 - Misc Nonoperating Income										
5040 Other Misc Income	282									
5420 Gain/(Loss) Property Dispositn	2,634									
Total 946 - Misc Nonoperating Income	2,916									
Total Nonoperating Income	(4,699)									
NONOPERATING EXPENSE										
952 - Bond Interest Expense										
6120 Bond Interest Expense 2015 Series	108,158									
6130 Bond Interest Expense 2019 Series	29,181									
Total 952 - Bond Interest Expense	137,339									
953 - Depreciation Expense										
6300 Depreciation Expense	1,211,180									
Total 953 - Depreciation Expense	1,211,180									
954 - Grant Expense										
6520 Grant Contractual	1,779									
Total 954 - Grant Expense	1,779									
Total Nonoperating Expense	1,350,298									
Net Nonoperating Revenue/(Expense)	(1,354,995)									
Change in Net Position	1,163,716									

Southeast Alaska Power Agency R&R Summary - Capital Expenditures as of March 31, 2021

	2021	2021	PRIOR YRS	OVERALL	Overall Budget
	EXPENDITURES	BUDGET	EXPENDITURES	EXPENDITURES	through 2021
RR19307 - Helipads Cleveland	-	500,874	18,626	18,626	538,126
RR19314 - Statn Service Switch	65,000	1,543,047	243,953	308,953	1,787,000
RR19326 - Don Finney Lane HQ	-	2,767,880	5,704	5,704	2,775,000
RR19331 - STCS-HMI-Historian	440	330,525	123,563	124,003	430,525
RR20337 - Excitation Brush Vacuum SWL	245	16,711	33,389	33,634	50,100
RR20338 - Excitation Brush Vacuum TYL	-	12,921	46,649	46,649	59,700
RR20339 - Guy Thimbles STI Phase II	799	93,000	-	799	211,817
RR20341 - Intake Gate Refurbish TYL	-	130,396	142,904	142,904	251,300
RR20343 - Partial Discharge Monitors SWL	-	21,710	85,930	85,930	108,229
RR20344 - Spillway Recovery Davit	5,754	8,860	3,640	9,394	12,500
RR20345 - Stationary Winch SWL	-	43,500	-	-	43,500
RR20346 - XFMR Dif Relay Bailey	-	40,000	3,420	3,420	43,420
RR20349 - Submarine Cable Stikine Strait	1,401,239	11,745,903	215,759	1,616,998	13,370,352
RR21350 - Bunkhouse SWL	-	25,000	-	-	25,000
RR21351 - Equipment Trailer KTN	-	15,000	-	-	15,000
RR21352 - Fiber Buildout PSG WRG	7	59,000	-	7	59,000
RR21353 - Flashboard Deicing SWL	-	25,000	-	-	25,000
RR21354 - Guardrail SWL	-	21,700	-	-	21,700
RR21355 - Lighting TYL-WRG	-	26,000	-	-	26,000
RR21356 - Office Unit SWL Four-Plex	-	15,000	-	-	15,000
RR21357 - PRV Valves TYL	-	43,000	-	-	43,000
RR21358 - RTAC KTN	22,050	30,000	-	22,050	30,000
RR21359 - XFMR Refurb SWL-Bailey	222	48,000	-	222	48,000
Total All RR Projects	1,495,756	17,563,027	923,538	2,419,294	19,989,269

Overall budget is through December 2021 and does not include future years.

* R&R Projects completed in 2021

Commercial Checking	\$2,488,728.20
Dedicated R&R Fund	1,502,955.91
Revenue Fund	985,772.29

DISBURSEMENTS FEB-MAR-APR 2021

	REVENUE	DEDICATED
VENDOR	FUND	R&R FUND
ABQ Industrial LP	1,520.00	-
Aircraft Spruce & Specialty Co	1,037.00	-
AK DNR 550-1410	150.00	-
Alaska Airlines Cargo	78.75	-
Alaska Dispatch News	-	54.80
Alaska Metal Goods Inc	-	5,650.00
Alaska Permanent Capital, Inc	4,550.43	-
All Around Tire Service	75.00	-
Amazon.com	6,242.17	439.84
Angerman's Inc	169.90	-
Arrowhead LP Gas WRG	179.91	-
Ascent Law Partners LLP	16,805.00	1,855.00
Bank of America - Jan	19,772.47	89.04
Bank of America - Feb	12,616.61	-
Bank of America - Mar	17,061.95	-
Bay Company	1,193.03	-
Bernies	639.92	-
Buness Bros. Inc	760.00	-
Cambria Properties LLC	4,575.00	-
Center Marine Services Inc	-	6,600.00
Channel Electric Inc	629.36	-
City Market Inc	341.98	-
CoastAlaska, Inc	2,301.00	-
Crew Enterprises	479.54	-
Daily Journal of Commerce	-	78.40
Dell	2,226.15	-
Diversified Diving Service	11,293.50	-
Electric Power Constructors Inc RR19314 Station Service	-	65,000.00
Electric Power Systems Inc	6,343.50	-
Federal Energy Regulatory Commissio Annual Land Use Fees	70,637.97	-
FedEx	448.73	-
First City Electric, Inc	3,101.62	245.36
G2 Risk Consulting	4,949.00	-
Grainger	2,226.50	-
Grip Studs	3,089.00	-
Hammer & Wikan, Inc	75.98	-
High Tide Parts	207.44	-
Johnson's Building Supply	1,225.30	-
Juneau Alaska Communications	1,633.95	-
Kemppel Huffman and Ellis PC	330.00	-
Ketchikan City of 334	190.00	-
Ketchikan Daily News	455.05	-
Ketchikan Gateway Borough	15,764.62	-
Landing Hotel	845.91	-
Legacy Comm Services	720.00	-
Litostroj Hydro Inc	10,561.80	-
LNM Services	150.51	-
Madison Lumber & Hardware Inc	481.71	-
Marble Construction	963.00	799.37
McMillen Jacobs Associates	1,779.00	-
Mops and Maids	886.00	-
Motion and Flow Control Products	1,538.27	-
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Commercial Checking	\$2,488,728.20
Dedicated R&R Fund	1,502,955.91
Revenue Fund	985,772.29

DISBURSEMENTS FEB-MAR-APR 2021

		REVENUE	DEDICATED
VENDOR		FUND	R&R FUND
National Hydropower Association, Inc		22,744.14	-
Northwest Hydroelectric Association		800.00	-
Northwest Public Power Assn		475.00	-
NRECA Group Ins	Admin employee benefits (3 mo)	56,646.15	-
NRECA Group Ins Admin		4,713.72	-
NRECA RSP Admin		2,724.21	-
NRECA RSP Trust Contrib	Admin employee benefits (3 mo)	88,135.53	-
Ottesen's Inc		1,763.90	-
Pacific Pride of Alaska, LLC		763.32	-
Petro Marine Services-KTN		818.75	-
Petro Marine Services-WRG		3,873.22	-
Pilot Publishing, Inc		52.50	-
Ray Matiashowski		12,000.00	_
Samson Tug & Barge		110.24	103.88
Satellite & Sound, Inc		3,315.50	-
Schmolck Mechanical KTN		119.27	
Schnabel Engineering LLC		15,050.00	
SE Business Machines		1,335.00	
SEARHC Accts Rec		350.00	
Segrity LLC		15,424.60	29,340.00
Sentry Hardware & Marine		908.46	6.57
Service Auto Parts		693.57	0.57
Sockeye Business Solutions Inc		3,000.00	
Southeast Auto & Marine Parts, Inc		3,787.93	
Stikine Inn		516.00	-
Sumitomo Electric USA Inc	RR20349 Submarine Cable	510.00	1 202 602 65
Sunrise Aviation Inc	RR20349 Submarine Cable	-	1,392,693.65
		17,905.00	-
Tamico Inc		1,049.00	-
Taquan Air TexRus LLC		2,080.00	-
		7,493.12	-
Tongass Business Center Inc		356.84	-
Tongass Trading Company Inc		449.94	-
TSS		3,442.00	-
Tyler Industrial Supply		977.25	-
Ward Creek Industrial		375.00	-
Wells Fargo 2015 Interest	Bond Principal and Interest payments	121,923.00	-
Wells Fargo 2019 Interest	Bond Principal and Interest payments	43,449.00	-
Wells Fargo 2019 Principal	Bond Principal and Interest payments	201,252.00	-
Wells Fargo Bank MN		500.00	-
Wells Fargo Corporate Trust	2021 DNR Reclamation Fund contribution	75,000.00	-
WesSpur Tree Equipment, Inc		327.52	-
Workforce Go		221.46	-
Wrangell City & Borough		27,243.12	-
Wrangell Extended Stay LLC		260.00	-
Wrangell IGA Inc		814.50	-
Wrangell Sentinel		329.00	-
X2nSat		6,900.00	-
TOTAL	2,488,728.20	985,772.29	1,502,955.91



Operations Plan Update | May 2021

Date: May 7, 2021

To: Trey Acteson, Chief Executive Officer

From: Robert Siedman, P.E., Director of Engineering & Technical Services

SEAPA 2021 Operations Plan Update

Every year SEAPA presents the Operations Plan (Ops Plan) for Board approval in accordance with Section 5 of the Power Sales Agreement¹ (PSA). The annual plan forecasts expected reservoir levels for Tyee Lake and Swan Lake for the upcoming year by maximizing output from SEAPA facilities and optimizing water resources. Pursuant to the PSA, the Ops Plan gives first priority to the dedicated Firm Power Requirements of each Utility and optimizes Additional Dedicated Output as a second priority for additional power requirements.

Due to the drought of 2018-2019, the Operations Plan was significantly revised for 2020-2021. In collaboration with Member Utilities, SEAPA addressed Communication, Dedicated Output, Additional Dedicated Output, Supplemental Diesel and Efficiency in the revised plan.

1.0 Operations

The Turn (beginning of the snow runoff) typically occurs at Swan and Tyee lakes around mid-April and late-April, respectively. As of the date of this report, the Turn is in full effect. SEAPA balances lakes in consideration of the Turn by utilizing the Swan-Tyee transmission line (STI), which balances lake levels at Tyee and Swan above Draft Limits and below spill (ideally). Between February and April, precipitation was above normal for both Tyee and Swan. Temperatures were slightly below normal for the same period and as a result, most of the realized precipitation was stored in the form of snow in both drainage basins. To ensure that Swan made the turn without reaching its Draft Limit, SEAPA leaned heavy on Tyee generation and sent 5615 MWh to the South across the STI for that period.

On April 14, SEAPA performed a Snow Survey at both Tyee and Swan (see attached). The surveys indicated that both Tyee and Swan snowpack were well above average with more potential water in the form of snow than either lake could hold. To minimize potential future operation of Swan Lake Vertical Gates and reduce the risk of spill, on April 20, SEAPA began transferring power from Swan to the North by reducing Tyee Output(s) and subsequently increasing Swan Output(s). Water is currently being transferred from Swan Lake to Tyee Lake by way of the STI (Water over Wire) to balance lakes and prevent spill at Swan.

The chart illustrated below demonstrates SEAPA operations as a function of balancing lakes. In January, SEAPA transferred power to the North across the STI to successfully prevent spill at Swan. From February to mid-April, SEAPA subsequently transferred power back from the North to the South, across the STI, to balance lakes and ensure draft limits were not reached and the Turn was successfully met. On April 20,

¹ Section 5 of the Power Sales Agreement states that SEAPA shall prepare annually an Operations Plan to estimate the Firm Power Requirements of the Purchasing Utilities and identify Dedicated output to maximize utilization and optimize output of each facility.



Operations Plan Update | May 2021

SEAPA again began transferring power from the South to the North after snow surveys indicated above average potential future inflows, to begin the fill cycle at both lakes, and to mitigate spill at Swan.



2.0 Current Lake Levels

The chart illustrated below is the Sales/Guide curves for Tyee Lake. The green line represents the sales curve, and the red line represents the curtailment curve. As represented by the blue line (actual lake levels over time), Tyee Lake is well above the curtailment curve and in a very healthy condition. Typically, Tyee does not make the Turn until May however in mid-April, there were 10 days of near 60-degree weather that kick started Tyee Lake's fill cycle. Tyee is currently at a lake elevation of 1338 feet and sits 62.5 feet above the curtailment curve.

The Agency typically performs snow surveys in May for both Swan and Tyee Lake however due to the warm weather in mid-April, the spring snow surveys were performed earlier than normal.



Operations Plan Update | May 2021



Tyee Lake Sales/Guide Curve: Elevation 1338 ft

As indicated in the image below (April 14, 2021), the Tyee drainage basin is looking excellent with a snowpack that is well above an average year. The Tyee snow pillow reported within 5% of the Snow Survey and the in-house designed snow pillow stand and communications array demonstrated this year that it will be an excellent resource for SEAPA for years into the future. With over 20 feet of snow measured, SEAPA has a high level of confidence that Tyee Lake will be full by the end of the fill cycle.



May 2021 SEAPA Operations Plan Update | 3



Operations Plan Update | May 2021



Swan Lake Guide Curve: Elevation 311.6 ft

Swan Lake is also currently at a very healthy lake level for this time of year with an elevation of 311.6 feet as indicated by the chart above. The snow pillow at Swan Lake (image below) was repaired in the Winter of 2020 (after a black bear incident) and reported within 5% of the Snow Survey in 2021, demonstrating its accuracy was within tolerance and similar to Tyee.




2021 Spring Snow Survey

Date of Survey: 4/14/2021

Drainage Basin: **Tyee Lake**







How Snow Surveys are Performed

SEAPA performs snow surveys typically at the beginning of every Spring during the month of April. There are 2 snow markers in the Tyee Lake basin that are used to gauge the height of the snow when a snow survey is not possible due to weather conditions or other extenuating circumstances. Weather permitting, 3 to 5 measurements are taken at each snow marker location. Locations at Tyee Lake include the Sugar Bowl and Avalanche Alley.

Snow Depth is measured by pushing an aluminum tube though the snowpack to the ground surface and extracting a snow core. The depth of the snow and the length of the snow core are measured. The weight of the tube and core are also measured. With measurements of the empty tube known (and recorded), the weight of the snow core sample equates to 1 oz per 1 inch of water (calibrated). For example, 1 pound of measured snow is equal to 16 inches of water (rain equivalent). Dividing the snow-water equivalent (SWE) value by the measured snow depth results in a calculated density, which is used to determine variability across the snow course and quality control of the samples taken.



Snow Survey Sampling Tool





Southeast Alaska Power Agency Snow Survey Report

Calculations for Snow Water Equivalent to Water in the Lake

The Tyee Lake catchment basin is approximately 15 square miles or 9,600 acres. On average, Tyee Lake has a surface area (top of the lake) of 359 acres. The lake's surface area varies at different lake levels however this variance is considered nominal given the lake's small percentage of the total basin. Subtracting the lake's surface area from the total basin catchment area leaves approximately 9,241 acres of area for snow to accumulate.



Tyee Lake Catchment Basin

Once the water snow equivalent has been calculated, the amount of water that will result as inflow into the lake and thereby increase the lake level is calculated. An average of the snow water equivalent is used from multiple sites on the snow course and calculated per the equations below:

Converting Acres to square feet:

 $acre = 43,560 ft^2$

Total area for snow to accumulate:

9,241 acres = 402,537,960 ft²

Total area of lake:

359 acres = 15,638,040 ft²

Converting inches of Snow Water Equivalent (SWE) to cubic feet in basin:

1 inch SWE = $\frac{402,537,960 ft^2}{12 in SWE} * 1 ft SWE = 33,544,830 ft^3 per inch of SWE$

Converting cubic feet in basin to feet of water in the lake:

 $\frac{33,544,830 ft^3}{15,638,040 ft^2} = 2.15 ft of lake elevation per inch of SWE$





Snow surveys are performed at discreet elevations and do not represent the entire catchment basin. It is therefore prudent to consider the elevation profile of the basin and consider the elevation at which snow is present. Below is an elevation profile of the Tyee Lake catchment basin, which divides elevation profiles into percentages of the total basin area.



Another measurement taken during the snow survey is the elevation where snow is visually present. Using the elevation profile for the Tyee Lake basin, a weighted percentage of total basin snow coverage is calculated. For example, if snow is not present below 1700 feet in elevation, only 85% of the basin is covered in snow (see elevation profile above). In addition, snow gradient as a function of elevation is also considered. On average, temperature decreases by 3-degrees per thousand feet in elevation. As a result, there is generally more snow at higher elevations and less at lower elevations. Snow surveys are therefore performed at approximately an elevation that is 50% of the total peak and near 50% of the elevation area profile. An average of the SWE at the snow survey locations results in an accurate average of the entire basin (minus elevations with no snow).

A final calculation is performed to forecast total sublimation of the existing snow over the snow melt season. Sublimation is a chemical process where a solid turns into a gas without going through a liquid stage. Anywhere from 10% to 40% of the drainage basins SWE can be lost to the atmosphere, and not end up in the lake. Forecasting sublimation is extremely challenging. Humidity, temperature, precipitation and direct sunlight all are contributing factors. As a conservative approach to forecasting sublimation, SEAPA uses the following percentage factors based on NOAA 3-month outlooks:

3-Month Forecast	Percent Sublimation
Warmer & Wetter	10.0%
Colder & Dryer	15.0%
Warmer & Dryer	20.0%





Southeast Alaska Power Agency Snow Survey Report

General Information

Surveyor Name(s)	Weather	Water in streams	Evidence of Avalanche	Start of Snow Elevation
SEAPA	Clear	Partial Frozen	No	

Data Recorded

Date	Site	Sample #	Depth of Snow (Inches)	Length of Core (Inches)	Weight of Tube (lbs)	FWDTV	Water Content (Inches)	Density Percent
4/14/2021	Sugar Bowl	1	186	179	22	17	80	0.43
4/14/2021	Sugar Bowl	2	190	178	21.5	17	72.2	0.38
4/14/2021	Avalanche Alley	1	240	200	25	19.5	88.8	0.37
4/14/2021	Avalanche Alley	2	240	200	25	19.5	88.8	0.37

Forecasted Water In Lake Equivalent

Average Snow Water	Sublimation & Snow	Total Water in Lake	Year-to-Year Percent
Equivalent (SWE)	Level Correction %	(Feet)	of Average
82.45 in	90%	159.54 ft	178%





2021 Spring Snow Survey

Date of Survey: 4/14/2021

Drainage Basin: Swan Lake







How Snow Surveys are Performed

SEAPA performs snow surveys typically at the beginning of every Spring during the month of April. There are 3 snow markers in the Swan Lake basin that are used to gauge the height of the snow when a snow survey is not possible due to weather conditions or other extenuating circumstances. Weather permitting, 3 to 5 measurements are taken at each snow marker location. Locations at Swan Lake include Swan Mountain, Mint Ridge and Lake Grace Pass.

Snow Depth is measured by pushing an aluminum tube though the snowpack to the ground surface and extracting a snow core. The depth of the snow and the length of the snow core are measured. The weight of the tube and core are also measured. With measurements of the empty tube known (and recorded), the weight of the snow core sample equates to 1 oz per 1 inch of water (calibrated). For example, 1 pound of measured snow is equal to 16 inches of water (rain equivalent). Dividing the snow water equivalent value by the measured snow depth results in a calculated density, which is used to determine variability across the snow course and quality control of the samples taken.



Snow Survey Sampling Tool





Calculations for Snow Water Equivalent to Water in the Lake

The Swan Lake catchment basin is approximately 36 square miles or 23,040 acres. On average, Swan Lake has a surface area (top of the lake) of 1500 acres. The lake's surface area varies at different lake levels however this variance is considered nominal given the lake's small percentage of the total basin. Subtracting the lake's surface area from the total basin catchment area leaves approximately 21,540 acres of area for snow to accumulate.



Swan Lake Catchment Basin

Once the water snow equivalent has been calculated, the amount of water that will result as inflow into the lake and thereby increase the lake level is calculated. An average of the snow water equivalent is used from multiple sites on the snow course and calculated per the equations below:

Converting Acres to square feet:

 $acre = 43,560 ft^2$

Total area for snow to accumulate:

21,540 acres = 938,282,400 ft²

Total area of lake:

1500 acres = 65,340,000 ft²

Converting inches of Snow Water Equivalent (SWE) to cubic feet in basin:

1 inch SWE = $\frac{938,282,400 ft^2}{12in SWE} * 1 ft SWE = 78, 190, 200 ft^3 per inch of SWE$

Converting cubic feet in basin to feet of water in the lake:

 $\frac{78,190,200 ft^{3}}{65,340,000 ft^{2}} = 1.2 ft of lake elevation per inch of SWE$





Snow surveys are performed at discreet elevations and do not represent the entire catchment basin. It is therefore prudent to consider the elevation profile of the basin and consider the elevation at which snow is present. Below is an elevation profile of the Swan Lake catchment basin, which divides elevation profiles into percentages of the total basin area.



Another measurement taken during the snow survey is the elevation where snow is visually present. Using the elevation profile for the Swan Lake basin, a weighted percentage of total basin snow coverage is calculated. For example, if snow is not present below 1300 feet in elevation, only 85% of the basin is covered in snow (see elevation profile above). In addition, snow gradient as a function of elevation is also considered. On average, temperature decreases by 3-degrees per thousand feet in elevation. As a result, there is generally more snow at higher elevations and less at lower elevations. Snow surveys are therefore performed at approximately an elevation that is 50% of the total peak and near 50% of the elevation area profile. An average of the SWE at the snow survey locations results in an accurate average of the entire basin (minus elevations with no snow).

A final calculation is performed to forecast total sublimation of the existing snow over the snow melt season. Sublimation is a chemical process where a solid turns into a gas without going through a liquid stage. Anywhere from 10% to 40% of the drainage basins SWE can be lost to the atmosphere, and not end up in the lake. Forecasting sublimation is extremely challenging. Humidity, temperature, precipitation and direct sunlight all are contributing factors. As a conservative approach to forecasting sublimation, SEAPA uses the following percentage factors based on NOAA 3-month outlooks:

3-Month Forecast	Percent Sublimation
Warmer & Wetter	10.0%
Colder & Dryer	15.0%
Warmer & Dryer	20.0%





Southeast Alaska Power Agency

Snow Survey Report

General Information

Surveyor Name(s)	Weather	Water in streams	Evidence of Avalanche	Start of Snow Elevation
SEAPA	Clear	Partial Frozen	No	

Data Recorded

Date	Site	Sample #	Depth of Snow (Inches)	Length of Core (Inches)	Weight of Tube (lbs)	Weight of Empty Tubes	Water Content (Inches)	Density Percent
4/14/2021	Swan Mountain	1	105	91	12.75	10.25	39.9	38.0%
4/14/2021	Swan Mountain	2	100	87	12.8	10.25	41	41.0%
4/14/2021	Swan Mountain	3	89	87	12.5	10.25	35.6	40.0%
4/14/2021	Mint Ridge	1	166	164	19.75	15.85	63.1	38.0%
4/14/2021	Mint Ridge	2	146	116	19.5	15.85	58.4	40.0%
4/14/2021	Mint Ridge	3	167	166	20	15.85	66.8	40.0%
4/14/2021	Grace Pass	1	221	200	25	19.5	88.4	40.0%
4/14/2021	Grace Pass	2	212	207	25	19.5	89	42.0%
4/14/2021	Grace Pass	3	213	202	25	19.5	87.3	41.0%

Forecasted Water In Lake Equivalent

Average Snow Water	Sublimation & Snow	Total Water in Lake	Year-to-Year Percent
Equivalent (SWE)	Level Correction %	(Feet)	of Average
63.28 in	90%	68.34 ft	243%



Agenda Item 6B

Wholesale Power Rate

Discussion Item Only



SOUTHEAST ALASKA POWER AGENCY

Date: May 7, 2021

To: Trey Acteson, CEO

FISCAL NOTE:

\$180,000 approved for Vank Island ROW clearing in SEAPA FY2021 Operating Budget

From: Clay Hammer, Operations Manager

Re: 2021 Revised Vank Island Transmission Line Brushing Contract

A Request for Proposals for SEAPA's 2021 Revised Vank Island Transmission Line Brushing Project was advertised on April 12, 2021. Two responsive bids were received on May 5, 2021. The results of the responsive bids are as follows:

Bidder	City/State	Bid Amount
BAM LLC	Ketchikan, Alaska	\$148,000.00
Carlos Tree Service, Inc.	Anchorage, Alaska	\$211,812.82

Each proposal was evaluated based on experience with Alaska generally and Southeast Alaska in particular in carrying out similar projects, safety program/record, schedule and capacity to respond to the work in a timely and efficient manner, competitive pricing, and completeness and quality of bid proposal documents.

Staff recommends award of the 2021 Revised Vank Island Transmission Line Brushing Contract to BAM LLC. Both responsive bidders were qualified and met the criteria required for the project, however, BAM is the low bidder. Funding of \$180,000 was approved in the FY2021 operating budget for the project.

One non-responsive bid was received. The bidder has emailed a timely appeal of the determination of the non-responsive bid. SEAPA is preparing a response to the appeal and the response will include information for the appellant to join the board meeting to discuss the appeal before the board. Staff will provide the response to the appeal as a lay on the table item early next week.

If the Board elects to deny the appeal, staff asks that the Board consider the following suggested motion for award of the contract:

SUGGESTED MOTION

I move to authorize staff to enter into a Contract with BAM LLC for SEAPA's Revised 2021 Vank Island Transmission Line Brushing Contract for the firm-fixed price of \$148,000.00.



SOUTHEAST ALASKA POWER AGENCY

Date: May 7, 2021

To: SEAPA Board of Directors

From: Trey Acteson, CEO

Subject: Second Revision to Digital Communication Device Policy

SEAPA adopted the attached policy on Digital Communication Devices at its June 26, 2012 board meeting (**Attachment 1**). A revision to the policy (**Attachment 2**) was adopted during SEAPA's April 25, 2013 meeting giving directors an option to purchase their iPad, appointing SEAPA as the depository and distributor of any returned devices, and purchaser of any new devices.

It is recommended that the Board consider a second revision to the policy to state that: (i) Directors may keep their iPad when their tenure is complete rather than returning it for re-distribution, (ii) if a returning Board member's device is no longer functioning, SEAPA will provide a replacement if requested, and (iii) Board members can choose to opt out of receiving a digital communication device. These changes are requested for the following reasons:

- When an iPad is returned by a board member, it must be restored to its factory setting which
 requires the user's Apple ID and password for device activation. Apple has strict security
 rules for unlocking devices so without the user's access information, the device is useless.
 In many cases, passwords are lost or forgotten, directors have moved out of state and are
 difficult to contact, or a family member has set it up and cannot recall the credentials or is
 not available. Staff spends an exorbitant amount of time trying to retrieve this information,
 and requesting a password change from Apple is a long and storied process
- Most iPad models may become obsolete after three years, sales are discontinued, and dated models may no longer be supported by Apple with software updates
- The devices are relatively inexpensive at a cost range of \$299 to \$350/device, and generally by the time a board member is no longer serving on the board, the residual value to SEAPA is zero
- The device is provided to each board member to limit the amount of paper used for board packet materials, and provide enhanced materials for better communication and oversight by the Board of Directors

Resolution 2021-077 and Second Revision to the policy to effect the recommended changes and delete of moot language is attached for your review (**Attachment 3**). If the Board elects to adopt the changes, please consider the following suggested motion:

SUGGESTED MOTION

I move to adopt Resolution 2021-077 adopting a Second Revision to SEAPA's Digital Communication Device Policy.

Attachment 1

Resolution #2012-041

Original Digital Communication Device Policy dated June 26, 2012

Resolution 2012-041**

The Southeast Alaska Power Agency **Approving Digital Communication Device Policy**

WHEREAS, on June 26, 2012, the Board of Directors of The Southeast Alaska Power Agency ("SEAPA") adopted a policy on Digital Communication Devices; and,

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Southeast Alaska Power Agency formally adopts the Digital Communication Device Policy dated June 26, 2012, attached hereto and made a part hereof.

Approved this 26th day of June 2012.

SOUTHEAST ALAŞKA POWER AGENCY Βv Jeremy Maxand, Chairman of the Board

ATTEST:

Robert Larson, Secretary/Treasurer



BOARD POLICY

BOARD OF DIRECTORS DIGITAL COMMUNICATION DEVICE POLICY

I. OBJECTIVE:

To establish guidelines and responsibilities for all Directors in the use of Digital Communication Devices provided by SEAPA.

II. POLICY:

- A. SEAPA's Board of Directors recognizes the benefits of utilizing digital communication and information instead of paper-laden board packets and binders. An analysis has determined the resulting benefits to the Agency will outweigh the upfront equipment purchase cost.
- B. SEAPA will provide iPads to its Member Utilities as follows: Four (4) to the City of Ketchikan, two (2) each to the City of Petersburg and the City & Borough of Wrangell, and two (2) to the 'at large' Member Community. Recognizing the annual rotation of project representation that occurs at year end, the two iPads from the current at large Member Utility shall be returned to SEAPA at year end for distribution to the next at large Member Utility. The iPads will be equipped with a minimum of 32-gigabytes of memory and 'Wi-Fi' coverage only. 3G or other 'cell' coverage is unnecessary as board meetings are only held where wireless internet coverage is provided. The iPad models provided shall be similar in price and provided according to availability. It will be the respective Member Utility's responsibility to distribute the iPads to their appointees to the SEAPA Board. SEAPA will retain 'ownership' of the iPads for the at large Members, which rotate annually.
 - 1. The recipient of the iPad will load the iAnnotates application or other similar application, agreed to by the Board, as the most appropriate application required for proper information retrieval. SEAPA will reimburse the expense of the iAnnotates application to the Director upon presentation to SEAPA of a receipt for the purchase. Any other applications loaded on the iPad will be at the Director's personal expense.
 - 2. Unless covered otherwise by warranty, any accidental damage to the iPad shall paid by SEAPA, unless the damage is caused by negligence.
 - 3. It is anticipated that the technological life of the iPads may not exceed three (3) years therefore the iPads will be assessed every three years by the Member Utility and if necessary, SEAPA will purchase upgraded devices and provide them to the Member Utility for each appointed Director.

- 4. The Member Utilities, not the appointed Director, shall keep the iPad when its useful life has expired.
- 5. Since iPads are 'synced' to the user's computer, it is suggested that the user request assistance from the respective Member Utility's information technology personnel to assist them in becoming more efficient and effective in utilizing the equipment.

III. RESPONSIBILITY:

It is the responsibility of the Chairman to oversee this policy.

ADOPTED by the SEAPA Board of Directors this $2 \frac{1}{2} \frac{1}{6}$ day of June 2012.

Signed: 1 11 21 Secretary-Treasurer

Attest: Chairman

Pdf Page No. 53 of 128 pages.

Attachment 2

Resolution #2013-047

Revision to Digital Communication Device Policy dated April 25, 2013

Resolution 2013-047

The Southeast Alaska Power Agency **Approving Revised Digital Communication Device Policy**

WHEREAS, on June 26, 2012, the Board of Directors of The Southeast Alaska Power Agency ("SEAPA") adopted a policy on Digital Communication Devices, which policy is attached to Resolution 2012-041; and,

WHEREAS, on April 25, 2013, the Board of Directors elected to revise the policy on Digital Communication Devices to provide an opportunity for buyout of the devices, appoint SEAPA as the depository and distributor of any returned devices, and purchaser of any new devices.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Southeast Alaska Power Agency formally adopts the attached revised Digital Communication Device Policy dated April 25, 2013 in place of the previously adopted Digital Communication Device Policy dated June 26, 2012.

Approved this 25th day of April 2013.

SOUTHEAST ALASKA POWER AGENCY

b Sivertsen, Chairman of the Board

ATTEST:

Sam Bergeron, Secretary/Treasurer



BOARD POLICY

BOARD OF DIRECTORS REVISED DIGITAL COMMUNICATION DEVICE POLICY

I. OBJECTIVE:

To establish guidelines and responsibilities for all Directors in the use of Digital Communication Devices provided by SEAPA.

II. POLICY:

- A. SEAPA's Board of Directors recognize the benefits of utilizing digital communication and information instead of paper-laden board packets and binders. An analysis has determined the resulting benefits to the Agency will outweigh the up-front equipment purchase cost.
- B. SEAPA will provide iPads to its Member Utilities as follows: Four (4) to the City of Ketchikan, two (2) each to the Petersburg Borough and the City & Borough of Wrangell, and two (2) to the 'at large' Member Community. When a Director's tenure is complete, they shall return the iPad they were provided to SEAPA for re-distribution as necessary. The iPads will be equipped with a minimum of 32-gigabytes of memory and 'Wi-Fi' coverage only. 3G or other 'cell' coverage is unnecessary as board meetings are only held where wireless internet coverage is provided. The iPad models provided shall be similar in price and provided according to availability.
 - 1. The recipient of the iPad will load the iAnnotates application or other similar application, agreed to by the Board, as the most appropriate application required for proper information retrieval. SEAPA will reimburse the expense of the iAnnotates application to the Director upon presentation to SEAPA of a receipt for the purchase. Any other applications loaded on the iPad will be at the Director's personal expense.
 - 2. Unless covered otherwise by warranty, any accidental damage to the iPad shall paid by SEAPA, unless the damage is caused by negligence.
 - 3. It is anticipated that the technological life of the iPads may not exceed three (3) years therefore the iPads will be assessed every three years by SEAPA. SEAPA will purchase upgraded devices and provide them to the Member Utility for each appointed Director as necessary.
 - 4. Directors may exercise the option at the end of their tenure on the board to purchase the device for the used market value of the device as

determined by SEAPA. If the useful life of the device has expired, it shall be returned to SEAPA for disposal.

5. Since iPads are 'synced' to the user's computer, it is suggested that the user request assistance from the respective Member Utility's information technology personnel to assist them in becoming more efficient and effective in utilizing the equipment.

III. RESPONSIBILITY:

It is the responsibility of the Chairman to oversee this policy.

ADOPTED by the SEAPA Board of Directors this 25th day of April 2013.

Signed: Secretary Freasurer

Attest:

Attachment 3

Resolution #2021-077

Second Revision to Digital Communication Device Policy



RESOLUTION NO. 2021-077

Southeast Alaska Power Agency

Approving Second Revision to SEAPA's Digital Communication Device Policy

WHEREAS, on June 26, 2012, the Board of Directors of the Southeast Alaska Power Agency ("SEAPA") adopted a policy on Digital Communication Devices, which policy is attached to Resolution 2012-041; and,

WHEREAS, on April 25, 2013, the Board of Directors adopted a revision to SEAPA's policy on Digital Communication Devices to provide an opportunity for buyout of the devices, appoint SEAPA as the depository and distributor of any returned devices, and purchaser of any new devices, which revised policy is attached to Resolution 2013-047; and,

WHEREAS, on May 13, 2021, the Board of Directors elected to make a second revision to the policy on Digital Communication Devices for the following policy changes: (i) when a Director's tenure is complete, the Director may keep the Digital Communication Device; (ii) if a returning Board Member's device is no longer functioning, SEAPA will provide a replacement if requested, and (iii) Board members may opt out of receiving a digital communication device.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Southeast Alaska Power Agency formally adopts the attached Second Revision to SEAPA's Digital Communication Device Policy dated May 13, 2021 in place of the previously adopted Digital Communication Device Policy dated June 26, 2012 and first revision to the policy dated April 25, 2013.

Approved this 13th day of May 2021.

SOUTHEAST ALASKA POWER AGENCY

By

Bob Sivertsen, Chairperson

ATTEST:

Karl Amylon, Secretary/Treasurer



I. OBJECTIVE:

To establish guidelines and responsibilities for all Directors in the use of Digital Communication Devices provided by SEAPA.

II. POLICY:

- A. SEAPA's Board of Directors recognize the benefits of utilizing digital communication and information instead of paper-laden board packets and binders. An analysis has determined the resulting benefits to the Agency will outweigh the up-front equipment purchase cost.
- B. SEAPA will provide iPads to its Member Utilities as follows: Four (4) to the City of Ketchikan, two (2) each to the Petersburg Borough and the City & Borough of Wrangell, and two (2) to the 'at large' Member Community. When a Director's tenure is complete, they may keep their iPad and if a returning Board Member's device is no longer functioning, SEAPA will provide a replacement device if requested. Directors may alternatively choose to opt out of receiving a digital communication device altogether. The iPads will be equipped with a minimum of 32-gigabytes of memory and 'Wi-Fi' coverage only. 3G or other 'cell' coverage is unnecessary as board meetings are only held where wireless internet coverage is provided. The iPad models provided shall be similar in price and provided according to availability.
 - 1. The recipient of the iPad will load the iAnnotates application or other similar application, agreed to by the Board, as the most appropriate application required for proper information retrieval. SEAPA will reimburse the expense of the iAnnotates application to the Director upon presentation to SEAPA of a receipt for the purchase. Any other applications loaded on the iPad will be at the Director's personal expense.
 - 2. Unless covered otherwise by warranty, any accidental damage to the iPad shall be paid by SEAPA, unless the damage is caused by negligence.
 - 3. Since iPads are 'synced' to the user's computer, it is suggested that the user request assistance from the respective Member Utility's information technology personnel to assist them in becoming more efficient and effective in utilizing the equipment.

III. RESPONSIBILITY:

It is the responsibility of the Chairperson to oversee this policy.

ADOPTED by the SEAPA Board of Directors this 13th day of May 2021.

Signed:

Attest:

Chairperson

Secretary-Treasurer



SOUTHEAST ALASKA POWER AGENCY

Date: May 5, 2021

To: SEAPA Board of Directors

From: Trey Acteson, Chief Executive Officer

Subject: Consideration and Approval of Authorizing Resolution and Indenture Re Submarine Cable Financing from Alaska Municipal Bond Bank

At SEAPA's Special Board Meeting on March 31, 2021, the board authorized me to enter into discussions with the Alaska Municipal Bond Bank ("AMBB") to participate in its next round of funding. Since that meeting, I have been diligently arranging to obtain financing for the Submarine Cable Replacement Project. My discussions with AMBB have led to the proposed agreements that are attached to this memorandum. They will result in SEAPA signing a loan agreement and related documents with AMBB to facilitate bond financing. At this time of the writing of this memorandum, there continue to be discussions with AMBB regarding the appointment of a Trustee, but we anticipate that the Resolution will be in substantially similar form.

The Transaction

SEAPA is seeking a loan through the AMBB in an amount not to exceed \$14,000,000. This includes the estimated total cost of the Project as well as all related costs of issuance. By working through the AMBB, the process is quite streamlined. We have retained bond counsel, Alice Ostiedek, to aid in the review and proper documentation of the financing. As part of the process, the Board is being asked to approve a Resolution in support of issuing electric revenue bonds, agreeing to a Supplemental Indenture and a new Loan Agreement. The proposed Resolution also authorizes the Board Chair and CEO to execute all necessary agreements to complete the transaction.

As usual, the loan payments are to be paid solely from the revenues of the Agency and are not a general obligation or a pledge of the full faith and credit of the Agency or the Member Utilities.

This is SEAPA's second financing conducted through the AMBB. The initial transaction was completed on May 2, 2019, the funds were used to refinance an earlier bond issued in 2009. The 2009 bond issuance was the original bond financing completed by SEAPA at the time of the Four Dam Pool restructuring. The total amount of the 2019 bond issuance was \$5,590,000, which allowed the Agency to reduce its interest obligations.

The Process

If the Board agrees to proceed with the AMBB bond financing, we expect to close the transaction in the beginning of June 2021. SEAPA will then be able to use those funds to pay our prime contractor, Sumitomo Electric U.S.A., Inc. Project completion. As we have discussed in the past, SEAPA has an insurance policy on our transmission lines, which include the Woronkofski – Vank Submarine Cable. We have been in contact with our carrier throughout the Project. It is unlikely to know the results of our claim until the cable itself is retrieved.

SUGGESTED MOTION

I move to adopt Resolution No. 2021-078 authorizing the sale and issuance of Electric Revenue Bond, Series 2021, to the Alaska Municipal Bond Bank consistent with the terms provided in the Resolution in order to provide the funds necessary (i) to pay or reimburse SEAPA for the costs of the Submarine Cable Replacement Project that consists of the replacement of the failed electrical submarine power cable between the islands of Woronkofski and Vank, which is necessary to provide reliable wholesale power to the rural island community of Petersburg as well as other capital improvements to the Agency's Projects (the "Improvements"); (ii) to make a deposit to the Bond Reserve Fund as necessary; and (iii) to pay the Issuance Costs of the Agency.

Attachment to Memo Re Alaska Municipal Bond Bank

Resolution #2021-078

CERTIFICATE

I, the undersigned Chief Executive Officer of the Southeast Alaska Power Agency (the "Agency"), herby certify that:

1. I am the duly appointed, qualified and acting Chief Executive Officer of the Agency and am authorized to execute this certificate.

2. Attached hereto is a true and correct copy of Resolution No. 2021-078 of the Agency, adopted by the Agency's Board of Directors at a special meeting of the Agency on ______, 2021.

3. The Board of Directors meeting of ______, 2021, was duly convened and held in all respects in accordance with law to the extent required by law, due and proper notice of such meeting was given; a quorum was present throughout such meeting and a legally sufficient number of members of the Board of Directors of the Agency voted in the proper manner for adoption of this resolution; and all of the requirements and proceedings incident to the proper passage of the resolution have been duly fulfilled, carried out, and otherwise observed.

4. Resolution No. 2021-078 has not been amended or repealed and is in full force and effect.

Dated as of _____, 2021.

SOUTHEAST ALASKA POWER AGENCY

Trey Acteson, Chief Executive Officer

RESOLUTION NO. 2021-078 of SOUTHEAST ALASKA POWER AGENCY

Authorizing the issuance of electric revenue bonds of the Agency to finance the Submarine Cable Replacement Project; approving a supplemental indenture, a loan agreement, and other documents to be executed, delivered, or distributed in connection therewith, and authorizing the sale of the bond to the Alaska Municipal Bond Bank on the terms and conditions provided in this resolution.

RECITALS

WHEREAS, the Southeast Alaska Power Agency (the "Agency") is authorized by AS 42.45.310(c)(4) to issue and sell revenue bonds in accordance with the provisions contained in AS 42.45.310, and to secure the payment of such bonds as provided in AS 42.45.310; and

WHEREAS, Section 10 of the Third Amended and Restated Joint Action Agency Agreement permits the Board of Directors ("Board") to authorize the issuance of Bonds for the primary purpose of providing funds to repair or maintain the Agency's Projects (as defined in therein), including associated transmission lines and other facilities; and

WHEREAS, the Agency is now in need of funds to finance improvements to an existing transmission line, specifically a failed electrical submarine power cable in the Stikine crossing between the islands of Woronkofski and Vank, which is necessary to provide reliable wholesale power to the rural island community of Petersburg (the "Submarine Cable Replacement Project"); and

WHEREAS, at its meeting on September 4, 2020, the Board approved a motion to authorize the Submarine Cable Replacement Project at an estimated cost of approximately \$13.4 million and expressed its intent to reimburse the Agency for such costs from the proceeds of Bonds to be issued at a future date, and by Resolution 2021-075, adopted on March 31, 2021, authorized application to the Alaska Municipal Bond Bank (the "Bond Bank") for this purpose; and

WHEREAS, as authorized by Resolution No. 2008-22, adopted by the Agency's Board of Directors (the "Board"), on December 22, 2008, and pursuant to an Indenture of Trust dated as of February 1, 2009 (the "Original Indenture"), between the Agency and Wells Fargo Bank, National Association, as trustee (the "Trustee"), the Agency issued its Electric Revenue Refunding Bonds, Series 2009, in the initial aggregate principal amount of \$16,495,000 (the "2009 Bonds"); and

WHEREAS, as authorized by Resolution No. 2015-058, adopted by the Board on March 26, 2015, and pursuant to a First Supplemental Indenture of Trust, dated as of May 1, 2015 (the "2015 Supplemental Indenture"), between the Agency and the Trustee, the Agency issued its Electric Revenue Improvement and Refunding Bonds, Series 2015, in the initial aggregate principal amount of \$10,295,000 (the "2015 Bonds"), a portion of which refunded the 2009 Bonds maturing in 2028; and

WHEREAS, as authorized by Resolution No. 2019-073, adopted by the Board on March 18, 2019, and pursuant to an Amended and Restated Indenture of Trust, dated as of May 2, 2019 (the "2019 Amended and Restated Indenture"), between the Agency and the Trustee (which amended and restated the Original Indenture, as amended by the 2015 Supplemental Indenture), the Agency issued its

Electric Revenue Refunding Bond, Series 2019, in the initial aggregate principal amount of \$4,245,000 (the "2019 Bond"), which refunded the remaining 2009 Bonds; and

WHEREAS, pursuant to Section 2.14 of the Amended and Restated Indenture, the Agency reserves the right to issue Additional Bonds (as defined in the Amended and Restated Indenture) for any purpose related to the Projects, including associated transmission facilities such as the Improvements, upon the satisfaction of certain conditions found therein; and

WHEREAS, the Board finds that those conditions can be met and that it is in the best interest of the Agency, its members, and their ratepayers to issue Additional Bond (as further described herein, the "2021 Bond") in an amount sufficient, together with other money available therefor, (i) to pay or reimburse itself for the costs of the Improvements, (ii) to make a deposit to the debt service reserve (if necessary), and (iii) to pay the costs of bond issuance, and to sell the 2021 Bond to the Bond Bank pursuant to a loan agreement to be entered into by the Agency and the Bond Bank; and

WHEREAS, the Bond Bank proposes to issue a series of its general obligation bonds (the "Bond Bank Bonds"), proceeds of which would provide funds to be loaned to the Agency pursuant to a loan agreement in substantially the form provided to the Agency (the "Loan Agreement"); and

WHEREAS, the Board has received, and the Agency has on file, forms of the 2021 Supplement to the Amended and Restated Indenture of Trust ("2021 Supplemental Indenture") and the Loan Agreement (collectively, the "Bond Documents"); and

WHEREAS, the Board desires to approve, authorize and take or direct to be taken those actions that are necessary, appropriate or useful to complete the transactions set forth in or contemplated by the Bond Documents; and

WHEREAS, the Board has determined that it is in the best interests of the Agency to secure the 2021 Bond as provided in the 2021 Supplemental Indenture and to sell the 2021 Bond to the Bond Bank on the terms and conditions set forth in this resolution and in the Loan Agreement;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SOUTHEAST ALASKA POWER AGENCY, as follows:

Section 1. Findings. It is hereby determined that:

(a) Issuance of the 2021 Bond to finance the Improvements is authorized by the Act and permitted under the Amended and Restated Indenture; and

(b) The issuance of the 2021 Bond for the purpose described herein and its sale to the Bond Bank, on the terms and conditions set forth in this resolution and in the Bond Documents, are in the best interests of the Agency and its members.

Section 2. 2021 Bond Authorized to be Issued and Sold to the Bond Bank.

(a) To provide the funds necessary (i) to pay or reimburse itself for the costs of the Submarine Cable Replacement Project, consisting of the repair or replacement of a failed electrical submarine power cable that is part of the existing transmission line in the Stikine crossing between the islands of Woronkofski and Vank, which is necessary to provide reliable wholesale power to the rural island community of Petersburg, and other capital improvements to the Projects (the "Improvements");

(ii) to make a deposit to the Bond Reserve Fund (if necessary); and (iii) to pay the Issuance Costs (as defined in the 2019 Amended and Restated Indenture), the Agency authorizes the issuance and sale to the Alaska Municipal Bond Bank (the "Bond Bank") of a revenue bond to evidence a loan to the Agency from the Bond Bank, in a principal amount not to exceed \$14,000,000.

(b) The Chairperson and the Chief Executive Officer, or each such officer's designee (each, an "Authorized Representative") are each authorized (acting separately, without the need for joint action) (i) to execute on behalf of the Agency a supplemental indenture (the "2021 Supplemental Indenture") with the Trustee under the 2019 Amended and Restated Indenture of Trust, pursuant to which such revenue bond is to be issued as an Additional Bond on a parity of lien with the outstanding 2015 Bonds and 2019 Bond, and (ii) to complete the sale of the 2021 Bond to the Bond Bank on terms and conditions consistent with this resolution and the Amended and Restated Indenture and the 2021 Supplemental Indenture. Following the sale of the Bond Bank Bonds, the terms of the 2021 Bond, including date, principal amount, principal installment payment schedule, interest rates, and prepayment provisions will be set forth in the final Loan Agreement and in the 2021 Supplemental Indenture.

(c) The Authorized Representatives are each authorized and directed to cause the 2021 Bond to be executed and delivered as authorized by this resolution. The 2021 Bond will be issued as a fully registered bond without coupons with such rights of exchange and transfer and in the form specified in the 2021 Supplemental Indenture. The Authorized Representatives are authorized and directed to execute the 2021 Bond, by facsimile or manual signatures, for and on behalf of the Agency as provided in the 2021 Supplemental Indenture. The 2021 Bond (a) will contain on its face a statement that (i) the Agency is not obligated to pay the 2021 Bond, or the interest thereon, except from the revenue pledged, and (ii) neither the faith and credit nor the taxing power of any Member Utility, the State, or of any instrumentality of either (other than the Agency) is pledged to such repayment; and (b) will include a recital that it is issued pursuant to the Act, and that recital will be conclusive evidence of the validity of the 2021 Bond and of the regularity of its issuance.

Section 3. <u>Limited Obligations</u>. The obligations of the Agency with respect to the 2021 Bond are payable solely from the Revenues (as defined in the Amended and Restated Indenture) received by the Agency under the Long-Term Power Sales Agreement between the Agency and its members and other amounts specifically pledged therefor under the Amended and Restated Indenture and will not constitute a general obligation or a pledge of the full faith and credit of the Agency. The obligation of the Agency to pay the 2021 Bond will not constitute a debt of the State of Alaska, of any Member Utility, or any other instrumentality or political subdivision of either of the foregoing (other than the Agency). Neither the faith and credit nor the taxing power of the State of Alaska or of any Member Utility, or of any instrumentality or political subdivision of either of the foregoing (other than the Agency), is pledged to the payment of the 2021 Bond.

Section 4. <u>Approval of Bond Documents</u>. The Bond Documents are hereby approved in substantially the form presented at this meeting, and the Authorized Representatives are each independently authorized and directed to execute and deliver the Bond Documents on behalf of the Agency, with such changes therein, consistent with this resolution, as may be approved by the Authorized Representative executing the Bond Documents, and the execution of the Bond Documents by an Authorized Representative constitutes conclusive evidence of the Agency's approval of those changes.

Section 5. <u>Appointment of Trustee</u>. Wells Fargo Bank, National Association (or its successor or assign duly qualified and appointed by the Authorized Representatives of the Agency to serve in that capacity under the Amended and Restated Indenture) is designated as trustee and paying agent for the 2021 Bond pursuant to the Amended and Restated Indenture. The Agency authorizes and directs the Trustee on behalf of the Agency to authenticate the 2021 Bond for delivery to the Bond Bank.

Section 6. <u>No Personal Liability</u>. No stipulation, obligation or agreement herein contained or contained in the Bond Documents shall be deemed to be a stipulation, obligation or agreement of any officer, director, agent or employee of the Agency in his or her individual capacity, and no such officer, director, agent or employee shall be personally liable on the 2021 Bond or be subject to personal liability or accountability by reason of the issuance thereof.

Section 7. <u>General Authority</u>. The Authorized Representatives and other appropriate officers and agents of the Agency are individually authorized and directed to do all such acts and things and to execute and deliver all such documents as may be necessary, desirable, appropriate, or expedient and in the best interest of the Agency to carry out and comply with the provisions of this resolution and the Bond Documents as executed and are further authorized and directed to take any and all further actions and execute and deliver any and all other documents, letters of representation, and certificates, including any documents or actions as may be necessary or desirable in connection with the issuance of the 2021 Bond and other matters set forth contemplated by this resolution and the Bond Documents.

Section 8. <u>Actions Ratified and Confirmed</u>. All acts of the officers of the Agency that are in conformity with the purposes and intents of this resolution and in the furtherance of the issuance of the 2021 Bond and the execution, delivery and performance of the Bond Documents, are in all respects ratified and confirmed.

Section 9. <u>Severability of Invalid Provisions</u>. If any one or more of the agreements or provisions herein contained are held contrary to any express provision of law or contrary to the policy of express law, though not expressly prohibited, or against public policy or are for any reason whatsoever held invalid, then such covenants, agreements or provisions shall be null and void and shall be deemed separable from the remaining agreements and provisions and shall in no way affect the validity of any of the other agreements and provisions hereof or of the 2021 Bond or the Loan Agreement.

Section 10. <u>Repealing Clause</u>. All resolutions or parts thereof of the Agency in conflict with the provisions herein contained are, to the extent of such conflict, hereby superseded and repealed.

Section 11. <u>Effective Date</u>. This resolution is effective immediately after its adoption.

Approved by a vote of a majority of all the members of the Board, appointed by the City of Ketchikan d/b/a Ketchikan Public Utilities, the City and Borough of Wrangell d/b/a City of Wrangell Municipal Light and Power, and the Petersburg Borough d/b/a Petersburg Municipal Power and Light.

DATED and EFFECTIVE this _____ day of _____, 2021.

SOUTHEAST ALASKA POWER AGENCY

By_____, Chairperson

ATTEST:

_____, Secretary

Attachment to Memo Re Alaska Municipal Bond Bank

2021 Supplemental Indenture

2021 Supplemental Indenture

pursuant to the 2019 Amended and Restated Indenture of Trust

by and between

SOUTHEAST ALASKA POWER AGENCY

and

WELLS FARGO BANK, NATIONAL ASSOCIATION, as Trustee

related to the issuance of

\$___,___,000

SOUTHEAST ALASKA POWER AGENCY

Electric Revenue Bond, Series 2021 (Alaska Municipal Bond Bank Loan)

Dated as of _____, 2021

TABLE OF CONTENTS
2021 Supplemental Indenture pursuant to the 2019 Amended and Restated Indenture of Trust

This SUPPLEMENTAL INDENTURE, dated as of May __, 2021 (the "2021 Supplemental Indenture") constitutes a Supplemental Indenture pursuant to the Amended and Restated Indenture of Trust, dated as of May 2, 2019, by and between the SOUTHEAST ALASKA POWER AGENCY (the "Agency"), a joint action agency formed under the authority of AS 42.45.300-AS 42.45.320 whose members are the City of Ketchikan d/b/a Ketchikan Public Utilities, the City and Borough of Wrangell d/b/a City of Wrangell Light Department and Petersburg Borough d/b/a Petersburg Municipal Power & Light, and WELLS FARGO BANK, NATIONAL ASSOCIATION, a national banking association duly organized under the laws of the United States of America and being duly qualified to accept and administer the trusts created hereby, as trustee (the "Trustee");

WITNESSETH

WHEREAS, the Agency is authorized by AS 42.45.310(c)(4) to issue and sell revenue bonds in accordance with the provisions contained in AS 42.45.310, and to secure the payment of such bonds as provided in AS 42.45.310; and

WHEREAS, pursuant to the 2019 Amended and Restated Indenture (the "2019 Indenture"), by and between the Agency and the Trustee, dated as of May 2, 2019 (which amended and restated the Indenture of Trust dated as of February 1, 2009, as supplemented by the First Supplemental Indenture of Trust, dated as of May 1, 2015), the Agency has previously issued and has currently outstanding its Electric Revenue Improvement and Refunding Bonds, Series 2015 (the "2015 Bonds") and its Electric Revenue Refunding Bond, Series 2019 (Alaska Municipal Bond Bank Loan) (the "2019 Bond"); and

WHEREAS, pursuant to Section 2.14 of the 2019 Indenture, the Agency reserved the right to issue Additional Bonds (as defined therein) to provide funds for any purpose authorized by law relating to the Projects (as defined therein), including associated transmission facilities; and

WHEREAS, by Resolution No. 2021-____, adopted on May ___, 2021 (the "2021 Bond Resolution"), the Board of Directors of the Agency has found that it is in the Agency's best interest and has authorized the Agency (a) to issue to the Alaska Municipal Bond Bank (the "Bond Bank") a revenue bond to evidence a loan to the Agency from the Bond Bank in an amount sufficient, together with other funds of the Agency, (i) to pay or reimburse itself for the costs of the Improvements (as defined in the 2021 Bond Resolution); (ii) to make a deposit to the Bond Reserve Fund (if necessary); and (iii) to pay the Issuance Costs, and (b) to enter into a supplemental indenture with the Trustee pursuant to which that revenue bond would be issued as an Additional Bond (as further described herein, the "2021 Bond"), on a parity of lien with the 2015 Bonds and the 2019 Bond, as permitted under the 2019 Indenture, and as provided herein; and

WHEREAS, the Agency proposes to issue a fixed rate revenue bond, to evidence a loan from the Bond Bank, as an Additional Bond designated the "Southeast Alaska Power Agency Electric Revenue Bond, Series 2021" in the principal amount of \$_____000 (the "2021 Bond"); and

WHEREAS, pursuant to Section 10.1 of the 2019 Indenture, the Agency and the Trustee may, without the consent of, or notice to, any of the Bondholders, enter into an indenture or indentures supplemental to the 2019 Indenture, among other purposes, to issue Additional Bonds pursuant to Section 2.14; and

WHEREAS, all things necessary to make the 2021 Bond, when authenticated by the Trustee and issued as provided in the 2019 Indenture, as supplemented by this 2021 Supplemental Indenture, the valid, binding and legal limited obligations of the Agency according to the import thereof, have been done and performed;

NOW, THEREFORE, WITNESSETH that to secure the payment of principal of and interest on the 2021 Bond according to its true intent and meaning, and to declare the terms and conditions upon and subject to which the 2021 Bond is and intended to be issued, held, secured and enforced and in consideration of the premises and the acceptance by the Trustee of the trusts created herein and of the purchase and acceptance of the 2021 Bond by the purchaser thereof and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Agency has executed and delivered this 2021 Supplemental Indenture;

IT IS DECLARED that the 2021 Bond issued under and secured by the 2019 Indenture is to be issued, authenticated and delivered subject to the terms, conditions, stipulations, covenants, agreements, obligations, trusts, uses and purposes provided in the 2019 Indenture, as supplemented by this 2021 Supplemental Indenture (the "Indenture"); and the Agency has agreed and covenanted, and agrees and covenants with the Trustee and with the purchaser of the 2021 Bond, as follows:

ARTICLE I. DEFINITIONS

Section 1.1 Definitions. Unless the context requires otherwise, capitalized terms used and not otherwise defined in this 2021 Supplemental Indenture shall have the meanings assigned such terms in the 2019 Indenture. The terms defined in this section shall, for all purposes of the Indenture and of any Indenture supplemental hereto and of any certificate, opinion or other document mentioned therein, have the meanings specified herein. Each term defined shall be equally applicable to both the singular and plural forms of such term.

"2019 Indenture" means the Amended and Restated Indenture of Trust, dated as of May 2, 2019, by and between the Agency and the Trustee (which amended and restated the Indenture of Trust, dated as of February 1, 2009, as supplemented by the First Supplemental Indenture of Trust, dated as of May 1, 2015).

"2021 Loan Agreement" means the Loan Agreement dated as of _____, 2021, between the Agency and the Bond Bank providing for the sale of the 2021 Bond to the Bond Bank.

"2021 Supplemental Indenture" means this Supplemental Indenture pursuant to the 2019 Indenture.

"<u>Authorized Denomination</u>" means, with respect to the 2021 Bond, \$5,000 or any integral multiple thereof, or such other Authorized Denomination as is set forth in the 2021 Loan Agreement.

"<u>Bond Counsel</u>" means Stradling Yocca Carlson & Rauth, a Professional Corporation, or another attorney or firm of attorneys selected by the Agency and experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds.

"<u>Closing Date</u>" means, as used in this 2021 Supplemental Indenture, _____, 2021, the date of the issuance and delivery of the 2021 Bond.

"<u>Improvements</u>" means the Submarine Cable Replacement Project, consisting of repair or replacement of a failed electrical submarine power cable that is part of the existing transmission line in the Stikine crossing between the islands of Woronkofski and Vank, which is necessary to provide reliable wholesale power to the rural island community of Petersburg, and other capital improvements to the Projects.

"Interest Payment Date" means for the 2021 Bond, each ____1 and ____1, commencing on _____1, 20__.

"<u>Principal Payment Date</u>" means with respect to the 2021 Bond, _____1 of each year beginning 1, 20__, until the 2021 Bond is paid in full, whether at maturity or upon prior redemption.

"Purchaser" means, with respect to the 2021 Bond, the Bond Bank.

"<u>Record Date</u>" means, with respect to the 2021 Bond, the date which is the 15th day of the month next preceding the month in which each Interest Payment Date occurs, whether or not a Business Day.

"<u>Tax Maximum</u>" as of the Closing Date is equal to \$_____.

ARTICLE II. THE 2021 BOND

Section 2.1 Authority for and Issuance of the 2021 Bond. There is hereby authorized and created under the 2019 Indenture, as supplemented by this 2021 Supplemental Indenture, an Additional Bond designated "Southeast Alaska Power Agency Electric Revenue Bond, Series 2021" (the "2021 Bond"). The 2021 Bond is issuable as a fully registered bond, without coupons, in any Authorized Denomination. The 2021 Bond shall be in such maturity and bear interest at such rate or rates as set forth in Section 2.2. The principal of and interest on the 2021 Bond shall be payable in any coin or currency of the United States of America which, at the respective dates of payment thereof, is legal tender for the payment of public and private debts.

Section 2.2 Terms of the 2021 Bond.

(a) <u>General</u>. The 2021 Bond shall be issued in the principal amount of $_$, payable in installments as set forth below, together with interest on such installments from the Dated Date or the most recent date to which interest has been paid or duly provided for, at the interest rates set forth below, commencing on _____ 1, 2021, and on each _____ 1 and _____ 1 thereafter until payment of the principal sum has been made or duly provided for. Interest on the 2021 Bond shall be computed on the basis of a 360-day year consisting of twelve 30-day months.



If not paid when due, the 2021 Bond shall bear interest on overdue principal and, to the extent permitted by law, on overdue premium, if any, and interest at the rates borne by the 2021 Bond from the date on which such principal, premium, or interest became due and payable (whether upon maturity, redemption, or otherwise).

(b) <u>Payment of Interest</u>. Payment of interest on the 2021 Bond shall be by check mailed on the Interest Payment Date to the Person appearing on the Bond Register as the registered owner thereof as of the close of business of the Trustee on the Record Date at the address of such owner as it appears on the Bond Register. Payment of interest on the 2021 Bond may be made to any owner of \$1,000,000 or more in Aggregate Principal Amount of the 2021 Bond as of the close of business of the Trustee on the Record Date upon written notice from such owner, received by Trustee not later than such Record Date (any such request shall remain in effect until rescinded in writing by such Bondholder), containing the wire transfer address within the continental United States to which such owner wishes to have such wire directs. Any applicable wire transfer fees shall be payable by the owner.

(c) <u>Payment of Principal</u>. Payment of principal on the 2021 Bond shall be by check mailed on the Principal Payment Date to the Person appearing on the Bond Register as the registered owner thereof, in the manner provided above for the payment of interest; provided, however, that payment of the final installment of principal shall be paid upon presentation of the 2021 Bond.

(d) <u>Payment to the Bond Bank</u>. Notwithstanding the foregoing, for so long as the Bond Bank is the owner of the 2021 Bond, payments of principal of, premium (if any), and interest on the 2021 Bond will be made to the Bond Bank (or to the trustee for bonds issued by the Bond Bank) seven days prior to an Interest Payment Date or Principal Payment Date in accordance with the 2021 Loan Agreement.

(e) <u>Redemption and Prepayment</u>. The principal installments of the 2021 Bond shall be subject to prepayment at the option of the Agency upon the terms set forth in the 2021 Loan Agreement. For so long as the Bond Bank is the holder of the 2021 Bond, notwithstanding Section 5.5 of the 2019 Indenture, notice of such prepayment shall be given as set forth in the 2021 Loan Agreement. The 2021 Bond is also subject to extraordinary redemption as set forth in Section 5.4 of the 2019 Indenture.

Section 2.3 Form of the 2021 Bond. The 2021 Bond shall be substantially in the form of the 2019 Bond, with such appropriate variations, omissions and insertions as are permitted or required by the Indenture or deemed necessary by the Trustee and the Agency.

Section 2.4 Delivery of the 2021 Bond. Upon the execution and delivery of this 2021 Supplemental Indenture, the Agency shall execute and deliver the 2021 Bond to the Trustee, and the Trustee shall authenticate and, upon request of the Agency, deliver the 2021 Bond to the order of the Purchaser. Prior to the delivery by the Trustee of the 2021 Bond to the order of the Purchaser, there shall be filed with or delivered to the Trustee:

(a) A copy, duly certified by an Authorized Representative of the Agency, of the 2021 Bond Resolution;

(b) An original executed counterpart of this 2021 Supplemental Indenture, the 2021 Loan Agreement, and the Tax Certificate;

(c) An opinion or opinions of Bond Counsel addressed to the Agency and the Trustee, to the effect that this Indenture, the 2021 Loan Agreement, and the 2021 Bond have each been validly authorized, are binding and enforceable against the Agency, subject to bankruptcy and equitable principles, that the issuance of the 2021 Bond has been duly authorized and that interest on the 2021 Bond is not included in gross income for federal income tax purposes under the Code and is exempt from income taxation by the State of Alaska;

(d) (1) A certificate of the Agency, signed by its Authorized Representative, that at the time of the issuance of the 2021 Bond: (i) no Event of Default under the 2019 Indenture has occurred and is continuing, (ii) there is no deficiency in any of the Funds, and (iii) amounts will be deposited in the Funds hereunder adequate for the necessary balances therein, with the 2021 Bond treated as Outstanding; and (2) a certificate satisfying the requirements of Section 2.14(d)(2) of the 2019 Indenture;

(e) Such other closing documents and opinions of counsel as the Trustee, the Agency, or Bond Counsel may reasonably require; and

(f) A request and authorization to the Trustee on behalf of the Agency and signed by an Authorized Representative of the Agency to authenticate and deliver the 2021 Bond to the Purchaser upon payment to or to the order of the Trustee, but for the account of the Agency, of the proceeds from the sale of the 2021 Bond.

ARTICLE III. APPLICATION OF 2021 BOND PROCEEDS

Section 3.1 Deposit of Proceeds. On the Closing Date, the Trustee shall apply the proceeds from the sale of the 2021 Bond as follows:

(a) \$_______ shall be delivered to the Agency, to be deposited to the Construction Fund [created pursuant to Section 4.1 of this 2021 Supplemental Indenture and]applied to pay or reimburse the costs of carrying out the Improvements;

(b) \$_____ shall be deposited into the 2021 Bond Costs of Issuance Account established pursuant to Section 4.2 of this 2021 Supplemental Indenture, and applied to pay Issuance Costs of the 2021 Bond; and

(c) [\$_____ shall be deposited into the Bond Reserve Fund to meet the Bond Reserve Requirement].

ARTICLE IV. FUNDS AND ACCOUNTS

Section 4.1 Creation of Construction Fund. The Agency hereby establishes a separate fund to be known as the "Construction Fund," to be held by the Agency and to be used to pay or reimburse the costs of carrying out the Improvements.

Section 4.2 Creation of Costs of Issuance Account. The Agency hereby establishes with the Trustee a separate account within the Bond Fund to be known as the "2021 Bond Costs of Issuance Account." Money on deposit in the 2021 Bond Costs of Issuance Account shall be paid to the Agency following receipt by the Trustee of a written request for payment of Issuance Costs from the Agency within 90 days after the Closing Date. Any amounts remaining in the 2021 Bond Costs of Issuance Account on the 90th day after the Closing Date shall be transferred to the Interest Account to pay interest on the 2021 Bond and the 2021 Bond Costs of Issuance Accounts shall thereafter be closed.

ARTICLE V. MISCELLANEOUS

Section 5.1 Severability. If any provision of this 2021 Supplemental Indenture shall be held or deemed to be or shall, in fact, be inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions or in all jurisdictions, or in all cases because it conflicts with any other provision or provisions or any constitution or statute or rule of public policy, or for any other reason, such circumstances shall not have the effect of rendering the provision in question inoperative or unenforceable in any other case or circumstance, or of rendering any other provision or provisions herein contained invalid, inoperative or unenforceable to any extent whatever. The invalidity of any one or more phrases, sentences, clauses or sections in this 2021 Supplemental Indenture contained shall not affect the remaining portions of the Indenture or any part thereof.

Section 5.2 Governing Law. This 2021 Supplemental Indenture shall be governed exclusively by and construed in accordance with the laws of the State.

Section 5.3 2019 Indenture in Full Force and Effect. Except as amended or supplemented by this 2021 Supplemental Indenture, all other provisions of the 2019 Indenture shall remain in full force and effect.

[Signature page follows]

Section 5.4 Counterparts. This 2021 Supplemental Indenture may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the Agency and the Trustee have caused this 2021 Supplemental Indenture to be executed, as of the date first above written.

SOUTHEAST ALASKA POWER AGENCY, as Agency

By:

Trey Acteson, Chief Executive Officer

WELLS FARGO BANK, NATIONAL ASSOCIATION, as Trustee

By:

Marybeth K. Jones, Vice President

Attachment to Memo Re Alaska Municipal Bond Bank

Loan Agreement

Pdf Page No. 79 of 128 pages.

FORM OF

LOAN AGREEMENT

THIS LOAN AGREEMENT, dated the [_]th day of June 2021 (the "Loan Agreement"), between the Alaska Municipal Bond Bank (the "Bank"), a body corporate and politic constituted as an instrumentality of the State of Alaska (the "State") exercising public and essential governmental functions, created pursuant to the provisions of Chapter 85, Title 44, Alaska Statutes, as amended (the "Act"), having its principal place of business at Juneau, Alaska, and the Southeast Alaska Power Agency, a duly constituted joint action agency of the State (the "Agency"):

WITNESSETH:

WHEREAS, pursuant to the Act, the Bank is authorized to issue bonds and make loans of money (the "Loan" or "Loans") to governmental units; and

WHEREAS, the Agency is a "Governmental Unit" as defined in the General Bond Resolution of the Bank hereinafter mentioned and is authorized to accept a Loan from the Bank, evidenced by its municipal bond; and

WHEREAS, the Agency desires to borrow money from the Bank in an amount not to exceed \$13,370,000 to finance a portion of certain of the Agency's renewal and replacement capital projects for SEAPA's electric utility assets (the "SEAPA Project"), and has submitted an application to the Bank for a Loan in the amount not to exceed \$13,370,000 (the "SEAPA Project Loan") to pay a portion of the costs of the SEAPA Project; and

WHEREAS, the Agency has duly authorized the issuance of its fully registered [Electric Revenue Bond, Series 2021], dated June [_], 2021, in the principal amount of \$[___] (the "Municipal Bond"), which Municipal Bond is to be purchased by the Bank as evidence of and security for the Agency's obligation to repay the SEAPA Project Loan in accordance with this Loan Agreement; and

WHEREAS, the application of the Agency contains the information requested by the Bank; and

WHEREAS, to provide for the issuance of bonds of the Bank to obtain from time to time money with which to make, and/or to refinance Loans, the Board of Directors of the Bank (the "Board") adopted its General Obligation Bond Resolution on July 13, 2005 (as amended, the "General Bond Resolution"); and

WHEREAS, the Board approved certain modifications to the General Bond Resolution, effective on the date when all bonds issued under the terms of the General Bond Resolution, prior to February 19, 2013, cease to be outstanding; and

WHEREAS, on April 15, 2021 the Board adopted Series Resolution No. 2021-01 (the "2021 Series Resolution" and together with the General Bond Resolution, the "Bond Resolution"), authorizing the Bank to, among other things, issue the Bank's General Obligation and Refunding Bonds, 2021 Series One (Tax-Exempt) (the "2021 Series One Bonds"), and General Obligation and Refunding Bonds, 2021 Series Two (Federally Taxable) (the "2021 Series Two Bonds" and

together with the 2021 Series One Bonds, the "2021 Bonds"), make the SEAPA Project Loan to the Agency and purchase the Agency's Municipal Bond.

NOW, THEREFORE, the parties agree as follows:

1. The Bank hereby makes the SEAPA Project Loan, and the Agency, hereby accepts the SEAPA Project Loan in the principal amount of $[___]$. As evidence of the SEAPA Project Loan made to the Agency and such money borrowed from the Bank by the Agency, the Agency hereby agrees to sell to the Bank the Municipal Bond in the principal amount, with the principal installment payments, and bearing interest from its date at the rate or rates per annum, stated in Exhibit A.

2. The Agency represents that it has duly adopted or will adopt all necessary ordinances or resolutions, including Resolution No. [___], adopted on May [_], 2019 (the "Agency Resolution") and that prior to or at closing, the Agency has executed and delivered the [First Supplemental Indenture, dated as of June 1, 2021 (the "First Supplement"), by and between the Agency and Wells Fargo Bank, National Association, as trustee (the "Agency Trustee"), supplementing the Amended and Restated Indenture of Trust, dated as of May 2, 2019 (as amended or supplemented from time to time, including by the First Supplement, the "Agency Indenture" and together with the Agency Resolution, the "Agency Bond Documents"), by and between the Agency and the Agency Trustee. The Agency further represents to the Bank that the Agency has taken or will take all other proceedings required by law to enable it to enter into this Loan Agreement and to issue its Municipal Bond to the Bank and that the Municipal Bond will constitute a revenue bond, secured by a special and limited obligation of the Trust Estate, created under the Agency Indenture, all duly authorized by the Agency Resolution.

The Agency represents that the Agency Bond Documents are in full force and effect and have not been amended, supplemented or otherwise modified, other than as may have been previously certified by the Agency to the Bank.

3. Subject to any applicable legal limitations, the amounts to be paid by the Agency pursuant to this Loan Agreement representing interest due on its Municipal Bond (the "Municipal Bond Interest Payments") shall be computed at the same rate or rates of interest borne by the corresponding maturities of the bonds sold by the Bank in order to obtain the money with which to make the SEAPA Project Loan and to purchase the Municipal Bond (the "Loan Obligations") and shall be paid by the Agency or by the Agency Trustee on behalf of the Agency at least seven (7) Business Days before the Interest Payment Date to provide funds sufficient to pay interest as the same becomes due on the Loan Obligations.

4. The amounts to be paid by the Agency pursuant to this Loan Agreement representing principal due on its Municipal Bond in amounts sufficient to pay the principal of the Loan Obligations as the same matures based upon the maturity schedule stated in Exhibit A (the "Municipal Bond Principal Payments"), shall be paid by the Agency or by the Agency Trustee on behalf of the Agency at least seven (7) Business Days before the payment date stated in the Municipal Bond.

5. In the event the amounts referred to in Sections 3 and 4 hereof to be paid by the Agency pursuant to this Loan Agreement are not made available at any time specified herein, the Agency agrees that any money payable to it by any department or agency of the State may be withheld from it and paid over directly to the Trustee acting under the General Bond Resolution, and this Loan Agreement shall be full warrant, authority and direction to make such payment upon notice to such department or agency by the Bank, with a copy provided to the Agency, as provided in the Act.

6. In the event that all or a portion of the Loan Obligations have been refunded and the interest rates the Bank is required to pay on its refunding bonds in any year are less than the interest rates payable by the Agency on the Municipal Bond for the corresponding year pursuant to the terms of the Municipal Bond, then both the Municipal Bond Interest Payments and the Municipal Bond Principal Payments will be adjusted in such a manner that (i) the interest rate paid by the Agency on any principal installment of the Municipal Bond is equal to the interest rate paid by the Bank on the corresponding principal installment of the Bank's refunding bonds and (ii) on a present value basis the sum of the adjusted Municipal Bond Interest Payments and Municipal Bond Principal Payments is equal to or less than the sum of the Municipal Bond Interest Payments and Municipal Bond Principal Payments due over the remaining term of the Municipal Bond as previously established under this Loan Agreement. In the event of such a refunding of the Loan Obligations, the Bank shall present to the Agency for the Agency's approval, a revised schedule of principal installment amounts and interest rates for the Municipal Bond. If approved by the Agency the revised schedule shall be attached hereto as Exhibit A and incorporated herein in replacement of the previous Exhibit A detailing said principal installment amounts and interest rates.

7. The Agency is obligated to pay to the Bank Fees and Charges. Such Fees and Charges actually collected from the Agency shall be in an amount sufficient, together with the Agency's Allocable Proportion (as defined below) of other money available therefor under the provisions of the Bond Resolution, and other money available therefor, including any specific grants made by the United States of America or any agency or instrumentality thereof or by the State or any agency or instrumentality thereof and amounts applied therefor from amounts transferred to the Operating Fund pursuant to Section 606 of the General Bond Resolution:

(a) to pay, as the same become due, the Agency's Allocable Proportion of the Administrative Expenses of the Bank; and

(b) to pay, as the same become due, the Agency's Allocable Proportion of the fees and expenses of the Trustee and paying agent for the Loan Obligations.

The Agency's Allocable Proportion as used herein shall mean the proportionate amount of the total requirement in respect to which the term is used determined by the ratio that the principal amount of the Agency's Municipal Bond outstanding bears to the total of all Loans then outstanding to all Governmental Units under the General Bond Resolution, as certified by the Bank. The waiver by the Bank of any fees payable pursuant to this Section 7 shall not constitute a subsequent waiver thereof.

8. The Agency is obligated to make the Municipal Bond Principal Payments scheduled by the Bank. The first such Municipal Bond Principal Payment is due at least seven (7) Business Days prior to each date indicated in Exhibit A, and thereafter on the anniversary thereof each year. The Agency is obligated to make the Municipal Bond Interest Payments scheduled by the Bank on a semi-annual basis commencing seven (7) Business Days prior to each date indicated in Exhibit A, and to pay any Fees and Charges imposed by the Bank within 30 days after receiving the invoice of the Bank therefor.

9. The Bank shall not sell and the Agency shall not redeem prior to maturity any portion of the Agency's Municipal Bond in an amount greater than the related Loan Obligations which are then outstanding and which are then redeemable, and in the event of any such sale or redemption, the same shall be in an amount not less than the aggregate of (i) the principal amount of the Municipal Bond (or portion thereof) to be redeemed, (ii) the interest to accrue on the Municipal Bond (or portion thereof) to be redeemed to the next redemption date thereof not previously paid, (iii) the premium, if any, payable on the Municipal Bond (or portion thereof) to be redeemed. (if previously paid, (iv) the cost and expenses of the Bank in effecting the redemption of the Municipal Bond (or portion thereof) to be redeemed. The Agency shall give the Bank at least 50 days' prior written notice of the Agency's intention to redeem its Municipal Bond.

In the event that the Loan Obligations with respect to which the sale or redemption prior to maturity of such Municipal Bond is being made have been refunded and the refunding bonds of the Bank issued for the purpose of refunding such Loan Obligations were issued in a principal amount in excess of or less than the principal amount of the Municipal Bond remaining unpaid at the date of issuance of such refunding bonds, the amount which the Agency shall be obligated to pay or the Bank shall receive under item (i) above shall be the principal amount of such refunding bonds outstanding.

In the event that all or a portion of the Loan Obligations have been refunded and the interest the Bank is required to pay on the refunding bonds is less than the interest the Bank was required to pay on the Loan Obligations, the amount which the Agency shall be obligated to pay or the Bank shall receive under item (ii) above shall be the amount of interest to accrue on such refunding bonds outstanding.

In the event that all or a portion of the Loan Obligations have been refunded, the amount which the Agency shall be obligated to pay or the Bank shall receive under item (iii) above, when the refunded Loan Obligations or portion thereof are redeemed, shall be the premium, if any, on the Loan Obligations to be redeemed.

Nothing in this Section shall be construed as preventing the Agency from refunding the Municipal Bond in exchange for a new Municipal Bond in conjunction with a refunding of all or a portion of the Loan Obligations.

10. Simultaneously with the delivery of the Municipal Bond to the Bank, the Agency shall furnish to the Bank evidence satisfactory to the Bank which shall set forth, among other things, that the Municipal Bond will constitute a valid and binding special and limited obligation of the Agency, secured by the Trust Estate.

Invoices for payments under this Loan Agreement shall be addressed to the Agency, Attention: Chief Executive Officer, 1900 First Avenue, Suite 318, Ketchikan, Alaska 99901. The Agency shall give the Bank and the corporate trust office of the Trustee under the General Bond Resolution at least 30 days' prior written notice of any change in such address.

12. The Agency hereby agrees that it shall maintain, or cause the Agency Trustee to maintain, the Bond Reserve Fund in accordance with the Agency Indenture and that the yield on amounts held in such fund shall be restricted to a yield not in excess of [___] percent. So long as the Bank is the owner of the Agency's Municipal Bond, the Agency shall notify, or cause the Agency Trustee to notify, the Bank of any transfer from or any other application of funds in the Bond Reserve Fund.

13. The Agency shall establish, maintain and collect Firm Wholesale Power Rates from the Purchasing Utilities consistent with the Power Sales Agreement and sufficient in each Agency Fiscal Year to produce Net Revenues in such Agency Fiscal Year equal to 120% of the Annual Debt Service on all Agency Bonds for such Agency Fiscal Year.

14. The Agency hereby agrees to keep and retain, until the date six years after the retirement of the Municipal Bond, or any bond issued to refund the Municipal Bond, or such longer period as may be required by the Agency's record retention policies and procedures, records with respect to the investment, expenditure and use of the proceeds derived from the sale of its Municipal Bond, including without limitation, records, schedules, bills, invoices, check registers, cancelled checks and supporting documentation evidencing use of proceeds, and investments and/or reinvestments of proceeds. The Agency agrees that all records required by the preceding sentence shall be made available to the Bank upon request.

15. Prior to payment of the amount of the SEAPA Project Loan or any portion thereof, and the delivery of the Municipal Bond to the Bank or its designee, the Bank shall have the right to cancel all or any part of its obligations hereunder if:

(a) Any representation, warranty or other statement made by the Agency to the Bank in connection with its application to the Bank for a Loan shall be incorrect or incomplete in any material respect.

(b) The Agency has violated commitments made by it in the terms of this Loan Agreement.

(c) The financial position of the Agency has, in the opinion of the Bank, suffered a materially adverse change between the date of this Loan Agreement and the scheduled time of delivery of the Municipal Bond to the Bank.

16. The obligation of the Bank under this Loan Agreement is contingent upon delivery of its 2021 Series One Bonds and receipt of the proceeds thereof.

17. The Agency agrees that it will provide the Bank with written notice of any default in covenants under the Agency Bond Documents within thirty (30) days after the date thereof.

18. The Agency agrees that it shall not take, or omit to take, any action lawful and within its power to take, which action or omission would cause interest on the Municipal Bond to become subject to federal income taxes in addition to federal income taxes to which interest on such Municipal Bond is subject on the date of original issuance thereof.

The Agency shall not permit any of the proceeds of the Municipal Bond, or any facilities financed with such proceeds, to be used in any manner that would cause the Municipal Bond to constitute a "private activity bond" within the meaning of Section 141 of the Code.

The Agency shall make no use or investment of the proceeds of the Municipal Bond that will cause the Municipal Bond to be an "arbitrage bond" under Section 148 of the Code. So long as the Municipal Bond is outstanding, the Agency, shall comply with all requirements of Section 148 of the Code and all regulations of the United States Department of Treasury issued thereunder, to the extent that such requirements are, at the time, applicable and in effect. The Agency shall indemnify and hold harmless the Bank from any obligation of the Agency to make rebate payments to the United States under said Section 148 arising from the Agency's use or investment of the proceeds of the Municipal Bond.

19. Upon request of the Bank, the Agency agrees that if its bonds constitute twenty percent (20%) or more of the outstanding principal of municipal bonds held by the Bank under its General Bond Resolution, it shall execute a continuing disclosure agreement prepared by the Bank for purposes of Securities and Exchange Commission Rule 15c2-12, adopted under the Securities and Exchange Act of 1934.

20. The Agency agrees that if its bonds constitute twenty percent (20%) or more of the outstanding principal of municipal bonds held by the Bank under its General Bond Resolution it shall provide to the Bank for inclusion in future official statements of the Bank and the Bank's annual reports, to the extent required by the Bank's continuing disclosure undertakings, financial and operating information of the Agency of the type and in the form requested by the Bank.

21. If any provision of this Loan Agreement shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such provision shall not affect any of the remaining provisions of this Loan Agreement and this Loan Agreement shall be construed and enforced as if such invalid or unenforceable provision had not been contained herein.

22. This Loan Agreement may be executed in one or more counterparts, any of which shall be regarded for all purposes as an original and all of which constitute but one and the same instrument. Each party agrees that it will execute any and all documents or other instruments, and take such other actions as are necessary, to give effect to the terms of this Loan Agreement.

23. No waiver by either party of any term or condition of this Loan Agreement shall be deemed or construed as a waiver of any other term or condition hereof, nor shall a waiver of any breach of this Loan Agreement be deemed to constitute a waiver of any subsequent breach, whether of the same or of a different section, subsection, paragraph, clause, phrase or other provision of this Loan Agreement.

24. In this Loan Agreement, unless otherwise defined herein, all capitalized terms which are defined in Article I of the General Bond Resolution shall have the same meanings, respectively,

Page 6

as such terms are given in Article I of the General Bond Resolution and if not defined herein or in Article I of the General Bond Resolution shall have the meanings given to them in Exhibit B hereto.

25. This Loan Agreement shall remain in full force and effect so long as the Municipal Bond remains outstanding.

26. This Loan Agreement merges and supersedes all prior negotiations, representations and agreements between the parties hereto relating to the subject matter hereof and constitutes the entire agreement between the parties hereto in respect thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Loan Agreement as of the date first set forth above.

ALASKA MUNICIPAL BOND BANK

Executive Director

SOUTHEAST ALASKA POWER AGENCY

By: _____

TREY ACTESON Chief Executive Officer

EXHIBIT A

\$[____] Southeast Alaska Power Agency Electric Revenue Bond, Series 2021 (the "Municipal Bond")

Due ([___]1) Principal <u>Amount</u> \$ Interest <u>Rate</u> %

Principal installments shall be payable on [__] 1 in each of the years, and in the amounts set forth above. Interest on the Municipal Bond shall be payable on [__] 1, 20[_], and thereafter on [__] 1 and [__] 1 of each year, at the rates set forth above.

Optional Prepayment: The Municipal Bond principal installments due on or after [_____1, 20__] are subject to prepayment in whole or in part at the option of the Agency on any date on or after [_____1, 20__], at a price of 100% of the principal amount thereof to be prepaid, plus accrued interest to the date of prepayment.

EXHIBIT B

Additional Defined Terms

"Additional Agency Bonds" means, collectively, the additional parity bonds, notes or other obligations of the Agency authorized to be issued or made pursuant to Section 2.14 of the Agency Indenture.

"Agency Annual Debt Service" means, with respect to any series of Agency Bonds for any particular period, an amount equal to the sum of:

(a) the interest payable during such period on all Outstanding Agency Bonds of that series, plus

(b) the principal payable during such period on all Outstanding Agency Bonds of that series, whether by maturity or mandatory sinking fund redemption;

provided however, that with respect to any Variable Rate Agency Bonds bearing interest at rates that cannot be ascertained for such period, it shall be assumed that such series of Variable Rate Agency Bonds will bear interest at a rate per annum equal to the average of the Securities Industry and Financial Markets Association Municipal Swap Index (or, if such index is not available, its successor or a comparable high-grade market index comprised of tax-exempt variable rate demand obligations selected by the Agency) for the ten years prior to the date of calculation plus 1.50%.

"Agency Bonds" means the Agency's Electric Revenue Improvement and Refunding Bonds, Series 2015, dated May 6, 2015, the Municipal Bond, and any Additional Agency Bonds issued pursuant to the Agency Indenture.

"Agency Fiscal Year" means the fiscal year of the Agency, initially the 12-month period ending on June 30 of each year.

"Bond Fund" means the Bond Fund created and established in Section 4.3 of the Agency Indenture.

"Bond Reserve Fund" means the Bond Reserve Fund created and established in Section 4.4 of the Agency Indenture.

"Firm Wholesale Power Rate" has the meaning set forth in the Power Sales Agreement.

"**Fund**" means (a) any of the funds established pursuant to the Agency Indenture and held by the Agency Trustee (other than the Rebate Fund) and all accounts created within such funds, and (b) any other Fund designated as such with respect to a series of Agency Bonds.

"Government Obligations" means noncallable direct obligations of, or obligations the timely payment of the principal of and interest on which is fully guaranteed by, the United States of America.

"Net Revenues" means, for any period, Revenues during such period, less Operation and Maintenance Expenses payable during such period. In calculating Net Revenues, the Agency shall not take into account any non-cash gains or losses with respect to any real or personal property, investment or agreement that it may be required to recognize under generally accepted accounting principles, such as unrealized mark-to-market gains and losses.

"Operation and Maintenance Expenses" means the expenses of owning, operating and maintaining the Projects in good repair, working order and condition as "expenses" are interpreted under generally accepted accounting principles applicable to utilities like the Agency and also include taxes, but exclude interest, amortization and depreciation expenses and costs of capital additions or capital replacements.

"**Outstanding**" when used with reference to Agency Bonds means, as of any given date, all Agency Bonds that have been duly authenticated and delivered under this Indenture, except:

(a) Agency Bonds canceled after purchase in the open market or because of payment at or redemption prior to maturity;

(b) Agency Bonds for the payment or redemption of which cash or Government Obligations shall have been theretofore deposited with the Agency Trustee (whether upon or prior to the maturity or redemption date of any such Agency Bonds) in accordance with Article XI of the Agency Indenture;

(c) Agency Bonds no longer deemed to be outstanding as provided in Section 11.1 of the Agency Indenture;

(d) Agency Bonds in lieu of which other Agency Bonds have been authenticated under Section 2.8 or Section 2.9 of the Agency Indenture; and

(e) For the purpose of all consents, approvals, waivers and notices required to be obtained or given hereunder, Agency Bonds registered in the name of the Agency.

"**Power Sales Agreement**" means the Long-Term Power Sales Agreement between the Purchasing Utilities and the Agency, effective February 24, 2009, as the same may be hereafter amended, supplemented or restated from time to time in accordance with its terms by agreement of the parties thereto.

"**Projects**" means the Swan Lake Hydroelectric Project and the Tyee Lake Hydroelectric Project, related auxiliary facilities and assets including, without limitation, all generation, transmission and substation facilities associated with each such project, either individually or collectively. "Projects" also includes the Swan-Tyee Intertie facilities and assets.

"**Purchasing Utilities**" means the City of Ketchikan d/b/a Ketchikan Public Utilities, the City and Borough of Wrangell d/b/a City of Wrangell Light Department, and the Petersburg Borough, as successor in interest to the City of Petersburg, d/b/a Petersburg Municipal Power & Light.

"**R&R Fund**" means the Renewal and Replacement Fund established in Section 4.6 of the Agency Indenture.

EXHIBIT A – LOAN AGREEMENT 4165-7960-7853.2 "**Rate Stabilization Fund**" means the Rate Stabilization Fund authorized to be established in Section 4.7 of the Agency Indenture.

"Rebate Fund" means the Rebate Fund created in Section 4.5 of the Agency Indenture.

"Revenue Fund" means the Revenue Fund created in Section 4.2 of the Agency Indenture.

"Revenues" means all income (including investment income) and revenues related to the Projects including, but not limited to, amounts received pursuant to the Power Sales Agreement and withdrawals from the Rate Stabilization Fund. However, Revenues shall not include: (1) principal proceeds of Agency Bonds or any other borrowings, or earnings or proceeds from any investments in a trust, defeasance or escrow fund created to defease or refund Agency Bonds (until commingled with other earnings and revenues included in Revenues) or held in the Rebate Fund; (2) income and revenue that may not legally be pledged for revenue bond debt service; (3) federal or state grants allocated to capital projects; (4) payments under bond insurance or other credit enhancement policy or instrument; (5) insurance or condemnation proceeds used for the replacement of capital projects or equipment; or (6) deposits into the Rate Stabilization Fund.

"Subordinate Debt Fund" means the Subordinate Debt Fund authorized in Section 6.1 of the Agency Indenture.

"Trust Estate" means:

(a) Revenues; and

(b) The Bond Fund, the Bond Reserve Fund, the Subordinate Debt Fund, the Revenue Fund, the Rate Stabilization Fund and the R&R Fund and accounts established thereunder and all investment earnings thereon and money, securities and obligations therein (subject to disbursements from any such Fund or account upon the conditions set forth in the Agency Indenture); and

(c) The Agency's rights and interest in the Power Sales Agreement; and

(d) All other Agency revenues related to the Projects, including without limitation, insurance and condemnation proceeds; in each case subject to disbursement in accordance with the provisions of the Agency Indenture.

"Variable Rate Agency Bonds" means, as of any date of calculation, Agency Bonds the terms of which on such date of calculation are such that interest thereon for any future period of time is expressed to be calculated at a rate that varies over time.



SOUTHEAST ALASKA POWER AGENCY

Date: May 7, 2021

To: SEAPA Board of Directors

From: Trey Acteson, Chief Executive Officer

Subject: Consideration and Approval of Second Amendment to Lease and Easement Documents for the Tyee Lake, Swan Lake, Terror Lake and Solomon Gulch Hydroelectric Projects and Agreement Re Reclamation Reserve Account Payment

One of the hold overs from the restructuring of the Four Dam Pool Power Agency ("FDPPA") is the current Reclamation Fund established through the Alaska Department of Natural Resources (ADNR). At the time of restructuring, an attempt was made to amend the original fund agreement to separate the FDPPA project owners who all contribute to the Reclamation Fund. However, this amendment was never finalized by the parties and annual reclamation contributions of \$75,000¹ have continued to be collected and held jointly. Complicating matters is the fact that SEAPA-owned projects are under the Juneau ADNR office jurisdiction and Kodiak Electric Association (KEA) and Copper Valley Electric Association (CVEA) projects are under the Anchorage office. There has also been turnover in those offices and loss of institutional knowledge on the issues since restructuring.

Disentanglement has been a priority for SEAPA and alternatives such as a bond or letter of credit in lieu of our annual \$37,500 payment were ruled out as these alternatives would be much more costly. The ADNR completed their legal review and accepts the attached Second Amendment to Lease and Easement Documents for the Tyee Lake, Swan Lake, Terror Lake and Solomon Gulch Hydroelectric Projects, and we anticipate acceptance by the other parties to the agreement to be forthcoming shortly.

At this time, I am seeking the Board's authority to enter into ADNR Amendment #2 which will be in substantially the same form as the attached draft, and an additional side agreement to memorialize SEAPA continuing an annual payment of \$37,500 under a separate dedicated reclamation reserve account to finally resolve this restructuring issue dating back to 2009 with the FDPPA.

Account Name	Balance as of Apr 30, 2021	G/L Acct
DNR Reclamation Fund	1,343,472	1130-002
DNR Fund CVEA KEA Liability	(671,736)	2200-002

Please consider the following suggested motion:

SUGGESTED MOTION

I move to authorize staff to enter into a Second Amendment to Lease and Easement Documents from the Alaska Department of Natural Resources for the Tyee Lake, Swan Lake, Terror Lake and Solomon Gulch Lake Hydroelectric Projects and an agreement for SEAPA to continue an annual payment of \$37,500 in a separate dedicated reclamation reserve account. Pursuant to these actions, I further move to authorize staff to apportion funds from the existing DNR Reclamation Fund, 50% of which shall be deposited to SEAPA's separate reclamation reserve fund, and 50% of which shall be distributed equally to Copper Valley Electric Association and Kodiak Electric Association.

¹ \$75,000 is the total for all parties.

SECOND AMENDMENT TO LEASE AND EASEMENT DOCUMENTS FOR THE TYEE LAKE, SWAN LAKE, TERROR LAKE AND SOLOMON GULCH HYDROELECTRIC PROJECTS

This amendment is entered into between The Southeast Alaska Power Agency ("SEAPA"), formerly known as The Four Dam Pool Power Agency ("SEAPA")¹, Copper Valley Electric Association, Inc. ("CVEA"), Kodiak Electric Association, Inc. ("KEA"), and the State of Alaska, Department of Natural Resources ("DNR"). This amendment shall be referred to as the "Second Amendment." SEAPA, KEA and CVEA shall be referred to collectively as the "Parties" and each individually as a "Party."

RECITALS

- A. WHEREAS, The Four Dam Pool Agency ("FDPPA") and DNR entered into lease and easement agreements related to the Tyee and Swan Lake hydroelectric projects, which agreements are listed in Attachment A-1 (the "Swan/Tyee Agreements"). FDPPA and DNR also entered into lease and easement agreements related to the Terror Lake hydroelectric project, which agreements are listed in Attachment A-2 (the "Terror Lake Agreements"). FDPPA and DNR also entered into lease and entered into lease and easement agreements are listed in Attachment A-2 (the "Terror Lake Agreements"). FDPPA and DNR also entered into lease and easement agreements are listed in Attachment A-3 (the "Solomon Gulch hydroelectric project, which agreements").
- B. WHEREAS, FDPPA and DNR amended the Swan/Tyee Agreements pursuant to an agreement titled "Amendment to Lease and Easement Documents For Tyee and Swan Lake Hydro Projects," dated April 6, 2005 (the "Swan/Tyee First Amendment"). FDPPA and DNR also amended the Terror Lake Agreement and Solomon Gulch Agreements pursuant to an agreement titled "Amendment to Lease and Easement Documents for Solomon Gulch and Terror Lake Hydro Projects," dated April 6, 2005 (the "Terror Lake/Solomon Gulch First Amendment"). The Swan/Tyee First Amendment and the Terror Lake/Solomon Gulch First Amendment shall collectively be referred to as the "First Amendments."
- C. WHEREAS, pursuant to the Asset Transfer Agreement ("ATA"), dated November 11, 2008, between SEAPA, KEA and CVEA, and consistent with the Joint Action Agency Agreement, KEA and CVEA have withdrawn from SEAPA as part of SEAPA's restructuring. When the restructuring closed on February 24, 2009 (the "Closing"), the following became final:
 - a. KEA purchased the Terror Lake hydroelectric project from SEAPA.
 - b. CVEA purchased the Solomon Gulch hydroelectric project from SEAPA.
 - c. SEAPA no longer held an interest in the Terror Lake and Solomon Gulch hydroelectric projects.

¹ In January 2009, the Four Dam Pool Power Agency's changed its name to The Southeast Alaska Power Agency.

Second Amendment To Lease And Easement Documents for the Tyee Lake, Swan Lake, Terror Lake, and Solomon Gulch Hydro Projects

- d. KEA no longer held an interest in SEAPA and the Swan Lake, Tyee Lake, and Solomon Gulch hydroelectric projects.
- e. CVEA no longer held an interest in SEAPA and the Swan Lake, Tyee Lake, and Terror Lake hydroelectric projects.
- D. WHEREAS, subject to the terms and conditions of the ATA and related documents, at Closing, SEAPA conveyed, transferred, assigned and delivered to KEA and KEA agreed to have transferred from SEAPA, all of SEAPA's right, title, and interest in and to the Terror Lake Project, including all of the real and personal property, contracts, contract rights, and other rights and interests relating to the Terror Lake Project, including, but not limited to the Terror Lake Agreements.
- E. WHEREAS, subject to the terms and conditions of the ATA and related documents, at Closing, SEAPA conveyed, transferred, assigned and delivered to CVEA and CVEA agreed to have transferred from SEAPA, all of SEAPA's right, title, and interest in and to the Solomon Gulch Project, including all of the real and personal property, contracts, contract rights, and other rights and interests relating to the Solomon Gulch Project, including, but not limited to the Solomon Gulch Agreements.
- F. WHEREAS, SEAPA and DNR desire to amend the Swan/Tyee Agreements to account for the change in ownership of the projects and hereby terminate all the terms and condition previously set out in the Swan/Tyee First Amendment related to performance guarantees for the Swan/Tyee Agreements.
- G. Similarly, KEA and DNR each desire to amend the Terror Lake Agreements to account for the change in ownership of the project and hereby terminate all the terms and conditions previously set out in the Terror Lake/Solomon Gulch First Amendment related to performance guarantees for the Terror Lake Agreements.
- H. Lastly, CVEA and DNR desire to amend the Solomon Gulch Agreements to account for the change in ownership of the project and hereby terminate all the terms and conditions previously set out in the Terror Lake/Solomon Gulch First Amendment related to performance guarantees for the Solomon Gulch Agreements.

NOW, THEREFORE, in consideration of the foregoing recitals and mutual covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, SEAPA, KEA, CVEA, and DNR agree to the following:

TERMS AND CONDITIONS

1. <u>Amendment</u>. This Second Amendment is an amendment to, and fully enforceable as a term of, each of the Swan/Tyee Agreements, the Terror Lake Agreements, and the Solomon Gulch Agreements, all terms of which, except to the extent expressly modified herein, remain in full force and effect.

Second Amendment To Lease And Easement Documents for the Tyee Lake, Swan Lake, Terror Lake, and Solomon Gulch Hydro Projects 2. <u>Breach/Remedies</u>. A breach of this Second Amendment is a breach of the applicable recorded lease or easement agreement and all remedies available under the applicable agreement apply, to the same extent, to this Second Amendment.

3. <u>Effective Date</u>. This Second Amendment shall be effective as of the date all Parties have signed the document (the "Effective Date").

4. <u>Amending the Agreements to reflect the appropriate party</u>. The Swan/Tyee Agreements and any Amendments and the Terror Lake/Solomon Gulch Agreements and any Amendments shall be amended to reflect the appropriate party consistent with this Second Amendment and as listed below:

- a. All references to "FDPPA," "Power Agency," "lessee," "grantee," or other similar terms in the Swan/Tyee Agreements shall hereafter mean SEAPA, not FDPPA.
- b. All references to "FDPPA," "Power Agency," "lessee," "grantee," or other similar terms in the Terror Lake Agreements and as it relates to the Terror Lake hydroelectric project shall hereafter mean KEA, not SEAPA or FDPPA.
- c. All references to "FDPPA," "Power Agency," "lessee," "grantee," or other similar terms in the Solomon Gulch Agreements and the as it relates to the Solomon Gulch hydroelectric project shall hereafter mean CVEA, not SEAPA or FDPPA.

5. <u>No Further SEAPA Liability for Terror Lake and Solomon Gulch</u>; The Parties hereby agree that SEAPA is released from and shall have no further obligations or liability under the Terror Lake Agreements and Solomon Gulch Agreements.

6. <u>No Further CVEA Liability for Swan/Tyee and Terror Lake.</u> The Parties hereby agree that CVEA is released from and shall have no further obligations or liability under the Swan/Tyee Agreements and the Terror Lake Agreements.

7. <u>No Further KEA Liability for Swan/Tyee and Solomon Gulch.</u> The Parties hereby agree that KEA is released from and shall have no further obligations or liability under the Swan/Tyee Agreements and the Solomon Gulch Agreements.

8. <u>No Joint and Several Liability</u>. As detailed in this Second Amendment, the obligations of SEAPA, KEA and CVEA are separate and the Parties agree SEAPA, KEA and CVEA will not have any joint and several liability for any obligations assumed under this Second Amendment.

9. <u>Assignment and Assumption</u>. The Parties agree and acknowledge that the obligations and liabilities associated with the Terror Lake Agreements have been assigned to and assumed by KEA. The Parties agree and acknowledge that the obligations and liabilities associated with the Solomon Gulch Agreements have been assigned to and assumed by CVEA.

10. <u>First Amendment Termination</u>. The Parties agree that the "Amendment to Lease and Easement Documents For Tyee and Swan Lake Hydro Projects", dated April 6, 2005 (the "Swan/Tyee First Amendment") and the "Amendment to Lease and Easement Documents for Solomon Gulch and Terror Lake Hydro Projects", dated April 6, 2005 (the "Terror

Lake/Solomon Gulch First Amendment"), are hereby terminated in their entirety, no longer bind the Parties, and each Party to this Agreement is hereby released from them.

11. <u>Performance Guarantee</u>. All Parties agree to work with their respective DNR/Division of Mining, Land & Water/Regional Land Office, to implement a Performance Guarantee arrangement consistent with the stipulations of the original authorizations, with each Party obtaining an independent arrangement for a Performance Guarantee.

12. <u>Binding Effect</u>. The covenants, agreements, terms, provisions and conditions contained in this Second Amendment shall bind and inure to the benefit of the Parties hereto and their respective successors and assigns.

13. <u>Authority</u>. Each Party hereto represents and warrants to the others that all necessary authorizations required for execution and performance of this Second Amendment have been given and that the undersigned is duly authorized to execute this Second Amendment and bind the Party for which it signs.

IN WITNESS WHEREOF, the Parties have each executed this Second Amendment as of the dates written below.

SIGNATURES FOLLOW ON NEXT PAGES

Dated:	
	Trey Acteson, CEO
	The Southeast Alaska Power Agency
STATE OF ALASKA)	
) THIRD JUDICIAL DISTRICT)	SS.
THIS IS TO CERTIFY that on the	e day of,, before
	nd for the State of,duly
and known to me to be the identical indiv	ally appeared to me known idual named in and who executed the foregoing same was signed freely and voluntarily for the uses and
IN WITNESS WHEREOF, I set n	ny hand and seal the day and year last above written.
	Notary Public in and for Alaska
	My commission expires:
Dated:	Travis Million, CEO Copper Valley Electric Association, Inc.
STATE OF ALASKA)	
) THIRD JUDICIAL DISTRICT)	SS.
THIS IS TO CERTIFY that on the me, the undersigned, a Notary Public in a	e day of,,before nd for the State of,duly
commissioned and sworn as such, personand known to me to be the identical indiv	
IN WITNESS WHEREOF, I set n	ny hand and seal the day and year last above written.

Notary Public in and for Alaska My commission expires: _____

Second Amendment To Lease And Easement Documents for the Tyee Lake, Swan Lake, Terror Lake, and Solomon Gulch Hydro Projects

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Darron Scott, CEO Kodiak Electric Association, Inc.

STATE OF ALASKA))

Dated:

SS.

THIRD JUDICIAL DISTRICT

THIRD JUDICIAL DISTRICT

THIS IS TO CERTIFY that on the _____ day of _____, ___, before me, the undersigned, a Notary Public in and for the State of ______, duly commissioned and sworn as such, personally appeared ______ to me known and known to me to be the identical individual named in and who executed the foregoing instrument, and acknowledged to me the same was signed freely and voluntarily for the uses and purposes therein stated.

IN WITNESS WHEREOF, I set my hand and seal the day and year last above written.

Notary Public in and for Alaska My commission expires: _____

Dated: ______ Chris Carpeneti, Southeast Regional Manager Division of Mining, Land and Water State of Alaska, Department of Natural Resources STATE OF ALASKA)) ss.

)

THIS IS TO CERTIFY that on the _____ day of _____, ___, before me, the undersigned, a Notary Public in and for the State of ______, duly commissioned and sworn as such, personally appeared ______ to me known and known to me to be the identical individual named in and who executed the foregoing instrument, and acknowledged to me the same was signed freely and voluntarily for the uses and purposes therein stated.

IN WITNESS WHEREOF, I set my hand and seal the day and year last above written.

Notary Public in and for Alaska My commission expires: _____

Second Amendment To Lease And Easement Documents for the Tyee Lake, Swan Lake, Terror Lake, and Solomon Gulch Hydro Projects

Dated:		Samantha Carroll, Southcentral Regional Manager Division of Mining, Land and Water State of Alaska, Department of Natural Resources
STATE OF ALASKA)	20
THIRD JUDICIAL DISTRICT)	SS.

THIS IS TO CERTIFY that on the _____ day of _____, ___, before me, the undersigned, a Notary Public in and for the State of ______, duly commissioned and sworn as such, personally appeared ______ to me known and known to me to be the identical individual named in and who executed the foregoing instrument, and acknowledged to me the same was signed freely and voluntarily for the uses and purposes therein stated.

IN WITNESS WHEREOF, I set my hand and seal the day and year last above written.

Notary Public in and for Alaska My commission expires: _____

Second Amendment To Lease And Easement Documents for the Tyee Lake, Swan Lake, Terror Lake, and Solomon Gulch Hydro Projects

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ATTACHMENT A-1 – Swan/Tyee Agreements

TYEE LAKE PROJECT:

ADL 106841 - A Lease entered into on January 29, 2002, between the State of Alaska, Department of Natural Resources as lessor and The Four Dam Pool Power Agency as lessee, as recorded January 31, 2002, in the Ketchikan Recording District in Book 339, pp 524-544 and in the Wrangell Recording District in Book 35, pp 714-734, and then as amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ADL 106842 – A Lease entered into on January 29, 2002, between the State of Alaska, Department of Natural Resources as lessor and The Four Dam Pool Power Agency as lessee, as recorded January 31, 2002, in the Ketchikan Recording District in Book 339, pp 466-486, and then as amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ADL 103426 – Amendment No. 2 to an Easement titled "Right-Of-Way Permit" entered into on August 16th 1985, as recorded September 3, 1987, in the Wrangell Recording District in Book 16, pp 74 -85, the Petersburg Recording District in Book 29, pp 782 -793, and the Ketchikan Recording District in Book 151, pp 830 -841, then as 1st amended on April 23, 1996 as recorded in the Wrangell Recording District in Book 26, pp 285 -287, and 2nd amended on January 29, 2002, as recorded January 31, 2002, in the Wrangell Recording District in Book 75, pp 679 -694, the Petersburg Recording District in Book 71, pp 714 -729, and the Ketchikan Recording District in Book 339, pp 508 -523, and then as 3rd amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-00307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ADL 104833 – Amendment No. 1 to an Easement titled "Right-Of-Way Permit" entered into on March 17[,] 1987 as recorded in the Petersburg Recording District in Book 28, pp 866 -868, then as 1st amended on January 29, 2002, as recorded January 31, 2002, in the Wrangell Recording District in Book 35, pp 697 -713, the Petersburg Recording District in Book 71, pp 695 -711, and the Ketchikan Recording District in Book 339, pp 489 -505, then as 2nd amended on October 6, 2004, as document No. 000452-0 in the Wrangell Recording District, as document No. 000990-0 in the Petersburg Recording District, and as document No. 004321-0 in the Ketchikan Recording District, and then as 3rd amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

Attachment A-1 Swan/Tyee Agreements Page 1 of 2

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ADL 103267 – An Easement titled "Right of Way Permit" entered into on March 7, 1985 between the State of Alaska, acting through the Department of Natural Resources, Division of mining land and water and The Four Dam Pool Power Agency, as recorded August 26, 1987, in the Wrangell Recording District in Book 16, pp 26 -47, and the Petersburg Recording District in Book 29, pp 634 -655, then as 1st amended on October 6, 2004 as document No. 000450-0 in the Wrangell Recording District, and as document No. 000988-0 in the Petersburg Recording District, and then as 2nd amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ADL 103762 – An Easement titled "Right-Of-Way Permit" entered into on May 26, 1987 between the State of Alaska, acting through the Department of Natural Resources, Division of lands as grantor and Alaska Power Authority as permittee, as recorded September 3, 1987, in the Wrangell Recording District in Book 16, pp 57 -73, then as 1st amended on October 6, 2004 as document No. 000448-0 in the Wrangell Recording District, and then as 2nd amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

SWAN LAKE PROJECT:

ADL 100921 – A Lease entered into on January 29, 2002 between the State of Alaska as lessor and The Four Dam Pool Power Agency as lessee, as recorded January 31, 2002, in the Ketchikan Recording District in Book 339, pp 415-435 and then as amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ADL 106840 – A Lease entered into on January 29, 2002 between the State of Alaska as lessor and The Four Dam Pool Power Agency as lessee, as recorded January 31, 2002, in the Ketchikan Recording District in Book 339, pp 436-456 and then as amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ADL 106839 – An Easement entered into on October 6, 2004 between the State of Alaska, acting through the Department of Natural Resources, Division of Mining, Land and Water and The Four Dam Pool Power Agency as permittee as recorded in the Ketchikan Recording District as Document No. 004320-0 and then as amended on April 6, 2005, as recorded August 19, 2005, in the Ketchikan Recording District as 2005-003174-0, pp. 1-13, in the Wrangell Recording District as 2005-000307-0, pp. 1-13, and in the Petersburg Recording District as 2005-00683-0, pp. 1-13.

ATTACHMENT A-2 – Terror Lake Agreements

TERROR LAKE PROJECT:

ADL 204022 - A Lease Agreement entered into on January 31, 2002 between the State of Alaska, Department of Natural Resources as lessor and The Four Dam Pool Power Agency as lessee, and recorded in the Kodiak Recording District at Book 187, pp. 424-444 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 206462 - A Lease Agreement entered into on January 31, 2002 between the State of Alaska, Department of Natural Resources as lessor and The Four Dam Pool Power Agency as lessee, and recorded in the Kodiak Recording District at Book 187, pp. 403-423 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 204024 - A Right-of-Way/Easement Agreement entered into on January 31, 2002 between the State of Alaska, acting by and through the Department of Natural Resources, Division of Mining, Land and Water as grantor and The Four Dam Pool Power Agency as grantee, and recorded in the Kodiak Recording District at Book 187, pp. 445-461 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 215520 — A Lease Application for a communication site previously authorized under an Easement titled "Right-of-Way Permit" which expired May 1, 2008. The Easement was entered into on May 3, 1983 between the State of Alaska, acting through the Department of Natural Resources, Division of Lands and grantor and the Division of Telecommunication Systems as grantee, and recorded in the Kodiak Recording District at Book 177, pp. 692-696, then assigned to The Four Dam Pool Power Agency on February 13, 2002, and recorded in the Kodiak Recording District on May 20, 2003 as 2003-001715-0, pp. 1-3, and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ATTACHMENT A-3 – Solomon Gulch Agreements

SOLOMON GULCH PROJECT:

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AD L 67279 - A Lease Agreement entered into on January 31, 2002 between the State of Alaska, Department of Natural Resources as lessor and The Four Dam Pool Power Agency as lessee, and recorded in the Valdez Recording District at Book 148, pp. 49-69 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 80113 - A Right-of-Way/Easement Agreement entered into on January 31, 2002 between the State of Alaska, acting by and through the Department of Natural Resource, Division of Mining, Land and Water as grantor and The Four Dam Pool Power Agency as grantee, and recorded in the Valdez Recording District at Book 148, pp. 70-86 and in the Chitina Recording District at Book 61, pp. 850-866 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 201784 - A Right-of-Way/Easement Agreement entered into on January 31, 2002 between the State of Alaska, acting by and through the Department of Natural Resource, Division of Mining, Land and Water as grantor and The Four Dam Pool Power Agency as grantee, and recorded in the Valdez Recording District at Book 148, pp. 87-103 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 226314 - A Right-of-Way/Easement Agreement entered into on January 31, 2002 between the State of Alaska, acting by and through the Department of Natural Resource, Division of Mining, Land and Water as grantor and The Four Dam Pool Power Agency as grantee, and recorded in the Valdez Recording District at Book 148, pp 104-120 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 226315 - A Right-of-Way/Easement Agreement entered into on January 31, 2002 between the State of Alaska, acting by and through the Department of Natural Resource, Division of Mining, Land and Water as grantor and The Four Dam Pool Power Agency as grantee, and recorded in the Valdez Recording District at Book 148, pp. 121-138 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-12.

ADL 226316 - A Right-of-Way/Easement Agreement entered into on January 31, 2002 between the State of Alaska, acting by and through the Department of Natural Resource, Division of Mining, Land and Water as grantor and The Four Dam Pool Power Agency as grantee, and recorded in the Valdez Recording District at Book 148, pp. 139-156 and then as amended on April 6, 2005, as recorded April 15, 2005, in the Valdez Recording District as 2005-00221-0, pp. 1-1.

MEMORANDUM <u>ATTORNEY-CLIENT COMMUNICATIONS</u>

TO:	Chairperson Robert Sivertsen Southeast Alaska Power Agency
FROM:	Joel R. Paisner, Ascent Law Partners, LLP, Counsel to SEAPA
DATE:	May 6, 2021
RE:	Suggested Motion for Executive Session

The Board of Directors may conduct an executive session during its Regular Board Meeting to be held on May 13, 2021 to discuss a potential interconnection with Metlakatla.

I recommend the following motion be made:

I move to recess into Executive Session to be conducted pursuant to SEAPA's Bylaws consistent with Alaska Statute 44.62.310 for discussions relating to a potential interconnection to Metlakatla <u>as</u> the discussions will include matters, the immediate knowledge of which would clearly have an adverse effect upon the finances of the public agency.



SOUTHEAST ALASKA POWER AGENCY CEO REPORT

DATE:	Mov 7	2021
DATE.	May 7,	202 I

TO: SEAPA Board of Directors

FROM: Trey Acteson, Chief Executive Officer

SUBJECT: CEO Report

SAFETY:

There has been no work related recordable or lost time incidents since my last report.

CORONAVIRUS (COVID-19) UPDATE:

COVID-19 cases around the region have been spiking recently serving as a reminder that we must remain diligent in protecting employees and critical operations. SEAPA's administrative staff have all been vaccinated which should reduce the risk of transmission and severity of any outbreaks. Most represented employees have also been vaccinated. SEAPA still requires contractors to complete a COVID-19 questionnaire and present negative test results within 3 days of travel.

GOVERNMENTAL AFFAIRS & EXTERNAL INDUSTRY ACTIVITIES:

I continue to meet regularly with the National Hydropower Association (NHA) as a member of their Legislative Committee and Hydraulic Power Committee to track movements on the Federal level and implement strategies to steer policy. The NHA recently completed their Washington Waterpower Week and is actively pursuing legislation to ensure hydropower is included in any infrastructure package that moves at the Federal level.

SEAPA filed comments under FERC's Notice of Inquiry (NOI) on Financial Assurance Measures for Hydroelectric Projects (**Attachment 1**). I also engaged the Alaska Power Association (APA) and Northwest Hydroelectric Association (NWHA) to file comments and worked with the NHA to formulate their response. As previously reported to the Board, any move by FERC to require financial assurances for all hydro projects would be unreasonably burdensome to ratepayers.

The State Legislature got off to a slow start this year mostly due to delays in the House organizing. The Legislature has some big issues on their plate (e.g., Budget, PFD, Taxes) so I do not expect many bills will move during the first year of this two-year cycle. There is currently a lot of ongoing discussion regarding the budget and the likelihood of a special session. I have provided an update below on a few bills that we are tracking.

HB29 (SB110) This bill makes clear in the statute that a utility offering electric service to the public may not be held liable for property damage, death, or personal injury resulting from contact between vegetation and the utility's facilities, unless the vegetation is located entirely within the boundaries of the utility's right-of-way or if the utility fails to have a written vegetation management plan or fails to comply with that plan. Big insurance lobbyists got involved and this bill morphed from liability limitation to a vegetation management plan oversight focus. We are currently working with Rep. Rauscher's and Sen. Micciche's offices to steer this back to its originally intended purpose of reducing/eliminating utility liabilities specific to vegetation "outside" of their existing rights of ways.

HB33 This bill would substantially increase the penalties for discharge of oil, which includes refined petroleum products such as diesel and heating fuel. It increases the penalties 400% across the board (current penalties range from \$1 to \$10 per gallon based on whether the spill is into freshwater, saltwater, or land and whether it has significant fishery resources). It quadruples fines for any other violation of a law or permit, from a minimum of \$500 to \$2,000 and a maximum of \$100,000 to \$400,000, with daily maximums increased from \$5,000 per day to \$25,000 per day. The same increases apply to individual liability for false reports or causing discharges. The bill would require increases to these amounts for inflation every ten years. The bill also rewrites the definition of a benefit of noncompliance to include not just avoided compliance costs but also "competitive advantage" from noncompliance and "income derived" from it. It adds a list of factors to consider deterring future misconduct in setting civil penalty levels. It also adds the ability for the Department of Environmental Conservation ("DEC") to issue administrative penalties, which can be assessed by DEC without going to court. Those penalties range from \$500 to \$10,000 per violation.

SB17 The goal of this bill is for the State to enter into energy service performance contracts valued at \$100 million to retrofit public facilities, public buildings, and public schools in a manner that will result in a net savings in energy costs to the state within 15 years after completion of the retrofits. This could have an impact on future loads in the communities we serve.

SB69 This bill will extend the deadline by which a plant or facility generating electricity entirely from renewable resources must be place into commercial operation, among other requirements, to qualify for an exemption from regulation. The bill extends the deadline from July 1, 2021 to July 1, 2031. This legislation was originally intended specifically for a one-time purpose associated with Fire Island Wind. SEAPA's exemption is not at risk. The bill was recently amended reducing the extension to 7 years.

SB123 (HB170) This legislation amends AS 44.88 to establish the Alaska Energy Independent Fund green bank within the Alaska Industrial Development and Export Authority (AIDEA). There have been several amendments shifting how AIDEA appointments are made and confirmed, as well as the funding level for the green fund.

ALASKA DEPARTMENT OF NATURAL RESOURCES (ADNR) – RECLAMATION FUND:

<u>History:</u> The joint ADNR Reclamation Fund is a holdover issue from restructuring. An attempt was made at that time to cleanly separate the FDPPA project owners, including acknowledgement of the FDPPA's name change to SEAPA, release of joint liability, insurance requirements, and performance guarantees. This effort was through what was referred to as the Second Amendment to Lease and Easement Documents for the Tyee Lake, Swan Lake, Terror Lake and Solomon Gulch Hydroelectric Projects (Amendment #2). However, this amendment was never finalized by the parties and annual reclamation contributions have continued to be collected and held jointly.

<u>Update</u>: The Juneau ADNR Southcentral Regional Office (SCRO) recently notified SEAPA that the Department of Law has completed their review of Amendment #2 and has solicited final comments from the effected parties. This item requires Board action and will be covered under New Business.

On a parallel path, the SCRO is working on a new individual contract for SEAPA to continue with our annual Reclamation Contingency Fund contribution. SEAPA's current share of the annual contribution is \$37,500 and we expect this to continue. We have explored other alternatives, but this remains the Agency's lowest cost option. The current fund balance is \$1,343,472 and would be split evenly between the four projects. It is anticipated that SEAPA will be required to use its 50% of the existing fund as the foundation of its standalone reclamation fund.

BEST PRACTICES AND PROCESS IMPROVEMENTS:

Staff is actively working on the 5-year review of the 4R Plan (Renewal, Replacement, and Risk Reserve). Historically, life expectancies have simply been based on industry standards. This year we are undertaking an extensive review of higher value assets and applying real time assessments. We are also taking a deeper look at possible life extension opportunities where appropriate. This will provide a much more accurate picture for the Board regarding the magnitude and timing of major capital investments in the future. We have contracted BKI Engineering Services to support the first phase of individual equipment assessments. That information will be integrated into the overall 4R Plan update that ultimately provides the basis for our annual levelized payment into the Dedicated R&R Plan.

The Managers' reports in your Board packets highlight several other ongoing best practices and process improvements. These include finalization of SEAPA's Vegetation Management Plan, MAPCON work management updates, Operations and Maintenance (O&M) manual updates, and acquisition of specialized test equipment for enhanced monitoring and detection.

STRATEGIC PLAN UPDATE:

Phase II of SEAPA's communications plan is scheduled for completion in the second quarter. I anticipate this will be distributed for the Board's review by the end of June.

PERSONNEL:

Recruitment for an Operator/Electrician at Tyee Lake was successful. SEAPA received moderate interest from qualified applicants, and we are pleased to announce the hiring of Nathan Stewart. Nathan has several years of experience working remotely on the North Slope and we look forward to the expertise he will bring to our team of skilled workers. Nathan and his family are excited to relocate to the community of Wrangell.

Recruitment for a qualified Control Systems Engineer with power plant experience is ongoing.

Attachment 1: SEAPA Comments Re FERC NOI

UNITED STATES OF AMERICA Before the FEDERAL ENERGY REGULATORY COMMISSION

Financial Assurance Measures for)	
Hydroelectric Projects):	Docket No. RM21-9-000
Notice of Inquiry)	

COMMENTS OF SOUTHEAST ALASKA POWER AGENCY

The Southeast Alaska Power Agency ("SEAPA") respectfully submits the following comments in response to the Federal Energy Regulatory Commission's ("FERC" or "Commission") Notice of Inquiry ("NOI") requesting comment on what changes, if any, the Commission should make to its practices for requiring financial assurance measures in licenses and other authorizations for hydroelectric projects.¹ SEAPA commends the Commission for proactively requesting comment on whether reforms are necessary to its financial assurance practices.

SEAPA is a regional joint action agency serving the wholesale power needs of Ketchikan, Petersburg, and Wrangell, Alaska. These are three economically distressed islanded communities in southern Southeast Alaska critically dependent on affordable hydropower. SEAPA is deeply concerned about the additional significant regulatory and financial burden being considered by the Commission. As a member of both the National Hydropower Association ("NHA") and the Alaska Power Association ("APA"), SEAPA supports the detailed comments they have filed and offers additional comments specific to our organization.

Financial assurance is one of many different tools used by the Commission to ensure safety and compliance. Most hydropower licensees are safe and have good records of compliance, are in good

¹ Financial Assurance Measures for Hydroelectric Projects, 174 FERC ¶ 61,039 (Jan. 19, 2021) ("NOI")

Attachment 1 to CEO Report / Page 2 of 3 pages.

standing with the Commission, and do not require financial assurance.² The Commission currently requires financial assurance on a case-by-case basis based on a licensee's or applicant's history of non-compliance. SEAPA supports this approach and does not believe changes to policies, regulations, or statutes are currently necessary.

SEAPA is a compliant owner and operator of two FERC regulated hydroelectric projects and already maintains a reclamation reserve fund with State of Alaska Department of Natural Resources. SEAPA's mission is to safely provide clean reliable, low-cost wholesale power to the communities it serves. Keeping the lights on at an affordable cost is compromised by requiring additional financial assurances, which would be duplicative regulation and overly burdensome to the ratepayers in our region. Additionally, it would be unreasonable and unfair to force compliant licensees in good standing to financially support non-compliant licensees. It would in effect be rewarding non-compliance. SEAPA believes this is a very small subset of licensees in the Nation and should continue to be addressed by the Commission on a case-by-case basis. The Commission's use of civil penalties or criminal prosecution should be examined to determine whether they are effective enough to assure compliance by non-compliant licensees.

The three potential options Commission staff identified for establishing financial assurance mechanisms are "one size fits all" approaches that punish compliant licensees rather than directly addressing non-compliant licensees. Requiring taxes, fees, or bonds from all licensees would unnecessarily tie up substantial capital that could otherwise be used to maintain and operate projects. Establishing an industry-wide trust would be unfair. SEAPA's ratepayers should not be financially responsible for hydro projects elsewhere in the country. Requiring licensees to obtain insurance policies for unforeseen hazards is also unreasonable. The Commission's dam safety regulations are already

² The Commission does not refer to any public safety or environmental concerns from compliant licensees in the NOI.
Attachment 1 to CEO Report / Page 3 of 3 pages.

extensive and are the best way to ensure against unknown or unforeseen circumstances. SEAPA concurs with NHA and APA that if the Commission believes its existing practices are insufficient, a technical conference should be held to discuss the issue in greater detail.

In conclusion, SEAPA is opposed to the Commission changing its financial assurance practices and recommends directly addressing non-compliant licensees. SEAPA's hydro projects comply and have no history of non-compliance. SEAPA's member utilities and their ratepayers should not be financially burdened due to a small number of unrelated license offenders.

Respectfully submitted,

SOUTHEAST ALASKA POWER AGENCY

By_

Trey Acteson Chief Executive Officer Southeast Alaska power Agency 1900 First Ave., Suite 318 Ketchikan, Alaska 99907



Date: April 30, 2021

To: Trey Acteson, Chief Executive Officer

From: Clay Hammer, Operations Manager

Re: Report for May 2021 Board Meeting

MAJOR CONTRACTS and PROJECTS

Brushing Work

Two Requests for Proposals (RFPs) issued in January 2021 for contract brushing work. One on Vank Island between Wrangell and Petersburg and one on Revillagigedo Island between Swan Lake and Ketchikan. Bam LLC of Ketchikan was awarded the Revillagigedo Island work and they are expected to start the project the first week of May. Unfortunately, the bids submitted for the Vank Island work were outside of the amount budgeted for that project. Staff revised the RFP by reducing the acreage to be brushed and re-solicited the project. Bids are due May 5 and staff anticipates recommending an award of the contract under New Business during the meeting.

SEAPA's in-house crew will be clearing tower structures in preparation for the annual line maintenance work. There are 64 structures to be cleared this season along with an additional eight-to-ten acres of right-of-way.



Vank Island 2021 Contract Area

Revillagigedo Island 2021 Contract Area

Tyee Plant PRV Valves

The Tyee Plant PRV Project continues to move ahead. These valves take the 600+ psi lake water coming from the penstock and reduce it in stages down to a more manageable 90 psi for use in the cooling water loops and potable water supply for the camp. Unfortunately, time, silt, and extreme pressure have taken its toll on the original valves and they are now slated for replacement as they have become worn and replacement parts are no longer available.

Seattle-based Core and Main was able to work with manufacturer, Cashco Inc., of Ellsworth Kansas to produce American made replacements. That work is complete, and the valves are on site. SEAPA's in-house crew will install the valves when they get a break in their schedule. It is estimated it will take 1-2 days per valve bank depending on the ease of fit.



Cashco Model DA1 Pressure Reducing Valve

Cleveland Peninsula Helipad Project

Over 50% of the helicopter pads along the Tyee line's Cleveland Peninsula route have aged to the point of being near or at structural failure. These are the original wooden pads installed in early 1980's when the line was constructed. Of the 43 pads in service in that area, 10 have failed and another 13 are in imminent danger of failure. There is also one critical tower that does not have a pad making maintenance access to that structure almost impossible.

Staff has contracted Tongass Engineering of Ketchikan for engineering and project management services to see this project through. Tongass Engineering has considerable experience in this line of work having performed similar work for SEAPA with helipad installations at over 100 locations along the Swan-Tyee Intertie (STI) in similar terrain. The pads that will be used for the Cleveland project were originally designed for the STI so we anticipate the design requirements from that project will carry over to this project without complications.

The Cleveland project includes replacement of 11 of the worst pads this season using helipad inventory currently in stock at the Wrangell warehouse. The goal is to have all required engineering and permits in place in time to issue an RFP later this Spring with the work expected to take place this summer.

The work will include removal of failed pads and installation of the new aluminum structures using fiberglass decking and improved foundation methods. These newer style pads will have an expected service life exceeding the wooden-type structures.



Hilltop Helipad on Cleveland Peninsula overlooking Bradfield Canal

Burnett Peak Repeater Communications

SEAPA's Tyee Lake radio voice repeater on Burnett Peak began experiencing communication issues with the onset of snow conditions last season. Higher-than-average snow conditions with abnormally low temperatures made access to the site difficult. When a break in the weather finally occurred, staff was able to visit the site to do some troubleshooting and discovered that most of the communication's shelter was incased in snow and ice. Once the snow was removed, partial communications were restored however a new coax cable and relocation of the antenna will be required to fully complete the repair. This site houses SEAPA's Bradfield Marine Terminal SCADA communications, the Wrangell Volunteer Fire Department's repeater communications, and SEAPA's voice repeater communications. The Fire Department's repeater adds an additional layer of emergency communications for the crew onsite in the event normal voice communications fail.



Burnett Peak Repeater Shack before Snow Removal



Burnett Peak Repeater Shack after Snow Removal

Positector UTG Ultrasonic Metal Thickness Tester

As SEAPA's plants age, corrosion is a constant concern in areas where there are metallic components with limited visual access. This includes anything from piping and plumbing to pressure vessels and penstocks. Ultrasonic testing of metallic components is an industry-accepted method of non-destructive testing that allows for the field measurement of these components without taking them apart or removing them from service. Accurate to within thousandths of an inch, this method is very similar to testing done on patients in a hospital. A gel is applied to the surface and then an ultrasonic pulse is applied with the results measured and interpreted by the tool. Multiple tests are conducted over a given area with corrosion identified by differences in the measurements.

The Positector UTG is the latest in SEAPA's arsenal of special tools and equipment that allow us to better track the aging process and remaining life expectancy of many of our hard-to-access critical components throughout the plants. This unit can store hundreds of measurements that can be downloaded by data cable to be used in reporting or documentation.



Positector UTG Kit for Metal Corrosion Testing

Tyee Lake Report

The Crew continues to stay busy with the regularly scheduled PMs and plant work. In addition to the normal duties the crew also accomplished the following:

- SAT Pad phone system upgrades
- Installation of sno-tracks on Honda side-by-side
- Extensive snow removal due to unusual amount of snowfall
- Rebuild snowplow castor wheels
- Rebuild Astro Van front end
- Replace exhaust system on the Cat Road grader



Track Kit installed on Honda side-by-side for access to Communication SAT pads.

Safety Training this quarter included:

- Workplace Harassment Training
- Online 24-Hour HAZWOPER class
- Online CPR
- CPR practical check off
- Blood Borne Pathogen
- Boater Safety
- Spill Prevention and Control
- Hazard Communication



Ed Schofield / Power System Specialist

Date: April 30, 2021

To: Trey Acteson, CEO

From: Ed Schofield: Power System Specialist

Subject: SEAPA Board Report for May 13, 2021 Regular Meeting

Swan Lake Preventative Maintenance Program (MAPCON) Update

The Swan Lake MAPCON Update Project is in the second phase of a project started in 2019 to update the Operations and Maintenance (O&M) manual to modern practices as presented in the Bureau of Reclamation Facilities Instruction, Standards and Techniques (FIST) manuals. The original Swan Lake O&M manual was written in 1984 and last revised in 1992 as part of the implementation of the computerized maintenance management program (MAPCON). The MAPCON update will update the preventative maintenance work orders using the updated O&M manual as a guidance and reference. Kerry McCalman of Big Sky Hydro, who has 30 years' experience with Hydro O&M management is the lead person on this project. Unfortunately, the project was tabled in March 2020 due to COVID-19 pandemic travel mandates. Mr. McCalman is scheduled to be at Swan Lake in mid-May this year for two weeks to review 1200+ MAPCON work orders to assess current work order instruction and update them to FIST standards. Once this is done, the Swan Lake portion of the O&M Update Project will be completed.

Tyee Operation and Maintenance (O&M) Manual Update

The Tyee Operation & Maintenance (O&M) Manual Update Project is scheduled to start immediately following the completion of the Swan Lake MAPCON update. The Tyee O&M manual rewrite will be phase one of a two-phase project that will be performed in the same manner as the Swan Lake O&M and MAPCON Updates. The Tyee O&M manual was developed in 1984 and last revised in 1992 as part of the State of Alaska's (Tyee's owner at the time) implementation of a computerized maintenance management system known as MAPCON.

SEAPA Ketchikan Headquarters

The new SEAPA Headquarters Facility Project is progressing well. The new Headquarters will be constructed at Mile 2.8 along South Tongass Highway and Don Finney Lane in Ketchikan. The headquarters will house SEAPA's management team, a warehouse, and the SEAPA Board of Directors chambers. A contract is in place with the Architect, Welsh Whiteley Architects, L.L.C., who will coordinate the facility design with mechanical, electrical, and civil engineers and assist in the preparation of Request for Proposal documents that should be ready this fall to solicit bids for a construction contractor.

Swan Lake FERC Activities

The Swan Lake Seventh Part 12, and the Standards Technical Information Document (STID) update were submitted to FERC in December 2019. FERC's review of each of the documents resulted in additional information requests related to Flash Board Gate (FBG) component stress analysis. The FBG stress analysis was not part of the information originally requested by FERC for SEAPA's Swan Lake Reservoir Expansion Project. Kuenz, the engineering and manufacturing firm for the FBGs, was contacted to develop the FBG component stress analysis reports in early 2020. The Swan Lake Independent Consultant (IC, third party engineer) developed a supplemental document to the Part 12 and the STID describing the findings of the FBG component stress analyses and preventative maintenance procedures required to prevent component failures. The supplemental documents and the Kuenz FBG component analysis report were submitted to FERC in April 2021.

The 2020 Dam Safety Surveillance and Monitoring Report (DSSMR) is presently underway. The DSSMR is a third-party engineer review of the preventative maintenance activities performed in 2020 related to the Swan Lake Dam and water conveyance infrastructure.

Tyee Intake Gate

The Tyee Intake Gate Refurbishing project started in June 2020 and was shut down due to snow in November 2020. The 2020 season accomplished about 90% of the total planned work prior to winter shut down. The project will start up this spring as soon as the intake site is free of snow (estimated start date is June 1, 2021). Tasks to be completed are the removal and refurbishing of the intake gate to be placed back into service.

Tasks Completed in 2020:

- The intake gate hydraulic power unit (HPU) was removed from the 200 ft. below ground elevation
- HPU was rebuilt and reinstalled above ground
- HPU mounting platform and enclosure were constructed
- HPU electrical circuits were installed
- HPU hydraulic piping to gate cylinder was installed.
- A new steel working platform was installed within the intake shaft 20 ft. below ground elevation
- Intake Gate cylinder was rebuilt.



Tyee Gate Intake Cylinder Removal

Tyee Intake Gate HPU Removal

Swan Lake Operation

The Swan Lake facility has recently had two in-house personnel change positions and one open position filled. To assure all governing agency mandates continue to be performed as directed, an in-house training effort has been implemented by SEAPA management. The training provided covered mandated requirements pertaining to the following government agencies:

- Federal Energy Regulatory Commission (FERC)
- Department of Environmental Conservation (DEC)
- Occupational Safety and Health Administration (OHSA)

One Swan Lake team member is currently off duty due to an off-hours' injury. This individual is not expected to return to duty for 6 to 8 weeks. The Swan Lake crew continues to fulfill the daily operational tasks and successfully accomplish all the preventative maintenance program requirements in the individual's absence.

Swan Lake Office 104 Renovation

The Office 104 renovation is scheduled to start on May 13th. This project will finish out the unfinished kitchen of housing unit 104 of the four-plex constructed in at Swan Lake in 2020. This unit was intended to be a staff meeting and training room. With the planned Bunkhouse and Housing Replacement Project scheduled in 2022, housing unit 104 will be converted to staff housing to replace one of the existing 40-year-old housing units.

2021 Swan Lake Safety Training

February:

- Harassment and Discrimination
 - Handouts were presented and discussed on how to recognize, document and report harassment/discrimination. Court cases are also included in the handout. Employees were instructed to complete the ONLINE TSS Harassment/Discrimination course by

March 3. In March safety meetings, we will follow up with question/answer section on the material.

March:

- Harassment Training review
- Arc Flash
 - Mr. Siedman presented an Arc Flash via Powerpoint
 - specific areas at Swan Lake that are flash points were discussed
- FR Clothing
 - discussion included flame resistant clothing, levels of need, care, and SEAPA policy on replacement
- Burns/Treatment
 - discussed first aid for burns, specifically around Arc Flash
- Lifting for Back Safety

April:

- Boat Safety
 - Discussed new boating regulations regarding cutoff switches and changes to life jacket identification icons
 - Water safety including getting on the dock after falling in
 - Discussion of first aid kits and their placement around the site, especially at the dock and in vehicles.
- Bloodborne Pathogens



Date: May 6, 2021

To: Trey Acteson, CEO

From: Robert Siedman, P.E., Director of Engineering & Technical Services

Subject: Report for May 13, 2021 Board Meeting

Swan-Bailey Transformer Refurbishment



RR21359 was approved by the Board of Directors in December of 2020 to refurbish the Swan Lake and Bailey transformers, extending life, and improving reliability. Bushings, seals, and gauges have all been ordered. The high voltage bushings have been delivered to Swan Lake and Bailey Substation. The work is currently scheduled to occur during the 2021 outage from June 10-June 20.



Swan Lake Station Service Switchgear

Contract Award0 daysTue 6/30/20Tue 6/30/20Procurement Switchgear224 daysWed 7/1/20Mon 1/25Procurement Transformers224 daysWed 7/1/20Mon 1/25Procurement Commodity Material60 daysMon 1/25/11Sun 3/21Mobilize to Site2 daysMon 7/21Sun 3/21Project Start- Begin Onsite Work1 dayTue 7/6/21Tue 7/6/21Project Start- Begin Onsite Work1 dayTue 7/6/21Tue 7/6/21Install transforms risk mich and temporary 480V panel1 daySat 7/10/21Sat 7/10/21Install ansforms servich and temporary 480V panel1 daySat 7/10/21Sat 7/10/21Install ansforms risk mich and temporary 480V panel1 daySat 7/10/21Sat 7/10/21Install ansform panel PPCL2 daysMon 7/12/21Thu 7/15/21Sun 7/18/21Install temporary feeders from panel PPCL2 daysMon 7/12/21Thu 7/12/21Install temporary feeders from panel PPCL2 daysMon 7/12/21Thu 7/2/21Install temporary feeders from panel PPU11 dayThu 7/2/21Thu 7/2/21Land temporary feeders and E2 cabinet and energize 480V temp panel, PCA panel and PPCL panel1 dayFri 7/23/21Fri 7/23/21Remove PCA feeders and E2 cabinet and energize 480V temp panel, PCA panel and PPCL panel1 dayFri 7/23/21Fri 7/23/21Remove feeders from panel PPA1 dayFri 7/23/21Fri 7/23/21Fri 7/23/21Fri 7/23/21Fri 7/23/21Install new quipment feeders to panel PPU11 day	fask Name	Duration	Start	Finish
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	Complete commissioning of all systems.	2 days	Sun 8/29/21	Mon 8/30/2

The Swan Lake Station Service project is currently on schedule and within budget. All equipment has been manufactured with Factory Acceptance Testing scheduled to occur on May 14. Installation is scheduled to begin on July 6 with an anticipated completion date of August 30.



Stikine Crossing Submarine Cables



The Stikine Crossing submarine cable manufacturing is complete. SEAPA participated in a Factory Acceptance Test (via Zoom) on April 8. The above image demonstrates one of the many tests performed on the cable (Partial Discharge Test at 80kV). All tests passed and the cable is ready for shipment.

Shoreside work is scheduled to begin in early June. Excavation, pedestal fabrication, transfer bus relocation and shoreside cable removal will occur during the 2021 outage, which will significantly reduce the amount of time Petersburg will be required to operate diesels for this project. The cable is scheduled to be removed from the water on July 1-3 and the new cable is scheduled to be installed on July 5-7.



RTAC SEAPA-KPU SCADA Points



The SEAPA-KPU SCADA points project is 90% complete. SEAPA purchased an Orion LX+ for KPU to complete the SCADA connections with a tentative delivery of May 18.

Exciter Carbon Dust Collectors

The exciter carbon dust collectors are currently 80% installed at both Tyee and Swan. The manufacturer is scheduled to be onsite for completing the installation and commissioning on May 17.



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SWL De-Ice Gate Bubbler



The design phase for the Swan lake de-ice bubbler automation project is nearly complete. HMI screens, PLC programming and equipment procurement is complete. Installation is scheduled to occur in the Summer of 2021.

Petersburg and Wrangell Fiber Buildout



The design phase for the Petersburg and Wrangell Fiber mesh network is 90% complete. Installation (buildout) of the fiber drops is scheduled to occur in June 2021. When complete, SEAPA's SCADA network to Petersburg and Wrangell will be Cyber-Secure on an isolated network.

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SEAPA 2021 BOARD MEETING DATES

Date(s)		Weekday(s)	Meeting Venue ¹	Comments					
May	13	Thursday	Virtually via Zoom	None					
September	9- 10	Thursday- Friday	TBD pending Board consensus	In person meeting venue: Petersburg on September 9 (1-5 pm) and September 10 (9-12 noon). If remote, meeting held virtually via Zoom on September 9 only.					
December	10	Friday	TBD pending Board consensus	Meeting venue is Ketchikan whether in-person or remote.					

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(See attached for additional information on 2021 meeting dates and events)

¹ Meetings may be held in-person alternating between communities or virtually pending Center for Disease Control social distancing guidelines and Board consensus. Pdf Page No. 125 of 128 pages.

2021 MEETING DATES | EVENTS

DATE	ORGANIZATION/EVENT	LOCATION					
	JANUARY	-					
1	SEAPA Holiday (New Year's Day)	N/A					
4	Petersburg Borough Assembly	Petersburg					
7	Ketchikan City Council	Ketchikan					
12	City & Borough of Wrangell Assembly	Wrangell					
19	Petersburg Borough Assembly	Petersburg					
21	Ketchikan City Council	Ketchikan					
26-28	APA Manager's Forum, State Legis. Conf & Board of Directors Mtgs	Virtual					
	FEBRUARY						
1	Petersburg Borough Assembly	Petersburg					
4	Ketchikan City Council	Ketchikan					
9	City & Borough of Wrangell Assembly	Wrangell					
9-10	SE Conference Mid-Session Summit	Virtual					
15	SEAPA Holiday (President's Day)	N/A					
16	Petersburg Borough Assembly	Petersburg					
17-18	NWHA Camp & Annual Conference (& FERC Meeting?-TBD)	Virtual					
18	Ketchikan City Council	Ketchikan					
23	City & Borough of Wrangell Assembly	Wrangell					
26 (Friday)	SEAPA BOARD MEETING	VIRTUAL					
	MARCH						
1	Petersburg Borough Assembly	Petersburg					
1	Ketchikan Gateway Borough Assembly	Ketchikan					
4	Ketchikan City Council	Ketchikan					
9	City & Borough of Wrangell Assembly	Wrangell					
15	Petersburg Borough Assembly	Petersburg					
15	Ketchikan Gateway Borough Assembly	Ketchikan					
18	Ketchikan City Council	Ketchikan					
23	City & Borough of Wrangell	Wrangell					
	APRIL	I					
1	Ketchikan City Council	Ketchikan					
5	Petersburg Borough Assembly	Petersburg					
5	Ketchikan Gateway Borough Assembly	Ketchikan					
8-9	NWHA Strategic Planning Meeting	TBD					
13	City & Borough of Wrangell Assembly	Wrangell					
TBD	SEAPA Audit	SEAPA Office					
15	Ketchikan City Council	Ketchikan					
19	Petersburg Borough Assembly	Petersburg					
19	Ketchikan Gateway Borough Assembly	Ketchikan					
27	City & Borough of Wrangell Assembly	Wrangell					
2830	NHA Water Power Week	Virtual					
	MAY						
3	Petersburg Borough Assembly	Petersburg					
3	Ketchikan Gateway Borough Assembly	Ketchikan					
6	Ketchikan City Council	Ketchikan					
11	City & Borough of Wrangell Assembly	Wrangell					
13	SEAPA BOARD MEETING	Virtual					
17	Petersburg Borough Assembly	Petersburg					
17	Ketchikan Gateway Borough Assembly	Ketchikan					
20	Ketchikan City Council	Ketchikan					
25	City & Borough of Wrangell Assembly	Wrangell					
31	SEAPA Holiday (Memorial Day)	N/A					
	JUNE	L					
3	Ketchikan City Council	Ketchikan					
6-11	APA Federal Legislative Conference	Washington, DC					
7	Petersburg Borough Assembly	Petersburg					
7	Ketchikan Gateway Borough Assembly	Ketchikan					
8	City & Borough of Wrangell Assembly	Wrangell					
17	Ketchikan City Council	Ketchikan					
21	Petersburg Borough Assembly Petersburg						
21	Ketchikan Gateway Borough Assembly Ketchikan						
22	City & Borough of Wrangell Assembly	Wrangell					
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	JULY						
1	Ketchikan City Council	Ketchikan					
5	SEAPA Holiday (Independence Day)	N/A					
6	Petersburg Borough Assembly	Petersburg					
6	Ketchikan Gateway Borough Assembly	Ketchikan					
13	City & Borough of Wrangell	Wrangell					
15	Ketchikan City Council	Ketchikan					
19	Petersburg Borough Assembly	Petersburg					
19	Ketchikan Gateway Borough Assembly	Ketchikan					
19-22	AEGIS POLICY HOLDER'S CONFERENCE	Las Vegas					
27	City & Borough of Wrangell Assembly	Wrangell					
2	AUGUST	Detershung					
2	Petersburg Borough Assembly	Petersburg					
2	Ketchikan Gateway Borough Assembly	Ketchikan					
5	Ketchikan City Council	Ketchikan					
10	City & Borough of Wrangell Assembly	Wrangell					
16	Petersburg Borough Assembly	Petersburg					
16	Ketchikan Gateway Borough Assembly	Ketchikan					
19	Ketchikan City Council	Ketchikan					
24	City & Borough of Wrangell Assembly SEPTEMBER	Wrangell					
2	Ketchikan City Council	Ketchikan					
6							
6 7	SEAPA Holiday (Labor Day) Petersburg Borough Assembly	N/A Petersburg					
7	Ketchikan Gateway Borough Assembly	Ketchikan					
9-10 (T-F)	SEAPA BOARD MEETING	TBD					
14	City & Borough of Wrangell Assembly	Wrangell					
14-16	Southeast Conference Annual Meeting	Haines					
16	Ketchikan City Council	Ketchikan					
20	Petersburg Borough Assembly	Petersburg					
20	Ketchikan Gateway Borough Assembly	Ketchikan					
28	City & Borough of Wrangell Assembly	Wrangell					
	OCTOBER						
4	Petersburg Borough Assembly	Petersburg					
7	Ketchikan City Council	Ketchikan					
12	City & Borough of Wrangell Assembly	Wrangell					
18	Petersburg Borough Assembly	Petersburg					
18	Ketchikan Gateway Borough Assembly	Ketchikan					
21	Ketchikan City Council	Ketchikan					
26	City & Borough of Wrangell Assembly	Wrangell					
	NOVEMBER						
1	Petersburg Borough Assembly	Petersburg					
1	Ketchikan Gateway Borough	Ketchikan					
1	Ketchikan Gateway Borough Assembly	Ketchikan					
4	Ketchikan City Council	Ketchikan					
9	City & Borough of Wrangell Assembly	Wrangell					
11	SEAPA Holiday (Veteran's Day)	N/A					
15	Petersburg Borough Assembly	Petersburg					
15	Ketchikan Gateway Borough	Ketchikan					
18	Ketchikan City Council	Ketchikan					
23	City & Borough of Wrangell Assembly	Wrangell					
25-26	SEAPA Holiday (Thanksgiving & Day After)	N/A					
2	DECEMBER	Katchikan					
2	Ketchikan City Council	Ketchikan Ketchikan					
2	Ketchikan Gateway Borough Assembly Petersburg Borough Assembly	Ketchikan Botorsburg					
0 10 (F)	SEAPA BOARD MEETING	Petersburg KETCHIKAN (may be held remotely)					
10 (F) 14	City & Borough of Wrangell Assembly						
14	Ketchikan City Council	Wrangell Ketchikan					
20	Petersburg Borough Assembly	Petersburg					
20	Ketchikan Gateway Borough Assembly	Ketchikan					
20 23-24	SEAPA Holidays (Christmas Eve and Christmas Day) N/A						
28	City & Borough of Wrangell Assembly	Wrangell					
20	I sity a porough or writingen asseringly	Wingen					

(Meetings noted on the calendar above are estimated as a result of the schedule below)

- Petersburg Borough Assembly Meetings
- Ketchikan Gateway Borough Assembly Meetings
- City & Borough of Wrangell Assembly Meetings
- Ketchikan City Council Meetings

1st & 3rd Monday every month 1st & 3rd Monday every month 2nd & 4th Tuesday every month 1st & 3rd Thursday every month