SOUTHEAST ALASKA POWER AGENCY

Regular Board Meeting

December 10, 2021 AGENDA

Best wishes for a Wonderful Holiday and Happy New Year!

Time	Event
8 AM	Meeting Starts
10 AM	15-Minute Break
12 Noon	SEAPA Staff Lunch and ****Working Lunch for Board Members and SEAPA Counsel Executive Session Discussions****
Est. 2 PM	Meeting Resumes in Regular Session
3 PM	15-Minute Break
5 PM	Meeting Adjourns

For telephonic participation dial:
1.888.475.4499[1]
Meeting ID No. 826 3317 0947

1. Call to Order
- A. Roll Call
- B. Communications/Lay on the Table Items:
  - i. SEAPA CEO Presents APA Awards
  - ii. CEO Report
- C. Disclosure of Conflicts of Interest
  - i. TSS Contract

2. Approval of the Agenda

3. Persons to be Heard
- A. Reserved for any members of the public calling in or attending in person
- B. Mike Rovito, Deputy Director, Alaska Power Association

4. Review and Approve Minutes
- A. September 9, 2021 Minutes of Regular Meeting
- B. September 17, 2021 Minutes of Special Meeting
- C. October 6, 2021 Minutes of Special Meeting

5. Staff Reports (Reports are provided in Board packet. No presentations will be given by staff during the meeting due to time constraints. Any questions under this Agenda item may be directed to staff through the Chair during the meeting.)
- A. Power System Specialist *(Schofield)*
- B. Director of Engineering and Technical Services *(Siedman)*
- C. Operations Manager *(Hammer)*

6. CEO Report

[1] 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. Financial Reports

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

8. New Business

A.	Executive Session Re: ➢ Hydrosite Analysis and Recommendations ➢ Discuss potential interconnection ➢ Discuss engineer's estimate for proposed project ➢ Discuss employees' performances ➢ Evaluation of Agency employee
B.	Reserved for any action(s) to be taken following Executive Session discussions
C.	Consideration and Approval of FY2022 Safety Training Contract
D.	Consideration and Approval of Air Carrier Contract
E.	Consideration and Approval of Resolution #2021-082 (Inventory Policy)
F.	Consideration and Approval of FY2022 Operations Plan
G.	4R Plan Presentation by John Heberling
H.	Presentation, Consideration, and Approval of FY2022 SEAPA Budget
I.	Consideration and Approval of Wholesale Power Rate

9. Next Meeting Dates:

February 28 (1-5 pm) - March 1, 2022 (9:30-2 pm) in-person in Wrangell, Alaska
(If Covid circumstances preclude an in-person meeting, the meeting will be held electronically on Monday, February 28, 2022 from 9:00 am to 5 pm)

10. Director Comments

11. Adjourn

Southeast Alaska Power Agency
Regular Meeting Minutes

Location: Held Electronically[1]

Date: September 9, 2021

Time: 9:00 a.m. AKDT

Agenda Items

1) Call to Order

A. *Roll Call.*

Chairperson Sivertsen called the regular meeting to order at 9:00 a.m. AKDT on September 9, 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		Jeremy Bynum	E	Swan Lake	Ketchikan
Cliff Skillings	E	Dick Coose		Swan Lake	Ketchikan
Stephen Prysunka	E	Mike Ottesen		Tyee Lake	Wrangell
Bob Lynn		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.	E	Sharon Thompson, EA/CA	E
Robert Siedman, DE/TS	E	Marcy Hornecker, Admin. Asst.	E

B. *Communications/Lay on the Table Items* - The Chair announced that Joy Merriner of BDO will be joining the meeting at 10 a.m. to discuss the audited financial statements.

C. *Disclosure of Conflicts of Interest* - None

2) Approval of the Agenda

Chairperson Sivertsen requested a motion to amend the Agenda to add Item 7K to New Business to appoint a Secretary-Treasurer in Mr. Amylon's absence.

➢ ***Motion***	M/S (Prysunka/Bynum) to amend the Agenda to add Item 7K to New Business for appointment of a Secretary-Treasurer in Mr. Amylon's absence. The motion was approved unanimously by polled vote.	✓ **Action 21-892**

[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 www.seapahydro.org

The Chair requested a motion to approve the Agenda, as amended.

➢ *Motion*	M/S (Hagerman/Bynum) to approve the agenda, as amended. The motion was approved unanimously by polled vote'.	✓ Action 21-893

3) Persons to be Heard - None.

4) Review and Approve Minutes

The Chair requested a motion to amend the minutes of May 13, 2021 to correct a sentence regarding the wholesale power rate.

➢ *Motion*	M/S (Hagerman/Bynum) to amend the minutes of May 13, 2021 to change the third sentence in Old Business Item 6.B. regarding the wholesale power rate from: "He advised that the Agency could then consider a one-quarter percent increase" to "He advised that the Agency could then consider a one-quarter cent per kilowatt hour increase". The motion was approved unanimously by polled vote.	✓ Action 21-894

The Chair requested a motion to approve the Minutes of May 13, 2021, as amended.

➢ *Motion*	M/S (Hagerman/Prysunka) to approve the minutes of May 13, 2021, as amended. The motion was approved unanimously by polled vote.	✓ Action 21-895

5) Financial Reports

Mr. Acteson reported that SEAPA's financial position was currently stable and explained how in spite of abundant rain, SEAPA sales can actually decrease because Ketchikan and Petersburg can use their own legacy assets to provide power prior to purchasing from SEAPA. He discussed the Agency's revenue and expenses, renewal and replacement projects, submarine cable capital funding, grants, and announced that Joy Merriner would be calling in to update the board on BDO's recent financial audit. He noted that clean audits have been key components of the Agency's success matrix.

The Chair requested a motion on the financial statements.

➢ *Motion*	M/S (Hagerman/Prysunka) to accept year-to-date financial statements through July 2021 and disbursements for May, June, and July 2021 totaling $7,250,737.35, as presented. Following discussion on the financial statements presented in the board packet, the motion was approved unanimously by polled vote.	✓ Action 21-896

Joy Merriner and Travis Werba of BDO USA, joined the meeting telephonically to present the audited financial statements for the year ended December 31, 2020.

The Chair requested a motion on the audited financial statements.

➢ *Motion*	M/S (Prysunka/Bynum) to accept the Audited Financial Statements of the Southeast Alaska Power Agency for the year ended December 31, 2020, as presented in the September 9, 2021 board meeting.	✓ Action 21-897

Ms. Merriner, BDO's Assurance Partner, introduced Travis Werba of BDO. Mr. Werba and Ms. Merriner presented a summary of the Agency's audited financial statements and responded to director's questions and comments. They reported a clean audit with no areas of concern. A recommendation was that the Agency institute an annual inventory

plan or policy and keep an inventory log. Mr. Acteson thanked Ms. Merriner and her team and recognized the Agency's Controller, Kay Key, for her hard work resulting in continuous successful audits.

A vote was taken and unanimously approved on the motion to accept the Audited Financial Statements for the period ending December 31, 2020 as presented.

The meeting recessed at 11:00 a.m. and resumed at 11:19 a.m.

6) Old Business

A. *SEAPA 3rd Quarter Update Re Operations Plan*

Mr. Siedman reported that a snow survey performed at both Tyee and Swan indicated 200% above-average snow pack that has more potential water in the form of snow than either lake can hold, and that both lakes are full and have been spilling throughout July and August. He presented charts demonstrating current lake levels at both plants and fielded director questions and comments.

B. *Update Re Wholesale Power Rate*

Mr. Acteson provided supporting information for potential one-quarter cent per kWh incremental rate increases to the wholesale power rate to cover the addition of $785,000/year new debt service due to the failed submarine cable, increased vegetation clearing, and general inflationary impacts that will eventually be fixed costs. Mr. Acteson advised that he'll bring information to the board at the December 2021 board meeting to decide whether to consider a rate increase at that meeting or a schedule of rate increases over the next several years.

C. *Discussion Re Second Revision to iPad Policy*

The Board reached a consensus that a second revision to the iPad Policy will not be necessary.

7) New Business

A. *Consideration and Approval of Amendment No. 3 to SEAPA Lease Agreement with Ketchikan Gateway Borough*

➢ ***Motion***	M/S (Hagerman/Prysunka) to authorize SEAPA's CEO to enter into Amendment No. 3 to the Lease Agreement between SEAPA and the Ketchikan Gateway Borough (KGB) provided in the September 9, 2021 board packet for the lease of SEAPA's offices in the KGB Building on a month-to-month basis from January 16, 2022 through January 15, 2023 under the terms set forth in Amendment No. 3. Mr. Bynum acknowledged that he has a conflict and recused himself from voting on the motion since he is a member of the KGB Assembly. The motion was passed unanimously by the remaining four board members.	✓ **Action 21-898**

B. *Consideration and Approval of Resolution #2021-079 Re First Amendment to Document Retention Policy*

➢ ***Motion***	M/S (Hagerman/Prysunka) to approve Resolution No. 2021-079 adopting the First Amendment to the Document Retention Policy as presented in the September 9, 2021 board packet. The motion passed unanimously by polled vote.	✓ **Action 21-899**

The meeting recessed at 11:52 a.m. for lunch and resumed at 1:00 p.m.

A roll call was taken and the same directors present at the start of the meeting were present following the lunch break.

C. *Consideration and Approval of Resolution #2021-080 adopting a Vegetation Management Plan*

➢ **Motion**	M/S (Bynum/Hagerman) to approve Resolution No. 2021-080 Adopting a Vegetation Management Plan as presented in the September 9, 2021 board packet. Following considerable discussion, the motion was approved unanimously by polled vote.	✓ **Action 21-900**

D. *Consideration and Approval of Resolution #2021-081 adopting a Communications Plan*

➢ **Motion**	M/S (Bynum/Hagerman) to approve Resolution No. 2021-081 Adopting a Communications Plan as presented in the September 9, 2021 board packet. Following discussion the motion was unanimously approved by polled vote.	✓ **Action 21-901**

E. *Consideration and Approval of SEAPA 2022 Administrative Employee Group Benefits*

➢ **Motion**	M/S (Bynum/Hagerman) to renew the NRECA 2022 Employee Group Benefit Plans and Administrative Employee Benefits as presented. Following discussion, the motion was approved unanimously by polled vote.	✓ **Action 21-902**

F. *Consideration and Approval of R&R Projects/Budget Increase*

➢ **Motion**	M/S (Prysunka/Hagerman) to approve R&R projects Potential Transformer Tyee Lake and Transformer Circuit Switcher Wrangell Substation as presented in the September 9, 2021 board packet, and an increase to the FY2021 R&R Budget of $16,600. The motion was approved unanimously by polled vote.	✓ **Action 21-903**

G. *Consideration and Approval of Sole Source to Southern States for Wrangell Substation Transformer Circuit Switcher Equipment*

➢ **Motion**	M/S (Hagerman/Prysunka) to authorize staff to enter into a sole source purchase order with Southern States, LLC for SEAPA's Wrangell Substation Transformer Circuit Switcher R&R Project for a total not-to-exceed value of $261,244. The motion was approved unanimously by polled vote.	✓ **Action 21-904**

H. *Discussion Re Demand Side Management*

Mr. Acteson explained that SEAPA's Strategic Plan requires staff to propose Demand Side Management (DSM) options to the board to offset new generation. He sought direction from the board as to SEAPA's deliverable since DSM is typically addressed through distribution entities. It was determined that the member utilities will communicate with SEAPA if DSM needs to be addressed in the future and partner with SEAPA to define a specific target or goals that SEAPA would like the utilities to achieve to manage energy demands and offset new generation.

I. *Review and Discuss CEO Evaluation Form and Schedule*

Mr. Paisner explained how the Agency developed the CEO evaluation form and process. The board reviewed and discussed the evaluation form and process and determined there will be no changes.

J. *Executive Session Re Hydrosite Analysis Update, Metlakatla Interconnection, and Kake-Petersburg Intertie.*

➢ ***Motion***	M/S (Hagerman/Prysunka) to recess into Executive Session to be conducted pursuant to SEAPA's Bylaws consistent with Alaska Statute 44.62.310 for discussions relating to Hydrosite Analysis and potential interconnections to Metlakatla and Kake as the discussions will include matters, the immediate knowledge of which would clearly have an adverse effect upon the finances of the Agency and the Projects. The motion was approved unanimously by polled vote.	✓ **Action 21-905**

The meeting recessed at 2:51 p.m. for the executive session and reconvened into regular session at 4:07 p.m.

The Chair announced that there is no action to be taken following the board's discussions in executive session.

K. *Nominations for SEAPA Secretary-Treasurer Position*

The Chair requested nominations for the Agency's vacant Secretary-Treasurer position. Mr. Skillings nominated Jeremy Bynum for the position. No other nominations were made.

➢ ***Motion***	M/S (Prysunka/Skillings) to appoint Jeremy Bynum as SEAPA's Secretary-Treasurer. The motion was approved unanimously by polled vote.	✓ **Action 21-906**

8) CEO Report

Mr. Acteson provided brief updates on Covid-19, Governmental Affairs and External Industry Activities, the State DNR's Reclamation Fund, and Insurance-related topics. He reported that staff is pursing funding for SkyWrap, a mechanically wrapped fiber on transmission lines to alleviate communication issues in the SEAPA system. He noted that SkyWrap could be a potential Capital Project Submission and Information System (CAPSIS) project and will keep the board updated. He also discussed SEAPA's 4R Plan and the Agency's Strategic Plan deliverables.

9) Staff Reports

Staff reports were very brief due to time constraints. A board member requested that staff reports be heard at the beginning of the Agency's December 10th regular board meeting rather than later in the Agenda.

A. *Director of Engineering and Technical Services (Siedman)*

Mr. Siedman provided highlights of SEAPA's Swan-Bailey transformer refurbishment, Swan Lake station service switchgear, the Stikine submarine cable replacement, and other projects noted in his report provided in the board packet. No comments or questions followed.

B. *Operation's Manager Report (Hammer)*

Mr. Hammer briefly discussed a GoPro transmission line survey that had been performed and noted updates on his ongoing projects are provided in his report provided in the board packet. No questions followed.

C. *Power System Specialist Report (Schofield)*

Mr. Schofield discussed SEAPA's MAPCON Program in place at the plants, FERC activities, progress of the design of SEAPA's headquarters, and the Tyee Lake Intake Gate HPU Reconditioning Project. Mr. Schofield fielded questions relating to the construction of SEAPA's headquarters.

10) Next Meeting Dates

The Chair noted the next regular board meeting is scheduled for December 10, 2021 in Ketchikan, and that there may be a special board meeting to discuss the CEO's annual evaluation prior to the regular board meeting. It was

determined that unless Covid-19 circumstances dictate otherwise, the December 10th regular meeting of the Board of Directors will be held in person.

11) Director Comments

Directors exchanged brief comments.

12) Adjourn

The Chair requested a motion to adjourn.

➢ *Motion*	M/S (Prysunka/Hagerman) to adjourn the meeting. There were no objections to the motion.	✓ Action 21-907

The meeting adjourned at 5:15 p.m.

Signed: ***Attest:***

Secretary/Treasurer **Chairperson**

Southeast Alaska Power Agency
Special Meeting Minutes

Location: Held Electronically[1]

Date: September 17, 2021

Time: 2:00 p.m. AKDT

Agenda Items

1) Call to Order

A. *Roll Call.*

Chairperson Sivertsen called the special meeting to order at 2:00 p.m. AKDT on September 17, 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	
Bob Sivertsen	E	Doug Ward	E	Swan Lake	Ketchikan
*		Jeremy Bynum	E	Swan Lake	Ketchikan
Cliff Skillings	E**	Dick Coose		Swan Lake	Ketchikan
Stephen Prysunka	E	Mike Ottesen		Tyee Lake	Wrangell
Bob Lynn		Karl Hagerman	E	Tyee Lake	Petersburg

*Director position vacant due to the untimely and sad demise of the late Mr. Karl Amylon
**Mr. Skillings joined the meeting at 2:37 p.m.

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	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

2) Approval of the Agenda

➢ ***Motion***	M/S (Hagerman/Prysunka) to approve the agenda.	✓ **Action 21-908**

The Chair requested a motion to amend the agenda to switch Agenda Items 3 (Persons to be Heard) and 4 (Proclamation Honoring Karl Amylon) so a Proclamation Honoring Karl Amylon could be read before Persons to be Heard.

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

➢ ***Motion***	M/S (Sivertsen/Bynum) to amend the agenda by switching Agenda Item 3 (Persons to be Heard) and Agenda Item 4 (Proclamation Honoring Karl Amylon) to facilitate the reading of the Proclamation prior to Persons to be Heard. Motion approved unanimously by polled vote.	✓ **Action 21-909**

A roll call was taken on the motion to approve the agenda, as amended, and it passed unanimously by polled vote.

3) Proclamation Honoring Karl Amylon

The Chair read a Proclamation honoring Karl Amylon for his longevity, dedication of service, and support of hydropower in Southeast Alaska**.**

4) Persons to be Heard

Former SEAPA CEO, Dave Carlson, former Four Dam Pool Counsel, Ron Saxton, and Acting City of Ketchikan and KPU Manager, Lacey Simpson, expressed their heartfelt condolences to Mr. Amylon's family, and shared their respective sentiments and memories of their time with Mr. Amylon.

5) Director Comments

SEAPA Board Members, Counsel, CEO, and staff also expressed their heartfelt condolences to Mr. Amylon's family and shared their respective sentiments and memories of their time with Mr. Amylon.

6) Adjourn

Chairperson Sivertsen requested a motion to adjourn.

➢ ***Motion***	M/S (Prysunka/Hagerman) to adjourn the meeting. The Chair declared the meeting adjourned after no objections were heard.	✓ **Action 21-910**

The meeting adjourned at 2:45 p.m.

Signed: ***Attest:***

_____ _____

Secretary/Treasurer **Chairperson**

Southeast Alaska Power Agency
Special Meeting Minutes

Location: Held Electronically[1]

Date: October 6, 2021

Time: 2:00 p.m. AKDT

Agenda Items

1) Call to Order

A. *Roll Call.*

Chairperson Sivertsen called the special meeting to order at 2:00 p.m. AKDT on October 6, 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	
Bob Sivertsen	E	Doug Ward	E	Swan Lake	Ketchikan
*		Jeremy Bynum	E	Swan Lake	Ketchikan
Cliff Skillings		Dick Coose	E	Swan Lake	Ketchikan
Stephen Prysunka	E	Mike Ottesen		Tyee Lake	Wrangell
Bob Lynn	E	Karl Hagerman	E	Tyee Lake	Petersburg

*Director Alternate, Jeremy Bynum, served as a Voting Director in place of the late Director, Mr. Karl Amylon

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	E	Joel Paisner, SEAPA Counsel	E
Clay Hammer, Operations Mgr.	E	Kay Key, Controller	
Ed Schofield, Power Sys. Sp.	E	Sharon Thompson, EA/CA	E
Robert Siedman, Dir. Eng & TS		Marcy Hornecker, Admin. Asst.	E

2) Approval of the Agenda

➢ *Motion*	M/S (Lynn/Prysunka) to approve the agenda as presented. Motion approved unanimously by polled vote.	✓ Action 21-911

3) New Business

A. *Consideration and Approval of Increase to Contract Re Tyee HPU Project.*

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

➢ *Motion*	M/S (Bynum/Prysunka) to increase the not-to-exceed value of BAM Contract 20131 by $47,500 from $128,500 to $176,000. Following Mr. Acteson's explanation of repairs necessary on the cylinder for the HPU Project, the motion was approved unanimously by polled vote.	✓ Action 21-912

B. *Executive Session*

➢ *Motion*	M/S (Prysunka/Bynum) to recess into Executive Session to be conducted pursuant to SEAPA's Bylaws consistent with Alaska Statute 44.62.310 for discussions regarding evaluation of the Agency's CEO which discussions may involve subjects that tend to prejudice the reputation and character of a person. Motion approved unanimously by polled vote.	✓ Action 21-913

The meeting recessed at 2:10 p.m. for the executive session and resumed into regular session at 3:40 p.m.

The Chair announced that the Board met in executive session, had discussions, and there is no action to be taken following those discussions.

4) Adjourn

Directors expressed brief closing comments prior to the Chair requesting a motion to adjourn.

➢ *Motion*	M/S (Prysunka/Lynn) to adjourn the meeting. The Chair declared the meeting adjourned after no objections were heard.	✓ Action 21-914

The meeting adjourned at 3:48 p.m.

Signed: ***Attest:***

Secretary/Treasurer **Chairperson**

SOUTHEAST ALASKA POWER AGENCY

Date: December 2, 2021

To: Trey Acteson, CEO

From: Ed Schofield, Power System Specialist

Subject: Report for December 10, 2021 SEAPA Board Packet

Tyee Operation and Maintenance (O&M) Manual Update

The updating of SEAPA's Tyee Operation and Maintenance (O&M) Manual which started in 2019 is now complete. The manual now reflects the most modern industry maintenance standards as defined in the Bureau of Reclamation (BOR), Facility Instructions, Standards & Techniques (FIST) maintenance manuals. The updated manual provides written narratives defining the basic functionality, safety standards, and maintenance practices associated with each piece of plant equipment and related infrastructure. It also provides links to additional technical information, pertinent drawings, schematics, and governing BOR FIST manuals. The BOR has developed and maintain a comprehensive library of over 70 hydro maintenance manuals which cover all essential aspects of hydro facility maintenance.

Swan Lake and Tyee Lake Preventative Maintenance Program (MAPCON) Update

The MAPCON Preventative Maintenance Work Order Update Project is scheduled for completion by the end of this year. This project was delayed by a year due to COVID-19 travel restrictions. The MAPCON Upgrade Project is closely intertwined with the O&M Manual rewrite. Both the O&M and MAPCON update projects are being performed by Big Sky Hydro LLC. The MAPCON work order task review is the final phase of this monumental undertaking. The MAPCON upgrade consists of reviewing work orders for general accuracy, revising work tasks, and modernizing all 2000 MAPCON work orders to coincide with the updated O&M manuals. In 2021, the contractor was onsite at both hydro plants for 15 days to review work order tasks with staff, identify obsolete or incomplete work orders, and develop work order tasks for equipment unique to the SEAPA facilities.

SEAPA Headquarters

The new SEAPA Headquarters design drawings and specifications are 100% complete. Request for Proposal documents will be issued to solicit bids in January 2022. The SEAPA Headquarters will be constructed at Mile 2.8 along the upland side of North Tongass. The headquarters will be approximately 6000 square feet consisting of a two-story office and warehouse complex. The warehouse and SEAPA Boardroom will occupy the ground floor. The second floor will be staff offices with an engineer's library, and Information Technology and SCADA Operations Center.

Southwest Facing Front View of SEAPA Headquarters

Swan Lake FERC License Activities

A Bathymetric Survey of the Dam Spillway Plunge Pool was completed in October. This survey is required annually if a spill of 3000 cubic feet per second or more occurs every five years. The Plunge Pool survey is part of SEAPA's Dam Safety Program governed by the Federal Energy Regulatory Commission (FERC) to assure no bottom scouring is occurring. Historically, a conventional ground-based survey has been performed using an installed wire grid system and survey grade stick from a small boat. This process was an extensive time commitment and subject to human errors. Due to conflicting survey results submitted over the life of the project, FERC requested that the plunge pool be dewatered for a visual inspection on a five-year rotation and surveyed as well. In response to the FERC dewatering directive, FERC requested that SEAPA perform a Bathymetric Survey in lieu of a conventional survey and dewatering of the plunge pool. The Bathymetric Survey provided a very detailed view of the plunge pool bottom along with accurate bottom elevations.

Dam settlement survey equipment has been upgraded from the conventional transit and target surveying equipment to a Geographic Information System (GIS). The first GIS survey was completed in July 2021. The GIS Dam settlement survey is much more accurate and less labor intensive.

Revision 4 of SEAPA's Owners Dam Safety Program (ODSP) was completed and submitted to FERC in November 2021. The ODSP is revised annually by SEAPA and audited by a third-party engineer on a five-year rotation. ODSP Revision 4 completes the five-year audit and rewrite commitment.

Swan Lake Operations

- A Swan Lake staff member retired on October 13th and an aggressive effort to fill the open position has been underway. Interviews were conducted with several applicants throughout November however the position is still open.

- Staff has been working to repair a damaged guardrail along the dam access road, which had been damaged multiple times over the life of the project during snow removal activities. Repairs to the guardrail have brought the safety competency of the guardrail system back to its original design.

- Staff has upgraded all facility lighting to LED over the last two years. The yard lighting upgrades were recently completed and are the last phase of this project.

- Except for short-term public moorage at Swan Lake's dock, public amenities upland of the Swan Lake Facility have been closed to public access due to Covid. To address the requirement of public restrooms for the dock, a Porta-Potty has been installed by staff adjacent to the dock access pier.

- OSHA and Dam safety training continues to occur monthly.

- Preventative maintenance of the hydro plant and related infrastructure has been staff's primary focus at Swan Lake. Preventative maintenance is performed under the issuance of work orders from the computerized maintenance management system (MAPCON). The MAPCON system consists of 2000 individual assets. Each asset has multiple work orders that are issued and completed monthly.

Conventional Transit Dam Survey

Swan Lake Dock Public Restroom

Swan Lake Dam Access Road Guardrail Repair Project

Swan Lake Office 104 Renovation

This project completes the kitchen of the fourth unit (#104) of the four-plex constructed at Swan Lake in 2019. Kitchen cabinets were intentionally left out of this unit as the original plan was to use this unit as a safety training center. With the proposed replacement of the Swan Lake Bunkhouse Project, #104 will be utilized for staff housing. The new bunkhouse will have accommodations for a safety training center. The contractor installed the kitchen cabinets and appliances in July. Installation of countertops remains incomplete due to back ordering issues. The estimated completion date is January 2022.

Four-Plex Housing Facility

Four-Plex Unit 104

Four-Plex Housing Unit Kitchen

Completed Four-Plex Unit Kitchen

SEAPA Equipment Trailer

The 16-foot equipment trailer depicted below was purchased in June 2021 by SEAPA to transfer freight from Ketchikan barge terminals to SEAPA's Landing craft.

SEAPA Safety Committee

A SEAPA Safety Committee has been composed of equal representation from SEAPA management and IBEW (one from each of the Swan and Tyee Plants). The Committee will meet as required to address safety concerns as they relate to the SEAPA Safety Manual or at a minimum, once annually. The committee will review incident/accident analysis forms, provide corrective actions, and follow up assessments to assure corrective actions are adhered too.

SOUTHEAST ALASKA POWER AGENCY

Date: December 1, 2021

To: Trey Acteson, CEO

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

Subject: Report for December 10, 2021 Board Meeting

Executive Summary:

Fiscal year 2021 was packed with extraordinary capital improvement projects and high rates of execution, equally on-time and under-budget. In addition to beating budgetary estimates, 2021 was a year of incredible savings for the Agency. The largest savings were realized with the submarine cable project when SEAPA negotiated $2.24 million off the initial bid price. Another big savings of $575K was realized after SEAPA rejected an initial bid and received a subsequent bid upon completion of detailed design and engineering on the Swan Lake station service project. The engineer's Renewal & Replacement list below demonstrates engineering execution of $15.3M and a total savings of $2.88M in 2021:

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
Swan Lake Station Service Switchgear	100%	$2,568,013	$2,031,000	$1,992,785	$575,228	Savings are due to SEAPA completing design and reducing contractor risk
STC-HMI-Historian	50%	$430,425	$45,000	$174,026	Not Complete	STC's phase is complete, HMI/Historian phase is 33% complete
Excitation Brush Vacuum SWL	100%	$50,100	$50,100	$43,199	$6,901	In-house engineering and labor savings.
Excitation Brush Vacuum TYL	100%	$59,700	$59,700	$56,841	$2,859	In-house engineering and labor savings.
Partial Discharge Monitors	90%	$108,229	$108,230	$85,930	Not Complete	Project is pending completion once Canadian Contractor IRIS Power can travel to U.S. (Covid Delay)
XFRM Diff Relay Bailey	100%	$43,420	$43,420	$44,903	-$1,483	3% over budget due to unforeseen component failures at Bailey
Fiber Buildout PSG WRG	100%	$59,000	$59,000	$54,640	$4,360	PTG sub had items near complete; savings were realized in the field
RTAC KTN (SEAPA-KPU Data Exchange)	100%	$30,000	$30,000	$27,360	$2,640	Savings due to engineering performed in-house for HMI build
Submarine Cable Stikine Strait	100%	$14,736,967	$13,370,352	$12,496,202	$2,240,765	Savings due to 3-month negotiations including risk assessment and detailed design/survey data
XFRM Refurbishment SWL-Bailey	100%	$379,000	$379,000	$326,847	$52,153	Savings due to logistics savings (SEAPA boat) and in-house labor
Totals		$18,464,854	$16,175,802	$15,302,733	**$2,883,423**	Overall savings totaling $2.88M were realized in 2021 due to extraordinary in-house ingenuity, long hours and SEAPA teamwork

Note: Savings estimates do not include STC-HMI-Historian and Partial Discharge Monitors projects which are not complete. Burnett Peak savings of $927,000 plus $75,000 per year are not in the table above because that project was not an RR.

Swan-Bailey Transformer Refurbishment:

RR21359 was approved by the Board of Directors in December 2020 to refurbish the Swan Lake and Bailey transformers to extend the asset(s) life and improve reliability. In July 2021, all eight transformers were successfully refurbished with new bushings, seals, gauges, and paint. The transformers were tested both internally and externally (oil, electrical, gauges) and demonstrate that they are now are in excellent condition. This project was a huge success and has likely extended the life of the assets by 20 years, saving the Agency millions of dollars in premature replacement costs.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
XFRM Refurbishment SWL-Bailey	100%	$379,000	$379,000	$326,847	$52,153	Savings due to logistics savings (SEAPA boat) and in-house labor

Note: Premature replacement costs were not considered in cost savings

Swan Lake Station Service Switchgear:

The Swan Lake Station Service project is 100% complete. Operator training was extremely successful considering the new equipment is intuitive and easy to operate. Arc Flash Maintenance Switches (ARMS) and fiber optic light detection as installed has increased safety tremendously. Remote operation with the ability to synchronize the emergency diesel generators was tested and works flawlessly. The original bid of $2.5M in 2019 was rejected by SEAPA. Cost savings were found in engineering by bolstering the design and detailing the manufacturer cost estimates. A new RFP was issued and a new subsequent bid of $1.7M was received. With an investment of $230K in design cost, the Agency saved $575K in total contract cost.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
Swan Lake Station Service Switchgear	100%	$2,568,013	$2,031,000	$1,992,785	$575,228	Savings are due to SEAPA completing design and reducing contractor risk

Note: Estimate/Bid included 1st bid and SEAPA overhead. Budget included 2nd bid and SEAPA overhead.

Stikine Crossing Submarine Cables

The Stikine Crossing submarine cable project is 100% complete. Removal of the faulty cable was the highest risk for the project however with all hands-on deck, operations were very successful. Six divers, six deck hands, multiple engineers, two tugs, three support vessels, the 200-foot ITB-45 dynamic positioning vessel, numerous captains, and a handful of shoreside civil and electrical experts with decades of experience provided a successfully outcome for an extremely challenging task. There were zero feet of cable abandoned, and no fluid was lost during the recovery process.

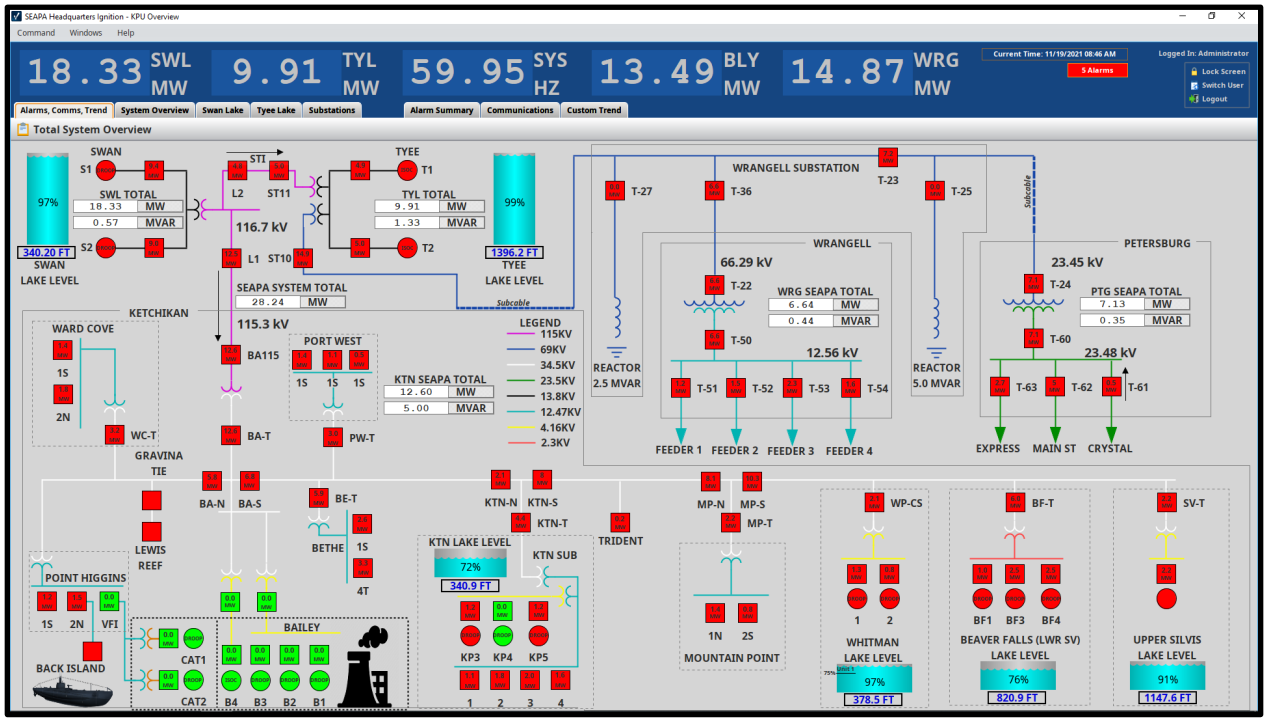
Installation of the new cable was a first-time accomplishment in several ways for the submarine cable industry. The large size of the three-phase cable, extreme depths, and challenging Southeast Alaska terrain was a modern-day marvel. SEAPA has finalized an article with T&D World magazine editors and anticipates publication in the magazines next release. This project is anticipated to receive feature article status in this world renown publication.

The original bid of $13.94M in 2020 was negotiated by SEAPA over the course of six months. Cost savings were found by negotiating the cost of lump-sum rates for shoreside work and developing day rates for subsea works. A final contract price of $11.7M was negotiated, saving the Agency $2.24M.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
Submarine Cable Stikine Strait	100%	$14,736,967	$13,370,352	$12,496,202	$2,240,765	Savings due to 6-month negotiations including risk assessment and detailed design/survey data

Note: Estimate/Bid based on bid of 13.94M plus SEAPA overhead (consultants/surveys).

RTAC SEAPA-KPU Data Exchange

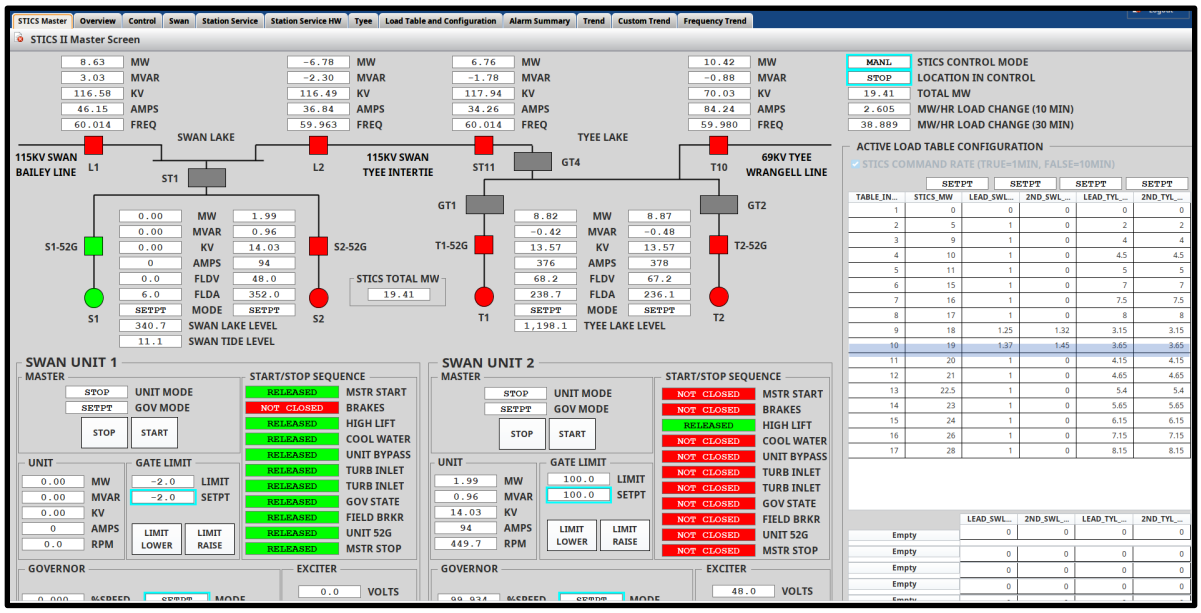


The SEAPA-KPU Data Exchange project is now 100% complete. Data exchange is currently up and running providing Bailey Operators the ability to see Tyee data and Tyee operators the ability to see Ketchikan data. In addition, completion of the exchange allows SEAPA to decommission a high-risk cybersecurity device at Swan Lake that is no longer required for Operations.

This project was a huge success whereas SEAPA and KPU Operations now retain the ability to respond swiftly to events on the system and coordinate efficiently to restore the grid when necessary. Additional points in the future are now possible with the infrastructure currently in place, when and if necessary. Savings of $2,640 were realized by in-house design and integration of the HMI screen illustrated above.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
RTAC KTN (SEAPA-KPU Data Exchange)	100%	$30,000	$30,000	$27,360	$2,640	Savings due to engineering performed in-house for HMI build

SEAPA STCS-HMI-Historian



The STCS-HMI-Historian Project is a multifaceted, multi-phased project, integrating Inductive Automation technology (Ignition Platforms) for Operations at all SEAPA facilities. The STCS phase of the project is now 100% complete and fully functional. This phase has increased reliability significantly for Tyee Operations (SEAPA's Control Center). Prior to completion of this phase, commands to operate Swan Lake by automated load tables were sent across the STI transmission line by the powerline carrier network, individually for each command. Every small change in the load required Tyee servers to send a connection established command, a setpoint command, a confirmed setpoint command and then repeat that typically 4 times for each MW request sent from Tyee to the Swan Lake generators. The new STCS however functions in a way that allows the entire load table to be sent from Tyee to Swan, and then Swan Lake servers (local to the generators) manage the load locally. This feature has proved to be a far superior, efficient, and reliable method of Operations.

The Human Machine Interface (HMI) phase of the project is 100% complete for the SEAPA HQ station. 50% of the HMI screens have been built for the remaining sites and most of the site-to-site SCADA connections are complete. The final product is anticipated to be fully functional in 2022. The existing HMI platform was built on an unsupported (due to age) and unreliable (due to bugs) platform and is still operational for now. With more frequent recent failures, timing of this project completion is near perfect.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
STC-HMI-Historian	50%	$430,425	$45,000	$174,026	Not Complete	STC's phase is 100% complete, HMI/Historian phase is 33% complete

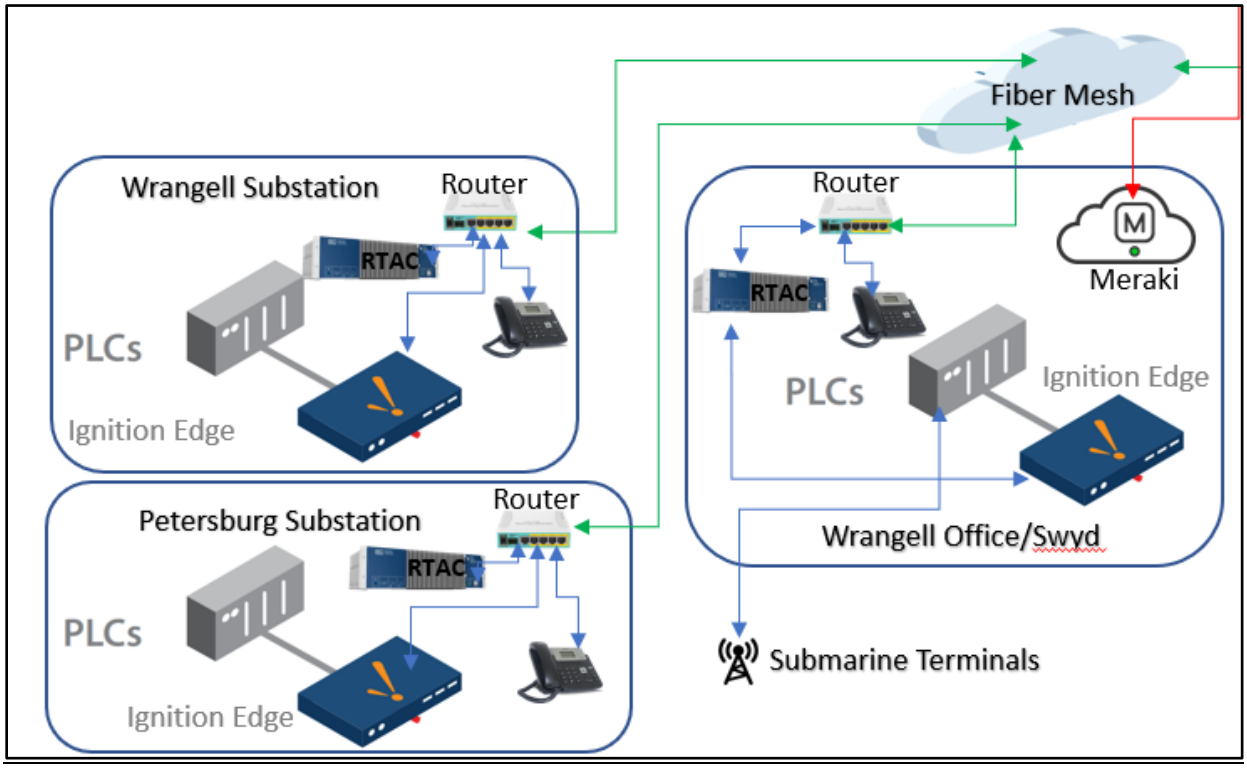
Exciter Carbon Dust Collectors

The Exciter Carbon Dust Collectors Project is 100% complete. The project was an excellent team effort between SEAPA and Mersen USA PTT Corp. Since the dust collectors have been in place, staff has noted that over 95% of carbon dust evident prior to this installation has been collected (removed) from the exciter collector ring housing. This has prevented electrical tracking (discharge), reduced maintenance, and improved life and reliability of the units at both Swan and Tyee Lake facilities.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
Excitation Brush Vacuum SWL	100%	$50,100	$50,100	$43,199	$6,901	In-house engineering and labor savings.
Excitation Brush Vacuum TYL	100%	$59,700	$59,700	$56,841	$2,859	In-house engineering and labor savings.

A total savings on this project was realized by utilizing in-house labor at both Tyee and Swan and by engineering and commissioning support from SEAPA staff. Total savings for both facilities was $9,760 and does not consider the savings in foregone maintenance (cleaning and failure repairs) that is afforded by keeping the units carbon dust-free now and into the future.

Petersburg and Wrangell Fiber Buildout

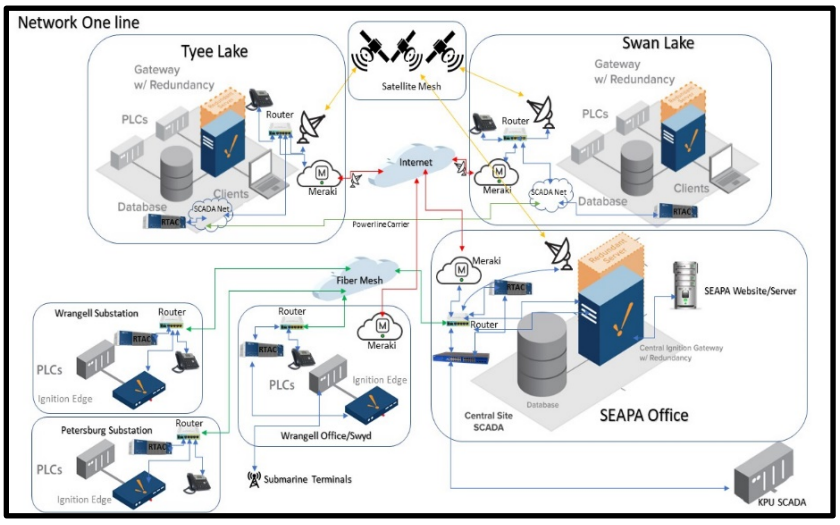


The design phase for the Petersburg and Wrangell Fiber mesh network is 100% complete. Installation (buildout) of the fiber drop(s) are also 100% complete in both Petersburg and Wrangell. With the Fiber Buildout project complete, SEAPA is now in the process of routing SCADA and phone networks from the remote sites (PTG and WRG) to the SEAPA HQ office in Ketchikan over the dedicated and secure fiber network. SEAPA's SCADA network from Petersburg and Wrangell is now one final step away from being 100% Cyber-Secure on an isolated network.

Savings were realized in Petersburg when it was identified that a fiber drop was already in the PTG substation. Perhaps the greatest savings to the Agency however is the future reduction in monthly charges. With the completion of this project, SEAPA will eliminate three internet connections and associated data and long-distance charges by consolidating all phones on a single plan for a total monthly savings of over $4,800 per year, in perpetuity.

Project	% Complete	Estimate/Bid	Budget	Total Cost	Savings	Notes
Fiber Buildout PSG WRG	100%	$59,000	$59,000	$54,640	$4,360	PTG sub had items near complete; savings were found in the field

Burnett Peak Microwave Decommissioning



As part of SEAPA's effort to increase cybersecurity and streamline the SEAPA SCADA network, reliability and security has significantly increased by removal of the Tyee-Burnett-Wrangell microwave link. The new Satellite mesh and HughesNet network(s) are 100% complete therefore the Burnett Peak Microwave system is no longer necessary. The microwave system was becoming increasingly unreliable with periods of interruption of nearly three weeks in 2020 and 2021. The site was also at the end of its useful life.

Estimates to replace the equipment on Burnett Peak were $927K (4R Plan). In 2020, SEAPA budgeted $102,000 for Tyee communication services whereas for 2022, SEAPA is only budgeting $27,000. This project has realized a total of $927k in instantaneous savings and $75,000 in savings per year in perpetuity.

Project	% Complete	Instant Savings	Yearly Data Charge Savings
Burnett Peak Microwave Decommissioning	100%	$927,000	$75,000

List of Projects/Tasks (not all inclusive) completed in 2021 and not detailed in this report:

Bailey XRM Diff Relay	Operations Plan Development	DNR Water Use Report
RFL Powerline Carrier Repair	Lidar Topography Survey(s)	EIA MWh Data Tool Development
4R Plan Development	Hydrokinetic Site Development	White River Stream Gauge Recon
Snow Surveys and Reports	Emergency Operations Support	Weekly Operations Plan Tool
IT Support	PLC Programming	Professional Engineering Support

SOUTHEAST ALASKA POWER AGENCY

Date: November 29, 2021

To: Trey Acteson, Chief Executive Officer

From: Clay Hammer, Operations Manager

Re: Report for December 10, 2021 Board Meeting

MAJOR CONTRACTS and PROJECTS

Substation and Switchyard Lighting Project

The Substations and Switchyards at Tyee, Wrangell, and Petersburg were all served with original early 1980's incandescent lighting fixtures. The lights were prone to failure, the level of illumination was below par compared to today's standards, and in many cases the light poles were so tall that service access was a challenge.

This season the light poles were taken down, shortened to a serviceable length, sand blasted and repainted, and then refitted with LED yard lights. At this point all yard and exterior building lighting has been changed over to LED providing better light, less maintenance while consuming much less electricity than the now obsolete incandescent alternative.

Switchyard and Substations with new LED lighting

Brushing Work

The 2021 season was closed out with continued work at Woronkofski and Vank Islands. SEAPA's in-house brushing crew was able to get some quality time in with the ARGO and work their way in from the shoreside marine terminals and clear approximately 4 acres of ROW at each of those locations. This was in addition to the 2 acres cleared along the Wrangell service spur and another 4 acres cleared along the Swan/Bailey line in the Ward cove area. In total the in-house crew was

able to clear 14 acres of right of way in addition to the 62 towers cleared to accommodate the annual T-Line maintenance.

Newly Cut ROW on Woronkofski Island

Brushing Adjacent to Ward Lake Road on Revillagigedo Island

Brushing adjacent to Ward Lake Dog Park on Revillagigedo Island

Wrangell Landslide Clearing

Earlier this year the Wrangell Transmission Line spur also known as “The Forgotten Line" dodged a bullet so to speak when a substantial landslide came down narrowly missing poles supporting the section of the line that connects the Wrangell Substation to the Wrangell Switchyard. That slide was pictured in the GoPro footage included in last quarter’s board packet. As a follow up to that, staff notes that the slide has since been cleaned up and access restored to the service road in that location.

Landslide Before Cleanup

Landslide After Cleanup

Tyee Plant PRV Valves

The Tyee Plant Pressure Reducing Valves (PRV) were identified for replacement earlier this year after staff used up the last of the available repair kits. Erosion problems were noted in the main body of the valves. Their replacement was budgeted for this fiscal year and the project has been completed. Lack of high-pressure pipe couplers and isolation valves on the low-pressure end made this project a challenge but the crew at the plant prevailed. High-pressure couplers were obtained, and additional isolation valves were added when the valves were replaced making future replacement much simpler. With regular maintenance the service life for these new valves is 30-40 years.

New PRV Valves in place; note high-pressure couplers and new Isolation Valves

Cleveland Peninsula Helipad Project

There are a total of 23 helipads along Tyee's Cleveland Peninsula route that need replacement. This project was scheduled to proceed over two seasons with Phase 1 to cover engineering and replacement of 11 of the worst pads using inventoried helipad kits. Phase 2 would complete the 12 additional replacements and one pad in a new location for a total of 24 helipads. This would include purchasing 13 additional helipad foundations, 24 ramps, and 8 more fiberglass decking pieces.

After completion of engineering, a Request for Proposals (RFP) issued for Phase 1; however, only one bid was received which exceeded budgeted funds and the bid was rejected accordingly. Staff is modifying its approach and plans to issue an RFP in 2022 for fabrication of the 13 additional helipad kits, 24 ramps, and 8 more fiberglass decking pieces. This will allow a subsequent RFP to install all 24 helipads at the same time. It is anticipated that economies of scale will reduce the installed cost per helipad.

Stikine Strait Submarine Cable Spare Parts and Cable

One of the biggest SEAPA projects in recent memory, the Stikine Strait Submarine Cable Replacement Project was completed on time and within budget this construction season. Further to that project was the receipt and storage of the spare section of sea cable and the two container loads of spare parts required to make field repairs in the future should the new cable get damaged. There has been nothing small about anything related to this project and the spare parts inventory reflects this. Depicted in the photos below is Wrangell's biggest mobile forklift offloading and staging the first of two 20 ft containers full of parts at SEAPA's Wrangell Warehouse. The next photo shows the 75,000 lb. spool of spare cable staged for storage next to the Port of Wrangell's barge facility.

38,000 lb. capacity Loader/Forklift picking Container of Spare Cable Parts

75,000 lb. Spool of Spare Submarine Cable

Wrangell Warehouse Fire Renovation

The Wrangell Warehouse received substantial damage resulting from an electrical fire in a storage area within the building. SEAPA hired a local engineering contractor to access the damage and prepare a report. An RFP was drafted based on that report for necessary repairs and replacements. The final draft of the RFP had just been completed when SEAPA's property insurer announced they were sending an engineer of their own to review the damage. The RFP is now on hold pending the results of the insurance company's engineering report. The current expectation is for this project to be completed during the 2022 construction season.

SEAPA's Wrangell Warehouse

Tyee Lake Report

The Tyee 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:

- Field inspection, Tyee marine terminals
- Upgrade Forest Service crew quarters with new LED outdoor lighting
- Mow brush along service roads
- Install LED yard lights at the Wrangell/Petersburg Substation and Switchyard
- Grade service roads
- Pressure wash mechanic shop and front of power plant
- Prepped snow removal equipment for service
- Built vault for protection of fiber service to housing location

Safety Training this quarter included:

- Slips, trips, and falls
- Hearing tests
- Hearing conservation
- Lifting, back safety
- Cold weather safety, hypothermia
- Covid awareness and mitigation

(Things you see on Crew Change Day)
Sitka Blacktail Deer swimming across the Channel

AGENDA ITEM 6

CEO Report

(Provided to SEAPA Board of Directors under separate cover and presented as Lay on the Table Item 1.B.ii)

SOUTHEAST ALASKA POWER AGENCY
CEO FINANCIAL COVER MEMO

DATE: December 2, 2021

TO: SEAPA Board of Directors

FROM: Trey Acteson, Chief Executive Officer

SUBJECT: CEO Financial Cover Letter

SEAPA's financial position is stable, but revenue adjustments will be necessary in 2022 and beyond to pay for increased debt service, enhanced transmission line right of way clearing, infrastructure investments, and inflation.

Reservoirs are at or near maximum capacity which will support sales throughout the winter. Ambient temperatures will have the most influence on power sales heading into Q1 of the new fiscal year.

REVENUE & EXPENSES: Annual revenue through the end of October was slightly below budget at $8,851,881 actual vs. $8,945,775 budget. Operating Expenses through the end of October were under budget at $5,528,072 actual vs. $6,251,850 budget.

RENEWAL & REPLACEMENT PROJECTS: R&R expenditures through the end of October were $13,938,750 actual vs. $17,958,327 total budget. The volume and magnitude of projects completed in 2021 is quite remarkable considering SEAPA's extremely small staff. These projects were expertly executed, resulting in considerable savings to the Agency. These savings are highlighted under staff reports.

GRANTS: SEAPA has one open grant, the FY13 DCCED, with an open balance at the end of Q3 totaling $270,736. The grant expires June 30, 2022.

INSURANCE CLAIMS: SEAPA received the maximum $5MM insurance claim settlement allowable under the Property Policy at the time of the submarine cable failure. The $250K retention (deductible) was waived due to replacement cost exceeding $5.25MM. The $5MM is booked as revenue and can be allocated to funds at the Agency's discretion. I have previously discussed the concept of purchasing a spare submarine cable suitable to span SEAPA's furthest crossing to better support operating existing cables to failure. This approach would maximize the life of existing cables and enable expedited replacement when the next cable fails. SEAPA recently received a budgetary quote for a spare cable from Sumitomo for approximately $5MM. Both commodity and shipping prices have spiked significantly over the past year (see pricing graphs behind this memo). Taking this into consideration, it is my recommendation that we move the $5MM insurance proceeds into the Self-Insured Risk Fund and delay purchase of a spare cable until the current inflationary cycle moderates. Bolstering the Self-Insured Risk Fund will help ensure adequate reserves in the event of another cable failure.

The insurance claim for SEAPA's Wrangell Warehouse/Office is still pending but I expect SEAPA to eventually receive a reasonable settlement. The assigned adjuster recently decided to dispatch their own engineer to conduct an assessment and I accompanied him during his walkthrough on November 8th. We have requested a copy of his report to review prior to releasing an RFP for cleaning and repairs. A rough order of magnitude to complete the work is $600K.

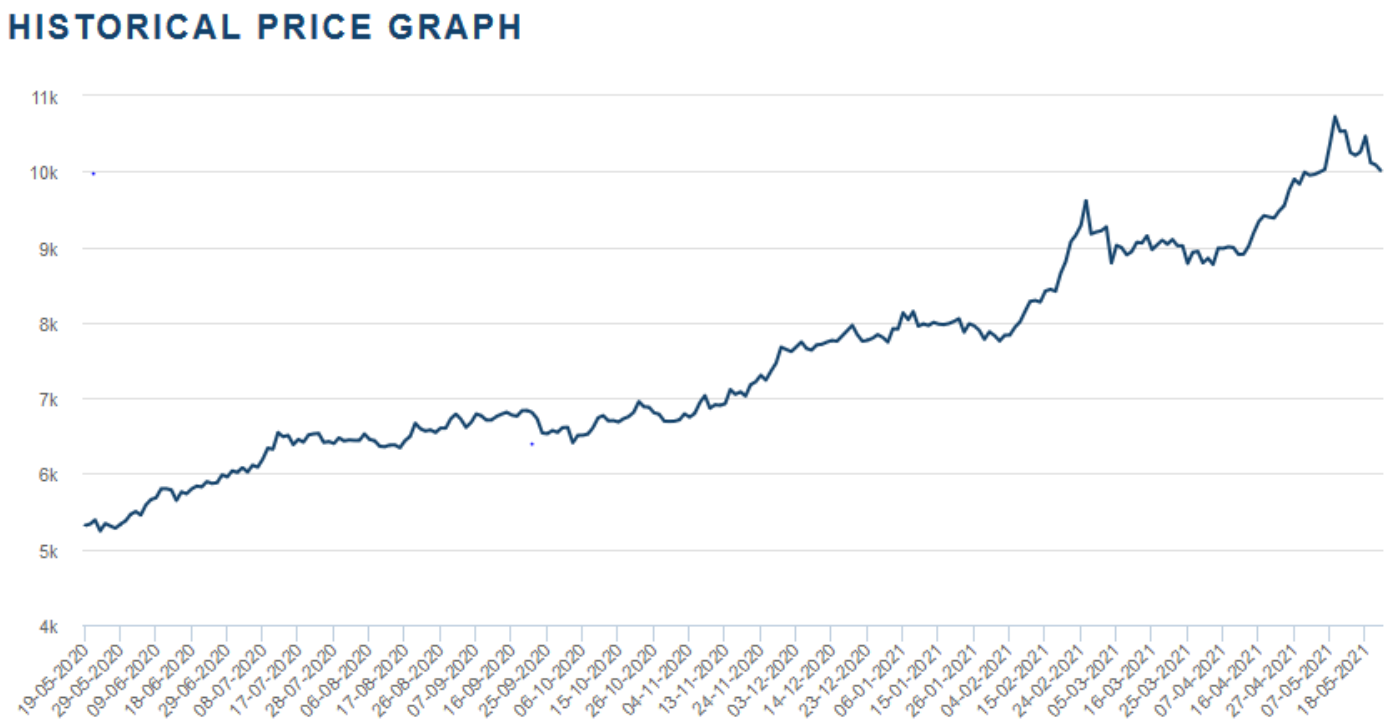
SUBMARINE CABLE BOND PROCEEDS: SEAPA bonded for $13.77MM, the full amount of the submarine cable replacement, including contingency. The project execution went extremely well with nearly perfect weather, leaving $857,192.12 in unspent contingency. Per the bond requirements, these remaining proceeds are required to be spent on capital related expenditures and have been moved to the Dedicated R&R Fund.

SUMITOMO ELECTRIC
1-3-13, Motoakasaka, Minato-ku, Tokyo 107-8468, Japan
TEL: +81-3-6406-2792 FAX:+81-3-6406-4044

November 15th, 2021

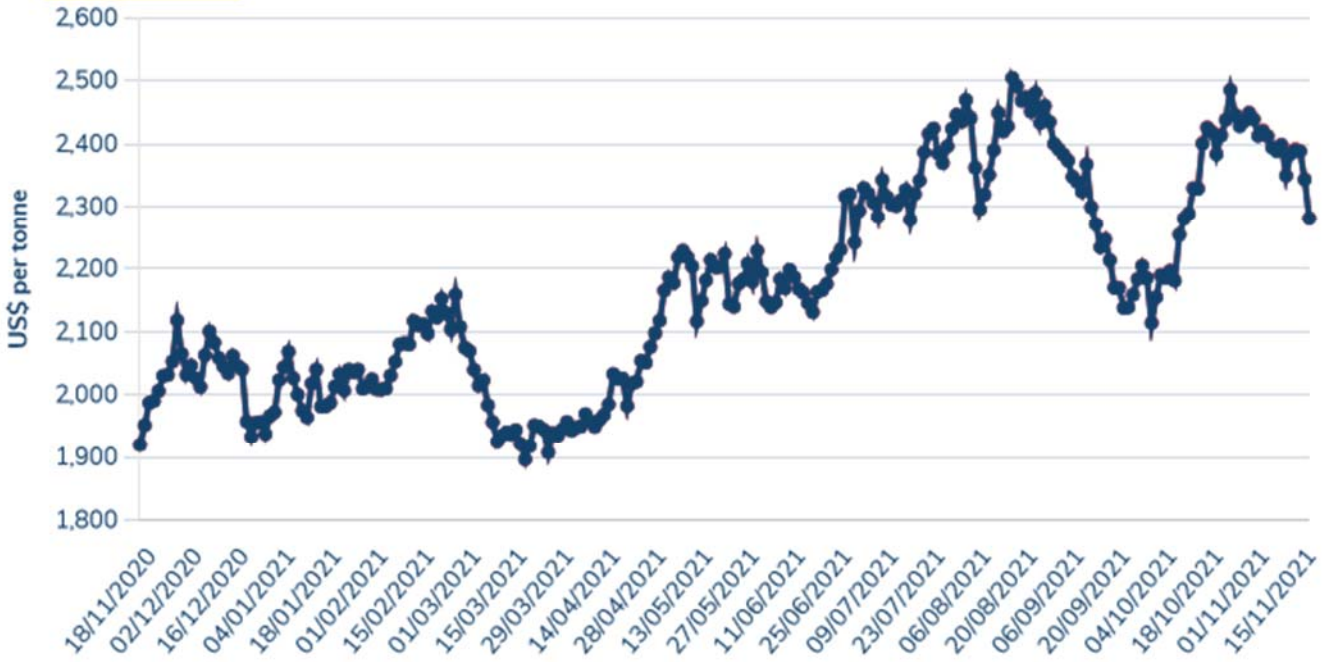
Subject: Price Escalation Factor for the Submarine Cable

1. LME Copper Rate



https://www.lme.com/Metals/Non-ferrous#tabIndex=2

2. **LME Lead Rate**



3. Transportation Cost
Baltic Dry Index (USD)

SOUTHEAST ALASKA POWER AGENCY

CONTROLLER MEMO

Date:	November 26, 2021	From:	Kay Key
To:	Trey Acteson	Subject:	**FINANCIAL STATEMENTS**

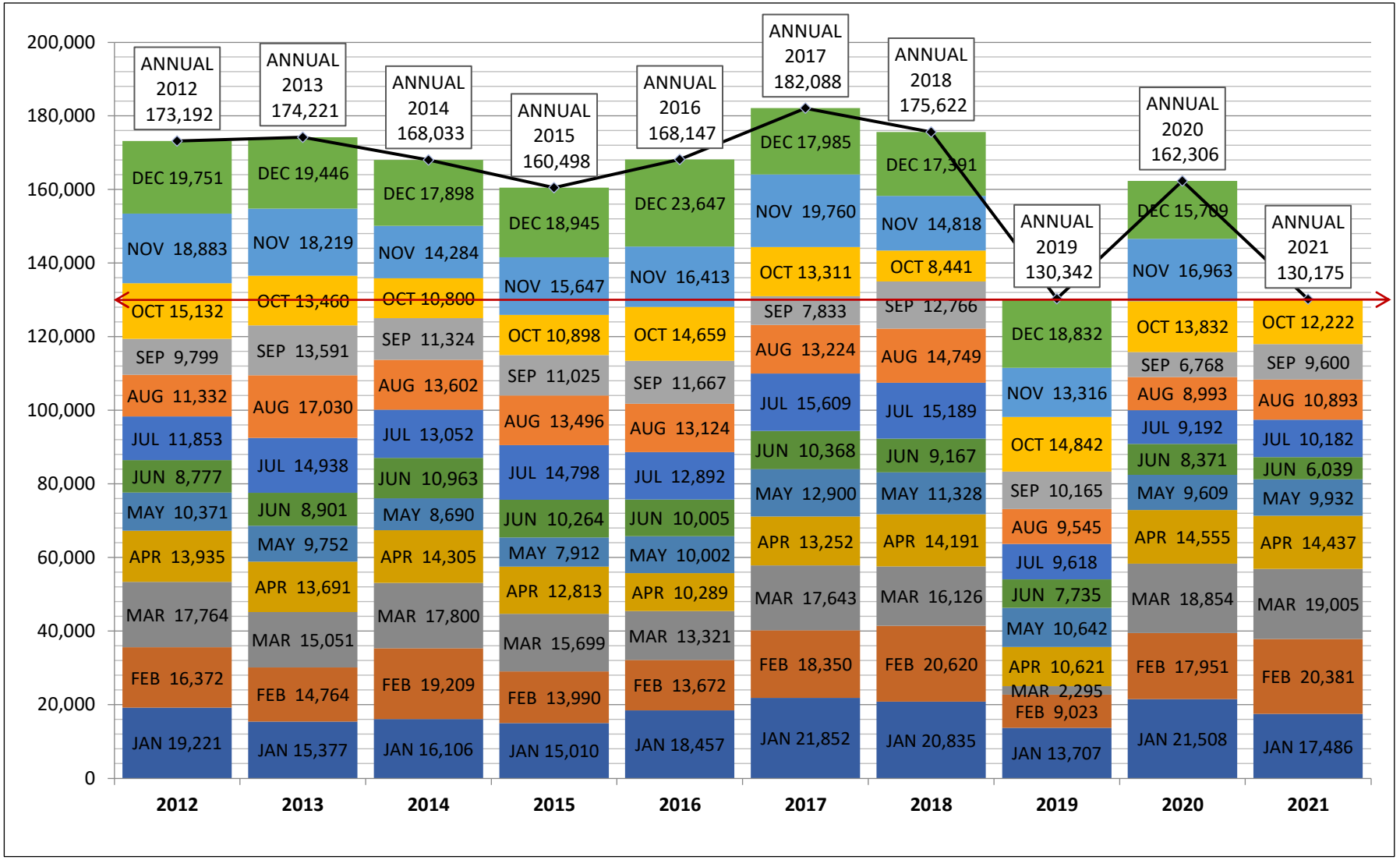
SUGGESTED MOTION
I move to accept year-to-date financial statements through October 2021, to approve RR21362 Storm Transmission Repair Swan Lake, and to accept disbursements for August, September, October, and November totaling $10,072,060.62, as presented.

Financial Statements in this board packet include:

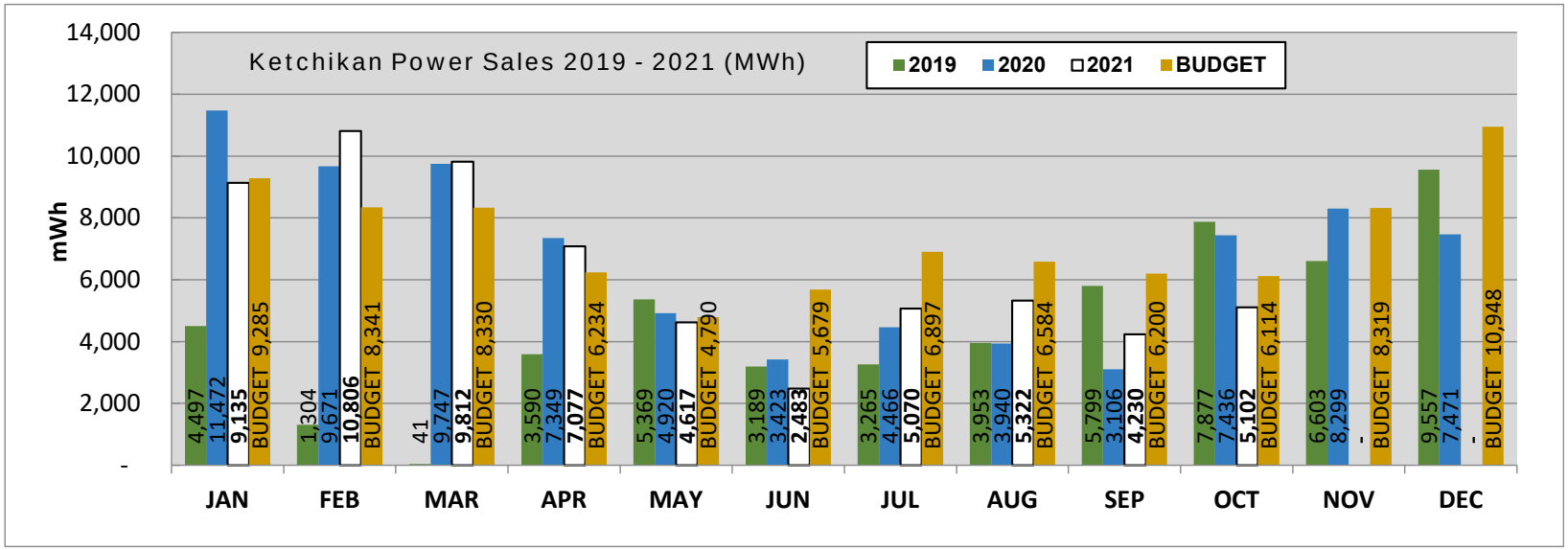
- **kWh Graphs** (Oct 2021)
- **Fund Allocation Graph** (Oct 2021)
- **Grant Summary** (Quarterly through June 2021)
- **Year-to-Date Financial Statements through October 2021**
  - ✓ Financial Overview
  - ✓ Statement of Financial Position – Year-to-date with prior year comparison
  - ✓ Statement of 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
  - ✓ **RR21362** Storm Transmission Repair Swan Lake: Although this work was specified in the 2021 O&M budget, total repair costs exceeded SEAPA's capitalization threshold, qualifying these expenditures to be classified as an R&R Project. Approval will allow us to capitalize this project.
- **Disbursements for August, September, October and November 2021**

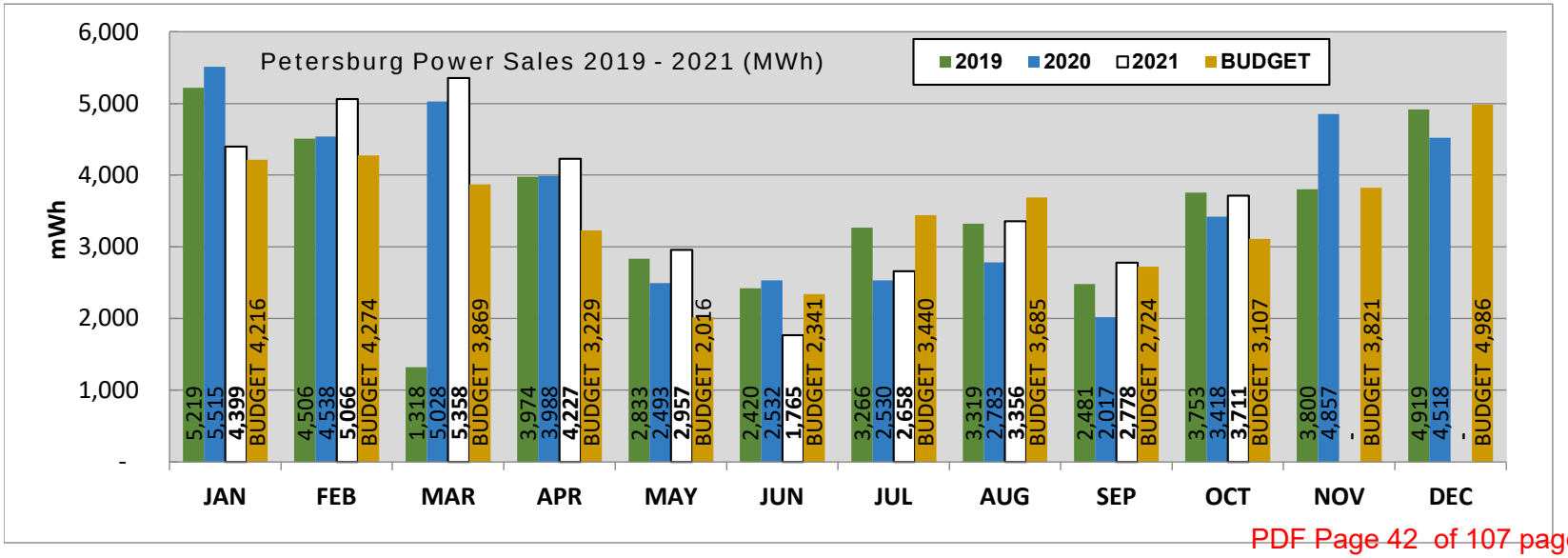
SOUTHEAST ALASKA POWER AGENCY

MWh Sales Year-to-Year Comparison



OCT 2021	2021 kWh HYDROPOWER SALES	CURRENT MONTH		YTD	
		Actual	Budget	Actual	Budget
	Ketchikan Power Purchases	5,102,400	6,113,571	65,530,213	68,453,767
	Petersburg Power Purchases	3,710,584	3,107,258	34,843,187	32,900,689
	Wrangell Power Purchases	3,408,800	2,898,363	29,260,120	30,201,024
	Total Power Purchases	12,221,784	12,119,192	129,633,520	131,555,480





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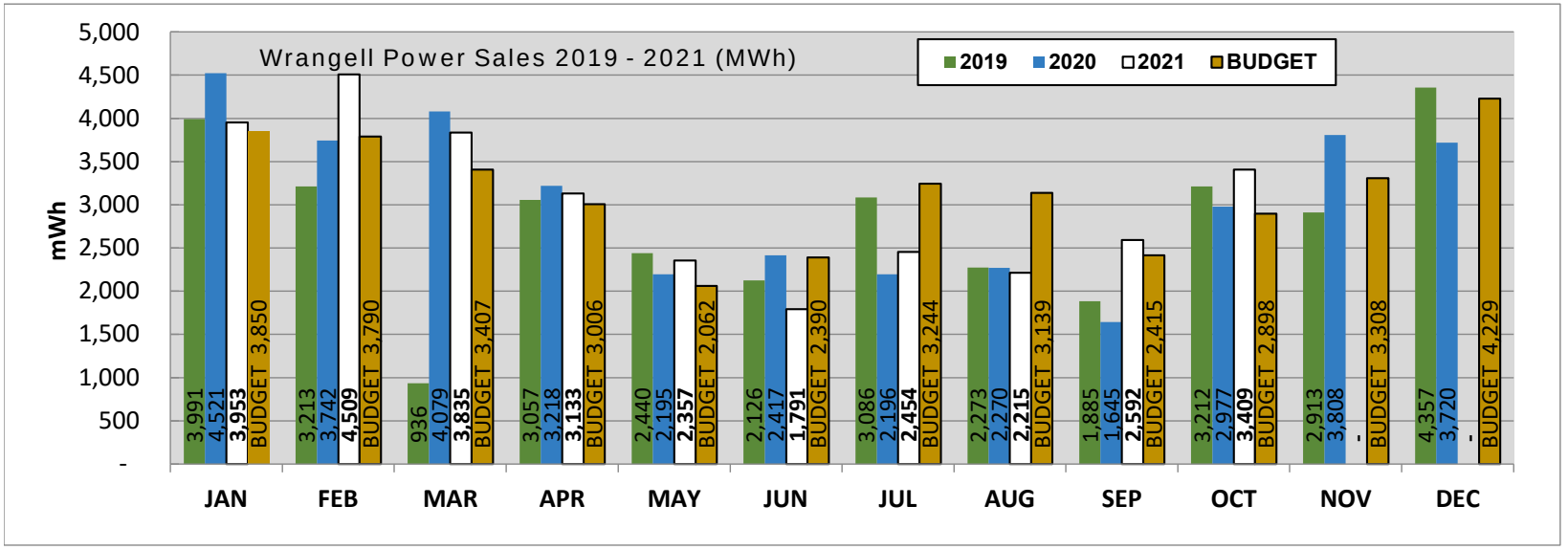

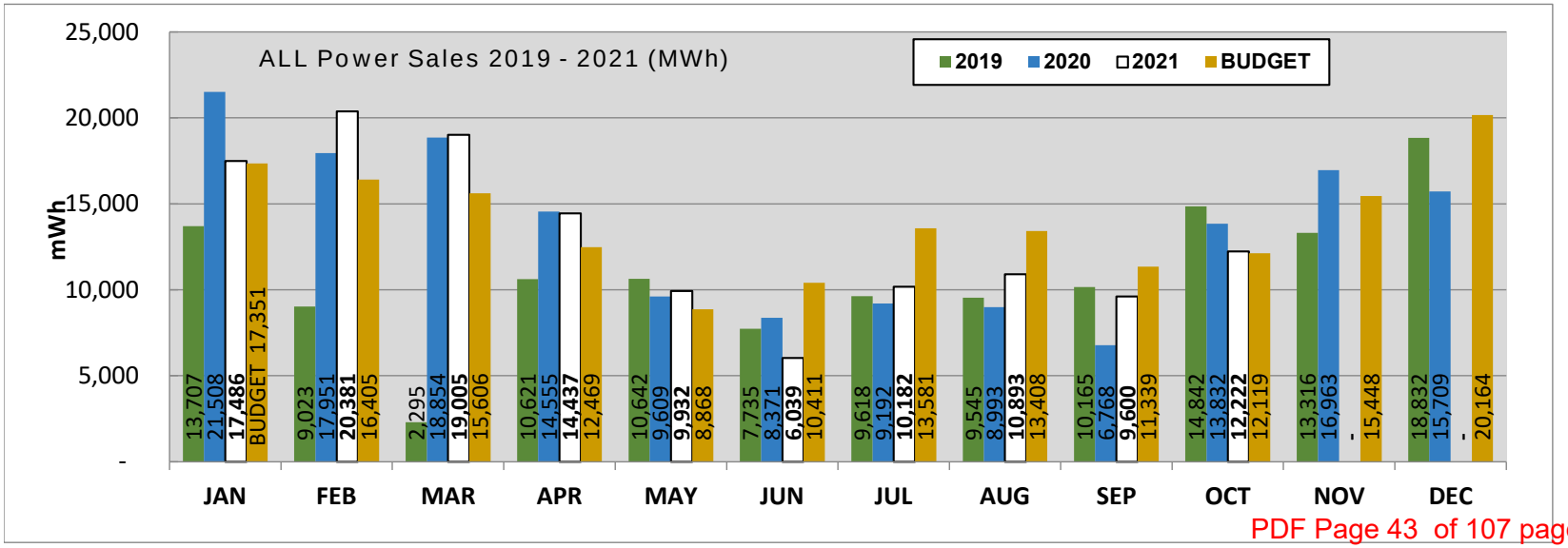

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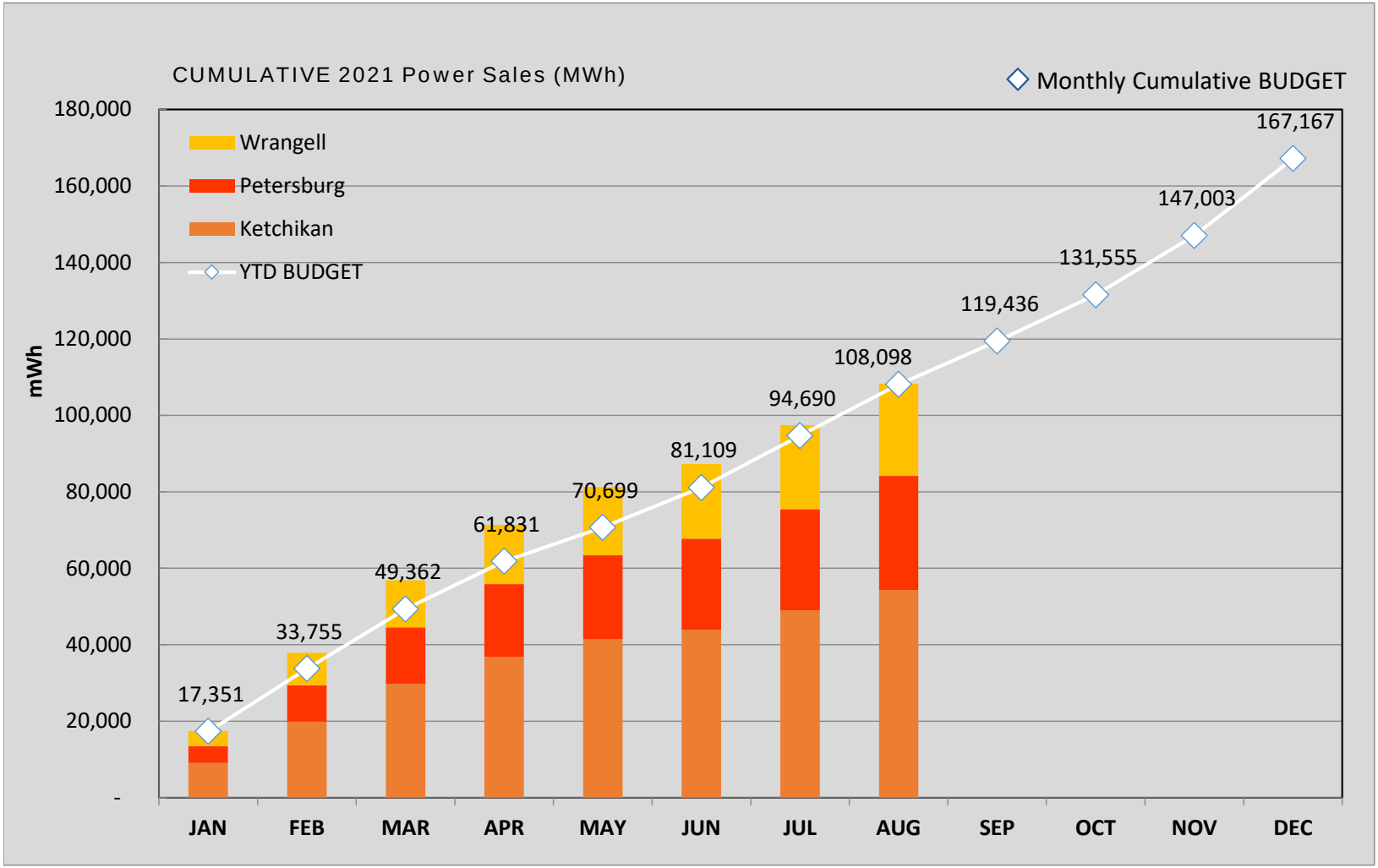
	Wrangell Power Purchases	3,408,800	2,898,363	29,260,120	30,201,024
	Total Power Purchases	12,221,784	12,119,192	129,633,520	131,555,480

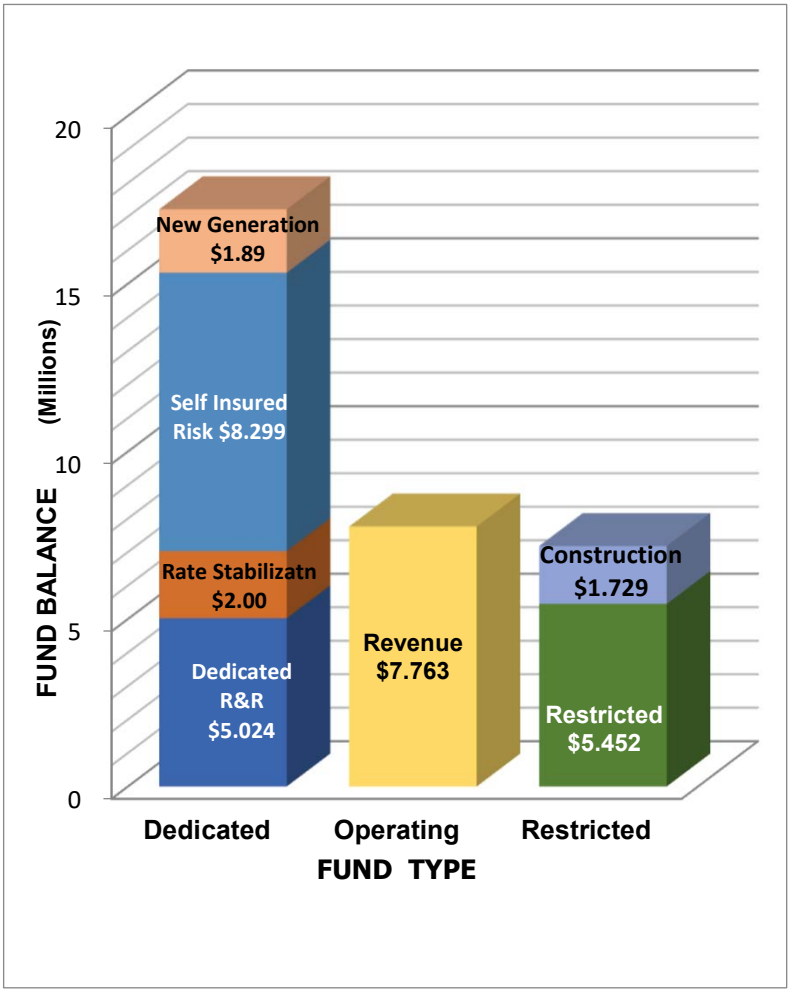


SOUTHEAST ALASKA POWER AGENCY

Fund Allocation Graph

OCT 2021

Operations, Capital and Self-Insured Funds		
Revenue Fund	$ 7,748,275	**
Checking	14,650	
Dedicated R&R Projects Fund	5,024,399	**
New Generation Fund	1,888,766	
Rate Stabilization Fund	2,003,471	
Self Insured Risk Fund	8,299,382	*
Total Operations, Capital and Insurance Funds	24,978,942	
Trustee Funds		
2015 Series Bond Interest	$ 203,369	
2015 Series Bond Reserve	205,240	
2019 Series Bond Interest	40	
2019 Series Bond Principal	422,852	
2019 Series Bond Reserve	1,264,259	
2021 Series Bond Interest	208,020	
2021 Series Bond Reserve	781,873	
2021 Series Costs of Issuance	0	
Total Trustee Funds	3,085,652	
Other Restricted Funds		
STI - USFS CD	$ 21,639	
DNR Reclamation Fund	1,343,472	
Required R&R Fund	1,000,866	
Construction Fund 2021	1,729,075	
Total Other Restricted Funds	4,095,052	
Total Agency Funds	$ 32,159,647	



* Self Insured Risk Fund balance is an estimate. This is an investment fund and statements are not available at month-end.

** Dedicated R&R Fund Levelized Payment - The last quarterly installment of the $2.552MM annual contribution to the R&R Fund (from the Revenue Fund) took place in October.

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 Costs of Issuance 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
Construction Fund 2021 = Proceeds from 2021 bond issuance restricted to Submarine Cable and other capital projects.

RR20349 - Submarine Cable Funding:
Prior to the 2021 bond issuance, submarine cable expenditures totaling $4,943,608 were paid from the Self Insured Risk Fund. Bond proceeds of $13.37MM were deposited to "Construction Fund 2021" in June 2021. In September, the $4.9MM was "repaid" to the Self Insured Risk Fund. Final project invoices were processed in November, and any unspent balance (approx. $855K) will be transferred to the Dedicated R&R Fund, complying with bond indenture requirements that stipulate the monies must be spent on capital projects.

SOUTHEAST ALASKA POWER AGENCY

GRANT SUMMARY

SEPTEMBER 2021

AK DCCED GRANT 13-DC-553

Grant Billing	Grant Budget	Billing thru 2021	Open Balance
1 - Hydro Storage	578,000	578,000	0
2 - G&T Site Evaluation	2,109,092	1,838,356	270,736
3 - Stability / Interconnecti	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	2,729,264	270,736

QUARTERLY BILLING

Mar-21	Jun-21	Sep-21	FY21
-	-	-	-
1,779	-	64,218	65,997
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
1,779	-	64,218	65,997

TERM: JUL 2013 - JUN 2022

The grant term has been formally extended through June 2022.

OCTOBER 2021

YTD FINANCIAL OVERVIEW

OPERATING REVENUE

FIRM kWh SALES	JAN-OCT Actual	JAN-OCT Budget	JAN-OCT Prior Yr
Ketchikan	$4,328,451	$4,654,856	$4,456,054
Petersburg	$2,466,690	$2,237,249	$2,369,337
Wrangell	$2,056,740	$2,053,670	$1,989,688
Total Revenue	$8,851,881	$8,945,775	$8,815,079

Whitman Displaced Sales	$650,000		$633,508

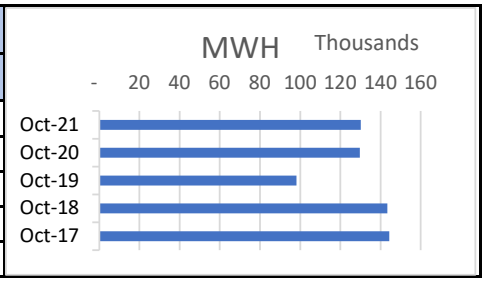
Displaced sales represent a year-end sales estimate of generation from Ketchikan's Whitman facility that has displaced SEAPA sales. (Whitman True-up Agreement) Displaced sales are invoiced at year-end after all generation figures have been reviewed by both parties.

OPERATING EXPENSES

	JAN-OCT Actual	JAN-OCT Budget	JAN-OCT Prior Yr
Hydro Facilities	$1,994,590	$2,092,770	$1,946,222
Transmission	$1,146,072	$1,336,780	$621,194
G&A	$2,387,410	$2,822,300	$2,312,313
Total Ops Exp	$5,528,072	$6,251,850	$4,879,729

MWH TREND

Year-to-Date MWH SALES	
Year	**MWH**
Oct-21	130,175
Oct-20	129,634
Oct-19	98,194
Oct-18	143,413
Oct-17	144,343



2019 drought.

Nonoperating Income

Insurance proceeds of $5MM were deposited in October (946-0-5041).

Nonoperating Expense

Wrangell warehouse/office fire-related expenditures are being recorded to nonoperating expense (955-0-6621) until insurance and contractors have completed their assessments and provided estimates.

Submarine Cable summary

Proceeds from the $11.33MM bond issuance	13,370,000	*Construction Fund (1130-004)*
RR20349 Submarine Cable Stikine Strait	(11,727,718)	*TYL Capital Assets (1300-200)*
Inventoried spare cable/repair kits	(768,484)	*Inventory Sub Cable (1200-303)*

Southeast Alaska Power Agency

Statement of Financial Position

as of October 31, 2021

	Year To Date 10/31/21	Prior Year To Date 10/31/20
Assets		
Current Assets		
Agency Funds		
Operating & Reserve Funds		
1110-001 - Revenue Fund	7,748,275	2,697,778
1110-002 - Commercial Checking	14,650	1,000
1110-003 - Dedicated R&R Fund	5,024,399	5,187,407
1110-004 - New Generation Fund	1,888,766	1,890,527
1110-101 - Rate Stabilization Fund	2,003,471	2,002,669
1110-102 - Self Insured Risk Fund	8,299,382	8,288,505
Total Operating & Reserve Funds	**24,978,942**	**20,067,887**
Restricted Trustee Funds		
1120-004 - 2015 Series Bond Interest Fund	203,369	204,404
1120-006 - 2015 Series Bond Reserve Fund	205,240	205,309
1120-009 - 2019 Series Bond Interest Fund	40	-
1120-010 - 2019 Series Bond Principal Fund	422,852	402,911
1120-011 - 2019 Series Bond Reserve Fund	1,264,259	1,264,165
1120-012 - 2021 Series Bond Interest Fund	208,020	-
1120-014 - 2021 Series Bond Reserve Fund	781,873	-
1120-015 - 2021 Series COI Fund	0	-
Total Restricted Trustee Funds	**3,085,652**	**2,076,789**
Restricted Other Funds		
1130-001 - USFS CD - STI	21,639	21,637
1130-002 - DNR Reclamation Fund	1,343,472	1,268,282
1130-003 - Required R&R Fund	1,000,866	1,000,466
1130-004 - Construction Fund 2021	1,729,075	-
Total Restricted Other Funds	**4,095,052**	**2,290,385**
Total Agency Funds	**32,159,647**	**24,435,061**
Accounts Receivable		
1100-001 - Accounts Receivable	1,295,120	1,151,983
1100-002 - Grants Receivable	64,218	-
1100-003 - Other Misc Receivable	5,800	5,800
Total Accounts Receivable	**1,365,138**	**1,157,782**
Other Current Assets		
Accrued Interest Receivable		
1200-102 - Accrued Interest Receivable	11,999	42,977
Total Accrued Interest Receivable	**11,999**	**42,977**
Prepaid Fees		
1200-201 - Prepaid FERC Fees	-	19,880
1200-202 - Prepaid Insurance	-	-
1200-204 - Prepaid USFS Land Use Fees	17,965	17,598
1200-206 - Prepaid Admin Group Ben	10,223	10,211
1200-207 - Prepaid Admin Retirement	15,143	28,737
Total Prepaid Fees	**43,331**	**76,427**
Inventory Assets		
1200-300 - Inventory Spares-Stores	235,991	230,863
1200-301 - Inventory SWL Winding Replace	890,405	890,405
1200-302 - Inventory Flashboard Kickers	439,456	439,456
1200-303 - Inventory Sub Cable Spare	768,484	-
Total Inventory Assets	**2,334,336**	**1,560,724**
Total Other Current Assets	**2,389,666**	**1,680,128**
Total Current Assets	**35,914,451**	**27,272,970**

Southeast Alaska Power Agency

Statement of Financial Position

as of October 31, 2021

	Year To Date 10/31/21	Prior Year To Date 10/31/20
Capital Assets		
1300-100 - Swan Lake Capital Assets	34,016,292	32,614,772
1300-200 - Tyee Lake Capital Assets	43,753,900	32,705,407
1300-300 - Swan-Tyee Intertie Capital Assets	115,183,752	114,974,970
1300-400 - Ketchikan Capital Assets	1,411,793	1,379,333
Total Capital Assets	**194,365,736**	**181,674,482**
R&R WIP Capital Projects		
1320-100 - WIP Swan Lake	2,022,599	1,468,180
1320-200 - WIP Tyee Lake	49,988	872,912
1320-300 - WIP Swan-Tyee Intertie	-	1,810
1320-400 - WIP Ketchikan	211,566	159,224
Total R&R WIP Capital Projects	**2,284,153**	**2,502,126**
Accumulated Depreciation	(59,920,211)	(56,312,012)
Total Capital Assets	**136,729,679**	**127,864,596**
Other Assets		
Deferred Assets		
1830-004 - Tyee Marine Access	-	10,655
1830-006 - New Generation Integration	7,021	4,505
1830-007 - 2019 Bond Gain on 2009 Refund	58,642	81,342
1830-008 - Submarine Cable Stikine Strait	-	-
Total Deferred Assets	**65,663**	**96,502**
Total Other Assets	65,663	96,502
Total Assets	**172,709,793**	**155,234,069**

Southeast Alaska Power Agency

Statement of Financial Position

as of October 31, 2021

	Year To Date 10/31/21	Prior Year To Date 10/31/20
Liabilities and Net Position		
Liabilities		
Current Liabilities		
Accounts Payable		
2100-001 - Accounts Payable General	886,554	170,094
Total Accounts Payable	**886,554**	**170,094**
Other Current Liabilities		
2100-301 - Other Current Liabilities	65,585	29,831
2100-304 - Reserve Interest Payable	404,722	171,904
2100-340 - Wages Payable	122,907	110,095
2100-341 - PTO Payable	201,445	257,451
Total Other Current Liabilities	**794,659**	**569,281**
2100-350 - Other Payroll Liabilities	17,519	44,086
Total Current Liabilities	**1,698,732**	**783,462**
Long Term Liabilities		
2200-001 - PERS Unfunded Liability WRG	634,379	784,575
2200-002 - DNR Fund CVEA KEA Liability	671,736	634,141
2200-202 - Series 2015 Bonds	10,295,000	10,295,000
2200-203 - Series 2019 Bonds	2,670,000	3,475,000
2200-204 - Series 2021 Bonds	11,330,000	-
2200-302 - 2015 Bond Issuance Premium	637,759	692,817
2200-303 - 2019 Bond Issuance Premium	206,079	285,852
2200-304 - 2021 Bond Issuance Premium	2,884,507	-
Total Long Term Liabilities	**29,329,460**	**16,167,385**
Total Liabilities	**31,028,192**	**16,950,846**
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	**3,165,314**	**(224,232)**
Total Net Position	**141,681,600**	**138,283,222**
Total Liabilities and Net Position	**172,709,793**	**155,234,069**

Southeast Alaska Power Agency

Statement of Activities - YTD Budget

as of **October 31, 2021**

	YTD FY21	YTD BUDGET	VARIANCE % of Budget	YTD FY20	ANNUAL Budget
OPERATING REVENUE					
400 - Hydro Facility Revenues	8,851,882	8,945,775	(1.04) %	8,815,079	11,367,356
454 - Rent-Electric Property	5,050	3,000	68.34 %	4,896	3,000
Net Operating Revenue	**8,856,932**	**8,948,775**	**(1.02) %**	**8,819,975**	**11,370,356**
OPERATING EXPENSE					
HYDRO FACILITY O&M					
535 - Operations Supervision	53,237	66,760	(20.3) %	14,077	90,900
537 - Hydraulic Expense	3,437	10,000	(65.6) %	6,417	10,000
538 - Electric Expenses	21,794	71,800	(69.6) %	25,183	79,000
539 - Operations Misc Expense	302,443	357,970	(15.5) %	340,045	419,900
540 - Rents	149,016	156,410	(4.7) %	136,981	186,250
541 - Hydro Power Station Maintenance	42,664	34,400	24.0 %	33,656	39,500
543 - Dams Reservoirs Waterways	7,279	27,590	(73.6) %	7,580	29,250
544 - Electric Plant Wages-Benefits	1,331,253	1,263,900	4.5 %	1,296,163	1,540,000
545 - Nonproduction Plant Maintenance	47,078	50,540	(6.9) %	45,084	54,900
561 - Control System Maintenance	46,932	53,400	(12.1) %	41,036	64,000
Total Hydro Facility Expense	**2,005,133**	**2,092,770**	**(4.7) %**	**1,946,222**	**2,513,700**
TRANSMISSION O&M					
562 - Substation Expense	83,331	70,080	18.9 %	58,065	73,800
564 - XMSN Submarine Cable Expense	1,495	2,840	(47.4) %	40,296	3,200
571 - XMSN Overhead Lines Expense	1,061,246	1,263,860	(16.0) %	522,833	1,287,650
Total Transmission Expense	**1,146,072**	**1,336,780**	**(14.3) %**	**621,194**	**1,364,650**
GENERAL & ADMIN EXPENSE					
920 - Admin Wages-Benefits	1,332,917	1,526,800	(12.7) %	1,339,052	1,832,000
921 - Office Expenses	122,003	183,750	(33.6) %	135,510	222,400
923 - Professional Services	210,450	343,750	(38.8) %	201,401	404,750
924 - Insurance	463,941	498,750	(7.0) %	387,384	598,500
928 - Regulatory Commission Expense	92,604	94,300	(1.8) %	80,413	113,500
930 - General Expense	103,685	106,950	(3.1) %	102,455	120,700
931 - Admin Rent	61,810	68,000	(9.1) %	66,097	81,600
Total G&A Expense	**2,387,410**	**2,822,300**	**(15.4) %**	**2,312,313**	**3,373,450**
Total Operating Expense	**5,538,615**	**6,251,850**	**(11.6) %**	**4,879,729**	**7,251,800**
NET OPERATING REVENUE/(EXPENSE)	**3,318,317**	**2,696,925**	**23.4 %**	**3,940,246**	**4,118,556**
Nonoperating Income					
941 - Grant Income	65,997				
942 - Interest Income Misc	89,877				
944 - Gain/(Loss) Investments	(91,721)				
946 - Misc Nonoperating Income	4,824,113				
Total Nonoperating Income	**4,888,266**				
Nonoperating Expense					
951 - Interest Expense	15,706				
952 - Bond Interest Expense	560,716				
953 - Depreciation Expense	4,198,920				
954 - Grant Expense	161,580				
955 - Misc Nonoperating Expense	104,347				
Total Nonoperating Expense	**5,041,270**				
NET NONOPERATING INCOME/(EXPENSE)	**(153,004)**				
Change in Net Position	**3,165,314**				

Southeast Alaska Power Agency
Statement of Activities
YTD Budget
as of October 31, 2021

	All Locations		0--No Location		1--Swan Lake		2--Tyee Lake		3--Swan-Tyee Intertie	
	01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21	
	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget
Revenue FERC										
400 - Hydro Facility Revenues										
4000-401 Hydropower Sales Ketchikan	4,328,451	4,654,856	4,328,451	4,654,856	-	-	-	-	-	-
4000-402 Hydropower Sales Petersburg	2,466,690	2,237,249	2,466,690	2,237,249	-	-	-	-	-	-
4000-403 Hydropower Sales Wrangell	2,056,740	2,053,670	2,056,740	2,053,670	-	-	-	-	-	-
Total 400 - Hydro Facility Revenues	**8,851,882**	**8,945,775**	**8,851,882**	**8,945,775**	**-**	**-**	**-**	**-**	**-**	**-**
454 - Rent-Electric Property										
4540-451 Rent Electric Property	5,050	3,000	5,050	3,000	-	-	-	-	-	-
Total 454 - Rent-Electric Property	**5,050**	**3,000**	**5,050**	**3,000**	**-**	**-**	**-**	**-**	**-**	**-**
Total Operating Revenue	**8,856,932**	**8,948,775**	**8,856,932**	**8,948,775**	**-**	**-**	**-**	**-**	**-**	**-**
Operating Expenses										
535 - Operations Supervision										
0310 Contractor	43,398	54,200	-	-	25,375	27,000	18,022	27,200	-	-
0390 Software	2,706	3,000	-	-	1,306	1,500	1,400	1,500	-	-
0610 Office Equipment	4,938	7,800	-	-	2,589	5,400	2,348	2,400	-	-
0730 Office Supplies	2,195	1,760	-	-	791	880	1,405	880	-	-
Total 535 - Operations Supervision	**53,237**	**66,760**	**-**	**-**	**30,061**	**34,780**	**23,176**	**31,980**	**-**	**-**
537 - Hydraulic Expense										
0330 Helicopters	3,437	8,000	-	-	1,719	4,000	1,719	4,000	-	-
0800 Materials-Minor Equip	-	2,000	-	-	-	1,000	-	1,000	-	-
Total 537 - Hydraulic Expense	**3,437**	**10,000**	**-**	**-**	**1,719**	**5,000**	**1,719**	**5,000**	**-**	**-**
538 - Electric Expenses										
0310 Contractor	6,441	55,000	-	-	2,171	10,000	4,270	45,000	-	-
0740 Operating Supplies	2,934	8,400	-	-	2,810	4,200	124	4,200	-	-
0800 Materials-Minor Equip	12,418	8,400	-	-	11,237	4,200	1,181	4,200	-	-
Total 538 - Electric Expenses	**21,794**	**71,800**	**-**	**-**	**16,219**	**18,400**	**5,575**	**53,400**	**-**	**-**
539 - Operations Misc Expense										
0300 Communication Services	66,604	76,500	-	-	17,589	18,300	49,015	58,200	-	-
0310 Contractor	16,939	13,100	-	-	6,563	6,300	10,376	6,800	-	-
0320 Flights	78,621	99,000	-	-	22,603	44,000	56,018	55,000	-	-
0330 Helicopters	8,614	-	-	-	-	-	8,614	-	-	-
0360 Lodging	2,863	-	-	-	-	-	2,863	-	-	-
0373 Rent-Other	1,333	1,000	-	-	1,333	1,000	-	-	-	-
0401 Training-Pro-Tech	9,311	11,250	-	-	4,510	5,625	4,801	5,625	-	-
0402 Training-Safety	23,187	63,400	-	-	12,934	29,200	10,253	34,200	-	-
0410 Transport-Other	6,130	23,800	-	-	2,618	10,800	3,512	13,000	-	-
0420 Utilities	587	1,000	-	-	587	1,000	-	-	-	-
0600 Phones, Radios, Video	2,003	2,840	-	-	754	840	1,249	2,000	-	-
0710 Food, Meals	2,458	2,490	-	-	335	840	2,123	1,650	-	-
0740 Operating Supplies	1,660	3,750	-	-	1,019	1,250	641	2,500	-	-
0750 Safety	8,428	9,200	-	-	5,948	4,600	2,480	4,600	-	-
0800 Materials-Minor Equip	5,693	7,240	-	-	-	840	5,693	6,400	-	-
0810 Rolling Stock Maint	14,825	10,450	-	-	2,058	4,200	12,767	6,250	-	-
0811 Marine Vessel Maint	872	2,100	-	-	872	2,100	-	-	-	-
0820 Fuels and Oils	39,484	22,500	-	-	26,153	12,500	13,332	10,000	-	-
0830 Fuels and Oils - Marine	12,227	8,350	-	-	4,248	4,200	7,979	4,150	-	-
0850 Tools	604	-	-	-	-	-	604	-	-	-
Total 539 - Operations Misc Expense	**302,443**	**357,970**	**-**	**-**	**110,123**	**147,595**	**192,319**	**210,375**	**-**	**-**

Southeast Alaska Power Agency
Statement of Activities
YTD Budget
as of October 31, 2021

	All Locations		0--No Location		1--Swan Lake		2--Tyee Lake		3--Swan-Tyee Intertie	
	01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21	
	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget
540 - Rents										
0010 Other Regulatory	-	18,000	-	-	-	-	-	-	-	18,000
0030 FERC Land Use	58,988	48,460	-	-	12,675	10,500	46,313	37,960	-	-
0050 USFS Land Use	90,028	89,950	-	-	-	-	23,561	24,700	66,467	65,250
Total 540 - Rents	**149,016**	**156,410**	**-**	**-**	**12,675**	**10,500**	**69,874**	**62,660**	**66,467**	**83,250**
541 - Hydro Power Station Maintenance										
0310 Contractor	-	4,400	-	-	-	2,100	-	2,300	-	-
0740 Operating Supplies	6,857	8,400	-	-	3,469	4,200	3,388	4,200	-	-
0750 Safety	1,608	-	-	-	-	-	1,608	-	-	-
0800 Materials-Minor Equip	28,937	9,500	-	-	21,256	4,750	7,681	4,750	-	-
0850 Tools	5,263	12,100	-	-	716	5,000	4,547	7,100	-	-
Total 541 - Hydro Power Station Maintenance	**42,664**	**34,400**	**-**	**-**	**25,441**	**16,050**	**17,223**	**18,350**	**-**	**-**
543 - Dams Reservoirs Waterways										
0310 Contractor	-	14,500	-	-	-	14,500	-	-	-	-
0330 Helicopters	-	7,000	-	-	-	-	-	7,000	-	-
0740 Operating Supplies	1,352	2,950	-	-	677	1,300	675	1,650	-	-
0800 Materials-Minor Equip	5,927	1,700	-	-	5,927	1,300	-	400	-	-
0820 Fuels and Oils	-	200	-	-	-	-	-	200	-	-
0850 Tools	-	1,240	-	-	-	840	-	400	-	-
Total 543 - Dams Reservoirs Waterways	**7,279**	**27,590**	**-**	**-**	**6,604**	**17,940**	**675**	**9,650**	**-**	**-**
544 - Electric Plant Wages-Benefits										
0110 Wages / PTO	801,600	865,000	-	-	430,456	440,700	371,143	424,300	-	-
0120 OT	214,914	115,000	-	-	89,987	68,500	124,926	46,500	-	-
0140 Taxes	83,202	60,800	-	-	42,450	35,600	40,752	25,200	-	-
0150 H&W	160,359	168,800	-	-	86,891	88,500	73,469	80,300	-	-
0160 Retirement	111,654	113,300	-	-	59,396	59,800	52,258	53,500	-	-
0170 Capx-Grants	(45,187)	(59,000)	-	-	(28,655)	(45,000)	(16,532)	(14,000)	-	-
0180 Moving Expense	4,712	-	-	-	3,102	-	1,609	-	-	-
Total 544 - Electric Plant Wages-Benefits	**1,331,253**	**1,263,900**	**-**	**-**	**683,628**	**648,100**	**647,626**	**615,800**	**-**	**-**
545 - Nonproduction Plant Maintenance										
0310 Contractor	22,121	15,950	-	-	22,013	15,500	108	450	-	-
0373 Rent-Other	3,210	3,320	-	-	3,210	3,320	-	-	-	-
0710 Food, Meals	67	-	-	-	-	-	67	-	-	-
0740 Operating Supplies	6,359	8,330	-	-	1,331	2,080	5,027	6,250	-	-
0750 Safety	156	-	-	-	-	-	156	-	-	-
0800 Materials-Minor Equip	11,254	15,600	-	-	9,405	6,500	1,849	9,100	-	-
0810 Rolling Stock Maint	75	420	-	-	-	-	75	420	-	-
0820 Fuels and Oils	75	-	-	-	-	-	75	-	-	-
0840 Furnishings	3,223	6,250	-	-	13	5,000	3,210	1,250	-	-
0850 Tools	538	670	-	-	-	250	538	420	-	-
Total 545 - Nonproduction Plant Maintenance	**47,078**	**50,540**	**-**	**-**	**35,973**	**32,650**	**11,105**	**17,890**	**-**	**-**
561 - Control System Maintenance										
0310 Contractor	44,934	50,000	-	-	17,283	25,000	27,651	25,000	-	-
0390 Software	-	3,400	-	-	-	1,700	-	1,700	-	-
0800 Materials-Minor Equip	1,999	-	-	-	1,999	-	-	-	-	-
Total 561 - Control System Maintenance	**46,932**	**53,400**	**-**	**-**	**19,281**	**26,700**	**27,651**	**26,700**	**-**	**-**

Southeast Alaska Power Agency
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as of October 31, 2021

	All Locations		0--No Location		1--Swan Lake		2--Tyee Lake		3--Swan-Tyee Intertie	
	01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21	
	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget
562 - Substation Expense										
0300 Communication Services	4,766	1,250	-	-	-	-	4,766	1,250	-	-
0310 Contractor	50,211	50,000	-	-	-	-	50,211	50,000	-	-
0320 Flights	6,750	3,000	-	-	-	-	6,750	3,000	-	-
0360 Lodging	-	400	-	-	-	-	-	400	-	-
0373 Rent-Other	-	400	-	-	-	-	-	400	-	-
0420 Utilities	9,197	10,000	-	-	-	-	9,197	10,000	-	-
0710 Food, Meals	78	170	-	-	-	-	78	170	-	-
0740 Operating Supplies	1,266	2,600	-	-	177	500	1,089	2,100	-	-
0750 Safety	1,041	-	-	-	-	-	1,041	-	-	-
0800 Materials-Minor Equip	9,737	1,840	-	-	-	1,000	9,737	840	-	-
0820 Fuels and Oils	-	210	-	-	-	-	-	210	-	-
0850 Tools	285	210	-	-	-	-	285	210	-	-
Total 562 - Substation Expense	**83,331**	**70,080**	**-**	**-**	**177**	**1,500**	**83,154**	**68,580**	**-**	**-**
564 - XMSN Submarine Cable Expense										
0360 Lodging	260	-	-	-	-	-	260	-	-	-
0410 Transport-Other	159	-	-	-	-	-	159	-	-	-
0740 Operating Supplies	208	840	-	-	-	-	208	840	-	-
0750 Safety	268	-	-	-	-	-	268	-	-	-
0800 Materials-Minor Equip	600	2,000	-	-	-	-	600	2,000	-	-
Total 564 - XMSN Submarine Cable Expense	**1,495**	**2,840**	**-**	**-**	**-**	**-**	**1,495**	**2,840**	**-**	**-**
571 - XMSN Overhead Lines Expense										
0110 Wages / PTO	101,102	109,200	97,001	109,200	-	-	4,101	-	-	-
0120 OT	2,055	1,800	2,055	1,800	-	-	-	-	-	-
0140 Taxes	8,748	9,600	8,434	9,600	-	-	314	-	-	-
0150 H&W	18,426	20,100	17,498	20,100	-	-	928	-	-	-
0160 Retirement	11,528	13,100	10,878	13,100	-	-	650	-	-	-
0170 Capx-Grants	(1,402)	-	(1,402)	-	-	-	-	-	-	-
0300 Communication Services	1,280	1,450	1,280	1,450	-	-	-	-	-	-
0310 Contractor	522,181	664,500	147	-	163,225	207,200	200,047	247,200	158,762	210,100
0320 Flights	5,990	6,000	5,990	6,000	-	-	-	-	-	-
0330 Helicopters	58,230	65,000	58,230	65,000	-	-	-	-	-	-
0360 Lodging	5,131	5,000	5,131	5,000	-	-	-	-	-	-
0373 Rent-Other	1,429	1,250	1,429	1,250	-	-	-	-	-	-
0380 ROW Clearing	307,100	345,000	-	-	159,100	165,000	148,000	180,000	-	-
0410 Transport-Other	3,459	1,500	3,459	1,500	-	-	-	-	-	-
0420 Utilities	721	910	721	910	-	-	-	-	-	-
0710 Food, Meals	1,879	3,000	1,879	3,000	-	-	-	-	-	-
0740 Operating Supplies	3,878	5,000	3,878	5,000	-	-	-	-	-	-
0750 Safety	1,307	-	1,307	-	-	-	-	-	-	-
0800 Materials-Minor Equip	-	2,300	-	2,300	-	-	-	-	-	-
0811 Marine Vessel Maint	4,704	4,600	4,704	4,600	-	-	-	-	-	-
0820 Fuels and Oils	2,188	1,550	2,188	1,550	-	-	-	-	-	-
0830 Fuels and Oils - Marine	278	3,000	278	3,000	-	-	-	-	-	-
0850 Tools	1,037	-	1,037	-	-	-	-	-	-	-
Total 571 - XMSN Overhead Lines Expense	**1,061,246**	**1,263,860**	**226,119**	**254,360**	**322,325**	**372,200**	**354,040**	**427,200**	**158,762**	**210,100**

Southeast Alaska Power Agency
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as of October 31, 2021

	All Locations		0--No Location		1--Swan Lake		2--Tyee Lake		3--Swan-Tyee Intertie	
	01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21	
	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget
920 - Admin Wages-Benefits										
0110 Wages / PTO	762,039	870,000	762,039	870,000	-	-	-	-	-	-
0120 OT	480	1,700	480	1,700	-	-	-	-	-	-
0140 Taxes	58,946	64,200	58,946	64,200	-	-	-	-	-	-
0150 H&W	185,694	219,200	185,694	219,200	-	-	-	-	-	-
0160 Retirement	325,758	371,700	325,758	371,700	-	-	-	-	-	-
Total 920 - Admin Wages-Benefits	**1,332,917**	**1,526,800**	**1,332,917**	**1,526,800**	**-**	**-**	**-**	**-**	**-**	**-**
921 - Office Expenses										
0190 Medical	100	-	100	-	-	-	-	-	-	-
0300 Communication Services	22,804	28,100	22,804	28,100	-	-	-	-	-	-
0310 Contractor	44,766	94,900	44,766	94,900	-	-	-	-	-	-
0350 Licenses-Permits	116	130	116	130	-	-	-	-	-	-
0390 Software	29,809	20,850	29,809	20,850	-	-	-	-	-	-
0420 Utilities	6,371	8,100	6,371	8,100	-	-	-	-	-	-
0600 Phones, Radios, Video	805	-	805	-	-	-	-	-	-	-
0610 Office Equipment	6,500	14,000	6,500	14,000	-	-	-	-	-	-
0710 Food, Meals	1,340	1,300	1,340	1,300	-	-	-	-	-	-
0730 Office Supplies	8,217	9,200	8,217	9,200	-	-	-	-	-	-
0810 Rolling Stock Maint	476	6,250	476	6,250	-	-	-	-	-	-
0820 Fuels and Oils	698	920	698	920	-	-	-	-	-	-
Total 921 - Office Expenses	**122,003**	**183,750**	**122,003**	**183,750**	**-**	**-**	**-**	**-**	**-**	**-**
923 - Professional Services										
0910 Audit-Accounting	34,700	32,000	34,700	32,000	-	-	-	-	-	-
0920 Banking-Trustee-Investment	26,174	21,050	26,174	21,050	-	-	-	-	-	-
0930 Legal	47,152	104,200	47,152	104,200	-	-	-	-	-	-
0940 Legislative	40,000	40,000	40,000	40,000	-	-	-	-	-	-
0950 Other Professional Services	62,424	146,500	62,424	146,500	-	-	-	-	-	-
Total 923 - Professional Services	**210,450**	**343,750**	**210,450**	**343,750**	**-**	**-**	**-**	**-**	**-**	**-**
924 - Insurance										
0960 Insurance	463,941	498,750	463,941	498,750	-	-	-	-	-	-
Total 924 - Insurance	**463,941**	**498,750**	**463,941**	**498,750**	**-**	**-**	**-**	**-**	**-**	**-**
928 - Regulatory Commission Expense										
0010 Other Regulatory	17,000	14,000	-	-	-	-	17,000	14,000	-	-
0020 FERC Admin	47,633	50,740	0	-	24,884	26,640	22,748	24,100	-	-
0040 FERC Other	25,656	22,910	-	-	25,656	22,910	-	-	-	-
0060 AK Agency	200	400	-	-	50	50	150	125	-	225
0310 Contractor	2,115	6,250	-	-	2,115	6,250	-	-	-	-
Total 928 - Regulatory Commission Expense	**92,604**	**94,300**	**0**	**-**	**52,706**	**55,850**	**39,898**	**38,225**	**-**	**225**
930 - General Expense										
0200 Advertising-Public Relations	9,902	25,000	9,902	25,000	-	-	-	-	-	-
0210 Association Dues	38,239	37,400	38,239	37,400	-	-	-	-	-	-
0220 Board Meeting Expense	2,670	9,000	2,670	9,000	-	-	-	-	-	-
0230 Professional Development	14,700	11,800	14,700	11,800	-	-	-	-	-	-
0240 Travel Expense (Admin)	12,135	12,500	12,135	12,500	-	-	-	-	-	-
0250 Non-Travel Incidental	1,124	1,250	1,124	1,250	-	-	-	-	-	-
0260 Recruitment	24,916	10,000	24,916	10,000	-	-	-	-	-	-
Total 930 - General Expense	**103,685**	**106,950**	**103,685**	**106,950**	**-**	**-**	**-**	**-**	**-**	**-**
931 - Admin Rent										
0371 Rent-Office Space	52,254	52,500	52,254	52,500	-	-	-	-	-	-
0372 Rent-Apartment	9,557	15,500	9,557	15,500	-	-	-	-	-	-
Total 931 - Admin Rent	**61,810**	**68,000**	**61,810**	**68,000**	**-**	**-**	**-**	**-**	**-**	**-**
Total Operating Expenses	**5,538,615**	**6,251,850**	**2,520,926**	**2,982,360**	**1,316,931**	**1,387,265**	**1,475,530**	**1,588,650**	**225,229**	**293,575**
NET OPERATING REVENUE/(EXPENSE)	**3,318,317**	**2,696,925**	**6,336,007**	**5,966,415**	**(1,316,931)**	**(1,387,265)**	**(1,475,530)**	**(1,588,650)**	**(225,229)**	**(293,575)**

Southeast Alaska Power Agency
Statement of Activities
YTD Budget
as of October 31, 2021

	All Locations		0--No Location		1--Swan Lake		2--Tyee Lake		3--Swan-Tyee Intertie		
	01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		01/01/21 Through 10/31/21		
	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	Actual	Current Budget	
Nonoperating Income											
941 - Grant Income											
5410 Grant Income	65,997										
Total 941 - Grant Income	**65,997**										
942 - Interest Income Misc											
5010 Interest Earned Misc	6,319										
5020 Interest DNR Liability	(16)										
5030 Interest Investment Income	83,574										
Total 942 - Interest Income Misc	**89,877**										
944 - Gain/(Loss) Investments											
5200 Realized Gain/(Loss) on Invest	93,939										
5210 Unrealized Gain/(Loss) Investmt	(185,660)										
Total 944 - Gain/(Loss) Investments	**(91,721)**										
946 - Misc Nonoperating Income											
5040 Other Misc Income	6,035										
5041 2021 Submarine Cable Insurance	5,000,000		5041 - Insurance proceeds								
5420 Gain/(Loss) Property Dispositn	(181,922)		5420 - Recording disposal of retired assets, primarily old submarine cable								
Total 946 - Misc Nonoperating Income	**4,824,113**										
Total Nonoperating Income	**4,888,266**										
Nonoperating Expense											
951 - Interest Expense											
6020 Interest Expense Investments	15,706										
Total 953 - Depreciation Expense	**15,706**										
952 - Bond Interest Expense											
6120 Bond Interest Expense 2015 Series	360,528										
6130 Bond Interest Expense 2019 Series	80,480										
6131 Bond Interest Expense 2021 Series	119,708										
Total 952 - Bond Interest Expense	**560,716**										
953 - Depreciation Expense											
6300 Depreciation Expense	4,198,920										
Total 953 - Depreciation Expense	**4,198,920**										
954 - Grant Expense											
6520 Grant Contractual	161,453										
6530 Grant Equipment	127										
Total 954 - Grant Expense	**161,580**										
955 - Misc Nonoperating Expense											
6600 Other Misc Expense	467										
6621 WRG Warehouse-Office	6,222										
6641 Issuance Costs 2021 Bonds	97,658										
Total 955 - Misc Nonoperating Expense	**104,347**										
Total Nonoperating Expense	**5,041,270**										
NET NONOPERATING INCOME/(EXPENSE)	**(153,004)**										
Change in Net Position	**3,165,314**										

Southeast Alaska Power Agency

R&R Summary - Capital Expenditures

as of **October 31, 2021**

	2021 EXPENDITURES	2021 BUDGET	PRIOR YRS EXPENDITURES	OVERALL EXPENDITURES	Overall Budget through 2021
RR19307 - Helipads Cleveland	3,569	500,874	18,626	22,195	538,126
RR19314 - Statn Service Switch	1,542,082	1,543,047	243,953	1,786,035	1,787,000
RR19326 - Don Finney Lane HQ	75,531	2,767,880	5,704	81,235	2,775,000
RR19331 - STCS-HMI-Historian	50,462	330,525	123,563	174,025	430,525
RR20337 - Excitation Brush Vacuum SWL	8,489	16,711	33,389	41,878	50,100
RR20338 - Excitation Brush Vacuum TYL	9,004	12,921	46,649	55,653	59,700
RR20339 - Guy Thimbles STI Phase II	89,965	93,000	118,817	208,782	211,817
RR20341 - Intake Gate Refurbish TYL	91,836	130,396	142,904	234,740	251,300
RR20343 - Partial Discharge Monitors SWL	-	21,710	85,930	85,930	108,229
RR20344 - Spillway Recovery Davit	9,208	8,860	3,640	12,848	12,500
RR20345 - Stationary Winch SWL	11,045	43,500	-	11,045	43,500
RR20346 - XFMR Dif Relay Bailey	41,482	40,000	3,420	44,902	43,420
RR20349 - Submarine Cable Stikine Strait	11,511,221	11,745,903	215,760	11,726,981	13,370,352
RR21350 - Bunkhouse SWL	-	25,000	-	-	25,000
RR21351 - Equipment Trailer KTN	9,088	15,000	-	9,088	15,000
RR21352 - Fiber Buildout PSG WRG	3,296	59,000	-	3,296	59,000
RR21353 - Flashboard Deicing SWL	40,981	44,300	-	40,981	44,300
RR21354 - Guardrail SWL	3,025	21,700	-	3,025	21,700
[1] RR21355 - Lighting TYL-WRG (expensed)	-	26,000	-	-	26,000
RR21356 - Office Unit SWL Four-Plex	4,060	15,000	-	4,060	15,000
RR21357 - PRV Valves TYL	36,949	43,000	-	36,949	43,000
RR21358 - RTAC KTN	27,360	30,000	-	27,360	30,000
RR21359 - XFMR Refurb SWL-Bailey	325,145	379,000	-	325,145	379,000
RR21360 - Potential XFMR TYL	16,559	16,600	-	16,559	16,600
RR21361 - XFMR Circuit Switcher WRG	-	-	-	-	-
[2] RR21362 - XMSN Storm Repair SWL	28,393	28,400	-	28,393	28,400
Total All RR Projects	**13,938,750**	**17,958,327**	**1,042,355**	**14,981,105**	**20,384,569**

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

R&R Projects completed in 2021

[1] RR21355 - Lighting TYL-WRG: This project was expensed as project was spread out over many locations/assets and did not end up fitting SEAPA's Capitalization Policy.

[2] RR21362 - XMSN Storm Repair SWL: Included in this packet for Board Approval.

RR21362
Storm XMSN Repair SWL

Description:	**Transmission line repair related to storm damage**		
Cost Estimate:	**$28,400**	Sched. Complete: OCT 2021	Project Mgmt: **Schofield**

PROJECT DISCUSSION

High winds and heavy rain on the early morning of 10-22-2021 resulted in damage from a hemlock tree, approximately 18 inches in diameter, falling into the Swan Lake transmission line. This occurred on Old Ward Lake Road at mile 6.8 on North Tongass Highway. The tree fell between tower 137 and 138, damaging all three conductors, insulators, and mounting hardware for all towers, up to tower 141. Tower 138 split approximately 12 feet down the center of the pole, which required replacement of the 85-foot wooden pole. A Request for Assistance was placed with KPU under our Mutual Aid Agreement, requesting that the KPU line crew perform all required repairs. This R&R covers the unscheduled equipment replacement costs.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET – EXPENDITURES	
85' Pole (from inventory)	$3,976	FY22 BUDGET	$28,400
KPU Mutual Aid	24,417		
	0		
Total Estimate	$28,393	Total Budget	$28,400

Project Cost Estimate Discussion

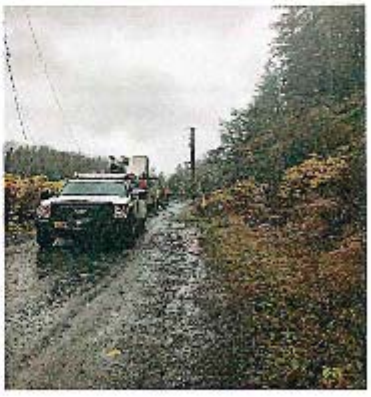
Project cost breakdown displays actual costs. $25K was included in the FY2021 Overhead Transmission Line operations and maintenance budget for "critical unforeseen events" (571-0-0310). Since the total repair costs exceed SEAPA's capitalization threshold, these expenditures have been recorded under an R&R, and approval of this R&R will allow SEAPA to capitalize this project.

Mutual Aid
REQUEST FOR ASSISTANCE
Between
Southeast Alaska Power Agency (SEAPA) and
Ketchikan Public Utilities (KPU) for
Emergency Transmission Line Support

Event Name:	Storm Damage Ward Cove	Requesting Party (RP)			SEAPA
Date:	10/22/2021	Name of RP Representative			Ed Schofeld
Time Needed:	ASAP	Name of Assisting Party (AP) Rep Contacted			Andy Donato
Contact Via	☑ Phone ☐ Email	RP Phone	907.228.2281	AP Phone	907.228.1847

Description and Photos of Incident

On 10/22/2021 at approximately 7:55 a.m. a tree located on U.S. Forest Service property in the Ward Cove area of Ketchikan, Alaska, fell into the Swan-Bailey Transmission Line adjacent to Structure #137 which also damaged Structures 138 and 139. Extensive damage to poles and insulators was observed.



Aid Requested	Labor, personnel, and equipment necessary to repair damages.
RP Supplies Provided	One (1) Pole and necessary insulator stacks
Name of Authorized Representative	Ed Schofield, SEAPA Power System Specialist
Signature of Authorized Representative	Ed Schofield Date 10-22-2021

SOUTHEAST ALASKA POWER AGENCY

Revenue Fund	2,767,008.42	-
Dedicated R&R Fund	1,744,145.08	-
Construction Fund	5,560,907.12	-
Commercial Checking	**$10,072,060.62**	-

DISBURSEMENTS
AUG-SEP-OCT-NOV 2021

VENDOR		REVENUE FUND	DEDICATED R&R FUND	CONSTRUC-TION
Admiralty Environmental LLC		36.75	-	-
AK DNR 111020 JNU		50.00	-	-
Alaska Airlines Cargo		71.19	-	-
Alaska Marine Lines		113.30	-	-
Alaska Permanent Capital, Inc		3,155.02	-	-
Alaska Power Association		600.00	-	-
Alltek Network Solutions Inc		219.95	-	-
Alpine Mini Mart		49.65	-	-
Amazon.com		485.77	-	-
Angerman's Inc		825.26	-	-
Applied Industrial Technologies Inc		-	865.53	-
Arrowhead LP Gas WRG		60.64	-	976.56
Ascent Law Partners LLP		19,445.00	-	105.00
BAM LLC	Intake Gate Refurbishment	-	74,500.00	-
Bank of America AUG 2021		9,899.23	32.17	-
Bank of America JUL 2021		14,653.04	360.61	164.41
Bank of America OCT 2021		11,230.52	147.29	63.95
Bank of America SEP 2021		14,128.56	202.80	60.16
Bay Company		3,652.71	-	-
BDO USA LLP		9,700.00	-	-
Big Sky Hydro LLC		43,389.42	-	-
Blasingame,Brett		27.31	-	-
Box-It LLC		-	-	12,500.00
Breakaway Adventures LLC		1,500.00	-	-
Breakaway Ferry & Freight LLC		8,350.00	-	-
Brown & Kysar Inc		30,475.51	-	-
Buness Electric LLC		404.84	8,542.27	-
Bureau Veritas North America		589.20	-	-
C&T Fire Protection Inc		8,992.66	-	-
Cambria Properties LLC		6,100.00	-	-
Center Marine Services Inc		-	-	38,078.20
City Market Inc		562.80	135.96	65.29
Eagle Eye Power Solutions, LLC		633.00	-	-
Electric Power Constructors Inc	Transmission line maintenance , RR19314 Station Service Switchgear SWL, RR20339 Guy Thimbles	542,731.63	1,521,464.81	-
Employee Travel Reimb. OCT 2021		86.39	-	-
Employee Travel Reimb. SEP 2021		268.75	-	-
Evans Keane LLP		1,860.51	-	-
Federal Energy Regulatory Commissio	FERC Admin Fees	57,043.43	-	-
FedEx		414.79	861.12	-
First Bank		135.00	-	-
First City Electric, Inc		220.54	-	-
Frontier Shipping & Copyworks		126.00	-	-
G2 Risk Consulting		4,612.50	-	-
Grainger		4,603.46	-	-
H.D. Fowler Company Inc		3,584.85	-	-
Hammer & Wikan, Inc		213.22	93.20	-
HDR Alaska Inc		1,719.57	-	-
Jaco Analytical Lab, Inc		2,762.70	-	-
Ketchikan City Port & Harbor		568.92	-	-

SOUTHEAST ALASKA POWER AGENCY

Revenue Fund	2,767,008.42	-
Dedicated R&R Fund	1,744,145.08	-
Construction Fund	5,560,907.12	-
Commercial Checking	**$10,072,060.62**	-

DISBURSEMENTS
AUG-SEP-OCT-NOV 2021

VENDOR		REVENUE FUND	DEDICATED R&R FUND	CONSTRUC-TION
Ketchikan Daily News		943.25	129.25	-
Ketchikan Gateway Borough		20,928.72	-	-
Landing Hotel		3,784.28	517.95	-
Legacy Comm Services		860.20	-	-
LNM Services		670.09	58.85	-
Madison Lumber & Hardware Inc		371.12	-	-
Mapcon Technologies, Inc		9,101.08	-	-
Marble Construction		1,284.00	-	-
Marsh USA	Insurance (Nov 2021-Oct 2022)	722,207.64	-	-
McMaster-Carr Supply Company		3,106.03	-	-
McMillen Jacobs Associates	Site Definition Documents (DCCED Grant)	54,172.72	-	-
Mersen Canada Dn Ltd		611.55	-	-
Mersen USA PTT Corp		-	3,000.00	-
Mitchell Instrument Co		512.11	-	-
NC Machinery Co		917.94	-	-
North Creative Design Co LLC		2,062.50	-	-
Northwest Public Power Assn		250.00	-	-
NRECA 758777		595.00	-	-
NRECA Group Ins	Administrative Employee Benefits (3 mo.)	56,646.15	-	-
NRECA Group Ins Admin		4,713.72	-	-
NRECA RSP Admin		2,724.21	-	-
NRECA RSP Trust Contrib	Administrative Employee Benefits (3 mo.)	88,135.53	-	-
Ottesen's Inc		862.68	-	-
Pacific Pride of Alaska LLC		173.98	-	-
Petro Marine Services-KTN		14,844.28	301.28	-
Petro Marine Services-WRG		13,508.47	-	-
Pilot Publishing, Inc		368.00	-	-
Puget Sound Pipe & Supply Co.		-	603.38	-
Quantum Spatial Inc	Aerial topographic mapping (DCCED Grant)	92,266.00	-	-
R&M Engineering-Ketchikan, Inc		11,429.68	-	-
Ray Matiashowski		16,000.00	-	-
Samson Tug & Barge		1.80	-	660.00
Satellite & Sound Inc		2,870.00	-	-
Satellite & Sound, Inc		1,015.00	-	-
Scandia House Hotel		133.00	-	-
Schmolck Mechanical KTN		1,135.63	-	-
SE Business Machines		1,120.00	-	-
Seaborne Marine Services JV		2,617.50	-	-
Segrity LLC	RR19314 Station Service, RR19331 HMI, RR21353 Flashbd Deice	29,034.85	48,457.85	-
Sentry Hardware & Marine		1,529.91	-	-
Service Auto Parts		1,687.04	-	-
Sockeye Business Solutions Inc		18,652.00	-	-
Southeast Auto & Marine Parts, Inc		3,080.41	-	-
Southeast Diesel & Electric		2,346.26	-	-
Specialty Engineering, Inc		-	11,735.00	-
Stikine Inn		810.36	916.52	214.47
Structural Diagnostic Testing Services		30.00	-	-
Sumitomo Electric USA Inc	RR20349 Submarine Cable Stikine Strait	-	-	5,500,200.00

SOUTHEAST ALASKA POWER AGENCY

Revenue Fund	2,767,008.42	-
Dedicated R&R Fund	1,744,145.08	-
Construction Fund	5,560,907.12	-
Commercial Checking	**$10,072,060.62**	-

DISBURSEMENTS
AUG-SEP-OCT-NOV 2021

VENDOR		REVENUE FUND	DEDICATED R&R FUND	CONSTRUC-TION
Sunrise Aviation Inc		23,765.00	5,215.00	7,700.00
Superior Marine Services		-	4,501.79	-
Svendsen Marine LLC		237.75	-	-
Tamico Inc		470.40	-	-
Taquan Air		4,835.00	1,430.00	-
Temsco Helicopters Inc		3,305.25	5,475.75	-
TexRus LLC		10,677.43	660.00	-
Tongass Business Center Inc		1,413.23	-	-
Tongass Trading Company Inc		129.99	-	-
TSS		14,598.50	-	-
Tyler Industrial Supply		374.84	-	-
Tyler Rental Inc		55.00	-	-
US Geological Survey		17,000.00	-	-
Wells Fargo 2015 Interest	2015 Series Bond Interest	162,564.00	-	-
Wells Fargo 2019 Interest	2019 Series Bond Interest	44,500.00	-	-
Wells Fargo 2019 Principal	2019 Series Bond Principal	281,600.00	-	-
Wells Fargo 2021 Interest	2021 Series Bond Interest	154,909.00	-	-
Welsh Whiteley Architects, LLC	RR19326 Don Finney Lane HQ	-	53,852.00	-
Westpark Electric Ltd		2,572.97	-	-
Workforce Go		3,912.30	-	-
Wrangell City & Borough		27,362.64	-	-
Wrangell IGA Inc		765.90	-	119.08
Wrangell Sentinel		292.30	84.70	-
X2nSat		11,198.64	-	-
		2,767,008.42	**1,744,145.08**	**5,560,907.12**

MEMORANDUM
ATTORNEY-CLIENT COMMUNICATIONS

TO: Chairperson Robert Sivertsen
Southeast Alaska Power Agency

FROM: Joel R. Paisner, Ascent Law Partners, LLP, Counsel to SEAPA

DATE: November 29, 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 December 10, 2021, for the following topics:

(1) final report on Hydrosite Analysis and possible recommendations;

(2) discuss engineer's estimate for proposed project;

(3) discuss potential interconnection;

(4) discuss employees' performances; and,

(5) conduct an evaluation of an Agency employee.

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 hydrosite analysis, engineer's estimate for a proposed project, potential interconnection, employees' performances, and evaluation of an Agency employee, as these discussions will include matters, the immediate knowledge of which would clearly have an adverse effect upon the finances of the Agency and the Projects and which discussions may involve subjects that tend to prejudice the reputation and character of a person.

AGENDA ITEM 8B

(Reserved as placeholder for any actions that may be taken in regular session following Executive Session discussions)

SOUTHEAST ALASKA POWER AGENCY

Date: November 29, 2021

To: SEAPA Board of Directors

From: Trey Acteson, Chief Executive Officer

Subject: SEAPA 2022 Safety Program Support Services and Training Contract

In 2019, a contract for SEAPA's Safety Program Support Services and Training was competitively bid. TSS, Inc. of Ketchikan was the sole bidder. The Board awarded the contract to TSS as a sole-source on a T&M basis at their proposed staff and hourly rates for the total not-to-exceed value of $96,000 for the remainder of 2019 through December 31, 2020. The contract provides that the Agency may exercise an option to renew annually unless the parties agree otherwise in writing.

At its December 10, 2020, board meeting, the Board awarded a one-year extension of the sole-source contract from January 1, 2021 through December 31, 2021 for the decreased not-to-exceed value of $76,000. TSS elected not to increase their staff and hourly rates for their 2021 services to the Agency.

A draft of a second amendment to the sole-source contract extending it through December 31, 2022 for the decreased not-to-exceed value of $40,000 is attached. TSS has again elected to not increase their rates for 2022 services.

Staff recommends the Board extend the contract as a sole source to TSS, Inc. for 2022 for the not-to-exceed value of $40,000.

Please consider the following suggested motion:

SUGGESTED MOTION
I move to authorize staff to enter into a sole-source contract amendment to SEAPA's Task Order No. 20055 for SEAPA's 2022 Swan and Tyee Lake Safety Program Support Services and Training, with TSS, Inc., for the not-to-exceed value of $40,000.

Attachment:

Draft Amendment No. 2 to TO20055 (TSS, Inc.)

KETCHIKAN - PETERSBURG - WRANGELL
SEAPA
Southeast Alaska Power Agency

T | S | S
the safety specialists

AMENDMENT NO. 2 to TASK ORDER #20055

THIS AMENDMENT NO. 2 (hereinafter "Amendment") to Task Order #20055 is made and entered into between the **Southeast Alaska Power Agency** (hereinafter "SEAPA" or "Agency"), and **TSS, Inc.** (hereinafter "Consultant"), WITNESSETH:

RECITALS

A. SEAPA and Consultant (collectively referred to herein as "Parties") entered into a Consulting Services Agreement and Task Order #20055 on October 8, 2019 for Consultant's Swan Lake and Tyee Lake Safety Program Support Services and Training, effective from October 1, 2019 through December 31, 2020.

B. Paragraph 4 of Task Order #20055 provides SEAPA an option to renew the contract to Consultant on an annual basis for each successive calendar year. SEAPA elected to exercise the option for 2021 and on December 10, 2020, at a regular board meeting, its Board of Directors awarded Consultant an extension of the sole source contract for the not-to-exceed value of Seventy-six Thousand and 00/100ths Dollars ($76,000) for Consultant's Safety Program Support Services and Training effective from January 1, 2021 through December 31, 2021.

C. SEAPA may continue to exercise a renewal option for the sole-source contract each successive calendar year subject to approval by its Board of Directors.

D. The Parties seek to further amend Task Order #20055 to extend the sole-source contract from January 1, 2022 through December 31, 2022. Consultant's staff and hourly rates for tasks, cancellation fee, lodging, annual audiometric testing, and respiratory fit testing prices set forth in Exhibit A to Task Order #20055 remain the same for Consultant's 2022 services. The not-to-exceed value however will be decreased from $76,000 to $40,000 based on actual costs of services rendered in 2021.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. Task Order #20055 is amended accordingly.

2. All other terms and conditions of Task Order #20055 shall remain in full force and effect.

3. The Parties agree that this Amendment, contracts ancillary to this Amendment, and related documents to be entered into in connection with this Amendment, will be considered signed when the last dated signature of a party is delivered by scanned image (e.g., .pdf or .tiff file extension name) as an attachment to electronic mail (email). Such scanned signature will be treated in all respects as having the same effect as an original signature.

APPROVED:

SOUTHEAST ALASKA POWER AGENCY	**TSS, INC.**
By:_____	By:_____
Trey Acteson, CEO	Renee L. Schofield, President
Date:_____	Date:_____

SOUTHEAST ALASKA POWER AGENCY

Date: November 29, 2021

To: Trey Acteson, Chief Executive Officer

From: Clay Hammer, Operations Manager

Subject: Tyee Air Carrier Contract

Sunrise Aviation, Inc., located in Wrangell, has facilitated most of the air transportation between Wrangell and the Tyee Hydroelectric Facility for the past several years. There are no other air carriers in Wrangell that can provide the services.

At its 12/10/2020 meeting, the Board authorized staff to enter into a sole-source contract with Sunrise that includes an evergreen clause automatically renewing the contract annually, unless it is terminated otherwise, at a special rate of $500 for each contracted, scheduled, completed flight between Wrangell and Tyee with an option for Sunrise to adjust its rates annually for insurance and fuel costs. The contract included a regular rate of $550 for all other flights.

Total costs from 01/01/2021 to date for the services are approximately $100,000.

Sunrise Aviation proposes increasing its special rate from $500 to $550/flight and regular rate from $550 to $600/flight due to increased fuel and insurance costs effective as of January 1, 2022 through December 31, 2022. The Air Carrier Contract and proposed amendment incorporating the increased rates are attached for your review.

Staff seeks the Board's consideration and approval of extending the sole-source contract through 12/31/2022 and increasing the special rate to $550/flight and regular rate to $600/flight.

Please consider the following suggested motion:

SUGGESTED MOTION
I move to authorize SEAPA staff to enter into an amendment to its sole source Air Carrier Contract executed between Sunrise Aviation, Inc. and SEAPA on February 18, 2021, for fixed wing flight services at the special rate of $550 for each contracted, scheduled, completed flight between Wrangell and the Tyee Hydroelectric facility and regular rate of $600 per flight for all other flights, effective as of January 1, 2022.

Attachments:

- *Amendment No. 1 to Air Carrier Contract*
- *SEAPA-Sunrise Air Carrier Contract*

SEAPA Southeast Alaska Power Agency	AMENDMENT NO. 1 TO AIR CARRIER CONTRACT	SUNRISE AVIATION, INC.

THIS AMENDMENT NO. 1 ("Amendment") to an Air Carrier Contract ("Contract") is made and entered into between the **Southeast Alaska Power Agency** ("SEAPA" or "Agency"), and **Sunrise Aviation, Inc.** ("Contractor"), WITNESSETH:

RECITALS

A. SEAPA and Contractor (collectively referred to as "Parties") entered into Contract on February 18, 2021, for Contractor's air carrier services.

B. The Contract was authorized as a sole-source contract by SEAPA's Board of Directors at a regular Board meeting held on December 10, 2020, and automatically renews annually unless terminated otherwise by either party subject to the Contract's termination provisions and provides for Contractor to adjust its rates on November 1 annually for insurance and fuel cost adjustments.

C. The Parties seek to amend Section 2 of Contract to increase the Special Contract Rate from $500 to $550 and the Regular rate from $550 to $600 for the two types of aircraft identified in Section 2 of Contract.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. Section 2 (Aircraft, Rates, and Pilots) of the Contract is amended as follows:

Aircraft	Rates		Capacity
N9468Q 1972 Beechcraft A-36 Bonanza	$550	Special Contract Rate for each scheduled completed flight between Wrangell and Tyee subject to annual adjustments as set forth in Section 1.C. above.	Capable of carrying minimum of four (4) passengers, mail, freight, and supplies
	$600	Regular rate for all flights utilizing this aircraft except scheduled flights between Wrangell and Tyee.	
N321JP 1981 Cessna 185 Amphib (float/wheel plane)	$550	Special Contract Rate applies to this aircraft only If the Bonanza is not available for a scheduled flight between Wrangell and Tyee and this aircraft must be used instead.	Capable of carrying three (3) passengers, mail, freight, and supplies
	$600	Regular rate for all flights utilizing this aircraft except when this aircraft must be used instead of the Bonanza for a scheduled flight between Wrangell and Tyee.	

PILOTS	
Name	**Requirements**
James Michael Lane with 2800 Alaska flight hours as of 11/01/2020	Minimum of 1,000 Alaska flight hours year-round flight time in Southeast Alaska subject to acceptance by SEAPA and a thorough procedures and training program, and at least 500 hours in the Aircraft type identified in this section above
Any retained pilot	

2. All other terms and conditions of the remaining paragraphs of the Contract shall remain in full force and effect.

3. SEAPA and Contractor agree that this Amendment to the Contract, agreements ancillary to this Amendment, and related documents to be entered into in connection with this Amendment, will be considered signed when the last dated signature of a party is delivered by scanned image (e.g., .pdf or .tiff file extension name) as an attachment to electronic mail (email). Such scanned signature will be treated in all respects as having the same effect as an original signature.

APPROVED:

SOUTHEAST ALASKA POWER AGENCY	**SUNRISE AVIATION, INC.**
By:_____	By:_____
Trey Acteson, CEO	James M. Lane, President
Date:_____	Date:_____

SEAPA – Southeast Alaska Power Agency	SUNRISE AVIATION, INC.

AIR CARRIER CONTRACT
BETWEEN
SOUTHEAST ALASKA POWER AGENCY AND SUNRISE AVIATION, INC.

COVID-19 ADVISORY ACKNOWLEDGMENT

The safety of SEAPA's employees, supply partners, consultants/contractors, families, and visitors remain SEAPA's overriding priority. SEAPA is monitoring the COVID-19 situation closely and will periodically update Agency guidance based on current recommendations. Only business critical visitors are permitted at any of SEAPA's facilities at this time. Contractor expressly acknowledges Agency's concerns and agrees that it will cooperate with Agency by participating in any necessary screening and/or testing as conditions warrant. The Center for Disease Control has guidelines for cleaning and sanitizing of aircraft. A copy of Contractor's Covid-19 Health & Safety Protocols is attached hereto as **Exhibit A** and made a part hereof.

The parties to this Air Carrier Contract ('Contract') are the **SOUTHEAST ALASKA POWER AGENCY**, a Joint Action Agency, formed under Alaska Statutes §§ 42.45.300, *et seq.*, of 1900 First Avenue, Suite 318, Ketchikan, Alaska 99901 ('SEAPA' or 'Agency') and **SUNRISE AVIATION, INC.,** an Alaska corporation, doing business in the State of Alaska, of Post Office Box 1440, Wrangell, Alaska 99929-1440 ('Contractor'). SEAPA (or Agency) and Contractor are collectively referred to herein as the 'Parties'.

RECITALS

A. Agency desires to obtain air carrier services.

B. Contractor can perform and desires to provide fixed wing flight services to Agency.

CONTRACT

In consideration of the mutual promises contained herein, the Parties agree as follows:

1. Contract Term, Option to Renew, and Rate Adjustments.

A. Term. The term of this Contract is effective as of December 1, 2020 through December 31, 2021.

B. Option to Renew. This Contract shall be automatically renewed each year as authorized by SEAPA's Board of Directors at a regular board meeting held on December 10, 2020, unless terminated otherwise by either party subject to the termination provisions of Section 12 herein.

C. The Parties agree the Contract may be opened on November 1 each year during its tenure for the sole purpose of contract rate adjustment(s) directly related to insurance or fuel costs. Contractor agrees that all agreed rate increases will be accompanied by supporting documents and will be effective January 1st each year that this contract is in place.

2. Aircraft, Rates and Pilot(s). Except for maintenance and any other unforeseen circumstances, Contractor's intent is to utilize the following aircraft and licensed and qualified pilots for the flight services required under this contract:

Aircraft	Rates		Capacity
N9468Q 1972 Beechcraft A-36 Bonanza	$500	Special Contract Rate for each scheduled completed flight between Wrangell and Tyee subject to annual adjustments as set forth in Section 1.C. above.	Capable of carrying minimum of four (4) passengers, mail, freight, and supplies
	$550	Regular rate for all flights utilizing this aircraft except scheduled flights between Wrangell and Tyee.	
N321JP 1981 Cessna 185 Amphib (float/wheel plane)	$500	Special Contract Rate applies to this aircraft only If the Bonanza is not available for a scheduled flight between Wrangell and Tyee and this aircraft must be used instead.	Capable of carrying three (3) passengers, mail, freight, and supplies
	$550	Regular rate for all flights utilizing this aircraft except when this aircraft must be used instead of the Bonanza for a scheduled /flight between Wrangell and Tyee.	

PILOTS	
Name	**Requirements**
James Michael Lane with 2800 Alaska flight hours as of 11/01/2020	Minimum of 1,000 Alaska flight hours year-round flight time in Southeast Alaska subject to acceptance by SEAPA and a thorough procedures and training program, and at least 500 hours in the Aircraft type identified in this section above
Any retained pilot	

3. Flight Services. Contractor shall provide to Agency the following flight services:

A. Two (2) fixed wing flights per week between Wrangell and the Tyee Hydroelectric Plant, with an estimated one hundred four (104) flights per year. These flights will normally be on Wednesday each week scheduled to match the manning requirements of the Tyee Hydroelectric Project.

B. It is not anticipated that the normal days of shift rotation will change, but if the rotation schedule at the Tyee Hydroelectric Plant does change, the Contractor must be prepared to change days to accommodate the shift rotation, including Sundays.

C. In the event the regularly scheduled shift change falls on a holiday, the holiday will have no effect on the scheduled flight.

D. The regularly scheduled flights between Wrangell and the Tyee Hydroelectric Plant shall not be combined with any other business of the Contractor without prior approval of SEAPA's Operations Manager.

E. Provisions shall be made by the Contractor for the holding of perishable food, and dry goods forty-eight (48) hours prior to flight time.

F. When the aircraft is only partially loaded on trips to the Tyee Hydroelectric Plant, the Contractor may use the trip for the purpose of familiarizing a relief pilot with the area.

G. At times, individuals other than SEAPA employees may wish to travel to the Tyee Hydroelectric Plant on SEAPA's regular scheduled flight. In this event and only if there is room on the flight after passengers, mail, freight, and supplies are accounted for, the Contractor must first contact SEAPA's Operations Manager for verbal approval. At times however the regularly scheduled flight rate shall be prorated if SEAPA's Operations Manager determines the requesting individual should pay for their seat; in which case, a seat fare of $200 will be imposed on the requesting party, and SEAPA's contracted scheduled flight rate reduced accordingly. SEAPA's Operations Manager must approve any non-employee flying to the Tyee Hydroelectric Plant location.

H. From time to time, SEAPA vendors and/or workers may need to fly out to Tyee; flights for these individuals must be approved by SEAPA's Operations Manager in advance. There are no exceptions. If the flight is not a scheduled SEAPA flight, the vendor/worker will be responsible and charged directly for their flight by the Contractor, unless SEAPA's Operations Manager gives verbal approval for SEAPA's account to be billed under this Contract.

4. Tyee Aircraft and Runway Standard Operating Procedure (SOP). Upon signing this Contract, Contractor acknowledges SEAPA's Tyee Aircraft and Runway Standard Operating Procedure (SOP) attached hereto as **Exhibit B** and made a part hereof, and that it has been read, understood, and agreed to with respect to statements relating to aircraft carriers in the SOP.

5. Flight Scheduling and Cancelation.

A. Persons authorized to change any flight scheduled on behalf of SEAPA are the SEAPA Management staff and Administrative Assistant.

B. Any on-site personnel at Tyee may call the Contractor for medivac purposes. In the event the medivac is for an employee's dependents, guests, vendor and/or any other non-SEAPA employee, charges for the flight shall be directly billed to the individual person.

C. SEAPA must provide Contractor a minimum of forty-eight (48) hours' notice via email to sunriseaviation@gci.net if any scheduled contract flight is canceled for any reason other than weather. The Parties acknowledge that weather in Southeast Alaska can be unpredictable and transportation to SEAPA's Tyee Hydroelectric Facility in Bradfield Canal is limited to air carriers and vessels, and that transportation by vessel is often limited to an early

morning high tide. SEAPA relies on weather forecasts in advance of a scheduled flight to determine whether a cancelation notice is necessary so transportation by vessel for its crew change can be arranged as tides allow. SEAPA reserves the right to have the flexibility to cancel a flight, with only twenty-four (24) hours' notice for weather if the forecast is predicted to be questionable on the day the flight is scheduled. The Parties expressly agree the cancelation is effective even if weather conditions become conducive to flying on the day of the scheduled flight contrary to the earlier prediction that transportation by flight is questionable. If SEAPA does not exercise its right to cancel a flight due to weather and weather delays the flight, the terms of Section 7, below, shall apply.

D. Contractor's process for flight manifests is recordation of the date, time, location, and names of the passengers on Contractor's schedule located in Contractor's office. In the event of a deviation in Contractor's flight plan, Wrangell Search & Rescue will be notified by individual's monitoring the plan, who in turn will notify the Wrangell Fire Chief who is authorized and has access to Contractor's office at all times in an emergency to obtain manifest and other information necessary for the emergency. Contractor also communicates information verbally to the Tyee Lake Plant personnel manning communications as to passenger names and other flight information prior to or during each flight to and from the Tyee Plant.

6. Use of Cessna 185 Amphib.

If Contractor uses its Cessna 185 Amphib as a float plane as may be required for weather conditions of visibility of less than one thousand (1,000) feet elevation or five (5) miles in distance, or SEAPA requests use of the Amphib as a float plane for any other reason, Contractor's standard charter rates for the actual time it takes for the flight will apply. SEAPA's regularly scheduled contract rate does not apply to the Amphib when used as a float plane.

7. Delayed Flights.

A. Weather delayed flights not otherwise canceled by SEAPA shall be made up as soon as possible. A flight delayed by weather to or beyond the next scheduled flight shall only be made up if the next scheduled flight cannot transport all waiting passengers and supplies.

B. In the event a regularly scheduled flight is delayed until the next day, the delayed flight will take precedence over any other schedules the Contractor may have made.

8. Payment Terms.

The Contractor shall submit monthly invoices which shall include the following for completed flights:

- Description of aircraft
- Date of flight
- Locations flown
- Actual passenger names (group reference such as "crew" is not acceptable) or if freight only on flight, identify as "Freight"
- Flight quantity, rate per flight and total
- Copies of Contractor's flight tickets

SEAPA's payment terms are Net 30 following receipt of the invoice.

9. Replacement Aircraft

Contractor's intent is to provide all required flights under this Contract; however, as of the signing of this Contract, there is only one pilot available to operate the aircraft utilized for services under this Contract. The Parties acknowledge the necessity of memorializing a schedule for time off for the sole pilot for vacations and unforeseen events (e.g., sickness, injury, or any other emergency) with reasonable notice to SEAPA as follows:

Month	Length of Time Requested	Notice Required to SEAPA
November and December	One Day to Two Weeks	Minimum 30 days' notice
January through March	One Day to Two Weeks	Minimum 30 days' notice
Unforeseen Events	To Be Determined	As soon as reasonably possible

In the event the Contractor has no aircraft or pilot available for scheduled flights, SEAPA shall be responsible for obtaining its own transportation to its Tyee Lake Hydroelectric Facility.

10. Representations and Warranties. The Contractor represents and warrants that it is a certificated air carrier pursuant to all local, State, and Federal regulations; and shall provide the following:

- Pilot with minimum of 1,000 Alaska flight hours year-round flight time in Southeast Alaska subject to a thorough procedures and training program and subject to acceptance by SEAPA, and at least 500 hours in the two aircraft identified in Section 2 above
- names and addresses of additional qualified pilots upon request by SEAPA
- qualified pilots familiar with local operating conditions, and in all other ways qualified to perform services under this Contract, consistent with all local, State and Federal regulations

and shall:

- operate and maintain all aircraft providing services under this contract, in flight-worthy condition, and in full compliance with all local, State and Federal regulations
- certify that its owner and operators have knowledge of all local, State and Federal regulations as they affect services under this Contract, and that they are now and will continue to be in compliance with all local, State and Federal regulations as they affect service under this Contract

and that the aircraft offered for use under this Contract possess the following safety features:

- a minimum of four (4) emergency cabin exits in the Beechcraft Bonanza
- a minimum of two (2) emergency cabin exits in the Cessna 185
- stretcher configuration capability

and that:

- aircraft offered under this Contract present a good appearance, including, but not limited to, a neat and clean interior with no visible corrosion or damage, and no fuel or oil leaks
- pilots offered under this Contract possess exemplary safety records, and have current FAR part 135 approval for each make and model of aircraft to be used to fulfill this Contract
- pilots are responsible for the safety of the aircraft, occupants, and cargo, and shall comply with all applicable local, State and Federal regulations regarding safety. The pilot shall refuse any flight or situation which he/she considers hazardous or unsafe
- pilots shall not allow smoking, consumption of alcohol, or the use of any judgment impairing substance by any occupant during flights under this Contract. Pilots may refuse passage to anyone that, in his/her opinion, is under the influence of any judgment impairing substance.

11. Status of Contractor. Contractor will be an independent Contractor and not an employee of Agency or the State of Alaska. Contractor represents and warrants that it has, or will obtain prior to the start of work, and will maintain, as required by applicable laws, ordinances, codes, and regulations all registrations, licenses, permits, and other similar documents and certification necessary for its performance of the work hereunder for successful performance of this Contract. Contractor shall not represent itself as an agent of Agency for any purpose and has no authority to bind Agency.

12. Termination

a. SEAPA may terminate this Contract for any reason upon thirty (30) days' written notice to Contractor, provided that SEAPA pays Contractor in full for fixed wing flight services already performed and delivered in accordance with this Contract.

b. SEAPA may terminate this Contract if Contractor assigns its rights or obligations to a third party without SEAPA's prior written consent.

c. Either party may terminate this Contract or any part thereof in which event such party shall have no further duties or obligations hereunder and/or may pursue any remedies the party may have under this Contract, at law or in equity, upon ten (10) business days' written notice to the other party upon the occurrence of any of the following events:

1. either party makes a general assignment for the benefit of its creditors, files a voluntary petition in bankruptcy or any petition or answer seeking, consenting to, or acquiescing in reorganization, arrangement, adjustment, composition, liquidation, dissolution or similar relief;

2. either party files an involuntary petition in bankruptcy, or other insolvency protection against a party is filed and not dismissed within sixty (60) days

3. appoints a receiver or trustee in bankruptcy or other similar officer over any or all of its property or assets;

4. either party has filed against it an involuntary petition in bankruptcy which remains in effect for thirty (30) days or makes any arrangements for the benefit of creditors; or,

5. either party merges with or is acquired by a third party without the other party's prior written consent.

d. Where the Contractor's services have been so terminated by SEAPA, the termination will not affect any rights or remedies of SEAPA against the Contractor then existing

or which may thereafter accrue. Any retention or payment of monies due the Contractor by SEAPA will not release the Contractor from liability.

13. Insurance.

A. Contractor shall procure and maintain minimum insurance coverage and limits of liability as more particularly described on the Certificate of Aircraft Insurance attached hereto as **Exhibit C** and made a part hereof, and shall provide evidence of the insurance to SEAPA by way of Certificates of Insurance acceptable in form and content, or their insurance companies and/or agents, naming the **SOUTHEAST ALASKA POWER AGENCY** as Certificate Holder and Additional Insured for the work specified in this Contract. Contractor shall provide evidence of current insurance to SEAPA annually upon renewal. Certificates of Insurance shall be delivered by email to: ContAdmin@seapahydro.org or may be mailed to:

Southeast Alaska Power Agency
1900 First Avenue, Suite 318
Ketchikan, Alaska 99901

B. Waiver of Subrogation. Contractor's insurers shall waive their rights of subrogation against the Agency under the insurance policies required herein.

C. Cancellation of Insurance. The Contractor shall not cause any insurance policy to be cancelled or permit any policy to lapse or reduce the amount of such insurance during the period of the Contract. All insurance policies shall include a provision to the effect that the insurance policy shall not be subject to cancellation, lapse or to a reduction in the amount of insurance until written notice has been first delivered to the Agency by the insuring company stating the date that such cancellation, lapse or reduction shall be effective, which date shall not be less than thirty (30) days after the delivery of such notice to the Agency.

Prior to any policy of insurance renewal, Contractor shall provide acceptable evidence of such renewal not less than ten (10) days before expiration of the term of the policy.

D. Primary Insurance. Such insurance afforded to Agency as additional insured under Contractor's policies shall be endorsed where necessary to be primary insurance and not excess over, or contributing with, any insurance purchased or maintained by Agency.

E. Release of Liability. Contractor's maintenance of insurance shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provision of this Contract. Damage recoverable by Agency shall not be limited by the amount or scope of the required insurance coverage.

14. Indemnification.

A. Notwithstanding any other provision of this Contract, neither party shall be liable for any indirect, incidental, special, consequential, exemplary, or punitive damages (including without limitation, damages for lost profits or lost revenues arising out of the performance or failure to perform under this Contract). Nothing in this Contract shall be construed as limiting the liability of either party for personal injury or death resulting from the negligence of a party or its employees.

B. To the extent permitted by law, each party (the indemnitor) agrees to defend, indemnify and save harmless the other party (the indemnitee), its elected board members, officers, agents and employees, from and against all loss or expense including, but not limited to: judgments, settlements, attorneys' fees and costs, claims for damages, penalties or other relief caused by the indemnitor's alleged negligence, or wrongful conduct, except for the injuries, penalties and damages caused by the sole negligence or wrongful conduct of the indemnitee. Claims for damages or other relief include, but are not limited to, those for personal or bodily injury including death. If the claim, suit, or action involves concurrent negligence of the parties, the indemnity provisions provided herein shall be applicable only to the extent of the percentage of each party' s negligence.

15. Modification. This Contract may be modified only by mutual written Contract by Agency and Contractor with specific reference to this Contract.

16. Governing Law. This Contract shall be governed by the laws of the State of Alaska. Venue of any action shall be in the Superior Court of the State of Alaska, First Judicial District, at Ketchikan.

17. Waiver. The failure of Agency to demand strict performance of any provision of this Contract shall not constitute a waiver of any provision, term, covenant, or condition of this Contract or of the right to demand strict performance in the future.

18. Dispute Resolution. If parties to this Contract are unable to reach a mutually agreeable resolution of any dispute after a good faith effort to resolve it, then any dispute or action under this Contract shall be mediated by a professional mediator mutually agreed upon by the parties at a mutually agreed upon location. If such mediation does not settle the dispute, it shall be subject to binding arbitration under the current rules governing commercial arbitration as promulgated by the American Arbitration Association. The arbitrator of any dispute or claim brought under or in connection with this Contract shall not have the power to award injunctive relief: injunctive relief may be sought solely in an appropriate court of law. No claim subject to arbitration under this Contract may be combined with a claim subject to resolution before a court of law. In any action to enforce or interpret this Contract, the prevailing party shall be entitled to recover, as part of its judgment, reasonable attorney's fees and associated necessary costs.

19. Affirmative Action/Equal Employment Opportunity. Agency is an Equal Opportunity Employer (EEO) under federal and Alaska law, and it is unlawful to discriminate against any employee or applicant for employment on the basis of race, religion, color, national origin, age, physical or mental disability, sex, marital status, changes in marital status, pregnancy, or parenthood (unless the reasonable demands of such position require a distinction). This is the policy of the Agency ("EEO Policy").

Contractor agrees that this EEO Policy shall apply equally to it, its employees, and hiring policies. Further, Contractor agrees that this EEO Policy shall apply to any subcontractor or contractor it hires to assist it under this Contract, and shall be responsible for inserting similar language into its contracts for the Project. Contractor, and any subcontractors or contractors, shall keep all records regarding compliance with this EEO Policy in the event the State and Federal agencies confidentially request such records.

20. Acceptance of Scanned Signatures. The Parties agree that this Contract, Contracts ancillary to this Contract, and related documents to be entered into in connection with this

Contract are signed when a party's signature is delivered by email or other electronic medium. The signature must be treated in all respects as having the same force and effect as original signatures.

21. **Entire Contract; Amendment.** This Contract constitutes the entire and final Contract and understanding between the parties with respect to the subject matter hereof and supersedes any prior Contracts relating to this Contract, which are of no further force or effect. Any exhibits referred to are integral parts of this Contract and are hereby made a part of this Contract.

22. **Severability.** If any portion of this Contract is held to be invalid or unenforceable for any reason as determined by a court, the remaining provisions will continue in full force without being impaired or invalidated in any way. The parties agree that any such invalid provision shall be replaced with a valid provision which most closely approximates the intent and economic effect of the invalid provision.

IN WITNESS WHEREOF, SEAPA and Contractor have executed this Contract as of the day and year last written below.

APPROVED:

SOUTHEAST ALASKA POWER AGENCY	SUNRISE AVIATION, INC.
By _____	By _____
Trey Acteson, CEO	James M. Lane, President
Date: 2/18/2021	Date: 2-3-2021

SOUTHEAST ALASKA POWER AGENCY

Date: December 1, 2021

To: SEAPA Board of Directors

From: Trey Acteson, Chief Executive Officer

Subject: Resolution No. 2021-082 Re Inventory Policy

SUGGESTED MOTION
I move to approve Resolution No. 2021-082, adopting an Inventory Policy establishing a process for the identification, recording, and accountability of materials and equipment purchased and held as Inventory Items by SEAPA.

Attached for your consideration is Resolution No. 2021-082, authorizing adoption of an Inventory Policy, which is also attached. Adoption of this policy will establish a process for identifying, recording and accounting for inventory materials and equipment.

The policy also includes guidance for amortizing (depreciating) high-value Inventory Items. Without amortization, should an Inventory Item be deemed obsolete due to degradation during storage or due to technological advancements, the entire cost of the item would be expensed in the year it is disposed. With amortization, an annual prorated expense (amortization) would be recorded instead, reducing the amount of any potential write-off (similar to depreciation expense). The policy calls for amortizing Inventory Items valued at $10,000 or greater, which is in line with SEAPA's Capitalization Policy.

The Inventory Stores-Spares account (1200-300) currently include helipads, wood poles, stuffing box housing units, and several smaller items. Inventory also includes the Swan Lake Winding Replacement (-301), Flashboard Kicker spares (-302), and Submarine Cable Spare (-303).

Upon adoption of the Inventory Policy, existing items would be evaluated, and adjustments would be recorded to comply with the Policy's guidelines. The table below displays the financial effect of 2021 amortization for the three largest Inventory items. Expense of $162,792 would record amortization from the date the items were placed into Inventory but would reduce to the Annual Amortization amount thereafter.

Placed in Inventory	Account	Inventory Item	Value	Life (yrs)	Annual Amortization	2021 Amortization Expense
05/31/17	1200-301	Winding Replacement SWL	890,405	35	25,440	118,721
12/31/18	1200-302	Flashboard Kicker Spares	439,456	35	12,556	37,668
08/31/21	1200-303	Submarine Cable Spare	768,484	40	19,212	6,404
					57,208	162,792

A copy of SEAPA's Capitalization Policy is also attached for reference.

SOUTHEAST ALASKA POWER AGENCY

RESOLUTION NO. 2021-082**

Southeast Alaska Power Agency
Authorizing an Inventory Policy

WHEREAS, the Southeast Alaska Power Agency (SEAPA) seeks to adopt an Inventory Policy to establish a process for the identification, recording, and accountability of materials and equipment purchased and held as Inventory Items;

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of SEAPA hereby adopts the attached Inventory Policy dated December 10, 2021.

This Resolution No. 2021-082 was duly PASSED and ADOPTED by SEAPA's Board of Directors on the 10th day of December 2021 in Ketchikan, Alaska.

SOUTHEAST ALASKA POWER AGENCY

By _____
Robert Sivertsen, Chairperson

ATTEST:

_____
Secretary/Treasurer

SOUTHEAST ALASKA POWER AGENCY

INVENTORY POLICY

The Inventory Policy establishes a process for the identification, recording, and accountability of materials and equipment purchased and held as Inventory Items by SEAPA, effective December 10, 2021.

SEAPA will record the purchase of materials and equipment to the financial classification of Inventory Stores-Supplies when all the following criteria are met:

Inventory Item: Material or equipment purchased is to be held in storage as an available spare and not placed into service until failure of the already-existing item in the field. Excludes materials or equipment purchased as part of a capital (R&R) project that are intended to be installed as part of that project.

Valuation: The item has a minimum cost of $1,000 each or $5,000 for like component pieces. Both purchase and delivery costs will be reflected in the valuation of Inventory Items.

Life Expectancy: The item has a minimum useful life of at least two years after being placed in service. (This matches the Capitalization Policy.)

Critical Spares: The item has been classified as a critical spare, which includes materials or equipment that are custom made or have long lead times for delivery and that would halt or severely compromise production or safety upon failure.

Obsolescence: Recognizing that Inventory Items could become obsolete due to degradation or advancements in technology, the value of Inventory Items valued at $10,000 or greater (the Capitalization Threshold) will be amortized (depreciated).

Financial Records:

- The value of new Inventory Items will be recorded to Inventory Stores-Spares in financial records.
- When Inventory Items are placed into service, their value will be deducted from Inventory Stores-Spares and recorded to expense or assigned to a capital asset, as appropriate to specific circumstances.
- An Inventory Count will take place at least annually, confirming the quantity, location, and condition of existing Inventory. The Inventory Count will be reconciled to financial records.
- Inventory Items valued at $10,000 or greater will be amortized in accordance with the same method and Depreciation Schedule used for Capital Assets.

SOUTHEAST ALASKA POWER AGENCY

CAPITALIZATION POLICY (201907)

Reduction of the Capitalization Threshold from $25,000 to **$10,000 effective July 1, 2019** was approved by the Board of Directors at the February 28, 2019 Board Meeting.

Southeast Alaska Power Agency (SEAPA) maintains an asset capitalization policy for financial statement purposes.

Capital Assets: Capital Assets are structures, equipment and land that have a useful life of at least two years and for which costs exceed the Capitalization Threshold of $10,000. The Capitalization Threshold generally applies to individual items, except when groups of similar items make up a significant portion of a total capital asset or when component pieces combine to form an asset that functions as a stand-alone unit. All rolling stock is capitalized, regardless of initial cost.

Capital Projects: All Capital Projects are approved by the SEAPA Board of Directors and are tracked by an assigned Renewal & Replacement number. Procedures for the acquisition of capital assets are outlined in the SEAPA Policy Handbook.

Capital Asset Expenditures: Capital Expenditures include the costs associated with the purchase or improvement of structures, equipment and land that exceed the Capitalization Threshold and increase the economic value of the asset. All costs necessary to acquire an asset and make it ready for its intended use; i.e., purchase, delivery and installation, qualify as Capital Expenditures. Capital Expenditures must also increase the useful life of the asset by at least two years beyond the original useful life or increase the productive capability or capacity of the asset. Capital Asset Expenditures do not include recurring costs (expenses) that maintain an asset's operating efficiency and expected productive life, but do not add value or increase its overall life.

Asset Disposal: The process of removing assets from company services is outlined in SEAPA's Procurement Policy, Section 11. Income and expenses related to the disposal of an asset, i.e., salvage income or freight costs, are expensed as a loss/gain on the disposal of the asset.

Fixed Asset Schedule: SEAPA's Fixed Asset Schedule is updated at least annually at fiscal year-end. The value of Capital Assets and improvements that were placed into service during the past fiscal year are added to the schedule, and the value of assets that were disposed during that period (and their accumulated depreciation) are removed. When Capital Projects span multiple years, a major portion of a capital project may be added to the Fixed Asset Schedule when it is placed into service if it meets the capitalization threshold on its own. When groups of similar items are added to the Fixed Asset Schedule as a single Capital Project, it takes place upon completion of the entire Capital Project.

Depreciation: SEAPA depreciates all fixed assets using the straight-line method beginning with the fiscal year the asset is placed into service. SEAPA assigns useful life to assets according to its Depreciation Table, based on GAAP's estimated useful life of depreciable hydro-plant generation assets table. (Land is not a depreciable asset.) The depreciation of used equipment is assessed individually.

SOUTHEAST ALASKA POWER AGENCY

Operations Plan | 2022

Date: December 2, 2021

To: Trey Acteson, Chief Executive Officer

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

SEAPA 2022 Operations Plan Report

Every year SEAPA presents the Operations Plan (Ops Plan) for Board approval in accordance with Section 5 of the Power Sales Agreement[1] (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. Optimization of water resources is achieved by an algorithmic math model as represented in Figure 1.

1.0 Water Resource Algorithmic Math Model Process

Step 1: Current lake levels

Step 2: Inflow Forecasts

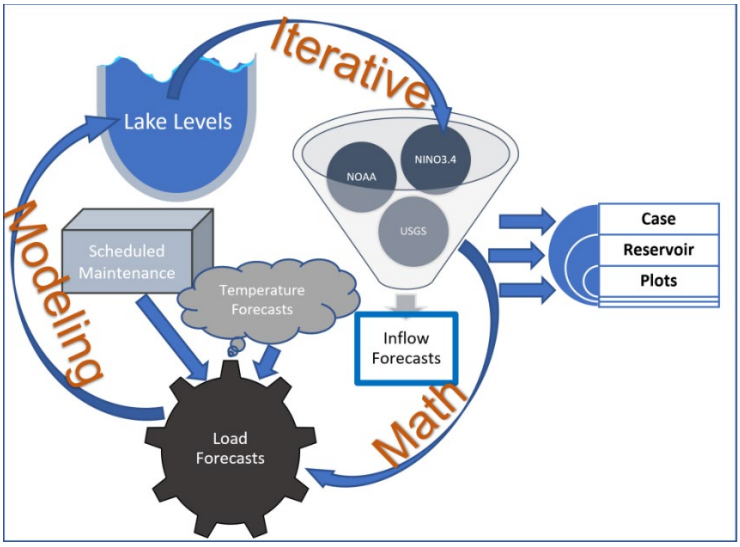
1. NOAA
2. USGS
3. NINO3.4

Step 3: Load Forecast

1. Temperature Forecasts
2. Scheduled Maintenance
3. STICS/Historic Loads

Step 4: Iterative Math Model

1. Case Reservoir Plots
2. Optimized Water Resources



[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.

The iterative process utilized in the algorithm to optimize water resources was applied to a variety of cases. Each case was further analyzed, and curves were developed. Special consideration was made to ensure optimization of water resources without risking dedicated Firm Power Requirements of the Purchasing Utilities. The process, assumptions, and results are discussed below.

2.0 Current Lake Levels

The lake levels as of December 2, 2021 were above average at 1391.1 feet for Tyee and 341.9 feet for Swan. This is due to well above-average precipitation for 2021. For September-November, precipitation was 55% above the average of the previous 8 water cycles. As of December 2, according to the latest Drought Monitor analysis (updated November 24), there is no longer any region in Alaska that is abnormally dry. It is not anticipated that a drought condition in Southeast Alaska will occur in 2022. NOAA is predicting a 3-Month outlook to be below average temperatures with average precipitation in Petersburg and Wrangell and above average precipitation in Ketchikan.

Figure 2: SEAPA Lake Levels 2021

With the lakes half full and a significant snowpack by April, both Tyee and Swan filled rapidly in April, May, and June. By July, both lakes were at full pool and began spilling. Between July and October, Swan Lake spilled 13,698MWh and Tyee Spilled 64,049MWh.

3.0 Rainfall – Inflows for 2019

As discussed in the preceding section, rainfalls for 2021 were well above average for most of the year. The Swan Lake weather station recorded approximately 170 inches of rain from January-December. This was three inches above the previous 9-year high with December rainfall yet to be accounted for.

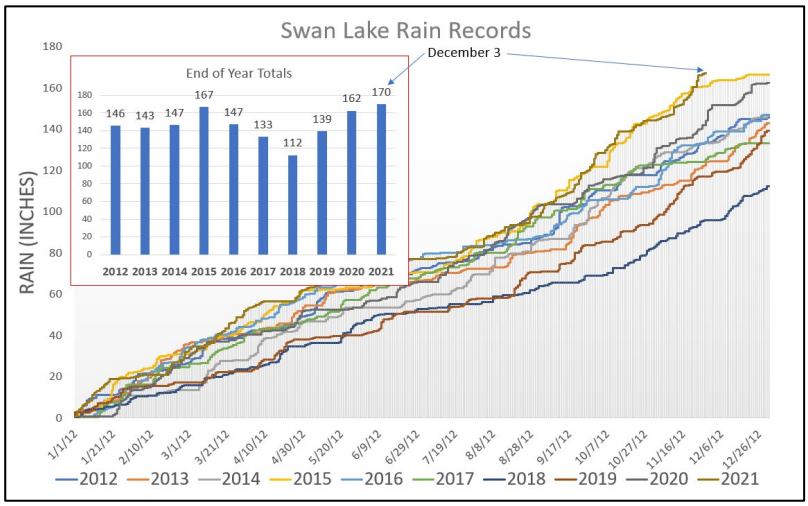


Figure 3: 9-Year Historical Rainfall: Swan Lake

4.0 Inflow Forecasts

Inflow predictions for calendar year 2022 were performed by utilizing NOAA, NINO3.4, Pacific Decadal Oscillation charts and historic USGS inflow data. NOAA 3-month forecasts for the months of December-January-February are predicting equal chance of average precipitation and a higher chance of below-normal temperatures. Figure 4 (below) illustrates NOAA's three-month outlook.

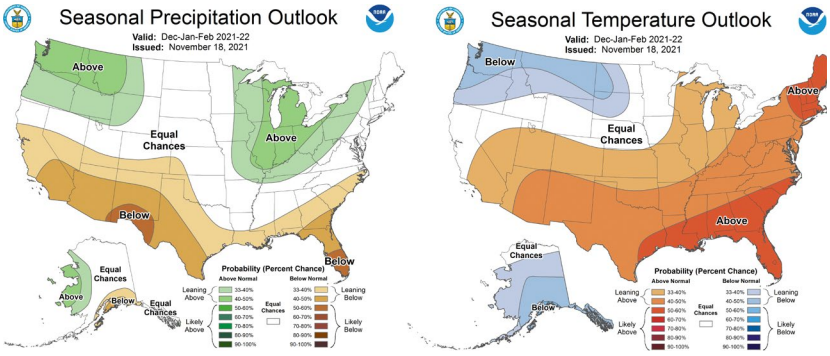


Figure 4: NOAA Dec-Jan-Feb Outlook

NOAA is also predicting a La-Nina for the first half of 2022. The models demonstrate a climate pattern like 2021 which would indicate a higher chance of an above-average snowpack.

There are dozens of institutions that have developed El Nino Southern Oscillation models (ENSO). Oceanographic temperature models such as ENSO's are used by NOAA to predict weather patterns.

The latest ENSO models show that we are currently in La-Nina conditions with Ocean temperatures currently below historically average levels. Cooler Southern Ocean temperatures typically correlate to cooler weather and lower precipitation rates in the Northwest hemisphere.

Figure 5 illustrates the International Research Institute (IRI) and Climate Prediction Centers (CPC) ENSO model. Apparent to all participating institute forecasts is a continued below-average ocean temperature. The models indicate that Ocean Temperatures should begin to rise through 2022 reaching an ENSO-Neutral status by August.

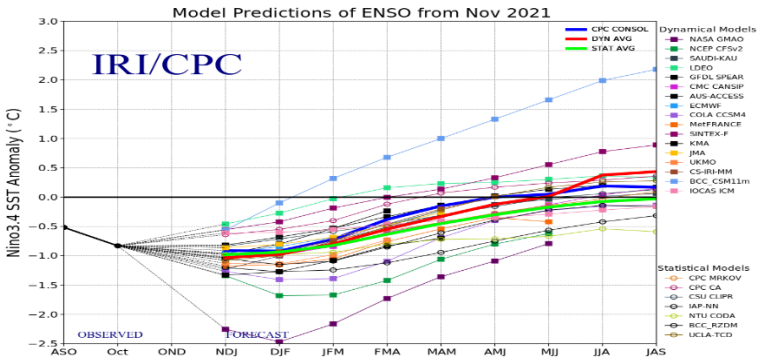


Figure 5: 2022 ENSO Model

Inflow seasons are cyclical and have a close correlation with ocean temperatures. El Nino and La Nina conditions impact precipitation in Southeast Alaska however a second oscillation discovered by scientist Steven Hare in 1996 called the Pacific Decadal Oscillation (PDO) also has an impact. In general, an El Nino will cause an increase in precipitation and a La Nina will cause a decrease in precipitation for Southeast Alaska. ENSO's (El Nino's and La Nina's) appear to impact the standard deviation of precipitation from average, and the PDO appears to shift the precipitation average up and down. As shown in Figure 6 below, in a Cold Phase (PDO), the average precipitation is approximately 160 inches whereas in a Warm Phase (PDO), the average precipitation is 125 inches. After superimposing Ketchikan rain data onto PDO and ENSO charts, data suggests that we are entering a Warm Pacific Decadal Oscillation Phase although Ketchikan has been oscillating above and below average recently.

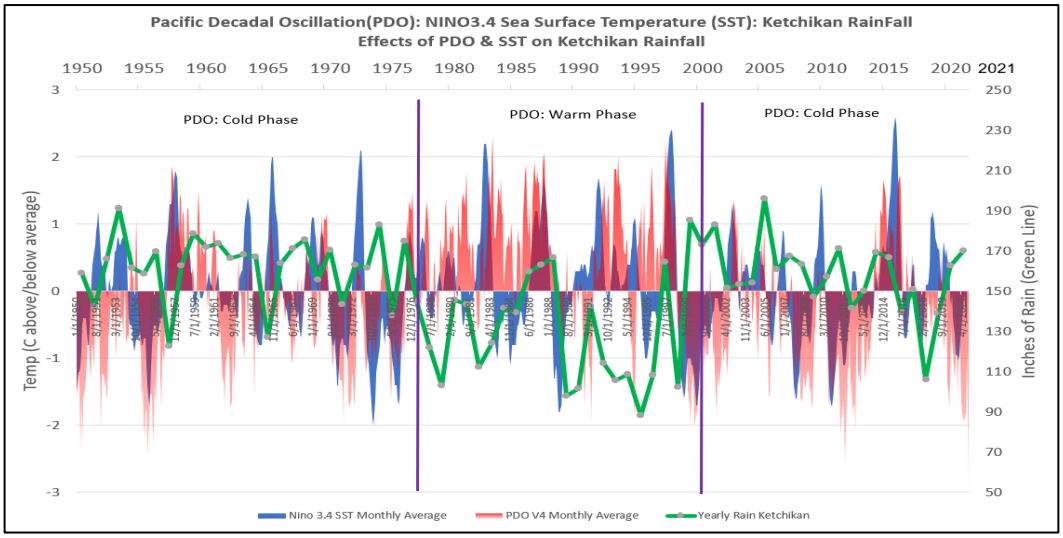


Figure 6: PDO Shifting of Average Rainfalls on 20-Year Cycle

If predictions from the PDO/ENSO models and historical trends hold true as discussed in previous sections, inflows will fluctuate up and down approximately near 22% below the previous 20-year averages. Figure 6 in the PDO/ENSO records also explain with a certain degree of confidence the reason for the 2018 and first half of 2019 low inflows (drought conditions). Although 2020 had average inflows and 2021 had above-average inflows, it is prudent for SEAPA to consider inflow cases that are reflective of a Warm PDO phase (below-average inflows) for developing sales and curtailment curves.

Case / Month	(2018) SWL Low Inflow (avg day cfs)	(2013-2017) SWL Avg Inflow (avg day cfs)	(2018) TYL Low Inflow (avg day cfs)	(2013-2017) TYL Avg Inflow (avg day cfs)
jan	256.3	316.5	38.8	95.6
feb	12.5	157.5	26.7	65.2
mar	156.4	133.0	20.4	53.3
apr	462.8	427.3	72.1	117.1
may	702.3	670.3	308.4	277.3
jun	358.9	560.8	160.0	266.3
jul	98.2	367.0	99.3	195.5
aug	99.2	295.9	74.1	162.8
sep	176.3	473.9	79.4	191.4
oct	440.8	410.9	132.0	186.0
nov	650.1	446.4	146.3	83.9
dec	364.8	387.8	120.3	76.1
Average Annual	314.9	387.3	106.5	147.5

Table 1: SEAPA Inflow Cases for 2022

4.1 Average Inflow (2013-2017) Cases

Table 1 illustrates SEAPA's predicted inflow cases that were used for the Swan Lake and Tyee Lake reservoir level models. As discussed previously, the inflow cases were selected based on NOAA and PDO predictions for 2022. The average annual cfs for this inflow case at Swan Lake was 387.3 cfs and the average annual cfs for Tyee Lake was 147.5 cfs.

4.2 Low Inflow (2018) Cases

The low (2018) inflow case for Swan Lake was inserted into the model with an average annual cfs value of 314.9 cfs. Low inflows were based on 2018 inflows. The low (2018) inflow case used in the model for Tyee Lake was 106.5 cfs. These inflow cases were selected based on a possible reoccurrence of 2018 (low probability) and developing sales/curtailment curves.

5.0 Load Forecasts

Load forecasts and subsequent SEAPA deliveries were estimated for the 2022 calendar year with consideration to the NOAA December-January-February outlook (cooler average temperatures) and the 2021 SEAPA delivery schedule. The 2022 budget for January 1 through December 31 was developed by using 2021 average Ketchikan, Petersburg and Wrangell loads, with a 0% bias (average) to account for anticipated similar loads in 2022 that occurred in 2021. Considering current lake levels and recent NOAA 3-month outlooks, SEAPA does not anticipate curtailment of Tyee in 2022. Firm Power Requirements are well known, documented by historical load profiles. Firm Power Requirements for all three communities are anticipated to be met by SEAPA generation.

The forecasted Firm Power Requirements for the respective utilities, based on average loads, are as follows:

Swan Lake Expected Generation: **56,376.3MWh (Dedicated Output)**

Ketchikan Loads: **82,920.9MWh (Firm Power Requirements)**

Tyee Lake Expected Generation: **118,940.0MWhr**

PTG & WRG Loads: **82,865.3MWhr (Firm Power Requirements and Dedicated Output)**

Table 2 illustrates the load forecasts for 2022 (starting in January) which demonstrates the anticipated transfer of energy across the STI. Section 5 of the PSA discusses development of the Operations Plan on an annual basis with a caveat for the plan to be reviewed periodically as needed. Given the recent severe drought circumstances and inflow forecasts, SEAPA will continue to review lake levels weekly and discuss the Operations Plan every Tuesday during Operation Meetings.

	KTN			Swan Lake		STI		WRG-PSG			Tyee Lake	
	Expected	Required	Required	Expected Gen	Expected Gen	STI Expected	STI Expected	Expected	Required	Required	Expected Gen	Expected Gen
	Delivery	Generation	Generation	from Inflow	from Inflow	(balance)	(balance)	Delivery	Generation	Generation	Inflow/STI	Inflow/STI
	MWh	MWh	Avg MW	Avg MW	MWh	MWh	Avg MW	MWh	MWh	Avg MW	Avg MW	MWh
JAN	9134.6	9500.0	12.8	6.8	5036.0	4464.0	6.0	8351.7	8685.8	11.7	17.7	13149.8
FEB	10806.1	11238.4	16.7	10.7	7206.4	4032.0	6.0	9574.6	9957.6	14.8	20.8	13989.6
MAR	9812.2	10204.6	13.7	10.7	7972.6	2232.0	3.0	9192.4	9560.1	12.8	15.8	11792.1
APR	7077.2	7360.3	10.2	7.2	5200.3	2160.0	3.0	7359.4	7653.8	10.6	13.6	9813.8
MAY	4617.3	4802.0	6.5	4.5	3314.0	1488.0	2.0	5314.3	5526.9	7.4	9.4	7014.9
JUN	2482.6	2581.9	3.6	1.6	1141.9	1440.0	2.0	3556.2	3698.4	5.1	7.1	5138.4
JUL	5070.0	5272.8	7.1	5.1	3784.8	1488.0	2.0	5111.7	5316.2	7.1	9.1	6804.2
AUG	5321.8	5534.7	7.4	3.4	2558.7	2976.0	4.0	5570.8	5793.6	7.8	11.8	8769.6
SEP	4229.6	4398.8	6.1	1.1	798.8	3600.0	5.0	5370.5	5585.3	7.8	12.8	9185.3
OCT	5102.4	5306.5	7.1	5.1	3818.5	1488.0	2.0	7119.4	7404.2	10.0	12.0	8892.2
NOV	8318.9	8651.7	12.0	10.0	7211.7	1440.0	2.0	7129.0	7414.1	10.3	12.3	8854.1
DEC	10948.3	11386.2	15.3	7.3	8332.8	5952.0	8.0	9215.4	9584.0	12.9	20.9	15536.0
Tota	**82920.9**	**86237.7**	-	-	**56376.3**	**32760.0**	-	**82865.3**	**86180.0**	-	-	**118940.0**

Table 2: SEAPA 2022 Load Forecast

5.1 Scheduled Maintenance

SEAPA does not anticipate any extended outages during calendar year 2022. Typical line maintenance, generator unit annual maintenance and substation maintenance were considered when developing the load forecasts. Petersburg substation rehabilitation and Wrangell substation circuit switcher projects will be executed in 2022. However, both projects will occur during the regularly scheduled outage with short durations. Therefore, SEAPA does not anticipate them affecting load profiles.

6.0 Iterative Math Model

The Tyee Lake and Swan Lake models used to predict lake levels involve iterating through inflow scenarios and generation load sequences. Lake levels are inputted with actual levels on the day the models were ran. Once the inflow predictions were developed, adjustments to generation inputs are performed to maximize utilization of the outputs for Tyee and Swan. Adjusting the amount of Additional Dedicated Output across the STI as illustrated in Table 2 changes draft rates and subsequent maximum drafts at each respective lake. The curves illustrated below demonstrate a band of operation that SEAPA predicts for Swan Lake levels, utilizing Additional Dedicated Output from Tyee.

6.1 Swan Lake Reservoir Plot (Expected Inflows)

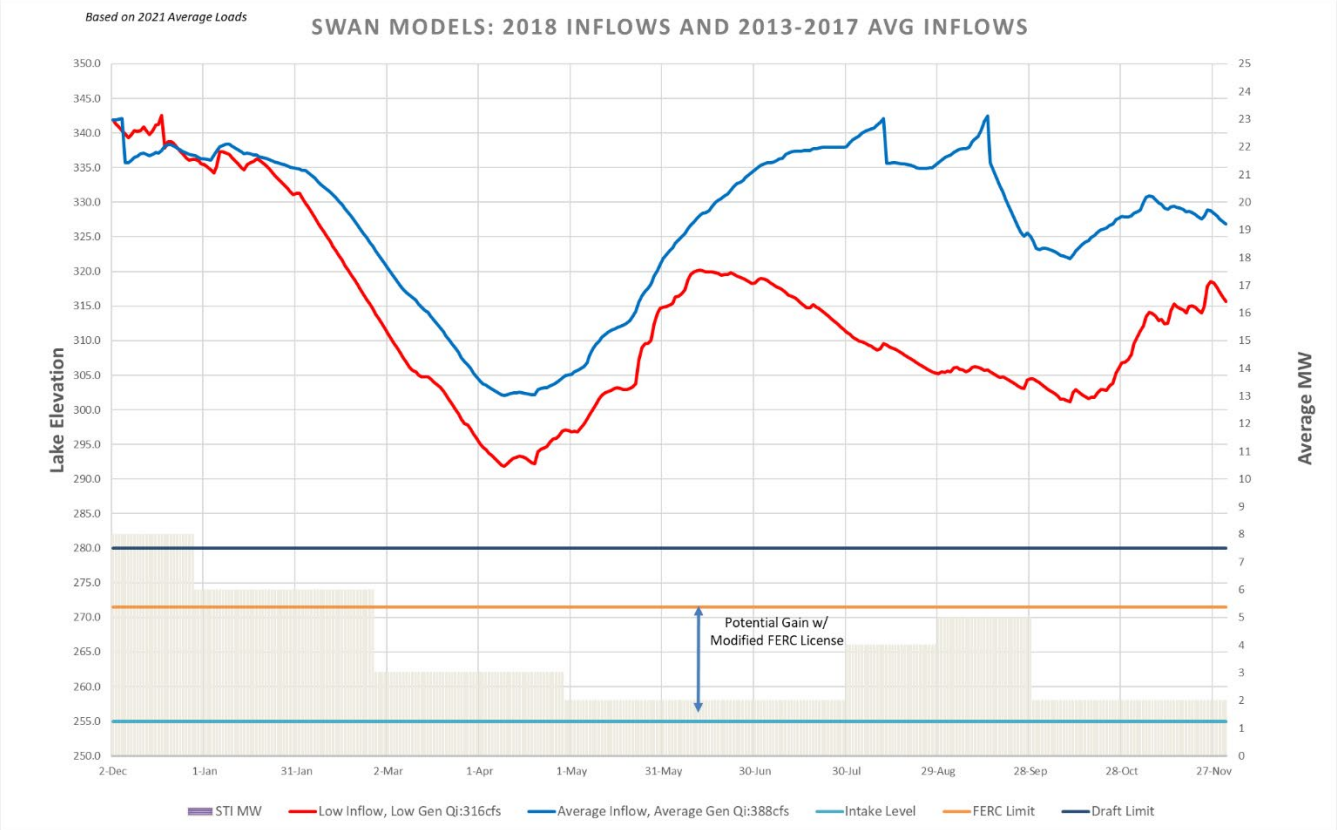


Figure 7: Swan Lake Reservoir Plot

The 2022 Swan Lake reservoir model as illustrated in Figure 7 above illustrates the two case scenarios as discussed in preceding sections. Both scenarios were modeled to illustrate recovery scenarios, draft rates and maximum drafts for Swan Lake utilizing Additional Dedicated Output from Tyee across the STI. Modeling inflows using average inflows (2013-2017 averages) (blue line) illustrate that Swan Lake will moderately draft and fully recover towards the end of 2022. In the case of using 2018 average inflows (worst case scenario), Swan Lake will likely not drop below the draft limit of 280ft in 2022. Additional Dedicated Output from Tyee as modeled are illustrated in the bar graphs.

6.2 Coordination of KPU Supplemental Diesel Generation

Ketchikan's Firm Power Requirements are typically provided by SEAPA in accordance with the PSA by utilizing Swan Lake's Dedicated Output and Tyee Lake's Additional Dedicated Output. However, with consideration of the 2018-2019 drought, Tyee may not have Additional Dedicated Output available if the drought returns. It is therefore prudent to formalize integration of KPU Supplemental Diesel Generation to ensure compliance with the Power Sales Agreement.

It is well known from historical lake levels and Ketchikan load profiles prior to the installation of the STI transmission line that Swan Lake does not have the capacity to meet the Firm Power Requirements of Ketchikan without Additional Dedicated Output from Tyee. On a typical year, Tyee Lake has capacity to provide Additional Dedicated Output. Pursuant to the PSA and with consideration of possible drought conditions, SEAPA coordinated with KPU to minimize overall use of diesel, maximize utilization of Swan Lake's output and avoid future spill in lower water years. The outcome of coordinating KPU Supplemental Diesel Generation is discussed below with reference to the figure below.

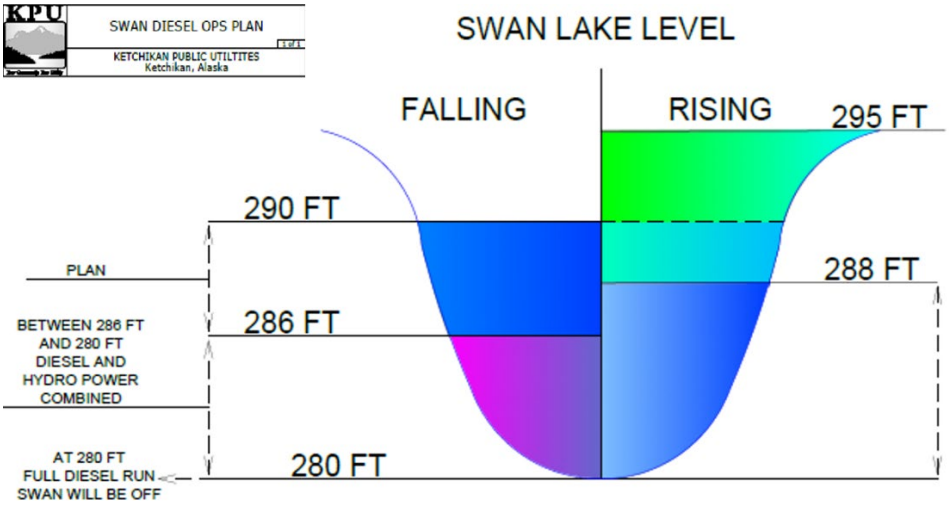


Figure 8: KPU Swan Diesel Ops Plan

During a drafting period of Swan Lake (typically early Spring), at an elevation of 286ft, KPU may utilize supplemental diesel generation to slow the draft rate at Swan Lake until the Draft Limit of 280ft is reached. Once the Draft Limit of 280ft has been reached, Swan Lake generators may remain off and KPU may utilize full diesel generation to meet Ketchikan's Full Power Requirements until an elevation of 288ft is reached. During a rising recovery period, KPU diesel generation should be terminated at elevation 288ft and Swan Lake should be utilized to meet the Firm Power Requirements of Ketchikan if Swan Lake has generating capacity to do so.

6.3 Tyee Lake Reservoir Plot (Operations Plan)

The 2022 Tyee Lake reservoir model (Figure 9) demonstrates 2 case scenarios, a guide/curtailment curve and a sales curve. All models represent Petersburg/Wrangell loads and Additional Dedicated Output as illustrated in Table 2, with two inflow cases. The Tyee 2018 inflow case (minus 5ft) with average loads represents the guide curve and will be considered as a curtailment curve (red line). If Tyee Lake elevations fall below this curve, Additional Dedicated Output will be considered unavailable and net sales from Tyee to Ketchikan will be curtailed. Tyee will remain curtailed until Tyee Lake levels have reached the sales curve (green line). The area between the Sales curve and curtailment curve is considered the Tyee Operations Band. Once the elevation of Tyee Lake has reached the sales curve (green line), Additional Dedicated Output will be made available to Ketchikan for as long as Tyee Lake levels remain above the curtailment curve (red line). The Balancing Lakes section discusses optimizing Swan Lake efficiencies during curtailment periods, where Tyee may be used to provide frequency support under certain conditions. This Operations Plan is conservative, using 2018 low inflow data minus 5ft and will maintain 21.5 feet in Tyee Lake (to the Draft limit) for the sales and curtailment curves.

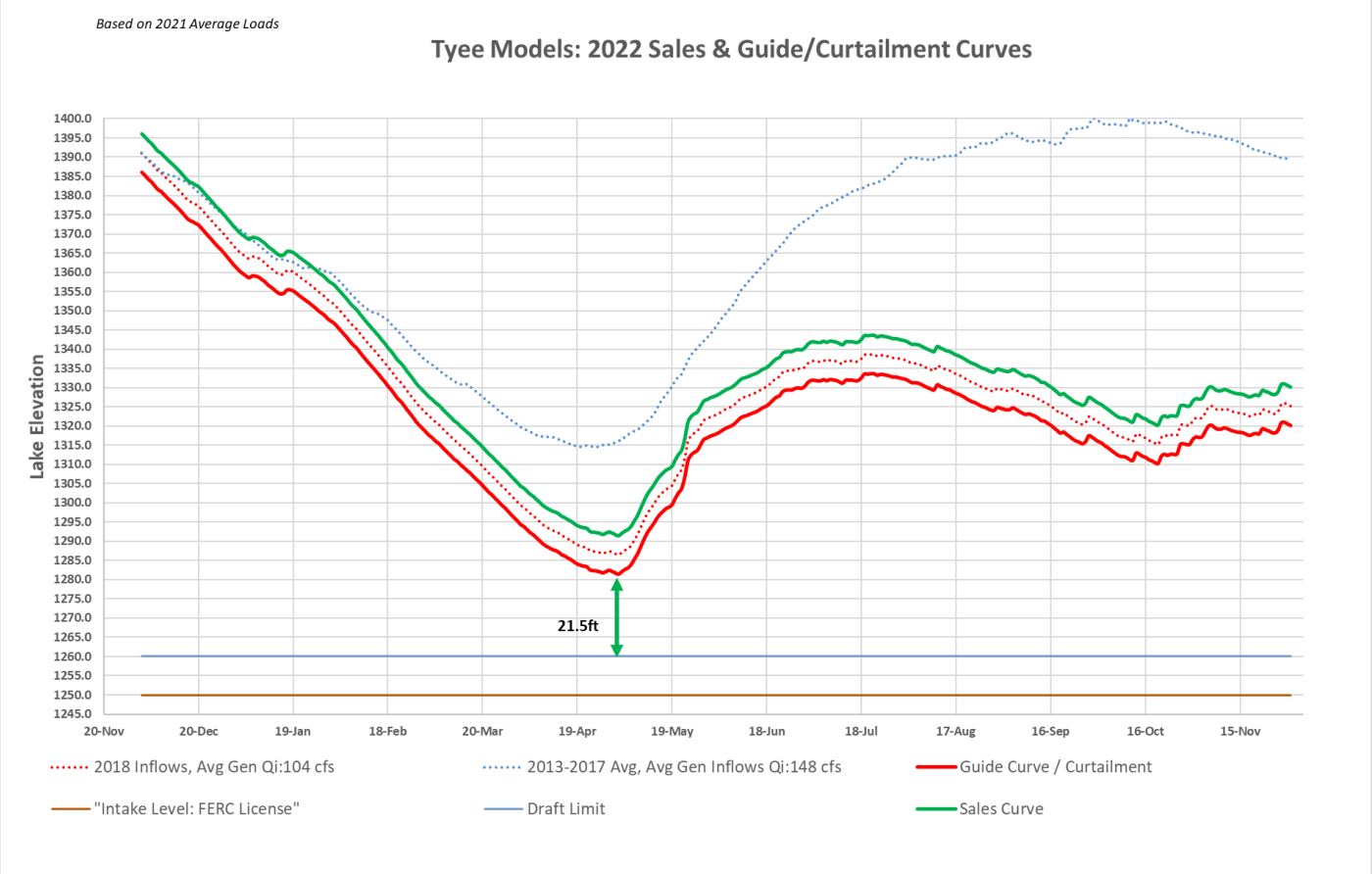


Figure 9: Tyee Lake Reservoir Plots

6.4 Coordination of Petersburg & Wrangell Supplemental Diesel Generation

Petersburg and Wrangell's Firm Power Requirements are typically provided by SEAPA in accordance with the PSA by utilizing Tyee Lake's Dedicated Output. However, with consideration of the 2018-2019 drought, Tyee could possibly exhaust Additional Dedicated Output and all available Dedicated Output if the drought returns. It is therefore prudent to formalize integration of Petersburg and Wrangell Supplemental Diesel Generation to ensure compliance with the Power Sales Agreement.

It is well known from historical lake levels and Petersburg/Wrangell load profiles prior to the installation of the STI transmission line that Tyee typically has the capacity to meet the Firm Power Requirements of Petersburg and Wrangell. On a typical year, Tyee Lake has capacity to provide Dedicated Output plus Additional Dedicated Output. If however, inflows are significantly less than the 2018 inflow season, Tyee could draft to the Draft Limit, without any sales to Ketchikan (even under curtailment). Coordination of Petersburg and Wrangell Supplemental Diesel Generation is discussed below with reference to the figure below.

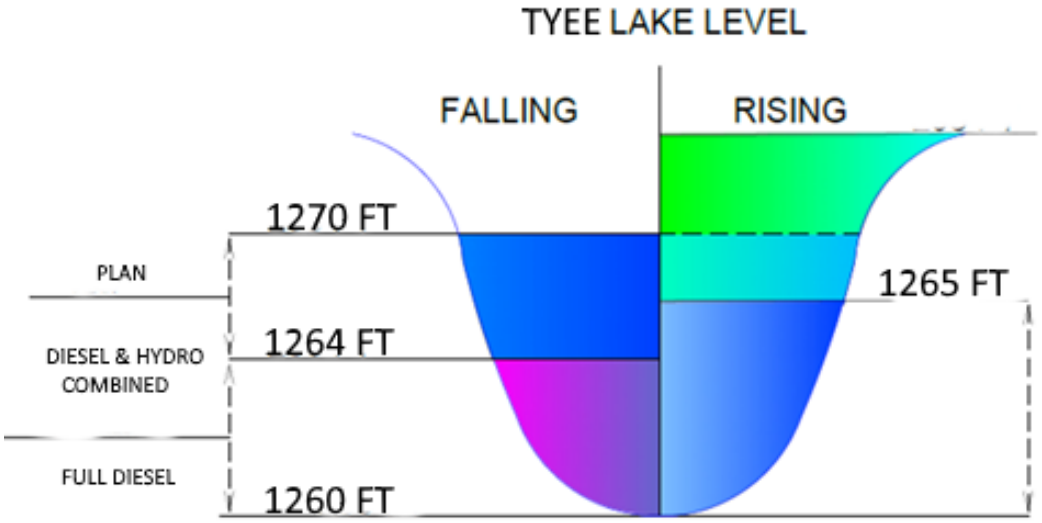


Figure 10: PTG & WRG Tyee Diesel Ops Plan

During a drafting period of Tyee Lake (typically early Spring), at an elevation of 1264ft, Petersburg and Wrangell may utilize supplemental diesel generation to slow the draft rate at Tyee Lake until the Draft Limit of 1260ft is reached. Once the Draft Limit of 1260ft has been reached, Tyee Lake generators may remain off and Petersburg and Wrangell may utilize full diesel generation to meet Petersburg and Wrangell's Full Power Requirements until an elevation of 1265ft is reached. During a rising recovery period, Petersburg and Wrangell diesel generation should be terminated at elevation 1265ft and Tyee Lake should be utilized to meet the Firm Power Requirements of Petersburg and Wrangell if Tyee Lake has generating capacity to do so. At elevations above the curtailment curve (once the sales curve is reached) in Figure 9 (red line), SEAPA may utilize Tyee Lake for Additional Dedicated Output to maximize utilization by sending power from Tyee Lake, across the STI, to Ketchikan (see Balancing Lakes section for further details).

7.0 Balancing Lakes

The Power Sales Agreement requires SEAPA to maximize utilization and optimize output of Tyee Lake and Swan Lake facilities using water management and other efficient dispatch procedures adopted by the Agency. Water management and efficient dispatch is referred to by the Agency as balancing lakes. The following sections discuss how the Agency uses load tables, efficient dispatch and generation plans for balancing lakes to maximize utilization and optimize output of Tyee and Swan.

7.1 Load Tables

Operations Table

	STCS MW	S1	S2	T1	T2
1	4.00	0.00	0.00	2.00	2.00
2	10.00	0.00	0.00	5.00	5.00
3	12.00	5.00	0.00	3.50	3.50
4	14.00	6.00	0.00	4.00	4.00
5	15.00	7.00	0.00	4.00	4.00
6	16.00	8.00	0.00	4.00	4.00
7	17.00	9.00	0.00	4.00	4.00
8	18.00	9.00	0.00	4.50	4.50
9	19.00	9.00	0.00	5.00	5.00
10	20.00	9.00	0.00	5.50	5.50
11	22.00	9.00	0.00	6.50	6.50
12	24.00	9.00	0.00	7.50	7.50
13	26.00	9.00	0.00	8.50	8.50
14	28.00	10.00	0.00	9.00	9.00
15	29.00	10.00	0.00	9.50	9.50
16	30.00	10.00	0.00	10.00	10.00
17	31.00	11.00	0.00	10.00	10.00
18	32.00	11.00	0.00	10.50	10.50
19	33.00	11.00	0.00	11.00	11.00
20	34.00	11.00	0.00	11.50	11.50

Figure 11: STCS Load Table

The Swan-Tyee Control System (STCS) is used by the Agency to automate Swan Lake generators for maximizing efficiency, delivering Firm Power Requirements and balancing lake levels. STCS is an automated Real Time Automation Controller (RTAC) that utilizes Load Tables (Figure 11) to input Swan Lake generation setpoints into the governors at specific total SEAPA system loads. Load tables are developed on a weekly basis. Changing Swan Lake generator setpoints in the load tables allows SEAPA to draft Swan and Tyee lakes at increased or decreased rates, to follow guide/sales curves and stay above curtailment curves if possible.

Load Tables are developed weekly based on lake levels, draft rates, load forecasts, weather forecasts and efficiency curves (Figures 12 and 13). SEAPA forecasts total system loads weekly by using historical data from the previous week and adjusting according to new loads (fish loads etc.) to include temperature corrections for the upcoming week. On average, SEAPA total system loads change in the winter months as a function of temperature at a rate of 0.67% per degree-day Fahrenheit. Adjusting load tables change the draft rates however if load table adjustments do not slow the draft rate at Tyee and the curtailment curve is reached, net sales from Tyee to Ketchikan will be curtailed. To maximize efficiency at Swan and Tyee during a curtailment period, transfer of energy across the STI will be balanced daily, with zero net sales. The overall sum of energy transferred across the STI (continuously summed and recorded weekly) will be maintained at zero total megawatts. During a curtailment period, Tyee will be used exclusively for Petersburg and Wrangell Firm Power Requirements and for maximizing efficiencies.

7.2 Efficiency Curves

Swan Lake generators have Francis, reaction type turbines designed specifically for full load operation in a range from approximately 270 feet to 350 feet of net head. Figure 12 (below) illustrates the efficiency curves for the Swan Lake turbines at various lake elevations. As seen from the figure below, efficiency of the Swan Lake turbines drops off significantly as loads are reduced below 9.5MW. If for example Swan Lake was operated at 5MW at elevation 290 feet, the efficiency of the turbine would be at 83%. The turbine efficiency curves below do not include penstock losses, generator windage losses, I^2R losses and all other stray losses that can reduce the efficiency by another 5-10%. By operating the Swan Lake generators in the efficiency zone, 92-94% turbine efficiencies can be achieved, thereby saving over 10% of wasted water (for a 5MW target). For SEAPA to operate Swan Lake turbines in their efficiency zones, cycling the units on-and-off (once a day or every few days) may be required to meet target MW and manage lake levels.

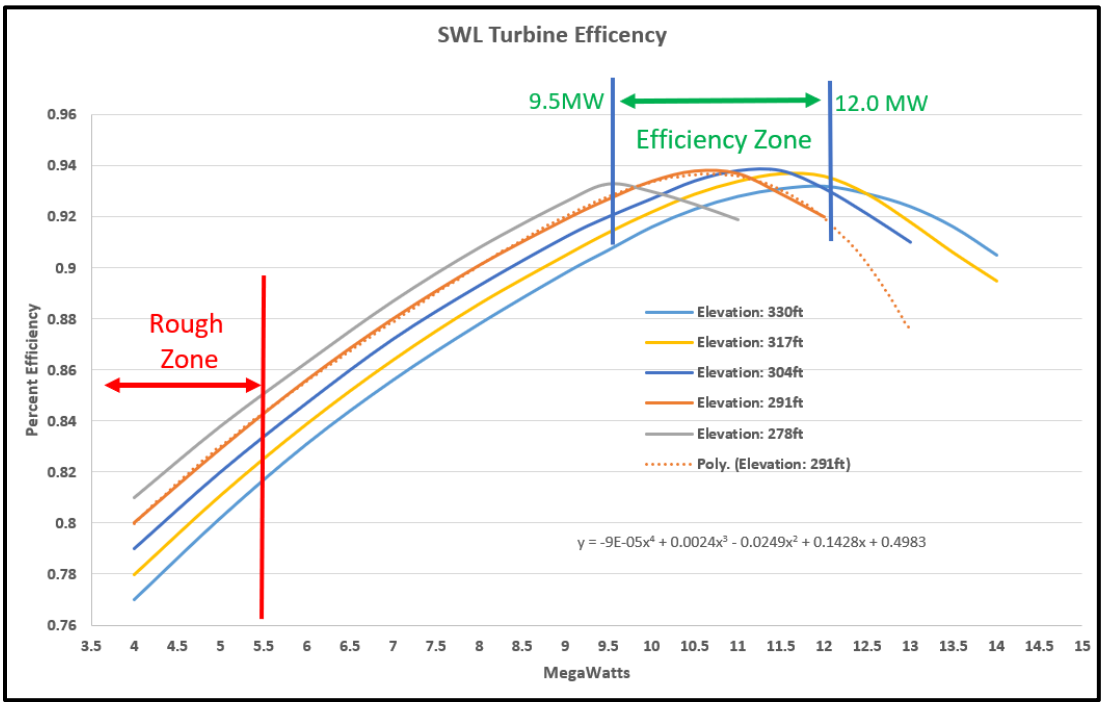


Figure 12: Swan Lake Turbine Efficiency Curves

Swan Lake generators begin to vibrate significantly as the turbines cavitate in the rough zone. The rough zone for Swan Lake generators is approximately between 2.5MW and 5.5MW. Rough zone operation causes abnormal wear and tear due to vibration and cavitation. Maintenance costs are greatly increased by operation in this zone to include increased cavitation repair, bearing damage, fatigue cracking, electrical generator winding damage and much more. Due to increased maintenance, operation in the rough zone will also reduce availability while making repairs. For reasons as stated above, SEAPA will not operate Swan Lake generators in the rough zone for extended periods of time.

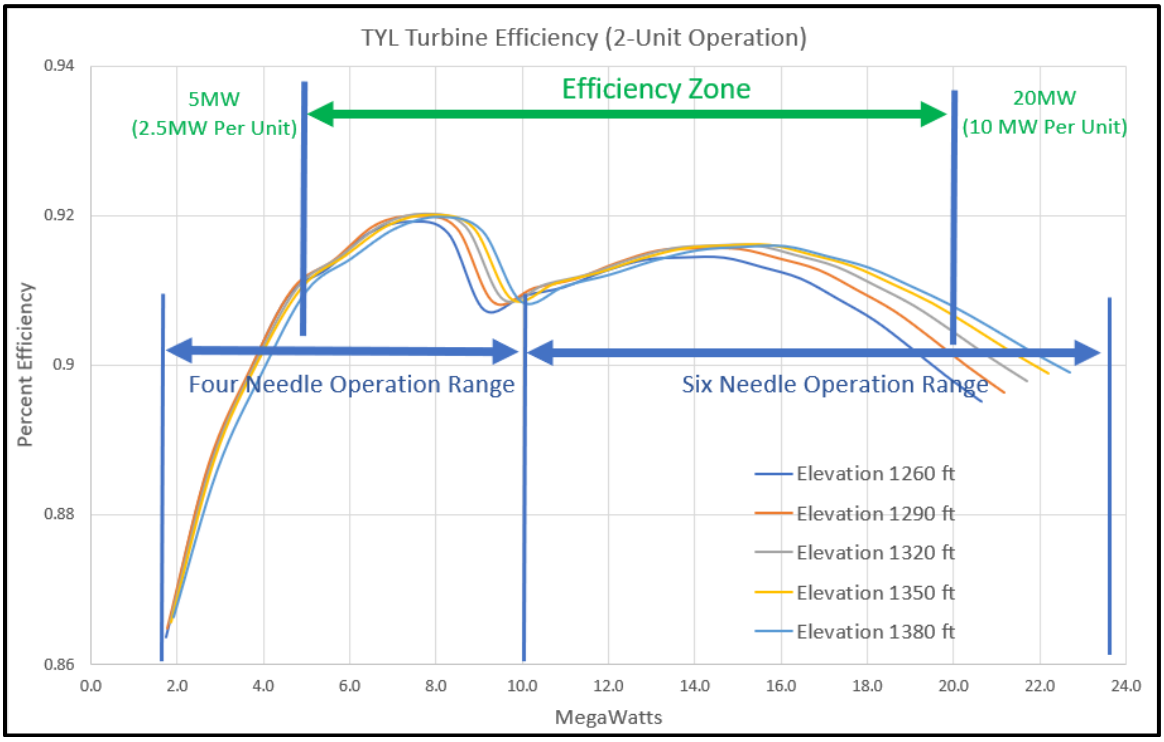


Figure 13: Tyee Lake Turbine Efficiency Curves'

Tyee Lake generators have Pelton, impulse-type turbines designed specifically to operate in a range from 1250 feet to 1398 feet net head. Figure 13 (above) illustrates the efficiency curves for the Tyee Lake turbines at various lake elevations. As shown in the figure above, operation of the Tyee Lake turbines has a very broad efficiency range. Impulse machines generally have a much flatter/broader range for efficiency compared to reaction machines, which allow them to operate at lower MW and remain in their efficiency zone. What is also evident is the efficiency gains achieved in the governors at Tyee by sequencing the needle valves from 6-valves to 4-valves at specific cfs ranges.

7.3 Optimizing Output

The Swan Lake load forecast (Table 2) illustrates that for the lake to maintain levels above the Draft Limit (in Figure 7), an average of 3.7MW to 10.4MW will likely be required throughout the year. Operating Swan Lake below 8MW will cause the machine(s) to run extremely inefficient (upwards of 20% of the water could be wasted in turbine efficiency losses at 2MW loads). To maximize Swan Lake efficiency, the generators will be operated using load tables or fixed generation points inside the efficiency zone as much as practicable. When isochronous support is requested by KPU during curtailment periods, Tyee will be used for isochronous support only. Megawatt-hours sent to the South for isochronous frequency support from Tyee during a curtailment period will be summed up daily and returned to the North from Swan on a daily or multi-day basis. The net transfer of energy during curtailment periods will be zero (recorded at the Tyee ST-11 breaker) and reported weekly during the Tuesday Operations meetings.

7.3.1 Example: Optimizing Output by Increasing Efficiency

Start Date of Operations Plan: January 1

Swan Lake Elevation (on start date): 290ft

Average Inflows: 288cfs

Average MW to match Inflows: 5MW

For the above numbers, where Swan Lake is at elevation 290 feet and the inflows due to precipitation are an average of 288 cfs, Swan Lake can be operated at an average of 5MW to maintain a lake elevation of 290 feet. If Swan Lake is operated continuously at this rate for 10-months as an example, the total number of megawatt-hours produced would be approximately 36,000MWhrs.

Operating Swan Lake generators at 5MW continuously would cause the average turbine efficiency of the Swan Lake generator(s) to be 83% (see Figure 12). To maximize efficiency of the generators, the unit(s) could be operated 50% of the time at 10MW (at a turbine efficiency of 93%), thereby gaining over 10% in efficiency. Over the same 10-month period, the 10% gains in efficiency (for this example) would equate to 3,600 MWhrs or 1 more month of operations for the same amount of water.

Under normal operating circumstances for this example, KPU would operate isochronous diesel generators 50% of the time when the Swan Lake unit is off to provide for the frequency support that the Swan Lake generator(s) provide when in service. Under circumstances where isochronous diesel generator support is not available from KPU due to mechanical or ADEC time/fuel limitations, the STI would be utilized and Tyee generators would provide isochronous frequency support. Operating Swan Lake at 10MW greatly increases efficiency in this case. For Tyee isochronous support periods, 5MW of the 10MW total generation from Swan Lake would be sent to the North 50% of the time (half-day), When Swan Lake is turned off (the other 50% or half-day), 5MW would then be sent from Tyee to the South. The result would be a net of zero megawatt-hours transferred across the STI (or used from Tyee for support) and an increase of 3,600 MWhrs of Swan Lake outputs due to efficiency gains for the 10-month period. This example is a way SEAPA may operate facilities by balancing lakes using water management and efficient dispatch to optimize outputs.

7.4 Maximizing Utilization

Precipitation in Southeast Alaska has historically had large swings from year-to-year. For example, in 1996, the precipitation was recorded at 108 inches. The next year, in 1997, precipitation increased to 165 inches. The third year, in 1998, precipitation was recorded at a record low of 102 inches, 63-inches less than 1997. Year-over-year, precipitation swings of as much as 60-inches have been recorded. On average (depending on saturation and lake levels), an inch of rain is equal to over two feet of water in Tyee lake and approximately one foot of water in Swan lake. To equate that to lake levels, Tyee would have had nearly 120 more feet of water in 1997 than in 1996.

To maximize utilization of both Tyee and Swan, as an example for this three-year period, would require drafting Tyee and Swan as much as possible in 1996 to capture the high inflows in 1997 and use the stored energy from 1997 to make it through the drought in 1998. On average, Petersburg and Wrangell use approximately 200 feet of lake from Tyee per year as Dedicated Output to meet Firm Power Requirements. In 1997, the amount of inflows (160 inches) would have equated to approximately 320 feet of water in Tyee lake. Without the STI, Tyee would have spilled approximately 120 feet of water from the lake under 2018 load requirements. For a reference, 120 feet of water in Tyee lake is approximately 51,600 MWhrs.

Drafting Tyee great enough to capture potential spilled energy requires dispatch of Additional Dedicated Output from Tyee to Ketchikan. Without Additional Dedicated Output, Tyee would spill excessively. However, maximizing utilization has inherent risk as it pertains to Dedicated Output.

7.4.1 Draft Limits

A Swan Lake Draft Limit was informally adopted by KPU prior to the installation of the STI to maintain contingency for diesel generators when lake levels were low. If a KPU diesel generator failed, water in Swan Lake could have been used for a limited number of contingency days until necessary repairs could be made. A Tyee Draft Limit was not taken into consideration prior to the STI because Tyee at the time was a stranded asset, with more than twice the lake capacity required to meet the Firm Power Requirements of Petersburg and Wrangell.

The Power Sales Agreement signed in 2009 did not take into consideration Draft Limits because it would have been contradictory to the term "maximum utilization". When for example a Draft Limit is reached and hydro generation is displaced by diesel generation, maximum utilization is reduced by the lesser of the amount of energy available from water in the lake below the Draft Limit (to the FERC limit) or the amount of energy from diesel generation that displaced hydro generation.

Every year since the 2009 Power Sales Agreement, the Operations Plan has had provisions for Draft Limits at both Swan and Tyee. SEAPA continues to recommend lowering Draft Limits to maximize utilization of both Swan and Tyee, however understands the generation and operational constraints of its Member Utilities. Since the installation of the STI, contingency for diesel generation has continued to be a concern. In 2019, prominent members of all three communities began discussing utilizing diesel generators from other communities (dispatched through SEAPA transmission lines) as contingency. Using diesel generators for diesel contingency (instead of SEAPA hydro) would be prudent and would improve SEAPA utilization of both Tyee and Swan Lake reservoirs.

Another area of consideration that could potentially maximize utilization at Swan Lake is revisiting the licensed FERC limit. Currently, SEAPA has a FERC license to operate Swan Lake down to an elevation of 271.5 feet. The top of the intake at Swan Lake is 251 feet. With hydraulic modeling and possibly reduced generation, utilization of Swan Lake below 271.5 feet is realistic and has a potential to provide upwards of 20 additional feet of capacity.

SEAPA will continue to encourage and facilitate discussion amongst Member Utilities to conceivably resolve diesel-for-diesel contingency solutions and research methods to maximize SEAPA hydro.

7.4.2 Tyee Lake Draft

Optimizing water resources is important for maximizing resource outputs as required by the Power Sales Agreement (Section 5: Operations Plan) and insuring FERC license limits are retained. It is however also SEAPA's mission to ensure Dedicated Outputs are delivered to meet the Firm Power Requirements of the Purchasing Utilities. In February and March of 2019, continued drought conditions in conjunction with a cold front (Polar Vortex) caused increased loads and reduced inflows at Tyee. As a result, Tyee Lake approached the Draft Limit constituting a diesel campaign in Petersburg and Wrangell.

The curtailment curve in Figure 9 illustrates utilizing a worst-case scenario (a repeat of 2018). For this inflow case, Tyee will have 21.5 feet of water in the lake at maximum draft. 21.5 feet in Tyee Lake is approximately equivalent to 8,922.5 MWh of available capacity.

7.4.3 Swan Lake Spill

The maximum Swan Lake reservoir height was raised from elevation 330 ft to elevation 345 ft at the end of 2016. Calendar year 2017 was the first year that the benefits of this effort were realized. In July 2021, Swan Lake reached an elevation of 342.0 ft. This added 4,800MWh of energy captured that would have otherwise been lost to spill. With recent water conditions, the energy captured in 2021 has already and will in the future continue to displace Diesel Generation (up to the maximum energy captured). Similar to the 2021 Ops Plan, SEAPA plans to operate Swan Lake above elevation 330 ft. in the following manner:

- Elevations 330 ft. to 341 ft. - Both generating units will be fully available and the vertical gate will be operable. Water will be stored for future use.
- Elevations 341 ft. to 342 ft. - Both units will operate to their highest levels that loads permit to draft the reservoir back down to 341 ft. or below, this will most likely occur in spring and fall and assist with refilling Tyee Lake as increasing Swan Generation will reduce Tyee Generation for a given SEAPA delivery schedule.
- For the first few years, water above elevation 342 ft. will be immediately spilled by automatic operation. At elevation 342.0 ft. as seen in July 2021, there were little signs of Flashboard leakage. Testing is still required at higher elevations if spill elevation is raised. Flashboards automatically release at elevation 347 ft.

7.4.4 Tyee Dedicated Output

As stated in preceding sections, Petersburg and Wrangell typically require approximately 200 feet of water from Tyee Lake a year to meet their Firm Power Requirements for that respective year. Tyee Lake has a capacity to only hold 148.3 feet of water (Elevation 1250ft to 1398.3ft) before it spills. Because Petersburg and Wrangel require more water from Tyee Lake to meet their Firm Power Requirements than Tyee has capacity for, any sales to Ketchikan could potentially be Dedicated Output. For example, consider the following scenario:

> *Tyee has a lake level elevation of 1398.3 feet. The lake is completely full whereas a single inch of rain would cause it to spill. If SEAPA dispatches one MWh from Tyee to Ketchikan and there is no rain for the rest of the year, that one MWh would have been dispatched as Dedicated Output and not Additional Dedicated Output.*

On an average year, Tyee Lake receives between 250 feet and 350 feet of water from precipitation in a water cycle (year). Without dispatch of Tyee to Ketchikan, all inflows (water) in the lake greater than 200 feet would be spilled (lost energy). As a result, SEAPA sales could be greatly reduced and reinvestment in SEAPA infrastructure such as generators, transformers, transmission lines and submarine cables would be reduced. Maximum utilization is required for reinvestment to maintain reliable power.

Dispatch of Tyee Additional Dedicated Output benefits all three Member Utilities and allows the Agency (in part) to maintain the lowest Wholesale Rate possible. For reasons as stated above, there are risks associated with dispatch of Tyee to the South on both ends of the spectrum. Under-dispatch of Tyee could cause the lake to spill. Over-dispatch of Tyee could cause the Northern Communities to burn diesel that would have been avoided by use of Tyee's Dedicated Output that was dispatched to the South. In theory, ideal dispatch of Tyee Lake's Additional Dedicated Output occurs if Tyee Lake reach's the Draft Limit at maximum draft and Petersburg and Wrangell are not required to burn diesel unnecessarily.

When Additional Dedicated Output from Tyee is dispatched to the South, it either reduces the draft rate or increases the recovery rate of Swan Lake. In either case, water levels in Swan Lake (over a discreet time interval) are directly impacted (increased) by the amount of Additional Dedicated Output sent South from Tyee.

8.0 Emergency Operations Plan Deviation

Deviation from this Operations Plan by SEAPA or a Member Utility shall not be permitted except under the following circumstances:

- Safety concerns whereas any human life is at risk of injury or death
- Declaration of an emergency by a Member Utility where immediate action is required to prevent rolling blackouts
- Equipment damage concerns where immediate action is required to prevent damage to SEAPA or Member Utility equipment or assets
- Supermajority vote of the Board of Directors dictates otherwise

In the event of a deviation, a Special Board Meeting shall be held as soon as practicable to discuss necessary actions. If a non-emergency deviation is requested by SEAPA or Member Utility, a Special Board Meeting shall be held to seek the Board's approval prior to any deviation.

9.0 Communication

SEAPA's Operations Manager is the primary point of contact for SEAPA operations. If the Operations Manager is not available, a designee will be assigned. For purposes of Tuesday Operations Calls and disseminating information about SEAPA operations to respective Member Utility communities and prominent leaders, each respective Member Utility shall assign a primary point of contact. The primary point of contact or designee shall be provided to SEAPA. All SEAPA communications regarding Operations shall be routed through each Member Utility's established point of contact or designee. The Member Utilities primary contact will be responsible for disseminating information to the Tuesday Operations Call group and any other respective community leader as each Member Utility deems appropriate.

10.0 2022 Operations Plan Summary

Section 5 of the Long-Term Power Sales Agreement provides the following:

> **Operations Plan Development.** … The objectives of the Operating Plan shall include maximizing the utilization of the output of the Agency Facilities and optimizing the output of the Agency Facilities in order to serve the Purchasing Utilities' Firm Power Requirements as set forth pursuant to this Agreement, through the use of water management and other efficient dispatch procedures adopted by the Agency, subject to Dedicated Parties' priority access to Dedicated Output. … [Emphasis added]

For the reasons demonstrated in the proposed Operations Plan and pursuant to the Power Sales Agreement, SEAPA staff proposes guide/curtailment curve elevations be used by the scheduling group as guides. If lake levels fall below the guide/curtailment curves, SEAPA will manage water resources, in consideration of current conditions, with an overall objective of restoring lake levels to their respective guide/curtailment curves. As lake levels approach the annual minimum Board-approved draft limits (Tyee: 1260 ft. and Swan: 280 ft.), SEAPA and the dedicated resource holder(s) will enter into discussions as to whether draft limits should be adjusted. Guide/Curtailment curve elevations and minimum draft limits for Swan Lake and Tyee Lake are listed in Figure 7 and Figure 9 and correspond with the table below.

SEAPA 2022 Operations Plan Guide Curve Values

Mth/Day	12/5	1/5	2/5	3/5	4/5	5/5	6/5	7/5	8/5	9/5	10/5	11/5	12/5
SWL Guide Curve Elevation (ft)	342.0	335.3	328.7	309.1	293.1	298.1	316.6	318.5	309.8	306.1	302.8	313.7	315.4
TYL Guide/Curtailment Curve Elevation (ft)	1384.7	1370.6	1354.4	1329.5	1300.3	1285.0	1320.8	1329.7	1319.9	1306.4	1295.9	1305.7	1307.4

For reference, past Operations Plan minimum draft limits are listed below. With the predicted inflows for CY2022, the 2022 Operations Plan proposes that Swan Lake and Tyee Lake draft limits be 280ft and 1260ft respectively.

SEAPA Historical Draft Limits							
	2016	2017	2018	2019	2020	2021	2022
Swan Lake	275 ft	273 ft	273 ft	280 ft	280 ft	280 ft	280 ft
Tyee Lake	1270 ft	1261 ft	1261 ft	1260 ft	1260 ft	1260 ft	1260 ft

Please consider the following suggested motion:

SUGGESTED MOTION
I move to approve the 2022 SEAPA Operations Plan as presented in the December 10, 2021 Board packet.

AGENDA ITEM 8G

(John Heberling will present SEAPA's Renewal & Replacement and Risk Reserve (4R) Plan, which will be provided under separate cover to SEAPA Directors, with a suggested motion for plan approval)

Agenda Item 8H

New Business

Presentation, Consideration, and Approval of FY2022 SEAPA Budget

(Draft Budget distributed to Directors under separate cover)

SOUTHEAST ALASKA POWER AGENCY

Date: December 1, 2021

To: SEAPA Board of Directors

From: Trey Acteson, Chief Executive Officer

Subject: Wholesale Power Rate

The fiscal year 2022 budget presented for the Board's consideration is premised on a Wholesale Power Rate of $0.0705 (7.05¢) per kWh, which is an increase of a quarter-cent ($0.0025) over the current rate of $0.068 (6.8¢). If approved, the new rate will be effective on January 1, 2022.

Please consider the following suggested motion:

SUGGESTED MOTION
I move to approve setting SEAPA's wholesale power rate at 7.05 cents per kWh for January 1, 2022 through December 31, 2022.

SEAPA 2022 BOARD MEETING DATES

Date(s)		Weekday(s)	Location[1]	Comments
February	**28[2]**	Monday	Wrangell	Regular Board Meeting (½ day) 1 - 5 pm
March	**1**	Tuesday	Wrangell	Regular Board Meeting (½ day) 9:30 am - 2 pm
May	**12**	Thursday	Ketchikan	Regular Board Meeting (9 am - 5 pm)
September	**22[3]**	Thursday	Petersburg	Regular Board Meeting (½ day) 1 - 5 pm
September	**23**	Friday	Petersburg	Regular Board Meeting (½ day) 9 am - 2 pm
December	**8**	Thursday	Ketchikan	Regular Board Meeting (9 am - 5 pm)

2022 Calendar

January 2022

N	S	M	T	W	T	F	S
52							1
1	2	3	4	5	6	7	8
2	9	10	11	12	13	14	15
3	16	17	18	19	20	21	22
4	23	24	25	26	27	28	29
5	30	31					

February 2022

N	S	M	T	W	T	F	S
5			1	2	3	4	5
6	6	7	8	9	10	11	12
7	13	14	15	16	17	18	19
8	20	21	22	23	24	25	26
9	27	28					

March 2022

N	S	M	T	W	T	F	S
9			1	2	3	4	5
10	6	7	8	9	10	11	12
11	13	14	15	16	17	18	19
12	20	21	22	23	24	25	26
13	27	28	29	30	31		

April 2022

N	S	M	T	W	T	F	S
13						1	2
14	3	4	5	6	7	8	9
15	10	11	12	13	14	15	16
16	17	18	19	20	21	22	23
17	24	25	26	27	28	29	30

May 2022

N	S	M	T	W	T	F	S
18	1	2	3	4	5	6	7
19	8	9	10	11	12	13	14
20	15	16	17	18	19	20	21
21	22	23	24	25	26	27	28
22	29	30	31				

June 2022

N	S	M	T	W	T	F	S
22				1	2	3	4
23	5	6	7	8	9	10	11
24	12	13	14	15	16	17	18
25	19	20	21	22	23	24	25
26	26	27	28	29	30		

July 2022

N	S	M	T	W	T	F	S
26						1	2
27	3	4	5	6	7	8	9
28	10	11	12	13	14	15	16
29	17	18	19	20	21	22	23
30	24	25	26	27	28	29	30
31	31						

August 2022

N	S	M	T	W	T	F	S
31		1	2	3	4	5	6
32	7	8	9	10	11	12	13
33	14	15	16	17	18	19	20
34	21	22	23	24	25	26	27
35	28	29	30	31			

September 2022

N	S	M	T	W	T	F	S
35					1	2	3
36	4	5	6	7	8	9	10
37	11	12	13	14	15	16	17
38	18	19	20	21	22	23	24
39	25	26	27	28	29	30	

October 2022

N	S	M	T	W	T	F	S
39							1
40	2	3	4	5	6	7	8
41	9	10	11	12	13	14	15
42	16	17	18	19	20	21	22
43	23	24	25	26	27	28	29
44	30	31					

November 2022

N	S	M	T	W	T	F	S
44			1	2	3	4	5
45	6	7	8	9	10	11	12
46	13	14	15	16	17	18	19
47	20	21	22	23	24	25	26
48	27	28	29	30			

December 2022

N	S	M	T	W	T	F	S
48					1	2	3
49	4	5	6	7	8	9	10
50	11	12	13	14	15	16	17
51	18	19	20	21	22	23	24
52	25	26	27	28	29	30	31

2022 Holidays	
Jan 01: New Year's Day	**Sep 05:** Labor Day
Jan 17: Martin Luther King Day	**Oct 10:** Columbus Day
Feb 21: Presidents Day	**Nov 11:** Veterans' Day
May 30: Memorial Day	**Nov 24:** Thanksgiving
Jul 04: Independence Day	**Dec 25:** Christmas Day

Notes

SEAPA Regular Board Meeting dates are highlighted in yellow.

(See attached for additional information on 2022 meeting dates and events)

[1] Meetings may be held electronically pending Center for Disease Control social distancing guidelines.

[2] If Covid circumstances preclude an in-person meeting, the meeting will be held electronically on Monday, February 28, 2022 from 9 am to 5 pm.

[3] If Covid circumstances preclude an in-person meeting, the meeting will be held electronically on Thursday, September 22, 2022 from 9 am to 5 pm

2022 MEETING DATES / EVENTS

(Updated 11/30/2021)

JANUARY

Date	Organization / Event	Location
3	**SEAPA Holiday (New Year's Day)**	**N/A**
3	PSG Assembly Mtg	PSG
6	KTN Council Mtg	KTN
11	WRG Assembly Mtg	WRG
18	PSG Assembly Mtg	PSG
20	KTN Counsel Mtg	KTN
25	WRG Assembly Mtg	WRG
25	APA Manager's Forum	JNU
26-27	APA State Legislative Conference	JNU

FEBRUARY

Date	Organization / Event	Location
3	KTN Council Mtg	KTN
7	PSG Assembly Mtg	PSG
8	WRG Assembly Mtg	WRG
8-10	SE Conf Mid-Session Summit	JNU
17	KTN Council Mtg	KTN
21	**SEAPA Holiday (President's Day)**	**N/A**
22	PSG Assembly Mtg	PSG
22	WRG Assembly Mtg	WRG
23-25	NWHA Camp & Annual Conf	Portland
28 (M)	**SEAPA Board Mtg 1/2 Day 1-5 PM**	**WRG**

MARCH

Date	Organization / Event	Location
1 (Tu)	**SEAPA Board Mtg 1/2 Day 9:30 AM-2 PM**	**WRG**
3	KTN City Council Mtg	KTN
7	PSG Assembly Mtg	PSG
8	WRG Assembly Mtg	WRG
17	KTN Council Mtg	KTN
21	PSG Assembly Mtg	PSG
22	WRG Assembly Mtg	WRG

APRIL

Date	Organization / Event	Location
4	PSG Assembly Mtg	PSG
5-7	NHA Water Power Week	Wash DC
7	KTN Council Mtg	KTN
12	WRG Assembly Mtg	WRG
18	PSG Assembly Mtg	PSG
21	KTN Council Mtg	KTN
26	WRG Assembly Mtg	WRG
27-29	NWHA Strategic Planning Mtg	Seattle
TBD	SEAPA Audit	KTN

MAY

Date	Organization / Event	Location
2	PSG Assembly Mtg	PSG
3-4	NWHA Technical Workshop	Bend OR
5	KTN Council Mtg	KTN
10	WRG Assembly Mtg	WRG
12 (Th)	**SEAPA Board Mtg 9-5 PM**	**KTN**
16	PSG Assembly Mtg	PSG
19	KTN Council Mtg	KTN
24	WRG Assembly Mtg	WRG
30	**SEAPA Holiday (Memorial Day)**	**N/A**

JUNE

Date	Organization / Event	Location
2	KTN Council Mtg	KTN
6	PSG Assembly Mtg	PSG
7-9	APA Federal Legislative Conf	Wash DC
14	WRG Assembly Mtg	WRG
16	KTN Council Mtg	KTN
20	PSG Assembly Mtg	PSG
28	WRG Assembly Mtg	WRG

JULY

Date	Organization / Event	Location
4	**SEAPA Holiday (Independence Day)**	**N/A**
5	PSG Assembly Mtg	PSG
7	KTN Council Mtg	KTN
11-14	AEGIS Policy Holders Conf	Denver CO
12	WRG Assembly Mtg	WRG
18	PSG Assembly Mtg	PSG
21	KTN Council Mtg	KTN
26	WRG Assembly Mtg	WRG

AUGUST

Date	Organization / Event	Location
1	PSG Assembly Mtg	PSG
4	KTN Council Mtg	KTN
9	WRG Assembly Mtg	WRG
15	PSG Assembly Mtg	PSG
16-19	**APA Annual Meeting**	**KTN**
18	KTN Council Mtg	KTN
23	WRG Assembly Mtg	WRG

2022 MEETING DATES / EVENTS

SEPTEMBER

Date	Organization / Event	Location
1	KTN Council Mtg	KTN
5	**SEAPA Holiday (Labor Day)**	**N/A**
6	PSG Assembly Mtg	PSG
13	WRG Assembly Mtg	WRG
13-15	**SE Conf Annual Mtg**	**KTN**
15	KTN Council Mtg	KTN
19	PSG Assembly Mtg	PSG
22 (Th)	**SEAPA Board Mtg 1/2 Day 1-5 PM**	**PSG**
23 (Fr)	**SEAPA Board Mtg 1/2 Day 9-2 PM**	**PSG**
27	WRG Assembly Mtg	WRG

OCTOBER

Date	Organization / Event	Location
3	PSG Assembly Mtg	PSG
6	KTN Council Mtg	KTN
11	WRG Assembly Mtg	WRG
17	PSG Assembly Mtg	PSG
20	KTN Council Mtg	KTN
25	WRG Assembly Mtg	WRG

NOVEMBER

Date	Organization / Event	Location
3	KTN Council Mtg	KTN
7	PSG Assembly Mtg	PSG
8	WRG Assembly Mtg	WRG
11	**SEAPA Holiday (Veteran's Day)**	**N/A**
17	KTN Council Mtg	KTN
21	PSG Assembly Mtg	PSG
22	WRG Assembly Mtg	WRG
24	**SEAPA Holiday (Thanksgiving)**	**N/A**
25	**SEAPA Holiday (Day After)**	**N/A**

DECEMBER

Date	Organization / Event	Location
1	KTN Council Mtg	KTN
5	PSG Council Mtg	PSG
8 (Th)	**SEAPA Board Mtg 9-5 PM**	**KTN**
13	WRG Assembly Mtg	WRG
15	KTN Council Mtg	KTN
19	PSG Assembly Mtg	PSG
23	**SEAPA Holiday (Christmas Eve)**	**N/A**
26	**SEAPA Holiday (Christmas Day)**	**N/A**
27	WRG Assembly Mtg	WRG

SEAPA Board Meetings noted on the above calendar are scheduled around the following:

Petersburg Borough Assembly Meetings	1st & 3rd Monday every month
Ketchikan Gateway Borough Meetings	Same as Petersburg every month
City and Borough of Wrangell Meetings	2nd & 4th Tuesday every month
Ketchikan City Council Meetings	1st & 3rd Thursday every month