SOUTHEAST ALASKA POWER AGENCY

Regular Board Meeting
AGENDA

Petersburg Assembly Chambers
Petersburg, Alaska

December 12, 2018 | 1:00 PM to 5:00 PM AKST
December 13, 2018 | 9:00 AM to 12:00 Noon AKST

For Telephonic Participation: Dial 1-800-315-6338 (Access Code: 73272#)

Annual Christmas Party

for Board Members, Staff, Counsel, other Invited Guests and Spouses/Significant Others
will be held December 12, 2018 at the Elks Lodge in Petersburg, Alaska
Hors d'oeuvres available at 6:00 p.m. ~ Dinner at 7:00 p.m.

December 12, 2018

1. Call to Order

   A. Roll Call
   B. Communications/Lay on the Table Items
   C. Disclosure of Conflicts of Interest

2. Approval of the Agenda

3. Proclamation Honoring Board Service

4. Persons to be Heard

5. Review and Approve Minutes

   A. September 27, 2018 Minutes of Regular Board Meeting

6. Financial Reports

   A. CEO Financial Memo
   B. Controller Memo
   C. Disbursements
   D. kWh Graphs
   E. Fund Allocation Graph
   F. Grant Summary
   G. Financial Statements – October, September & August 2018
   H. R&R Reports

7. New Business

   A. Executive Session Re Union Contract Negotiations, Swan Lake Transition, Hydrosite Analysis, RCA matters, and CEO Annual Evaluation
   B. Consideration and Approval of Roving Relief Operator for Hydroelectric Projects
   C. Consideration and Approval of Contract Award for Swan Lake and Tyee Lake Fabric Covered Equipment Storage Building Packages Project
   D. Consideration and Approval of Increase to FY19 R&R Budget for Swan Lake Flashboard Gate Trigger Assembly

December 13, 2018

8. Call to Order

   A. Roll Call

   Agenda Item 7 (New Business) continued:

   E. Presentation and Acceptance of FY18 Audited Financials (Joy Merriner of BDO will join the meeting telephonically at approximately 9:00 a.m.)
   F. Consideration of Staff Bonuses
   G. Consideration and Approval of Distribution of Rebate to Member Utilities
   H. Consideration and Approval of SEAPA's Operations Plan for 2019

9. CEO Report

10. Staff Reports

   A. Operations Manager's Report *(Hammer)*
   B. Power System Specialist's Report *(Schofield)*
   C. Director of Engineering & Technical Services Report *(Siedman)*

11. Calendar Year 2019 Meeting Dates

12. Director Comments

13. Adjourn

KETCHIKAN - PETERSBURG - WRANGELL

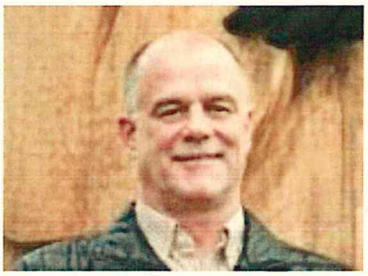
SEAPA

Southeast Alaska Power Agency

PROCLAMATION
HONORING BOARD MEMBERS

Clay Hammer

Judy Zenge



John Jensen

FOR DEDICATION OF SERVICE AND SUPPORT OF HYDROPOWER IN SOUTHEAST ALASKA

WHEREAS, the Southeast Alaska Power Agency ("SEAPA") recognizes the importance of Hydropower in Southeast Alaska; and

WHEREAS, SEAPA appreciates the vital role played by those individuals who, as Directors of the Agency, establish policies to ensure the Agency's mission of providing the lowest wholesale power rate consistent with sound utility planning and business practices; and

WHEREAS, Directors of the Agency serve as a voice for their respective communities and the Agency to provide unified regional leadership for project development and prudent management of SEAPA's interconnected power system; and

WHEREAS, Clay Hammer, Judy Zenge, and John Jensen, all having served in various capacities in their respective communities and one or more years as board members of the Southeast Alaska Power Agency, who selflessly devoted their knowledge, time, and talents as advocates of affordable power and responsible for communicating the best interests of their respective communities and balancing those interests with Agency goals;

NOW, THEREFORE, the Southeast Alaska Power Agency Board of Directors hereby recognizes, thanks, and honors Clay Hammer, Judy Zenge, and John Jensen for their investment of time, dedication of service, and support of hydropower in Southeast Alaska.

Minutes of Regular Meeting
September 27, 2018
The Landing Hotel | Sunny Point Ballroom
Ketchikan, Alaska

(An audio recording of this meeting is available on SEAPA's website at www.seapahydro.org)

1) Call to Order

A. *Roll Call*

Chairman Stephen Prysunka called the meeting to order at 9:00 a.m. AKDT on September 27, 2018. The following directors and alternates were present, thus establishing a quorum of the board:

Director	Alternate	Representing	
		Swan Lake	Ketchikan
Judy Zenge	Bob Sivertsen	Swan Lake	Ketchikan
Bob Lynn	John Jensen	Tyee Lake	Petersburg
Stephen Prysunka	Jim Nelson	Tyee Lake	Wrangell
Lisa Von Bargen	Steve Beers	Tyee Lake	Wrangell

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

Trey Acteson, Chief Executive Officer	Clay Hammer, Operations Manager
Ed Schofield, Power System Specialist	Robert Siedman, Dir. of Eng & Tech Svc.
Kay Key, Controller	Sharon Thompson, Ex Asst/Cont Admin
Marcy Hornecker, Administrative Asst.	Joel Paisner, Ascent Law Partners, LLC

B. *Communications/Lay on the Table Item(s):* KPU Swan Lake Report

C. *Disclosure of Conflicts of Interest:* None.

2) Approval of the Agenda

➢ ***Motion***	M/S (Von Bargen/Lynn) to approve the agenda, as amended, to move New Business Item 6-G to be heard first as Agenda Item 6-A with the remaining items moved forward accordingly and adding Agenda Item 6-H for a discussion on rate stabilization. Motion approved unanimously by polled vote.	Action 19-678

3) Persons to be Heard: None.

4) Review and Approve Minutes

➢ ***Motion***	M/S (Von Bargen/Lynn) to approve the Minutes of the Regular Meeting of June 19-20, 2018, Minutes of Special Meeting of July 27, 2018 and Minutes of Special Meeting of August 31, 2018. Motion approved unanimously by polled vote.	Action 19-679

5) Financial Reports

(A)-(J) Mr. Acteson reported that SEAPA's financial position is stable and provided an overview of SEAPA's finances.

➢ ***Motion***	M/S (Prysunka/Zenge) to accept the May, June and July 2018 financial statements as presented, and disbursements for June, July, and August 2018 in the amount of $2,455,544.77. Following additional discussion by the CEO on the disbursements that had been paid out, and FY2018 and 2019 kWh graphs, R&R reports, a grant summary, and financial statements, the motion was approved unanimously by polled vote.	Action 19-680

6) New Business

A. *Executive Session*

➢ ***Motion***	M/S (Zenge/Lynn) to move to recess into Executive Session for discussions relating to the following two matters: (1) Agency's contract negotiations with the IBEW Local 1547. The Executive Session will be conducted pursuant to SEAPA's Bylaws which are consistent with Alaska Statute 44.62.310 as the discussions will include subjects the immediate knowledge of which would clearly have an adverse effect upon the Agency Projects; and (2) discussion of matters that could tend to prejudice the reputation and character of an individual. Motion approved unanimously by polled vote.	Action 19-681

The meeting recessed at 9:21 a.m. for the executive session. The executive session ended at 10:50 a.m. and the regular session reconvened at 11:10 a.m.

B. *Consideration and Approval of Contract Award for Swan Lake Reservoir Access Ladder Extension Project*

➢ ***Motion***	M/S (Prysunka/Lynn) to authorize staff to enter into a contract with BAM, LLC for SEAPA's Swan Lake Reservoir Access Ladder Extension Project for the lump-sum bid amount of $58,800. Motion approved unanimously by polled vote.	Action 19-682

C. *Consideration and Approval of Award for Swan Lake Wastewater Treatment System Modification Project*

➢ ***Motion***	M/S (Zenge/Von Bargen) to authorize staff to enter into a contract with BAM, LLC for SEAPA's Swan Lake Wastewater Treatment System Modifications Project for the lump-sum bid amount of $118,800. Motion approved unanimously by polled vote.	Action 19-683

D. *Consideration and Approval of R&R Budget Amendment*

➢ ***Motion***	M/S (Von Bargen/Lynn) to approve the addition of RR241 Stream Gage and RR270 Dampers capital projects to the FY2019 budget in the amounts of $10,000 and $70,700 respectively. Motion approved unanimously by polled vote.	Action 19-684

E. *Consideration and Approval of Whitman True-up Agreement*

➢ ***Motion***	M/S (Lynn/Zenge) to authorize SEAPA's Chief Executive Officer to enter into the Amended Whitman True-up Agreement between the City of Ketchikan, d/b/a Ketchikan Public Utilities and the Southeast Alaska Power Agency, which was signed by the City of Ketchikan's Manager, Karl Amylon, on June 22, 2018, a copy of which is included in SEAPA's September 27, 2018 Board packet, regarding a true-up process for certain displaced sales resulting from the annual operation of the Whitman Lake Hydroelectric Project in Ketchikan, Alaska. Following a brief explanation by Mr. Acteson of the Whitman True-up's process and history, the motion was approved unanimously by polled vote.	Action 19-685

F. *Consideration and Approval of Administrative Employee CY2019 Group Benefits*

➢ ***Motion***	M/S (Zenge/Von Bargen) to renew NRECA employee group benefit plans for calendar year 2019 as presented. Motion approved unanimously by polled vote.	Action 19-686

G. *Consideration and Approval of Resolution No. 2019-071 Re: Amended and Restated 457(b) Deferred Compensation Plan*

➢ ***Motion***	M/S (Zenge/Von Bargen) to adopt Resolution 2019-071 which approves and adopts the Amended and Restated Deferred Compensation Plan of the Southeast Alaska Power Agency with an effective date of January 1, 2018. Motion approved unanimously by polled vote.	Action 19-687

H. *Discussion Re Rate Stabilization*

Mr. Acteson distributed a handout on Large Projects and Debt Service to illustrate the Agency's large capital expenditures (capex) not covered under its 4R Plan. He explained that although the 4R Plan mentions transmission lines it does not account for new generation. He illustrated what the cost with inflation, annual debt service, and debt duration may be in the future for the Swan

and Tyee transmission lines, submarine cables, and new generation. He advised there are additional costly projects such as marine access at Tyee that are not in the 4R Plan that will also need to be integrated into future fund planning along with costs for relicensing of the projects. He discussed the Agency's current risk mitigation efforts and advised that as the Agency monitors its loads, the timing for development of new generation would become clear. The discussion evolved into ways to finance future projects, the possibility of future rate increases, and the prudency of saving now to lower long-term debt and help hedge inflation. It was determined that it would be prudent to review these items on an annual basis as more information becomes available.

The meeting recessed at 11:51 a.m. for lunch and reconvened at 1 p.m.

7) CEO Report

Mr. Acteson reported that the Swan Lake Hydroelectric Project Boundary Correction Act was signed into law by the President on July 20, 2018, and that letters had been sent to two Congressmen soliciting support to advance important reforms extending preliminary project permit durations to four years, construction timeline extensions to eight years, and reducing scheduling risks associated with new project permitting and development. He announced that he applied for a position on the Alaska Roadless Rule Citizen Advisory Committee for development of a state-specific roadless rule and expressed his appreciation for all the support he received from the Agency's three Member Communities, the Alaska Energy Authority, Alaska Power Association, Alaska Electric Light and Power, and Southeast Conference towards that effort. Mr. Acteson discussed his concerns with Ballot Measure 1 and provided updates on the RCA certificate of public convenience issue. He announced that a draft report of findings for the hydrosite investigations effort would be provided at the December board meeting, provided updates on insurance renewals, and discussed highlights of the National Hydropower Association and Southeast Conference meetings that were held in Ketchikan the week of September 10. He reported he met with KPU management on the Swan Lake O&M transition to discuss key issues and also met with Swan Lake employees and the local I.B.E.W. representative. He advised it may be necessary to hire a Roving Relief Operator to help cover vacations following the Agency's assumption of Swan Lake operations and maintenance.

8) Staff Reports

A. *Operations Manager Report*

Mr. Hammer advised that the Tyee Road Access to Tidewater Project may be cost prohibitive for the Agency and suggested that an evaluation include comparative figures for ongoing dredging. He provided updates on the status of ATV use on the Tyee transmission system, reported that the Alaska DNR approved a survey and plat for the Tyee Satellite Platform; noting, however it may take the DNR from three to 12 months to respond to field survey work that had been completed on the Swan-Tyee Intertie (STI) for right-of-way permitting. Mr. Hammer announced that a submarine cable ROV inspection was completed on July 8th and initial reviews indicate that with the exception of some unusual spanning the cables appear to be in very good condition for their age. He noted that inspection of submarine cables along shoreline areas were not a part of the scope of the project and that those areas still need to be inspected by divers or a small ROV in the spring of 2019 when water clarity is more conducive to an inspection. He advised that access foot ramps had been placed on taller helipads along the STI, that new snow markers had been built by the staff at the Swan and Tyee plants and placed at each site, and that staff applied for a permit from the DNR to erect a 100 ft. tower Meteorological Tower with data collecting equipment. He provided updates on wood pole testing, annual transmission line and plant maintenance, and tasks performed by the Tyee crew at the Tyee Plant. The Swan Lake report was distributed for board review.

The meeting recessed at 2:07 p.m. and reconvened at 2:19 p.m.

Chairman Prysunka announced that Mr. Siedman's report would be moved ahead of the Power System Specialist Report.

B. *Director of Engineering & Technical Services Report*

Mr. Siedman provided highlights of several projects successfully completed or in the design and testing phase which included the Phone Servers, Control Room Touch Screens, Governor Modernization, PLC and RTD Modernization, and battery discharge testing projects at Swan Lake and the Lake Level Remote RF-Modem Project at Tyee Lake. He continued with a PowerPoint presentation on lake levels and SEAPA's operations plan illustrating how the operations plan provided in December 2017 was on track with the guide curve through to June of this year, when it changed due to the unpredictability of the dry weather experienced in July, August, and September, which produced less than half of the typical average 87 inches of rain to date. He explained what the Agency does, why it's done that way, and how it's done regarding operations of the Swan and Tyee Lakes to maximize the utilization of each based on predicted inflows and expected load forecasts. He clarified that the reason power shifts north and south throughout the course of a day is because of how the Agency's Swan-Tyee Control System (STICS) is set up, explaining that the system runs on load tables, which are based on total SEAPA load so as the load reaches a different value, a unit is either turned on or megawatts are increased in that unit, which to date has been successful for operational goals.

C. *Power System Specialist Report*

Mr. Schofield reported that the Tyee Lake power tunnel was inspected with a remotely operated vehicle (ROV) on September 12, 2018 for the first time since it was commissioned in 1983. During the inspection it was determined the overall condition of the tunnel is good; however, evidence of minor wall sluffing in three locations was observed. He reported that a tunnel dewatering plan can now be developed from information gleaned during the inspection that will take tunnel deficiencies into account to decrease the risk of a tunnel failure in the event an emergency draining of the tunnel is required. He reported that before the ROV inspection of the power tunnel could be performed, the Tyee intake gate had to be removed from the gate shaft. Removal of the gate afforded an opportunity for inspection which revealed the gate stems were severely damaged by rust. Sandblasting revealed that at least ten stems require replacement, which will be requested in the FY2020 budget. Mr. Schofield advised additional repairs, including replacement of gate seals and roller guide bearings are needed on the intake gate. Mr. Schofield also reported that the Marine Bulkhead Restoration Project and the rare plant portion of a USFS condition of FERC's licensing requirements in Swan Lake were both completed. He provided an update on the Swan Lake Flash Board Gate Components and announced that the final report for the Swan Lake PRO&M review was complete. He closed is report with a slide show of the ROV tunnel inspection.

9) Next Meeting Date

There were no objections to the next board meeting date of December 12-13, 2018 in Petersburg.

10) Director Comments

Directors provided brief comments.

11) Adjourn

Chairman Prysunka adjourned the meeting at 3:41 p.m.

Signed: Attest:

_____ _____

Secretary/Treasurer Chairman

SOUTHEAST ALASKA POWER AGENCY
CEO FINANCIAL COVER MEMO

DATE: December 6, 2018

TO: SEAPA Board of Directors

FROM: Trey Acteson, CEO

SEAPA's financial position was reviewed during the month of October by Standard & Poor's and is categorized as "stable". During the interview process I emphasized our ongoing risk mitigation strategies, the recent implementation of a Rate Stabilization Fund, and our overall prudent utility management practices. The Agency provided significant financial documentation in support of the review process, as did our Members Utilities. I greatly appreciate the timely cooperation of our members in responding to S&P's detailed information requests. Resulting from this rigorous effort, S&P has upgraded the Agency's credit rating from an "A-" to an "A". This is a direct reflection of the collective financial health of the Agency and our member utilities. The upgrade should result in a reduction of 5-10 basis points when we conduct a refunding of the remaining callable 2009 bonds next year. That effort is estimated to achieve an average annual savings of $65,450 The total NPV savings would be $296,848 (5.31%) based on the $5,590,000 principal amount of 2009 callable bonds and a true interest cost (TIC) of 2.706%.

REBATES:

The board approved a Fiscal Year 2018 rebate in the amount of $800,000 to the Member Utilities at our June 19-20, 2018 Board meeting. Issuance of the rebate in December is predicated on successful completion of the FY18 audit, satisfying bond covenant requirements (including debt service ratio compliance), and on the condition that no catastrophic system events took place in the interim. Although we experienced a landslide on the STI, I would not characterize the financial impact as catastrophic. Additionally, historic drought conditions are expected to negatively impact revenues for FY19, and combined with payout of the rebate, could negatively impact cash flow later in the year. If needed, we will shift non-dedicated funds from the R&R fund to temporarily cover commercial account activity. The intent would be to replenish those funds after revenues recover. In recognition of this flexibility, I am recommending that we proceed with the Board approved rebate distribution. I am also advising that rebates for FY19 are unlikely and the Member Utilities should plan accordingly.

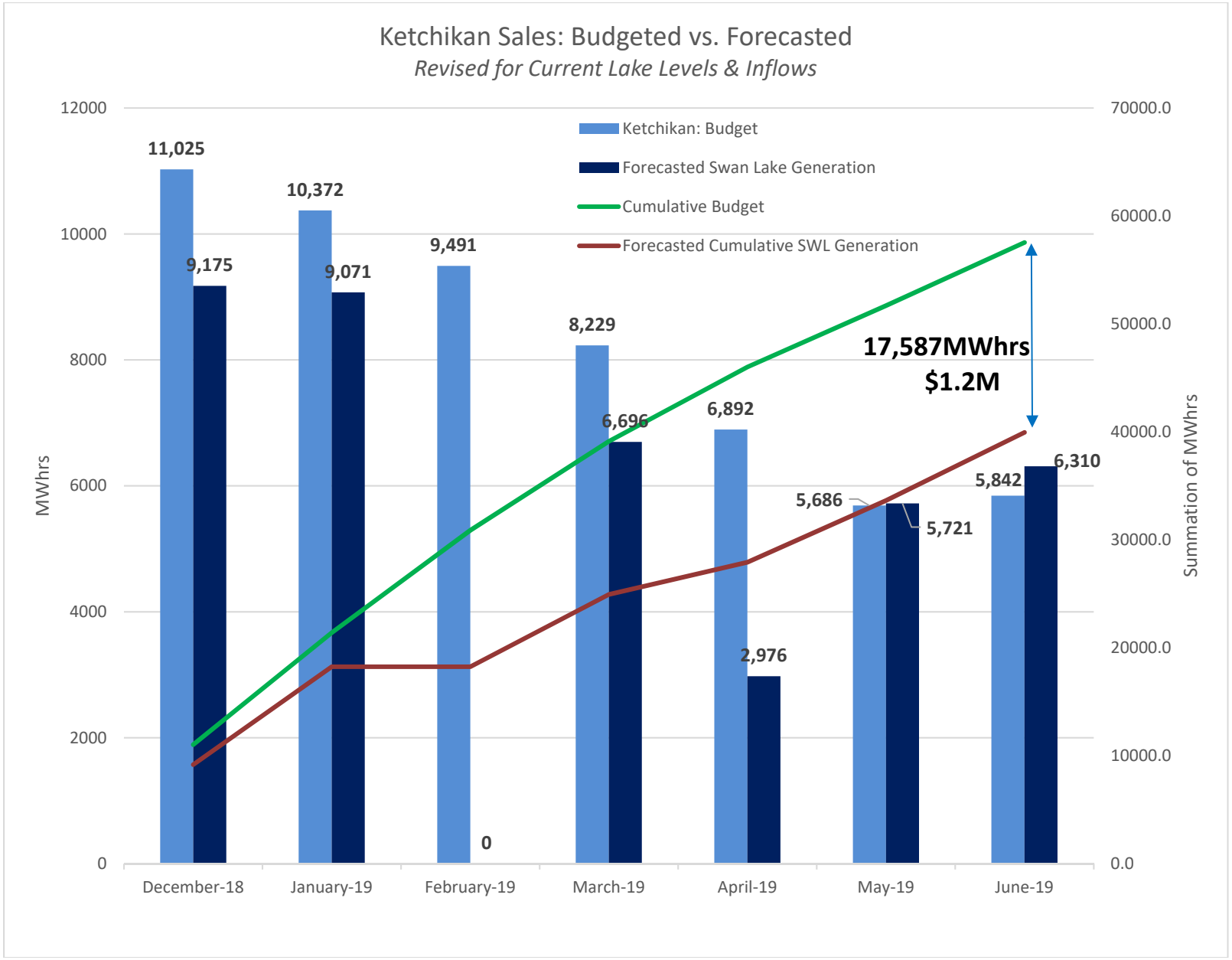
REVENUE & EXPENSES:

Total FY19 revenues through November are $4,485,514 actual vs. $4,681,670 budget. This is better than expected considering sales to the south out of Tyee were suspended beginning back on September 17th. October sales to Ketchikan were significantly below budget, compounded further by abnormally low reservoir levels at Swan Lake. We are forecasting overall sales to fall short of the FY19 budget by approximately 10% (see attached graph). This will be reviewed in depth during the Operations Plan discussion.

Total administrative and operating expenses through the end of October were under budget by $286,074, at $1,945,354 actual vs. $2,231,428 budget. The Board should expect additional expenses not previously identified as a result of the Swan Lake transition and eventual ratification of a new I.B.E.W. labor agreement. In anticipation of lower revenues and higher expenses, we have proactively deferred larger expense budget items that do not significantly impact safety and reliability priorities.

RENEWAL & REPLACEMENT PROJECTS:

Total R&R expenditures for FY19 through the end of October were $409,042 actual vs. the total budget of $2,966,166. Most of the larger projects are queued up and major expenditures will occur in the second half of the fiscal year. Six projects have been closed out.


Ketchikan Sales: Budgeted vs. Forecasted
Revised for Current Lake Levels & Inflows
Ketchikan: Budget
Forecasted Swan Lake Generation
Cumulative Budget
Forecasted Cumulative SWL Generation
MWhrs
Summation of MWhrs
12000
10000
8000
6000
4000
2000
0
70000.0
60000.0
50000.0
40000.0
30000.0
20000.0
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0.0
11,025
9,175
10,372
9,071
9,491
0
8,229
6,696
6,892
2,976
5,686
5,721
5,842
6,310
17,587MWhrs
$1.2M
December-18
January-19
February-19
March-19
April-19
May-19
June-19

SOUTHEAST ALASKA POWER AGENCY

CONTROLLER MEMO

Date:	November 19, 2018	From:	Kay Key
To:	Trey Acteson	Subject:	**FINANCIAL STATEMENTS**

SUGGESTED MOTION
I move to accept disbursements for September, October and November 2018 totaling $1,920,159 and financial statements for August, September and October 2018 as presented.

Monthly financial reports have been reformatted in an effort to provide the Board with enough information to monitor and evaluate SEAPA's financial activity without being overloaded with data. The Board's input regarding the effectiveness of the revised financial reports is welcome.

Financial Statements in this board packet include:

- **Disbursements for September, October and November 2018**
- **kWh Graphs** (November 2018)
- **Fund Allocation Graph** (November 2018)
- **Grant Summary** (Quarterly – September 2018)
- **Monthly Financial Statements for October, September, and August 2018 (FY19)**
  - ✓ Financial Overview
  - ✓ Statement of Financial Position – Monthly prior year comparison
  - ✓ Statement of Activities – Monthly prior year comparison, YTD prior year comparison, YTD and annual budget
  - ✓ Statement of Activities – YTD Detail (**October only**)
- **R&R Reports (FY19)**
  - ✓ Summary
  - ✓ Project Close-outs

DISBURSEMENT SUMMARY

The table below summarizes the expenditures included in the disbursement reports that follow:

	Revenue Fund	R&R Fund	New Gen Fund
September 6, 2018	107,350.58	181,202.25	72.75
September 17, 2018	35,514.60	202,056.96	-
October 1, 2018	308,919.96	4,634.58	-
October 16, 2018	228,918.56	2,325.00	-
November 1, 2018	75,088.29	4,328.23	-
November 16, 2018	685,125.24	84,621.87	-
TOTALS	1,440,917.23	479,168.89	72.75
	$1,920,159		

Revenue Fund - Operations and maintenance expenses, grant expenses.

R&R Fund - Expenditures for capital (R&R) projects.

New Gen Fund - Costs directly associated with developing new generation.

Insurance premiums for the period November 2018 through October 2019 were paid in November. The premiums are recorded as a prepaid asset, and 1/12th is expensed each month.

Company (vendor)	Revenue Fund	Dedicated R&R Fund	New Gen Fund	Southeast Alaska Power Agency SEPTEMBER Disbursements
Alaska Broadcast Communications, Inc.	$ 782	$ -	$ -	
Alaska Charters and Adventures	750	-	-	
Alaska Permanent Capital Inc	3,351	-	-	
Alaska Power Association	350	-	-	
Alden Systems, Inc.	2,649	-	-	Equipment: Resistograph
Alpine Mini Mart	76	-	-	
Amazon.com	86	-	-	
Angerman's Inc	802	-	-	
Ascent Law Partners LLP	4,218	-	-	
BAM LLC	11,250	11,250	-	TYL intake gate maint, weir foam; SWL container setup
Bank of America CC	20,798	-	-	Recurring utility expense (note below)
Bay Company Enterprises, LLC	361	-	-	
Board Member Reimbursement	228	-	-	
Cambria Properties LLC	1,525	-	-	
City Market	626	-	-	
Employee Reimbursement	626	-	-	
EnviroSupply & Service, Inc.	545	-	-	
Esteem Wireless Modems	4,196	-	-	
Evans Keane LLP	23	-	-	
FedEx	88	-	-	
GovConnection, Inc.	274	-	-	
Grainger	3,530	-	-	
Gresco Utility Supply, Inc.	-	28,771	-	Drone (RR19302)
Helicopter Air Alaska LLC	5,115	-	-	
I Even Do Windows	400	-	-	
Johnson's Building Supply	48	-	-	
Ketchikan City of 2933 P&H	-	28	-	
Ketchikan Daily News	-	178	-	
Ketchikan Gateway Borough	4,810	-	-	
Kuenz America Inc	-	84,170	-	Flashboard Spares installment (RR278)
Landing Hotel & Restaurant	371	-	-	
LNM Services	189	-	-	
Marble Construction	321	-	-	
NRECA 207442 Group Ins Admin	1,514	-	-	
NRECA 207452 RSP Admin	621	-	-	
NRECA 207470 Group Ins	16,969	-	-	
OS Engineering	-	1,300	-	
Ottesen's Inc	796	249	73	
Pacific Airways Inc	1,320	440	-	
Pacific Pride	421	-	-	
Pacific Wings Inc.	297	-	-	
Petro Marine Services-WRG	999	-	-	
Pilot Publishing, Inc.	-	146	-	
R&M Engineering-Ketchikan	3,560	-	-	
Ray Matiashowski & Associates	4,000	-	-	
Satellite & Sound Inc	1,325	-	-	
SE Island Fuel	80	-	-	
Segrity LLC	19,658	71,324	-	SWL Governor Modernization (RR289) SWL Unit Control PLC-RTD (RR298) Annual GE Support contract ($16K)

Company (vendor)	Revenue Fund	Dedicated R&R Fund	New Gen Fund	Southeast Alaska Power Agency SEPTEMBER Disbursements
Sentry Hardware & Marine	586	92	-	
Sign Pro	-	1,177	-	
Southeast Auto & Marine Parts, Inc	232	-	-	
Stikine Inn	270	-	-	
Sunrise Aviation Inc	8,785	-	-	
Superior Marine Services	7,339	-	-	
Svendsen Marine	6,479	-	-	
Temsco Helicopters, Inc.	10,375	15,718	-	Support for TYL tunnel ROV inspect.
Tetra Tech Inc	362	-	-	
TexRus	11,114	1,210	-	
Timber & Marine Supply Inc	999	-	-	
Tongass Business Center	322	-	-	
TSS, Inc.	2,475	-	-	
Tyler Industrial Supply	-	545	-	
Tyler Rental, Inc.	1,650	-	-	
Wells Fargo 2009 Interest	22,448	-	-	Monthly bond payment.
Wells Fargo 2009 Principal	68,808	-	-	Monthly bond payment.
Wells Fargo 2015 Interest	40,641	-	-	Monthly bond payment.
Wells Fargo Bank MN	29	-	-	
Wrangell Extended Stay LLC	689	-	-	
Wrangell Sentinel	-	117	-	
X2nSat	1,590	-	-	
Yukon Fire Protection Services, Inc	4,268	-	-	Annual TYL fire inspection.
SEPTEMBER DISBURSEMENTS TOTAL	$ 309,408	$ 216,717	$ 73	
		$ 526,197		

Bank of America credit card charges include commercial travel, most telecom and some utility expenses (ACS, AT&T Mobility, AP&T, GCI GCI, KPU, PSG Borough, Roadpost, Wrangell City & Boro). These recurring telecom & utility charges are approximately $12K/mo.

VENDOR	Revenue Fund	Dedicated R&R Fund	New Gen Fund	Southeast Alaska Power Agency OCTOBER Disbursements
4RF USA, Inc	$ 10,558	$ -	$ -	Radio Assessment for submarine cables
Admiralty Environmental, LLC	179	-	-	
Alaska Airlines Cargo	61	-	-	
Alaska Broadcast Communications, Inc.	911	-	-	
Alpine Mini Mart	68	-	-	
Amazon.com	1,448	-	-	
Arrowhead LP Gas WRG	353	-	-	
Ascent Law Partners LLP	6,160	-	-	
Bank of America	17,663	-	-	Recurring utility expense (note below)
Bay Company Enterprises, LLC	620	-	-	
Breakaway Adventures, LLC	4,500	-	-	
Buness Bros. Inc.	661	-	-	
Cambria Properties LLC	1,525	-	-	
Channel Electric	130	-	-	
City Market	1,038	-	-	
Comptus	1,050	-	-	
Electric Power Systems Inc.	227	-	-	
Employee Reimbursement	58	-	-	
Frontier Shipping & Copyworks	110	-	-	
Grainger	5,078	-	-	
Hammer & Wikan	268	-	-	
Helicopter Air Alaska LLC	7,009	2,325	-	
Hibbard Inshore, GLBC	172,202	-	-	Tyee tunnel ROV inspection
I Even Do Windows	400	-	-	
Ketchikan Daily News	156	-	-	
Ketchikan Gateway Borough	4,810	-	-	Office rent
Ketchikan Stitches	36	-	-	
Landing Hotel & Restaurant	5,398	-	-	
Legacy Health Clinic, LLC	883	-	-	
LNM Services	148	-	-	
Madison Lumber & Hardware Inc	-	865	-	
Marble Construction	321	-	-	
Master Medical Equipment	125	-	-	
McMillen Jacobs Associates	31,054	-	-	Hydro site analysis, safety design
Meridian Environmental	2,772	-	-	
NC Machinery	143	-	-	
Newark Corporation	807	-	-	
Northern Safety Co., Inc.	1,934	-	-	
NRECA 207442 Group Ins Admin	1,514	-	-	
NRECA 207452 RSP Admin	621	-	-	
NRECA 207470 Group Ins	16,969	-	-	
Ottesen's Inc	249	11	-	
Pacific Airways Inc	1,760	-	-	
Pacific Wings Inc.	990	-	-	
Petro Marine Services-WRG	1,747	-	-	
Pilot Publishing, Inc.	68	-	-	
Precision Process Solutions	2,995	-	-	
R&M Engineering-Ketchikan	800	-	-	
Ray Matiashowski & Associates	4,000	-	-	
RLW Services, LLC	1,574	-	-	
Samson Tug & Barge	209	-	-	
Satellite & Sound Inc	1,181	-	-	
Scandia House Hotel	1,596	-	-	

VENDOR	Revenue Fund	Dedicated R&R Fund	New Gen Fund	Southeast Alaska Power Agency OCTOBER Disbursements
Seals Unlimited	3,925	-	-	
Sentry Hardware & Marine	1,608	-	-	
Southeast Auto & Marine Parts, Inc	459	-	-	
Stikine Inn	1,408	-	-	
Sunrise Aviation Inc	7,980	-	-	
Temsco Helicopters, Inc.	48,979	3,759	-	Helipads (RR290), TYL tunnel ROV support
TexRus	2,940	-	-	
Therm-Tec, Inc.	160	-	-	
Tongass Business Center	216	-	-	
TSS, Inc.	675	-	-	
Tyler Industrial Supply	1,170	-	-	
Tyler Rental, Inc.	619	-	-	
US Geological Survey	17,000	-	-	
Wells Fargo 2009 Interest	22,448	-	-	Monthly bond payment.
Wells Fargo 2009 Principal	68,808	-	-	Monthly bond payment.
Wells Fargo 2015 Interest	40,641	-	-	Monthly bond payment.
Wells Fargo Bank MN	24	-	-	
Wrangell Sentinel	54	-	-	
X2nSat	1,590	-	-	
OCTOBER DISBURSEMENTS TOTAL	$ 537,839	$ 6,960	$ -	
		$ 544,798		

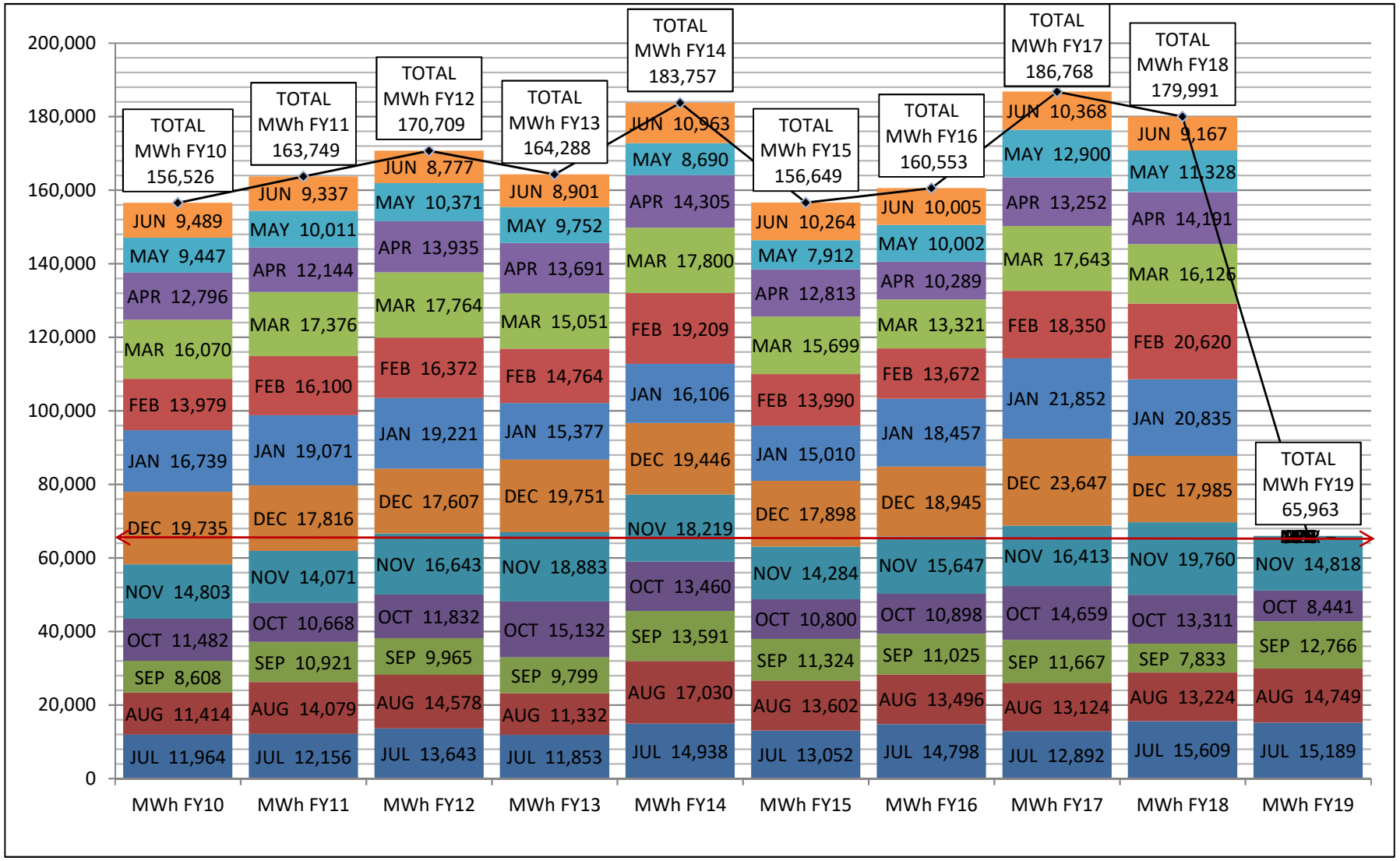
Bank of America credit card charges include commercial travel, most telecom and some utility expenses (ACS, AT&T Mobility, AP&T, GCI GCI, KPU, PSG Borough, Roadpost, Wrangell City & Boro). These recurring telecom & utility charges are approximately $12K/mo.

VENDOR	Revenue Fund	Dedicated R&R Fund	New Gen Fund	Southeast Alaska Power Agency NOVEMBER Disbursements
4Imprint, Inc.	$ 762	$ -	$ -	
Admiralty Environmental, LLC	105	-	-	
Alaska Airlines Cargo	39	-	-	
Alaska Broadcast Communications, Inc.	782	-	-	
Alaska Permanent Capital Inc	3,357	-	-	
Alaska Power Association	650	-	-	
Alpine Mini Mart	397	-	-	
Amazon.com	157	-	-	
Ascent Law Partners LLP	17,197	-	-	
Bank of America	23,041	-	-	Recurring utility expense noted below, Apartment furniture, Wage survey, Moorage
Bay Company Enterprises, LLC	779	-	-	
Big Sky Hydro LLC	25,014	-	-	SWL O&M Review
Cambria Properties LLC	1,525	-	-	
City Market	2,042	-	-	
CoastAlaska, Inc.	2,184	-	-	
Electric Power Systems Inc.	1,365	-	-	
Employee Reimbursement	1,026	-	-	Employee travel (included hotel)
First City Electric, Inc.	390	-	-	
G2 Risk Consulting	1,013	-	-	
Grainger	4,441	-	-	
Hammer & Wikan	291	-	-	
I Even Do Windows	400	-	-	
Intandem, LLC	1,500	-	-	
Ketchikan CHARR Education Fund	1,000	-	-	
Ketchikan City of 2933 P&H	29	-	-	
Ketchikan Daily News	-	148	-	
Ketchikan Gateway Borough	4,810	-	-	
Ketchikan High School	500	-	-	
Ketchikan Ready Mix & Quarry, Inc	6,500	-	-	Fuel barge to Tyee
Kuenz America Inc	-	84,170	-	Flashboard spares final pmt (RR278)
LNM Services	127	-	-	
Marble Construction	321	-	-	
Marsh USA Inc.	328,350	-	-	Annual insurance premium
Marsh Wortham	118,080	-	-	Annual insurance premium
McMillen Jacobs Associates	6,765	-	-	
NRECA Group Ins	16,969	-	-	
NRECA Group Ins Admin	1,514	-	-	
NRECA RSP Admin	621	-	-	
OS Engineering	-	3,803	-	SWL Switchgear engineering (RR19314)
Ottesen's Inc	671	-	-	
Petersburg Bottled Gas	468	-	-	
Petro Marine Services-KTN	286	236	-	
Petro Marine Services-WRG	9,033	-	-	Tyee fuel delivery
Pilot Publishing, Inc.	-	120	-	
R&M Engineering-Ketchikan	1,802	-	-	
Ray Matiashowski & Associates	4,000	-	-	
Samson Tug & Barge	352	376	-	
Satellite & Sound Inc	525	-	-	
Schofield Equipment & Repair Inc	317	-	-	
SE Island Fuel	78	-	-	
Segrity LLC	9,582	-	-	

VENDOR	Revenue Fund	Dedicated R&R Fund	New Gen Fund	Southeast Alaska Power Agency NOVEMBER Disbursements
Sentry Hardware & Marine	460	-	-	
Source North America Corporation	1,995	-	-	
Southeast Auto & Marine Parts, Inc	12	-	-	
Sunrise Aviation Inc	5,447	-	-	
TexRus	5,121	-	-	
Tongass Business Center	651	-	-	
TSS, Inc.	2,025	-	-	
Tyler Industrial Supply	902	-	-	
Tyler Rental, Inc.	3,312	-	-	
Wells Fargo 2009 Interest	22,448	-	-	Monthly bond payment
Wells Fargo 2009 Principal	68,808	-	-	Monthly bond payment
Wells Fargo 2015 Interest	40,641	-	-	Monthly bond payment
Wrangell City & Borough	3,138	-	-	PERS Past Service Cost
Wrangell Extended Stay LLC	1,866	-	-	
Wrangell Medical Center	641	-	-	
Wrangell Sentinel	-	96	-	
X2nSat	1,590	-	-	
NOVEMBER DISBURSEMENTS TOTAL	$ 760,214	$ 88,950	$ -	
		$ 849,164		

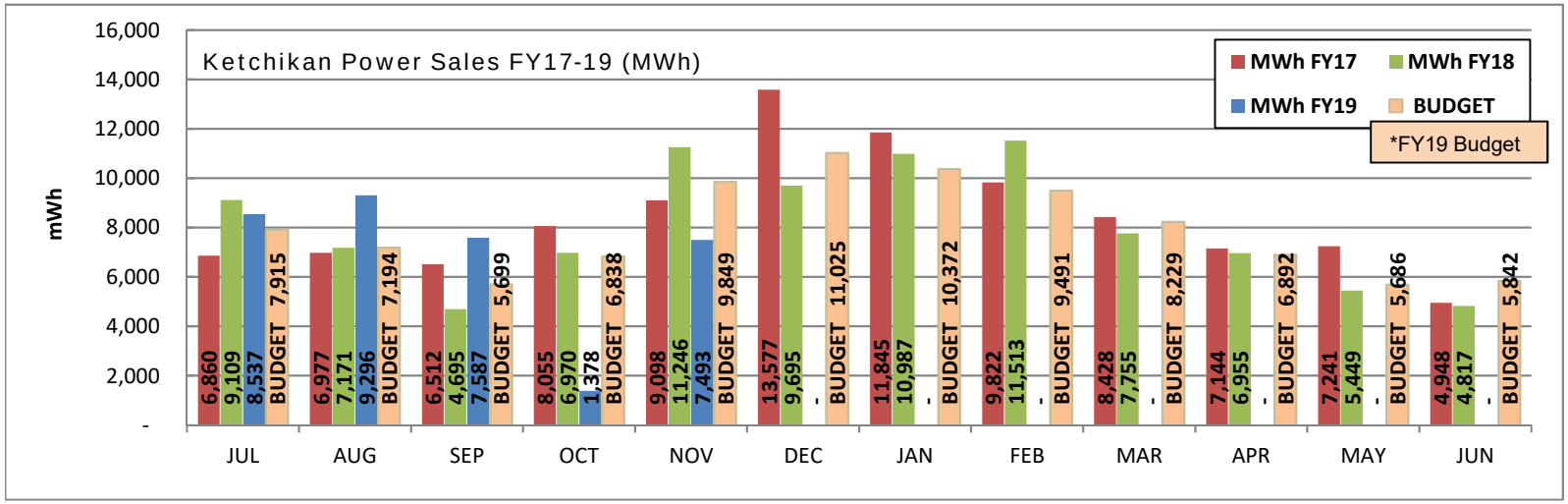
Bank of America credit card charges include commercial travel, most telecom and some utility expenses (ACS, AT&T Mobility, AP&T, GCI GCI, KPU, PSG Borough, Roadpost, Wrangell City & Boro). These recurring telecom & utility charges are approximately $12K/mo.

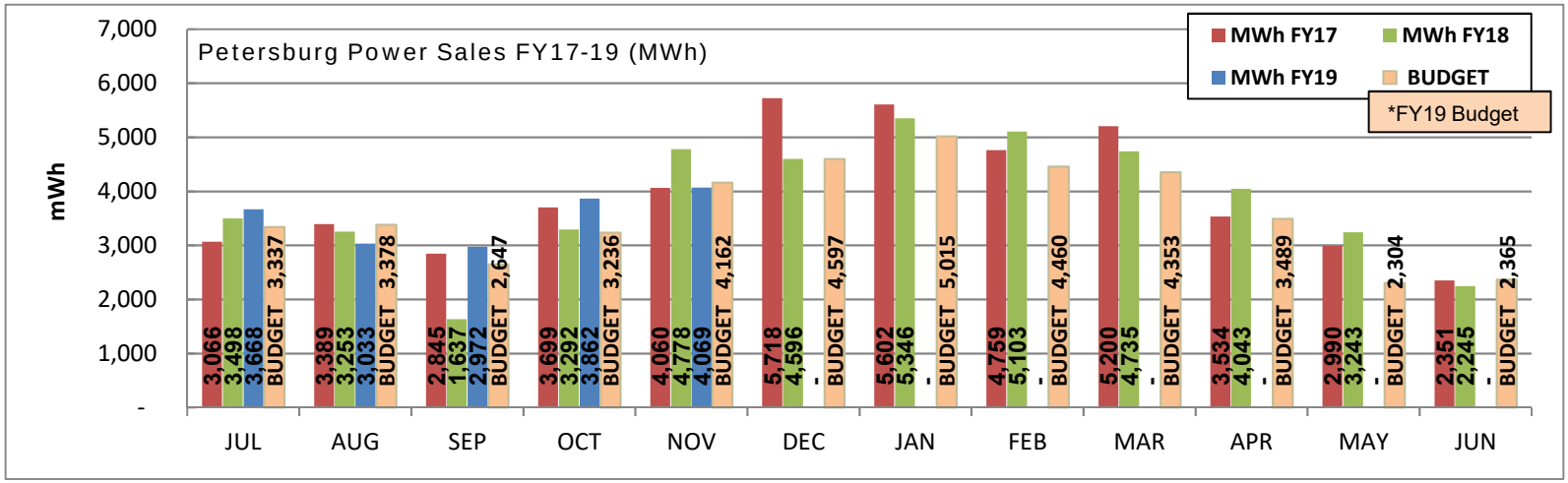
MWh Sales Year-to-Year Comparison (NOV FY19)



SOUTHEAST ALASKA POWER AGENCY
FIRM POWER SALES (kWh / MWh)

NOV 2018	FY19 kWh HYDROPOWER SALES	CURRENT MONTH		YEAR-TO-DATE	
		Actual	Budget	Actual	Budget
	Ketchikan Power Purchases	7,492,544	9,849,097	34,290,048	37,494,419
	Petersburg Power Purchases	4,069,480	4,162,237	17,604,543	16,760,552
	Wrangell Power Purchases	3,255,920	3,405,722	14,068,850	14,593,115
	Total Power Purchases	14,817,944	17,417,056	65,963,441	68,848,086





SOUTHEAST ALASKA POWER AGENCY
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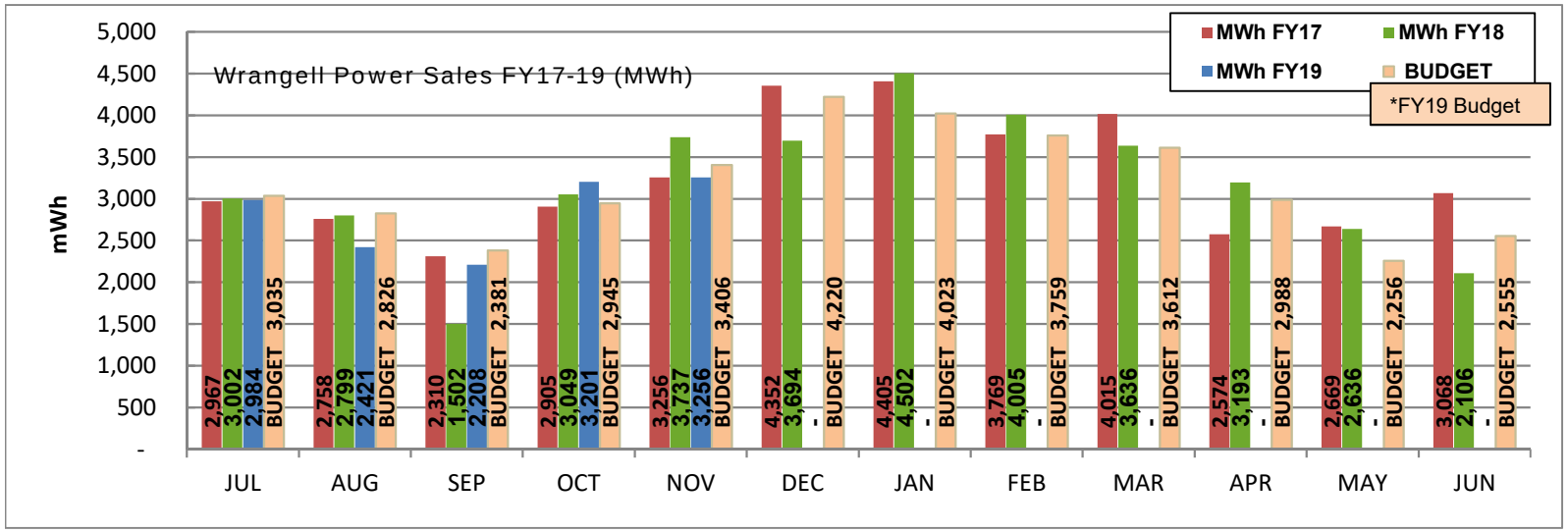

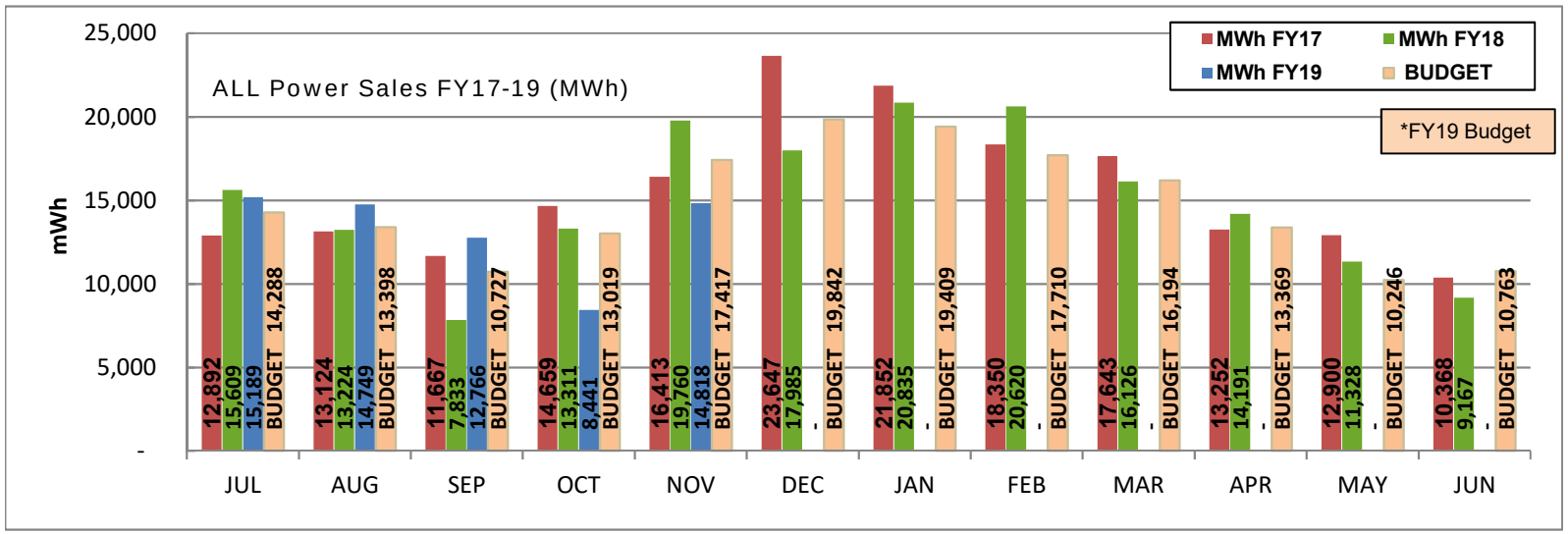

SOUTHEAST ALASKA POWER AGENCY
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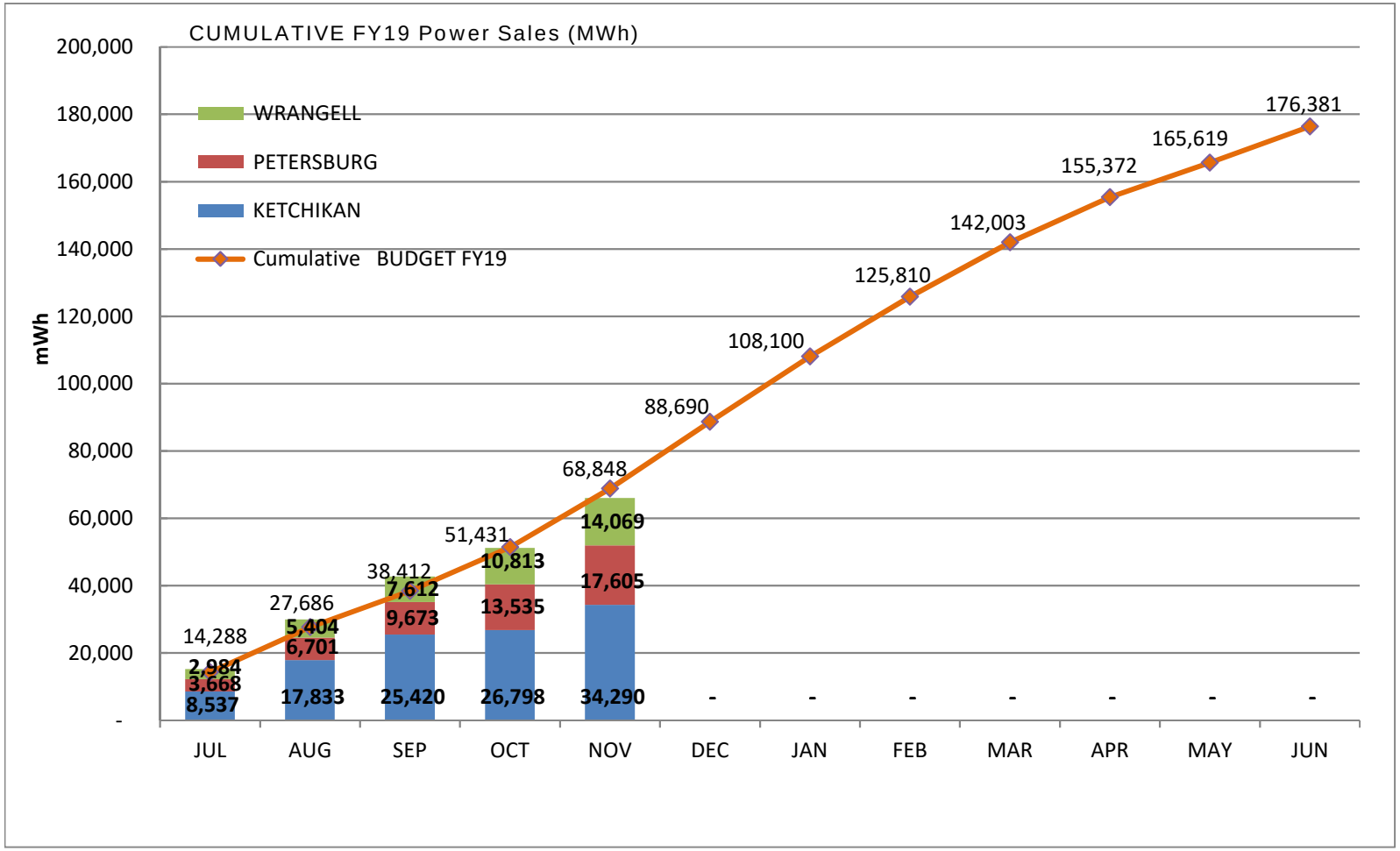
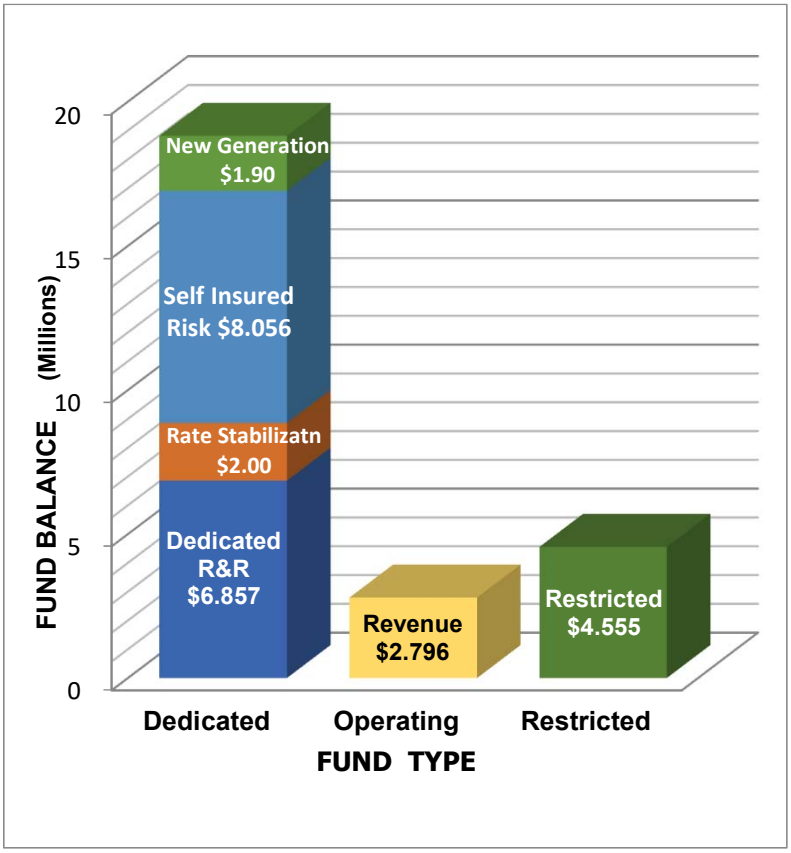


NOVEMBER 2018

Operations, Capital and Insurance Funds		
Revenue Fund	$ 2,794,761	
Required R&R Fund	1,000,256	
Dedicated R&R Projects Fund	6,856,586	
Commercial	766	
New Generation Fund	1,899,629	
Rate Stabilization Fund	2,000,412	
Self Insured Risk Fund	8,055,706	*
Total Operations, Capital and Insurance Funds	22,608,115	
Trustee Funds		
2009 Bond Interest	$ 135,872	
2009 Bond Principal	418,250	
2009 Bond Reserve	1,431,648	
2015 Bond Interest	244,475	
2015 Bond Reserve	216,049	
Total Trustee Funds	2,446,294	
Other Restricted Funds		
STI - USFS CD	$ 21,633	
DNR Reclamation Fund	1,086,941	
Total Other Restricted Funds	1,108,574	
Total Agency Funds	$ 26,162,983	



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 to ensure stability of Member Utility rates.
Dedicated R&R = Funds Replacement & Repair projects approved by the SEAPA Board in the budget.

Operating Funds

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

Restricted Funds (Legally or contractually restricted)

All Trustee Funds: Bond Interest, Principal, Reserve and Escrow accounts
R&R = $1,000,000 minimum balance required by bond indenture
DNR = Alaska DNR Reclamation Agreement
USFS = USFS Land Remediation Certificate of Deposit

*Balance of the Self-Insured Risk Fund may change slightly pending final valuation of investments.
(Graph was prepared before final statement was received.)

SOUTHEAST ALASKA POWER AGENCY

GRANT SUMMARY

SEPTEMBER 2018

AK DCCED GRANT 13-DC-553

FY19 Grant Billing	Grant Budget	Billing thru FY19	Open Balance
1 - Hydro Storage	578,000	578,000	0
2 - G&T Site Evaluation	1,705,000	1,577,844	127,156
3 - Stability / Interconnecti	146,000	0	146,000
4 - Load Balance Model	112,000	9,181	102,819
5 - Project Mgmt	309,000	255,712	53,288
6 - Business Analysis / PSA	150,000	48,015	101,985
Total FY13 AK DCCED	3,000,000	2,468,752	531,248

(0)

TERM: JUL 2013 - JUN 2019

QUARTERLY BILLING

Sep-18	Dec-18	Mar-19	May-19	FY19
-	-	-	-	-
22,908	-	-	-	22,908
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
22,908	-	-	-	22,908

OCTOBER 2018
FINANCIAL OVERVIEW

These tables provide a snapshot of SEAPA's revenues and expenses for OCTOBER 2018.

Revenues from kWh sales were under budget for the month and lower than last year:

FIRM kWh SALES	OCT Sales	OCT Budget	Prior Year Sales
Ketchikan	$93,699	$464,951	$473,948
Petersburg	262,636	220,063	223,863
Wrangell	217,684	200,256	207,350
Total Revenue	$574,018	$885,270	$905,160

Fiscal year-to-date revenues from kWh sales were over budget and higher than last year:

FIRM kWh SALES	YTD Sales	YTD Budget	Prior YTD Sales
Ketchikan	$1,822,230	$1,879,882	$1,900,250
Petersburg	920,384	856,685	794,250
Wrangell	735,279	760,743	703,998
Total Revenue	$3,477,894	$3,497,310	$3,398,497

FIRM kWh SALES (Year-Over-Year)	FISCAL YEAR	OCT kWh	YTD JUL-OCT kWh
	FY2019	8,441,448	51,145,497
	FY2018	13,311,181	49,977,903
	FY2017	14,659,289	52,342,761

Administrative and operating expenses were under budget:

Administrative & Operating Expenses	OCT Actual	OCT Budget	Prior Yr Expense
	$442,663	$513,597	$671,098
	YTD Actual	YTD Budget	Prior YTD Expense
	$1,945,354	$2,231,428	$2,100,695

OCTOBER 2018

	OCT 2018	OCT 2017
ASSETS		
Current Assets		
Agency Funds		
111000 · Ops/Capital/Insurance Funds		
111100 · Revenue Fund FB	2,995,419	5,771,142
111200 · Required R&R Fund FB	1,000,206	1,000,206
111210 · Dedicated R&R Projects Fund FB	6,945,190	6,507,819
111300 · Commercial FB	994	140,589
111401 · New Generation Fund	1,899,534	1,898,448
111402 · Rate Stabilization Fund	2,000,312	-
111500 · Self Insured Risk Fund FNBA	8,032,377	8,002,150
Total 111000 · Ops/Capital/Insurance Funds	22,874,032	23,320,354
112000 · Trustee Funds		
112100 · WF Trust 2009 Bond Interest	113,283	151,318
112200 · WF Trust 2009 Bond Principal	349,006	400,768
112300 · WF Trust 2009 Bond Reserve	1,429,585	1,413,996
112501 · WF Trust 2015 Bond Interest	203,581	203,481
112503 · WF Trust 2015 Bond Reserve	215,737	213,385
Total 112000 · Trustee Funds	2,311,191	2,382,947
113000 · Other Restricted Funds		
113100 · STI - USFS CD WF	21,633	21,626
113500 · DNR Reclamation Fund WF	1,086,941	1,003,273
Total 113000 · Other Restricted Funds	1,108,574	1,024,899
Total Agency Funds	26,293,796	26,728,200
Accounts Receivable		
110000 · Accounts Receivable	959,686	1,354,786
110100 · Grants Receivable	22,908	-
Total Accounts Receivable	982,594	1,354,786
Other Current Assets		
120200 · Other Receivables	5,800	5,800
120300 · Accrued Interest Receivable	31,302	23,454
120500 · Prepaid Fees		
120510 · Prepaid FERC Fees	-	-
120520 · Prepaid Insurance	-	-
120530 · Prepaid Operating Expense	14,756	16,159
120540 · Prepaid USDA FS Land Use Fees	16,881	16,533
120550 · Prepaid Admin Benefits	45,222	41,463
Total 120500 · Prepaid Fees	76,860	74,155
120700 · Inventory Assets		
1207001 · Inventory Spares-Stores	167,250	151,834
1207003 · Inventory - SWL Winding Replace	890,405	890,405
Total 120700 · Inventory Assets	1,057,655	1,042,239
Total Other Current Assets	1,171,616	1,145,648
Total Current Assets	28,448,007	29,228,633

OCTOBER 2018

	OCT 2018	OCT 2017
Fixed Assets		
130100 · Capital Assets	179,117,642	177,317,481
132200 · R&R Projects WIP Capital Improv	421,853	635,988
132900 · Accumulated Depreciation	(46,685,432)	(41,889,030)
Total Fixed Assets	132,854,063	136,064,439
Other Assets		
183000 · Deferred Assets		
183003 · 2009 Bond - Refunded Discount	104,281	122,959
Total 183000 · Deferred Assets	104,281	122,959
Total Other Assets	104,281	122,959
TOTAL ASSETS	**161,406,351**	**165,416,031**
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		
210100 · Accounts Payable General	109,524	1,042,795
Total Accounts Payable	109,524	1,042,795
Other Current Liabilities		
210150 · Other Current Liabilities	9,975	100,171
210151 · Member Utility Rebate Payable	800,000	2,700,000
210152 · DNR Fund - CVEA KEA Portion	-	337,500
210300 · Reserve Interest Payable	315,286	359,414
210400 · Wages Payable	59,156	58,170
210401 · PTO Payable	165,072	179,803
210500 · Payroll Liabilities	21,594	23,360
Total Other Current Liabilities	1,371,084	3,758,418
Total Current Liabilities	1,480,608	4,801,213
Long Term Liabilities		
220100 · Series B Bonds 2009	5,590,000	6,390,000
220120 · 2009 Bond Issuance Discount	(22,461)	(26,484)
220121 · PERS Unfunded Liability WRG	931,965	1,005,501
220122 · DNR Fund CVEA KEA Liability	543,471	-
220130 · Series 2015 Bonds	10,295,000	10,295,000
220131 · 2015 Bond Issuance Premium	802,933	857,992
Total Long Term Liabilities	18,140,907	18,522,009
Total Liabilities	19,621,516	23,323,222
Net Position		
310000 · Net Position	142,091,471	142,591,882
Net Income	(306,635)	(499,072)
Total Net Position	141,784,836	142,092,809
TOTAL LIABILITIES & NET POSITION	**161,406,351**	**165,416,031**

OCTOBER 2018	OCTOBER 2018	FISCAL YEAR-TO-DATE - OCTOBER 2018			ANNUAL BUDGET	% Annual Budget
		YTD FY18	YTD FY19	YTD BUDGET		
Operating Income/Expense						
Operating Income						
410000 · Hydro Facility Revenues						
410100 · Ketchikan Power Purchases	$ 93,699	$ 1,900,250	$ 1,822,230	$ 1,879,882	$ 6,462,162	
410200 · Petersburg Power Purchases	262,636	794,250	920,384	856,685	2,947,334	
410300 · Wrangell Power Purchases	217,684	703,998	735,279	760,743	2,584,416	
Total 410000 · Hydro Facility Revenues	$ 574,018	$ 3,398,497	$ 3,477,894	$ 3,497,310	$ 11,993,912	29%
Total Operating Income	$ 574,018	$ 3,398,497	$ 3,477,894	$ 3,497,310	$ 11,993,912	
Operating Expense						
535000 · Hydro Ops-Suprvsn & Engineering	$ 2,741	$ 24,757	$ 6,008	$ 30,160	$ 322,480	2%
537000 · Hydraulic Expenses	-	-	11	-	10,000	0%
538000 · Electric Expenses	10,407	12,844	14,630	25,100	97,500	15%
539000 · Misc Power Generation Expense	49,993	96,009	154,310	130,000	359,545	43%
540000 · Rents	13,191	62,402	52,457	56,688	180,500	29%
541000 · Hydro Power Station Maintenance	4,897	14,727	19,623	28,410	75,500	26%
543000 · Dams, Reservoirs & Waterways	8,232	20,945	288,858	333,405	386,705	75%
544000 · Maintenance of Electric Plant	108,970	401,660	429,445	414,360	1,297,463	33%
545000 · Plant Miscellaneous Maintenance	3,008	24,216	12,243	19,850	57,500	21%
561000 · Control System Maintenance	1,341	31,719	6,698	30,000	126,000	5%
562000 · Trans/Operations Station Exp	1,564	10,448	7,327	14,000	65,700	11%
564000 · Trans/Submarine Cable Expense	10,558	668	20,807	23,400	548,500	4%
571000 · Trans/Maint Overhead Lines(OHL)	23,745	438,217	107,706	209,425	1,627,626	7%
920000 · Admin Wages & Benefits	120,494	476,061	470,757	459,030	1,418,000	33%
921000 · Office Expenses	8,778	30,644	31,678	50,700	144,500	22%
922000 · Legislative Affairs	4,000	16,000	16,043	19,000	53,000	30%
923000 · Contract Services	10,379	64,244	43,642	90,800	320,250	14%
924000 · Insurance	37,556	153,226	150,226	152,000	478,000	31%
928000 · Regulatory Commission Expense	5,225	141,834	29,494	59,000	174,500	17%
930000 · General Expenses	10,128	51,062	53,184	54,900	186,450	29%
931000 · Admin Rent	7,456	29,012	30,206	31,200	95,400	32%
Total Operating Expense	$ 442,663	$ 2,100,695	$ 1,945,354	$ 2,231,428	$ 8,025,119	24%
Net Operating Income	$ 131,356	$ 1,297,802	$ 1,532,540	$ 1,265,882	$ 3,968,793	

OCTOBER 2018	OCTOBER 2018	FISCAL YEAR-TO-DATE - OCTOBER 2018		
		YTD FY18	YTD FY19	YTD BUDGET
Nonoperating Income/Expense				
Nonoperating Income				
941000 · Grant Income	$ -	$ 25,420	$ 7,189	
942000 · Interest Income	13,683	39,327	51,982	
944000 · Realized Gain/(Loss)	-	(3,668)	(4,178)	
945000 · Unrealized Gain/(Loss)	2,129	(12,338)	6,387	
946000 · Misc Nonoperating Income	-	7,000	1,500	
Total Nonoperating Income	$ 15,812	$ 55,740	$ 62,881	
Nonoperating Expense				
950001 · Misc Nonoperating Expense	$ -	$ -	$ (9,746)	
952000 · Bond Interest 2009 Series	24,340	108,276	97,359	
952001 · Bond Interest 2015 Series	36,052	144,210	143,984	
953000 · Depreciation Expense	408,620	1,574,567	1,633,934	
954000 · Grant Expenses	6,514	25,562	35,991	
960001 · Meteorological Tower	-	-	536	
Total Nonoperating Expense	$ 475,526	$ 1,852,615	$ 1,902,056	
Net Nonoperating Income	$ (459,714)	$ (1,796,874)	$ (1,839,175)	
Net Income	**$ (328,358)**	**$ (499,072)**	**$ (306,635)**	

JULY - OCTOBER 2018	Jul - Oct 18	YTD Budget	% of Budget	Annual Budget
Operating Income/Expense				
Operating Income				
410000 · Hydro Facility Revenues				
410100 · Ketchikan Power Purchases	1,822,230	1,879,882	97%	6,462,162
410200 · Petersburg Power Purchases	920,384	856,685	107%	2,947,334
410300 · Wrangell Power Purchases	735,279	760,743	97%	2,584,416
Total 410000 · Hydro Facility Revenues	3,477,894	3,497,310	99%	11,993,912
Total Operating Income	3,477,894	3,497,310	99%	11,993,912
Operating Expense				
535000 · Hydro Ops-Suprvsn & Engineering				
535100 · Hyd/Ops Sup & Eng - Swan Lake	3,623	6,160	59%	18,480
535150 · Hyd/Ops Sup & Eng - SWL SEAPA	1,348	16,000	8%	147,500
535250 · Hyd/Ops Sup & Eng -TYL SEAPA	1,037	4,000	26%	86,500
535400 · Hyd/Op Sup & Eng - Proj Drawing	-	4,000	0%	70,000
Total 535000 · Hydro Ops-Suprvsn & Engineering	6,008	30,160	20%	322,480
537000 · Hydraulic Expenses				
537150 · Hydraulic Expense - SWL SEAPA	11	-	100%	5,000
537250 · Hydraulic Expense - TYL SEAPA	-	-	0%	5,000
Total 537000 · Hydraulic Expenses	11	-	100%	10,000
538000 · Electric Expenses				
538100 · Electric Expense - Swan Lake	62	5,600	1%	17,000
538150 · Electric Expense - SWL SEAPA	3,515	7,000	50%	35,000
538200 · Electric Expense - Tyee Lake	11,053	5,500	201%	20,500
538250 · Electric Expense - TYL SEAPA	-	7,000	0%	25,000
Total 538000 · Electric Expenses	14,630	25,100	58%	97,500
539000 · Misc Power Generation Expense				
539100 · Misc Exp - Swan Lake	21,169	34,400	62%	104,195
539150 · Misc Expense - SWL SEAPA	22,232	4,500	494%	11,000
539151 · Misc Expense - SWL Communicatn	17,539	9,300	189%	15,300
539200 · Misc Expense - Tyee Lake	40,203	30,000	134%	90,000
539250 · Misc Expense - TYL SEAPA	15,237	19,000	80%	56,250
539251 · Misc Expense - TYL Communicatn	37,930	32,800	116%	82,800
Total 539000 · Misc Power Generation Expense	154,310	130,000	119%	359,545
540000 · Rents				
540300 · FERC Land Use Fee - Swan Lake	3,996	4,200	95%	13,000
540400 · FERC Land Use Fee - Tyee Lake	14,698	14,700	100%	45,000
540500 · USDA Land Use Fee - USFS ROW	8,156	8,160	100%	25,000
540600 · USDA Land Use Fee - STI	24,980	24,980	100%	75,500
540601 · AK DNR Land Use Fee - STI	-	4,000	0%	20,000
540700 · USDA Tyee Passive Reflector	441	460	96%	1,400
540710 · USDA Etolin Burnett Radio	186	188	99%	600
Total 540000 · Rents	52,457	56,688	93%	180,500
541000 · Hydro Power Station Maintenance				
541100 · Maintenance - Swan Lake	10,783	8,000	135%	24,000
541150 · Maintenance - SWL SEAPA	931	4,000	23%	12,500
541200 · Maintenance - Tyee Lake	7,909	7,160	110%	21,500
541250 · Maintenance - TYL SEAPA	-	9,250	0%	17,500
Total 541000 · Hydro Power Station Maintenance	19,623	28,410	69%	75,500

JULY - OCTOBER 2018	Jul - Oct 18	YTD Budget	% of Budget	Annual Budget
543000 · Dams, Reservoirs & Waterways				
543100 · Dams Res & Waterwys - Swan Lake	883	1,000	88%	5,000
543150 · Dams Res & Waterwys - SWL SEAPA	730	17,000	4%	49,500
543200 · Dams Res & Waterwys - Tyee Lake	254,803	296,405	86%	297,205
543250 · Dams Res & Waterwys - TYL SEAPA	32,442	19,000	171%	35,000
Total 543000 · Dams, Reservoirs & Waterways	288,858	333,405	87%	386,705
544000 · Maintenance of Electric Plant				
544100 · SWL Plant Wages & Benefits				
5441911 · SWL Plant Wages/PTO	122,394	113,200	108%	340,463
5441912 · SWL Plant Wages OT	30,114	28,000	108%	84,000
5441920 · SWL Plant Benefit - Taxes	11,522	15,000	77%	45,000
5441930 · SWL Plant Benefits - Insurance	37,577	31,000	121%	95,000
5441940 · SWL Plant Benefits - Retirement	19,326	15,200	127%	47,000
544100 · SWL Plant Wages & Benefits - Other	300	-	100%	-
Total 544100 · SWL Plant Wages & Benefits	221,232	202,400	109%	611,463
544150 · Maint Electric Plant-SWL SEAPA	-	-	0%	-
5442900 · TYL Plant Wages & Benefits				
5442911 · TYL Plant Wages/PTO	126,129	135,660	93%	427,000
5442912 · TYL Plant Wages OT	20,405	11,000	186%	38,000
5442920 · TYL Plant Benefit - Taxes	11,358	19,800	57%	65,200
5442930 · TYL Plant Benefits - Insurance	30,852	33,000	93%	117,300
5442940 · TYL Plant Benefits - Retirement	19,997	12,500	160%	38,500
5442992 · TYL Plant Grant-Capital Payroll	(528)	-	100%	-
Total 5442900 · TYL Plant Wages & Benefits	208,213	211,960	98%	686,000
Total 544000 · Maintenance of Electric Plant	429,445	414,360	104%	1,297,463
545000 · Plant Miscellaneous Maintenance				
545100 · Plant Misc Maint - Swan Lake	2,274	9,600	24%	29,000
545150 · Plant Misc Maint - SWL SEAPA	1,810	1,350	134%	4,500
545200 · Plant Misc Maint - Tyee Lake	7,677	8,400	91%	22,500
545251 · Plant Misc Maint - WRG Warehous	482	500	96%	1,500
Total 545000 · Plant Miscellaneous Maintenance	12,243	19,850	62%	57,500
561000 · Control System Maintenance				
561150 · Control System Maint. - SWL	3,855	15,000	26%	63,000
561250 · Control System Maint. - TYL	2,843	15,000	19%	63,000
Total 561000 · Control System Maintenance	6,698	30,000	22%	126,000
562000 · Trans/Operations Station Exp				
562100 · Trans/Ops Station - Swan Lake	-	4,200	0%	15,000
562150 · Trans/Ops Station - SWL SEAPA	-	-	0%	21,500
562200 · Trans/Ops Station - Tyee Lake	3,012	4,000	75%	12,200
562250 · Trans/Ops Station-TYL SEAPA	4,315	5,800	74%	17,000
Total 562000 · Trans/Operations Station Exp	7,327	14,000	52%	65,700
564000 · Trans/Submarine Cable Expense				
564200 · Trans/Sub Cable Exp - Tyee Lake	20,807	23,400	89%	548,500
Total 564000 · Trans/Submarine Cable Expense	20,807	23,400	89%	548,500

JULY - OCTOBER 2018	Jul - Oct 18	YTD Budget	% of Budget	Annual Budget
571000 · Trans/Maint Overhead Lines(OHL)				
571100 · Trans/Maint OHL - Swan Lake	648	8,000	8%	24,000
571150 · Trans/Maint OHL - SWL SEAPA	-	-	0%	261,365
571151 · Trans/Maint OHL - SWL ROW Clear	-	110,000	0%	260,000
571200 · Trans/Maint OHL - Tyee Lake	37,697	27,500	137%	34,000
571250 · Trans/Maint OHL - TYL SEAPA	6,177	8,600	72%	260,742
571251 · Trans/Maint OHL - TYL ROW Clear	-	-	0%	235,000
5712900 · TYL Brushing Wages & Benefits				
5712911 · TYL Brushing Wages/PTO	42,467	27,090	157%	79,000
5712912 · TYL Brushing Wages OT	3,016	4,000	75%	10,000
5712920 · TYL Brushing Benefit - Taxes	3,653	2,600	140%	7,880
5712930 · TYL Brushing Benefit- Insurance	7,713	7,720	100%	23,450
5712940 · TYL Brushing Benefit- Retiremnt	4,752	2,515	189%	7,670
5712992 · TYL Brush Grant-Capital Payroll	-	-	0%	-
Total 5712900 · TYL Brushing Wages & Benefits	61,600	43,925	140%	128,000
571300 · Trans/Maint OHL STI Maintenance	-	3,400	0%	329,519
571500 · Trans/Maint OHL STI Therml Scan	-	-	0%	-
571700 · Trans/Maint OH STI Clearing	1,584	-	100%	55,000
571800 · Trans/Maint OHL System Events	-	8,000	0%	40,000
Total 571000 · Trans/Maint Overhead Lines(OHL)	107,706	209,425	51%	1,627,626
920000 · Admin Wages & Benefits				
9201911 · Admin Wages/PTO	289,932	282,900	102%	851,000
9201912 · Admin Wages - Overtime	244	650	38%	2,000
9201920 · Admin Benefit - Taxes	17,532	19,480	90%	61,000
9201930 · Admin Benefit - H&W Insurance	67,667	68,000	100%	208,000
9201940 · Admin Benefit - Retirement	95,382	88,000	108%	296,000
Total 920000 · Admin Wages & Benefits	470,757	459,030	103%	1,418,000
921000 · Office Expenses				
921100 · Office Supplies	5,541	5,000	111%	15,000
921200 · Office Equipment	4,589	6,000	76%	14,000
921300 · Phone, Courier, Internet	8,486	6,300	135%	17,500
921400 · System Network / IT Support	12,445	31,900	39%	93,500
921600 · Vehicle Expenses	618	1,500	41%	4,500
Total 921000 · Office Expenses	31,678	50,700	62%	144,500
922000 · Legislative Affairs	16,043	19,000	84%	53,000
923000 · Contract Services				
923200 · Annual Financial Audit	-	-	0%	35,000
923300 · Bank & Trustee Fees	1,172	1,000	117%	16,250
923400 · Insurance Consultant	1,013	4,000	25%	10,000
923500 · Investment Consultant	6,708	7,200	93%	22,000
923600 · Legal Fees	27,890	58,000	48%	170,000
923700 · Recruitment	1,761	6,000	29%	26,000
923800 · Other Professional Services	5,098	14,600	35%	41,000
Total 923000 · Contract Services	43,642	90,800	48%	320,250
924000 · Insurance	150,226	152,000	99%	478,000
928000 · Regulatory Commission Expense				
928001 · Other Regulatory Expense	7,985	10,000	80%	29,700
928150 · FERC SWL Admin Fees	10,827	8,000	135%	24,000
928151 · FERC SWL Other Expenses	800	31,500	3%	94,500
928250 · FERC TYL Admin Fees	9,883	8,000	124%	24,000
928251 · FERC TYL Other Expenses	-	1,500	0%	2,300
Total 928000 · Regulatory Commission Expense	29,494	59,000	50%	174,500

JULY - OCTOBER 2018	Jul - Oct 18	YTD Budget	% of Budget	Annual Budget
930000 · General Expenses				
930100 · Advertising Expense	394	850	46%	2,500
930110 · Public Relations	13,440	16,000	84%	37,000
930300 · Association Dues Expense	700	400	175%	33,900
930310 · Professional Assn Dues	-	200	0%	500
930400 · Board Meeting Expenses	7,112	11,000	65%	35,000
930500 · Training Expense	18,113	15,050	120%	38,550
930600 · Travel Expense	12,998	10,000	130%	35,000
930700 · Non-Travel Incidental	427	1,400	31%	4,000
Total 930000 · General Expenses	53,184	54,900	97%	186,450
931000 · Admin Rent				
931010 · Office Rent	22,459	23,300	96%	73,100
931100 · Apartment Rent - Ketchikan	7,747	7,900	98%	22,300
Total 931000 · Admin Rent	30,206	31,200	97%	95,400
Total Operating Expense	1,945,354	2,231,428	87%	8,025,119
Net Operating Income	1,532,540	1,265,882	121%	3,968,793
Nonoperating Income/Expense				
Nonoperating Income				
941000 · Grant Income	7,189			
942000 · Interest Income				
942100 · Misc Interest Income	12,270			
942200 · Investment Interest Income	39,713			
Total 942000 · Interest Income	51,982			
944000 · Realized Gain/(Loss)	(4,178)			
945000 · Unrealized Gain/(Loss)	6,387			
946000 · Misc Nonoperating Income	1,500			
Total Nonoperating Income	62,881			
Nonoperating Expense				
950001 · Misc Nonoperating Expense	(9,746)			
952000 · Bond Interest 2009 Series	97,359			
952001 · Bond Interest 2015 Series	143,984			
953000 · Depreciation Expense	1,633,934			
954000 · Grant Expenses	35,991			
955000 · Interest Expense	-			
960001 · Meteorological Tower	536			
Total Nonoperating Expense	1,902,056			
Net Nonoperating Income	(1,839,175)			
Net Income	(306,635)	1,265,882	-24%	3,968,793

YTD SUMMARY	Jul - Oct 18	YTD Budget	% of Budget	Annual Budget
Operating Income	3,477,894	3,497,310	99%	11,993,912
Operating & Maintenance Expense	1,120,124	1,314,798	925%	5,155,019
General & Administrative Expense	825,230	916,630	640%	2,870,100
Net Operating Income	1,532,540	1,265,882		3,968,793
Net Nonoperating Income & Expense, including Depreciation	(1,839,175)			
Net Income	(306,635)			

SEPTEMBER 2018

FINANCIAL OVERVIEW

These tables provide a snapshot of SEAPA's revenues and expenses for September 2018.

Revenues from kWh sales were over budget for the month and higher than last year:

FIRM kWh SALES	SEP Sales	SEP Budget	Prior Year Sales
Ketchikan	$515,912	$387,499	$319,232
Petersburg	202,095	179,978	111,308
Wrangell	150,113	161,933	102,133
Total Revenue	$868,120	$729,410	$532,673

Fiscal year-to-date revenues from kWh sales were over budget and higher than last year:

FIRM kWh SALES	YTD Sales	YTD Budget	Prior YTD Sales
Ketchikan	$1,728,532	$1,414,931	$1,426,302
Petersburg	657,749	636,622	570,387
Wrangell	517,595	560,487	496,648
Total Revenue	$2,903,875	$2,612,040	$2,493,337

FIRM kWh SALES (Year-Over-Year)	FISCAL YEAR	SEP kWh	YTD JUL-SEP kWh
	FY2019	12,766,476	42,704,049
	FY2018	7,833,430	36,666,722
	FY2017	11,666,990	37,683,472

Administrative and operating expenses were under budget:

Administrative & Operating Expenses	SEP Actual	SEP Budget	Prior Yr Expense
	$670,897	$698,197	$626,438
	YTD Actual	YTD Budget	Prior YTD Expense
	$1,502,691	$1,717,331	$1,429,597

$407K in R&R projects were capitalized in September (refer to R&R report for details).

The DNR Fund liability, representing the portion of the fund assigned to Copper Valley and Kodiak Electric, was reclassed from Other Current Liabilities (210152) to Long Term Liabilities (220122) on the Statement of Financial Position. Current Liabilities only include those that are to be paid within one year.

SEPTEMBER 2018

	SEP 2018	SEP 2017
ASSETS		
Current Assets		
Agency Funds		
111000 · Ops/Capital/Insurance Funds		
111100 · Revenue Fund FB	2,754,330	5,744,524
111200 · Required R&R Fund FB	1,000,154	1,000,154
111210 · Dedicated R&R Projects Fund FB	6,951,790	6,934,126
111300 · Commercial FB	1,006	1,000
111401 · New Generation Fund	1,899,435	1,898,350
111402 · Rate Stabilization Fund	2,000,208	-
111500 · Self Insured Risk Fund FNBA	8,020,988	8,005,077
Total 111000 · Ops/Capital/Insurance Funds	22,627,911	23,583,231
112000 · Trustee Funds		
112100 · WF Trust 2009 Bond Interest	90,737	126,091
112200 · WF Trust 2009 Bond Principal	279,896	334,003
112300 · WF Trust 2009 Bond Reserve	1,427,766	1,413,343
112501 · WF Trust 2015 Bond Interest	162,765	162,778
112503 · WF Trust 2015 Bond Reserve	215,463	213,286
Total 112000 · Trustee Funds	2,176,627	2,249,501
113000 · Other Restricted Funds		
113100 · STI - USFS CD WF	21,627	21,625
113500 · DNR Reclamation Fund WF	1,086,941	1,003,273
Total 113000 · Other Restricted Funds	1,108,568	1,024,898
Total Agency Funds	25,913,107	26,857,630
Accounts Receivable		
110000 · Accounts Receivable	1,383,167	1,197,555
110100 · Grants Receivable	22,908	-
Total Accounts Receivable	1,406,076	1,197,555
Other Current Assets		
120200 · Other Receivables	5,800	5,800
120300 · Accrued Interest Receivable	30,531	25,243
120500 · Prepaid Fees		
120510 · Prepaid FERC Fees	-	-
120520 · Prepaid Insurance	37,556	38,244
120530 · Prepaid Operating Expense	17,935	17,373
120540 · Prepaid USDA FS Land Use Fees	25,322	24,800
120550 · Prepaid Admin Benefits	69,767	61,733
Total 120500 · Prepaid Fees	150,581	142,150
120700 · Inventory Assets		
1207001 · Inventory Spares-Stores	167,250	151,834
1207003 · Inventory - SWL Winding Replace	890,405	890,405
Total 120700 · Inventory Assets	1,057,655	1,042,239
Total Other Current Assets	1,244,567	1,215,431
Total Current Assets	28,563,749	29,270,617

SEPTEMBER 2018

	SEP 2018	SEP 2017
Fixed Assets		
130100 · Capital Assets	179,117,642	176,273,987
132200 · R&R Projects WIP Capital Improv	419,003	1,555,863
132900 · Accumulated Depreciation	(46,276,813)	(41,492,516)
Total Fixed Assets	133,259,833	136,337,334
Other Assets		
183000 · Deferred Assets		
183003 · 2009 Bond - Refunded Discount	105,838	124,515
Total 183000 · Deferred Assets	105,838	124,515
Total Other Assets	105,838	124,515
TOTAL ASSETS	**161,929,420**	**165,732,465**
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		
210100 · Accounts Payable General	373,364	1,212,269
Total Accounts Payable	373,364	1,212,269
Other Current Liabilities		
210150 · Other Current Liabilities	-	88,000
210151 · Member Utility Rebate Payable	800,000	2,700,000
210152 · DNR Fund - CVEA KEA Portion	-	337,500
210300 · Reserve Interest Payable	252,198	293,596
210400 · Wages Payable	58,902	57,440
210401 · PTO Payable	164,042	177,095
210500 · Payroll Liabilities	22,560	26,079
Total Other Current Liabilities	1,297,701	3,679,709
Total Current Liabilities	1,671,066	4,891,978
Long Term Liabilities		
220100 · Series B Bonds 2009	5,590,000	6,390,000
220120 · 2009 Bond Issuance Discount	(22,797)	(26,819)
220121 · PERS Unfunded Liability WRG	931,965	1,005,501
220122 · DNR Fund CVEA KEA Liability	543,471	-
220130 · Series 2015 Bonds	10,295,000	10,295,000
220131 · 2015 Bond Issuance Premium	807,522	862,580
Total Long Term Liabilities	18,145,160	18,526,262
Total Liabilities	19,816,226	23,418,240
Net Position		
310000 · Net Position	142,091,471	142,591,882
Net Income	21,723	(277,656)
Total Net Position	142,113,194	142,314,226
TOTAL LIABILITIES & NET POSITION	**161,929,420**	**165,732,465**

SEPTEMBER 2018	SEPTEMBER 2018	FISCAL YEAR-TO-DATE - SEPTEMBER 2018			ANNUAL BUDGET	% Annual Budget
		YTD FY18	YTD FY19	YTD BUDGET		
Operating Income/Expense						
Operating Income						
410000 · Hydro Facility Revenues						
410100 · Ketchikan Power Purchases	$ 515,912	$ 1,426,302	$ 1,728,532	$ 1,414,931	$ 6,462,162	
410200 · Petersburg Power Purchases	202,095	570,387	657,749	636,622	2,947,334	
410300 · Wrangell Power Purchases	150,113	496,648	517,595	560,487	2,584,416	
Total 410000 · Hydro Facility Revenues	$ 868,120	$ 2,493,337	$ 2,903,875	$ 2,612,040	$ 11,993,912	24%
Total Operating Income	$ 868,120	$ 2,493,337	$ 2,903,875	$ 2,612,040	$ 11,993,912	
Operating Expense						
535000 · Hydro Ops-Suprvsn & Engineering	$ 1,451	$ 16,447	$ 3,268	$ 23,870	$ 322,480	1%
537000 · Hydraulic Expenses	-	-	11	-	10,000	0%
538000 · Electric Expenses	919	10,974	4,223	15,700	97,500	4%
539000 · Misc Power Generation Expense	32,399	76,187	104,317	85,800	359,545	29%
540000 · Rents	13,089	46,801	39,266	41,391	180,500	22%
541000 · Hydro Power Station Maintenance	4,746	7,688	14,726	22,370	75,500	20%
543000 · Dams, Reservoirs & Waterways	248,408	18,133	280,627	297,905	386,705	73%
544000 · Maintenance of Electric Plant	111,031	299,718	320,476	310,840	1,297,463	25%
545000 · Plant Miscellaneous Maintenance	2,257	23,691	9,235	15,075	57,500	16%
561000 · Control System Maintenance	1,448	19,480	5,356	17,000	126,000	4%
562000 · Trans/Operations Station Exp	2,789	6,690	5,763	10,250	65,700	9%
564000 · Trans/Submarine Cable Expense	1,912	668	10,249	13,400	548,500	2%
571000 · Trans/Maint Overhead Lines(OHL)	28,736	162,433	83,961	188,070	1,627,626	5%
920000 · Admin Wages & Benefits	125,354	356,293	350,262	344,110	1,418,000	25%
921000 · Office Expenses	6,230	27,787	22,900	27,375	144,500	16%
922000 · Legislative Affairs	4,026	12,000	12,043	14,000	53,000	23%
923000 · Contract Services	17,150	46,100	33,264	68,450	320,250	10%
924000 · Insurance	37,556	114,982	112,669	114,000	478,000	24%
928000 · Regulatory Commission Expense	9,521	124,578	24,269	43,125	174,500	14%
930000 · General Expenses	14,273	37,513	43,056	41,400	186,450	23%
931000 · Admin Rent	7,602	21,433	22,750	23,200	95,400	24%
Total Operating Expense	$ 670,897	$ 1,429,597	$ 1,502,691	$ 1,717,331	$ 8,025,119	19%
Net Operating Income	$ 197,223	$ 1,063,740	$ 1,401,184	$ 894,709	$ 3,968,793	

SEPTEMBER 2018	SEPTEMBER 2018	FISCAL YEAR-TO-DATE - SEPTEMBER 2018		
		YTD FY18	YTD FY19	YTD BUDGET
Nonoperating Income/Expense				
Nonoperating Income				
941000 · Grant Income	$ 22,908	$ 25,420	$ 7,189	
942000 · Interest Income	13,231	29,018	38,299	
944000 · Realized Gain/(Loss)	-	(3,168)	(4,178)	
945000 · Unrealized Gain/(Loss)	(11,878)	172	4,259	
946000 · Misc Nonoperating Income	-	-	1,500	
Total Nonoperating Income	$ 24,262	$ 51,442	$ 47,070	
Nonoperating Expense				
950001 · Misc Nonoperating Expense	$ (3,038)	$ -	$ (9,746)	
952000 · Bond Interest 2009 Series	24,340	81,207	73,019	
952001 · Bond Interest 2015 Series	36,052	108,157	107,931	
953000 · Depreciation Expense	414,455	1,178,053	1,225,314	
954000 · Grant Expenses	22,287	25,420	29,477	
960001 · Meteorological Tower	-	-	536	
Total Nonoperating Expense	$ 494,097	$ 1,392,838	$ 1,426,531	
Net Nonoperating Income	$ (469,835)	$ (1,341,396)	$ (1,379,461)	
Net Income	**$ (272,612)**	**$ (277,656)**	**$ 21,723**	

AUGUST 2018
FINANCIAL OVERVIEW

The following tables provide a snapshot of SEAPA's revenues and expenses for AUG, 2018.

Revenues from kWh sales were over budget for the month and higher than last year:

FIRM kWh SALES	AUG Sales	AUG Budget	Prior Year Sales
Ketchikan	$632,102	$489,210	$487,624
Petersburg	206,230	229,695	221,234
Wrangell	164,602	192,166	190,362
Total Revenue	$1,002,934	$911,071	$899,220

Fiscal year-to-date revenues from kWh sales were over budget and higher than last year:

FIRM kWh SALES	YTD Sales	YTD Budget	Prior YTD Sales
Ketchikan	$1,212,620	$1,027,432	$1,107,069
Petersburg	455,653	456,644	459,079
Wrangell	367,482	398,554	394,516
Total Revenue	$2,035,755	$1,882,630	$1,960,664

FIRM kWh SALES (Year-Over-Year)	FISCAL YEAR	AUG kWh	YTD JUL-AUG kWh
	FY2019	14,749,024	29,937,573
	FY2018	13,223,821	28,833,292
	FY2017	13,124,451	26,016,482

Administrative and operating expenses were under budget:

Administrative & Operating Expenses	AUG Actual	AUG Budget	Prior Yr Expense
	$419,899	$592,442	$392,955
	YTD Actual	YTD Budget	Prior YTD Expense
	$831,794	$1,019,134	$803,159

AUGUST 2018

	AUG 2018	AUG 2017
ASSETS		
Current Assets		
Agency Funds		
111000 · Ops/Capital/Insurance Funds		
111100 · Revenue Fund FB	1,877,023	5,006,751
111200 · Required R&R Fund FB	1,000,104	1,000,104
111210 · Dedicated R&R Projects Fund FB	7,168,156	6,993,306
111300 · Commercial FB	203,827	1,238
111401 · New Generation Fund	1,899,413	1,898,255
111402 · Rate Stabilization Fund	2,000,108	-
111500 · Self Insured Risk Fund FNBA	8,033,044	8,023,830
Total 111000 · Ops/Capital/Insurance Funds	22,181,675	22,923,483
112000 · Trustee Funds		
112100 · WF Trust 2009 Bond Interest	68,217	100,874
112200 · WF Trust 2009 Bond Principal	210,866	267,268
112300 · WF Trust 2009 Bond Reserve	1,425,960	1,412,685
112501 · WF Trust 2015 Bond Interest	121,996	122,094
112503 · WF Trust 2015 Bond Reserve	215,190	213,187
Total 112000 · Trustee Funds	2,042,230	2,116,108
113000 · Other Restricted Funds		
113100 · STI - USFS CD WF	21,627	21,625
113500 · DNR Reclamation Fund WF	1,086,941	1,003,273
Total 113000 · Other Restricted Funds	1,108,568	1,024,898
Total Agency Funds	25,332,473	26,064,488
Accounts Receivable		
110000 · Accounts Receivable	1,702,794	1,875,622
110100 · Grants Receivable	-	20,035
Total Accounts Receivable	1,702,794	1,895,657
Other Current Assets		
120200 · Other Receivables	5,800	5,800
120300 · Accrued Interest Receivable	20,563	18,708
120500 · Prepaid Fees		
120510 · Prepaid FERC Fees	9,809	3,447
120520 · Prepaid Insurance	75,113	76,487
120530 · Prepaid Operating Expense	19,383	1,214
120540 · Prepaid USDA FS Land Use Fees	33,763	33,067
120550 · Prepaid Admin Benefits	91,563	82,333
Total 120500 · Prepaid Fees	229,631	196,548
120700 · Inventory Assets		
1207001 · Inventory Spares-Stores	167,250	264,814
1207003 · Inventory - SWL Winding Replace	890,405	890,405
Total 120700 · Inventory Assets	1,057,655	1,155,220
Total Other Current Assets	1,313,648	1,376,275
Total Current Assets	28,348,915	29,336,420

AUGUST 2018

	AUG 2018	AUG 2017
Fixed Assets		
130100 · Capital Assets	178,710,458	176,273,987
132200 · R&R Projects WIP Capital Improv	824,643	625,371
132900 · Accumulated Depreciation	(45,862,357)	(41,099,832)
Total Fixed Assets	133,672,745	135,799,527
Other Assets		
183000 · Deferred Assets		
183003 · 2009 Bond - Refunded Discount	107,394	126,072
Total 183000 · Deferred Assets	107,394	126,072
Total Other Assets	107,394	126,072
TOTAL ASSETS	**162,129,054**	**165,262,019**
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		
210100 · Accounts Payable General	363,861	278,529
Total Accounts Payable	363,861	278,529
Other Current Liabilities		
210150 · Other Current Liabilities	-	80,667
210151 · Member Utility Rebate Payable	800,000	2,700,000
210152 · DNR Fund - CVEA KEA Portion	543,471	337,500
210300 · Reserve Interest Payable	189,109	227,778
210400 · Wages Payable	60,690	62,226
210401 · PTO Payable	151,919	171,217
210500 · Payroll Liabilities	22,080	24,928
Total Other Current Liabilities	1,767,269	3,604,315
Total Current Liabilities	2,131,130	3,882,845
Long Term Liabilities		
220100 · Series B Bonds 2009	5,590,000	6,390,000
220120 · 2009 Bond Issuance Discount	(23,132)	(27,155)
220121 · PERS Unfunded Liability WRG	938,140	1,005,501
220130 · Series 2015 Bonds	10,295,000	10,295,000
220131 · 2015 Bond Issuance Premium	812,110	867,168
Total Long Term Liabilities	17,612,118	18,530,514
Total Liabilities	19,743,248	22,413,359
Net Position		
310000 · Net Position	142,091,471	142,591,882
Net Income	294,335	256,778
Total Net Position	142,385,805	142,848,660
TOTAL LIABILITIES & NET POSITION	**162,129,054**	**165,262,019**

AUGUST 2018	AUGUST 2018	FISCAL YEAR-TO-DATE - AUGUST			ANNUAL BUDGET	% Annual Budget
		YTD FY18	YTD FY19	YTD BUDGET		
Operating Income/Expense						
Operating Income						
410000 · Hydro Facility Revenues						
410100 · Ketchikan Power Purchases	$ 632,102	$ 1,107,069	$ 1,212,620	$ 1,027,432	$ 6,462,162	
410200 · Petersburg Power Purchases	206,230	459,079	455,653	456,644	2,947,334	
410300 · Wrangell Power Purchases	164,602	394,516	367,482	398,554	2,584,416	
Total 410000 · Hydro Facility Revenues	$ 1,002,934	$ 1,960,664	$ 2,035,755	$ 1,882,630	$ 11,993,912	17%
Total Operating Income	$ 1,002,934	$ 1,960,664	$ 2,035,755	$ 1,882,630	$ 11,993,912	
Operating Expense						
535000 · Hydro Ops-Suprvsn & Engineering	$ 751	$ 9,736	$ 1,816	$ 9,330	$ 322,480	1%
537000 · Hydraulic Expenses	-	-	11	-	10,000	0%
538000 · Electric Expenses	3,130	10,974	3,305	8,050	97,500	3%
539000 · Misc Power Generation Expense	36,518	54,551	71,918	56,800	359,545	20%
540000 · Rents	13,089	31,201	26,177	26,194	180,500	15%
541000 · Hydro Power Station Maintenance	3,241	4,621	9,980	14,080	75,500	13%
543000 · Dams, Reservoirs & Waterways	20,887	18,133	32,219	50,500	386,705	8%
544000 · Maintenance of Electric Plant	100,602	197,291	209,445	205,150	1,297,463	16%
545000 · Plant Miscellaneous Maintenance	3,439	4,166	6,978	10,300	57,500	12%
561000 · Control System Maintenance	2,460	18,193	3,908	4,000	126,000	3%
562000 · Trans/Operations Station Exp	1,513	2,839	2,974	6,500	65,700	5%
564000 · Trans/Submarine Cable Expense	7,412	425	8,337	11,000	548,500	2%
571000 · Trans/Maint Overhead Lines(OHL)	24,838	48,630	55,225	167,140	1,627,626	3%
920000 · Admin Wages & Benefits	111,041	230,794	224,908	228,040	1,418,000	16%
921000 · Office Expenses	10,575	16,919	16,670	18,450	144,500	12%
922000 · Legislative Affairs	4,017	8,000	8,017	9,000	53,000	15%
923000 · Contract Services	8,799	27,599	16,113	46,900	320,250	5%
924000 · Insurance	37,556	76,738	75,113	76,000	478,000	16%
928000 · Regulatory Commission Expense	9,586	9,097	14,748	28,750	174,500	8%
930000 · General Expenses	13,211	18,954	28,782	27,450	186,450	15%
931000 · Admin Rent	7,233	14,297	15,148	15,500	95,400	16%
Total Operating Expense	$ 419,899	$ 803,159	$ 831,794	$ 1,019,134	$ 8,025,119	10%
Operating Income (Loss)	$ 583,035	$ 1,157,505	$ 1,203,961	$ 863,496	$ 3,968,793	

AUGUST 2018	AUGUST 2018	FISCAL YEAR-TO-DATE - AUGUST		
		YTD FY18	YTD FY19	YTD BUDGET
Nonoperating Income/Expense				
Nonoperating Income				
941000 · Grant Income	$ -	$ -	$ (15,719)	
942000 · Interest Income	12,603	19,057	25,068	
944000 · Realized Gain/(Loss)	(4,178)	(3,203)	(4,178)	
945000 · Unrealized Gain/(Loss)	17,624	20,451	16,136	
946000 · Misc Nonoperating Income	-	-	1,500	
Total Nonoperating Income	$ 26,050	$ 36,305	$ 22,808	
Nonoperating Expense				
950001 · Misc Nonoperating Expense	$ (6,176)	$ -	$ (6,708)	
952000 · Bond Interest 2009 Series	24,340	54,138	48,679	
952001 · Bond Interest 2015 Series	36,052	72,105	71,879	
953000 · Depreciation Expense	405,429	785,369	810,859	
954000 · Grant Expenses	7,189	25,420	7,189	
960001 · Meteorological Tower	536	-	536	
Total Nonoperating Expense	$ 467,371	$ 937,032	$ 932,434	
Net Nonoperating Income	$ (441,321)	$ (900,727)	$ (909,626)	
Change in Net Position	**$ 141,714**	**$ 256,778**	**$ 294,335**	

Southeast Alaska Power Agency R&R CAPITAL PROJECTS	FY2019		WIP CAPITAL PROJECTS October 31, 2018	FY13 - FY16	FY17	FY18*	FY19	TOTAL Expenditr.	Overall BUDGET
	Budget	Expenditures							
241-13 Stream Gauge TYL	$ 10,000	9,299	**COMPLETE JUL 2018**	729,761	75,368	(139)	9,299	**$ 814,289**	815,000
259-15 Turbine Shutoff Valves TYL	$ 365,700	-	Contract repairs in FY19.	255,631	-	4,127	-	**$ 259,758**	290,630
269-16 Guy Thimbles STI	$ 80,100	-	Yr3 of 3 spring 2019	-	44,781	62,571	-	**$ 107,352**	270,000
270-16 Dampeners OHL TYL	$ 70,700	-	Held Over til spring 2019	8,696	(8,696)	33,307	-	**$ 33,307**	99,900
278-17 Flashboard Kickers SWL	$ 178,278	96,451	Delivery scheduled Oct 2018		-	252,686	96,451	**$ 349,137**	544,819
281-18 Bulkhead Repair SWL	$ 200,153	148,341	**COMPLETE JUL 2018**			23,552	148,341	**$ 171,892**	223,000
282-18 Control Rm Touchscrn SWL	$ 25,536	25,592	Scheduled completion 2018			10,537	25,592	**$ 36,128**	36,000
286-18 Duplex Housing SWL	$ 7,500	10,670	Design-permitting.			2,165	10,670	**$ 12,835**	393,000
289-18 Governor Moderniztn SWL	$ 46,560	37,059	**COMPLETE JUL 2018**			58,338	37,059	**$ 95,397**	92,000
290-18 Helipad Ramps STI	$ 42,000	27,528	**COMPLETE AUG 2018**			-	27,528	**$ 27,528**	76,000
298-18 Unit Control PLC-RTD SWL	$ 8,271	13,810	**COMPLETE AUG 2018**			53,518	13,810	**$ 67,328**	60,000
19300 Access Ladder Ext SWL	$ 75,000	221	Extension of access ladders			-	221	**$ 221**	75,000
19301 Disconnect Swtch-Bush SWL	$ 102,800	-	Equipment replacement			1,022	-	**$ 1,022**	147,000
19302 Drone - Infrared Utility	$ 30,500	28,771	**COMPLETE AUG 2018**				28,771	**$ 28,771**	30,500
19303 Gov Pressure System SWL	$ 33,400	-	System upgrade				-	$ -	45,620
19304 Gov Pressure System TYL	$ 33,400	-	System upgrade				-	$ -	45,620
19305 Governor PLC TYL	$ 75,682	-	PLC Modernization Tyee				-	$ -	93,302
19306 Gravel WRG Switch-Sub	$ 34,500	-	Cap gravel surface				-	$ -	34,500
19307 Helipads Clevelnd-Gatehs	$ 130,000	-	Repair and replace				-	$ -	130,000
19308 Hydraulic Power Unit TYL	$ 175,000	-	Relocate HPU at gatehouse				-	$ -	175,000
19309 Marker Balls TYL	$ 220,000	376	Replacement				376	**$ 376**	220,000
19310 Penstock Flow Monitor SWL	$ 45,300	8	New flow meters				8	**$ 8**	45,300
19311 Pier-Ramp SWL	$ 193,500	-	Replacement				-	$ -	193,500
19312 Rock Anchors SWL	$ 55,000	-	S. dam abutment				-	$ -	55,000
19313 Snow Markers-Gauges	$ 40,000	5,445	Replace markers-new gauges				5,445	**$ 5,445**	85,000
19314 Station Switchgear SWL	$ 300,000	5,103	480V switchgear			6,847	5,103	**$ 11,950**	1,300,000
19315 STCS Modernization	$ 43,500	-	Control system modernztn				-	$ -	64,720
19316 Storage Structure SWL	$ 89,950	74	Rolling stock storage				74	**$ 74**	184,000

Southeast Alaska Power Agency R&R CAPITAL PROJECTS	FY2019 Budget	FY2019 Expenditures	WIP CAPITAL PROJECTS October 31, 2018	FY13 - FY16	FY17	FY18*	FY19	TOTAL Expenditr.	Overall BUDGET
19317 Storage Structure TYL	$ 55,000	74	Inventory storage				74	**$ 74**	110,000
19318 Site-Glass Swtch UGB SWL	$ 27,700	-	Governor switches				-	**$ -**	41,720
19319 Valve Cntrl-Manifold SWL	$ 46,136	-	Distribution controller				-	**$ -**	49,736
19320 Wastewater Upgrades SWL	$ 125,000	221	Leach field at SWL				221	**$ 221**	125,000
Total WIP R&R Capital Projects	**$2,966,166**	**$409,042**		$994,088	$111,454	$508,530	$409,042	$2,023,112	$6,150,867

*FY18, RR241 Stream Gage, Items moved from capital project to inventory

CLOSED R&R 241-13

STREAM GAGE

Project	**STREAM GAGE – Tyee Lake**		
Description	Weir, helipad, emergency shelter for USGS Stream Gage at Tyee Lake		
Estimate:	**$814,289**	Completion: **JUL 2018**	Project Mgmt: **E. Schofield**

Project Discussion

The log jam at the Tyee Lake outlet prevented the U.S. Geological Survey (USGS) from calibrating the discharge-to-stage relationship at the outlet. To ensure compliance with the terms of our FERC license, this project includes removal of the log jam in the vicinity of the outlet and installation of a weir, stream gage, helipad (for access), and emergency shelter.

FY14 – Partial removal of the large log jam at the outlet of Tyee Lake and construction of the concrete weir. As a part of the weir construction, several feet of wood debris located beneath the removed log jam had to be hand-excavated. The debris excavation revealed several potential voids in the abutments of the weir. Leakage was assessed after the reservoir elevation increased, and it was determined that further remediation was required.

FY15 – Site investigation and sealing plan developed. Contract awarded to BAM to execute foam fill sealing plan. Log retention system inspected and satisfactory.

FY16 – Sealing of the weir abutments to fill voids discovered during original construction took place. Incurred delays due to high reservoir levels.

FY17 – Additional foam sealing set in place, satellite dish platform was installed at the Tyee gatehouse, and one helipad was pulled from inventory and installed near the stream gage site.

FY18-19 – Emergency shelter has been installed. The emergency shelter is a weather tight fiberglass structure located next to the weir helicopter pad. The weir emergency shelter provides emergency supplies and shelter for maintenance personnel if adverse weather was to occur grounding aircraft. The Tyee weir is located in a very steep canyon, if adverse conditions were to occur there is no means of exit out of this location by foot.

Original plans where to install a real time stream gage at the weir as part of this project, after developmental testing it was determined that satellite coverage for transmitting would not function properly in the locations of the weir do to the steep canyon walls adjacent to the weir. The USGS currently records Tyee Lake elevation and interpolates cubic feet-per-second (cfs) spill over the weir based on established feet-per-second (fps) flow measurements.

Additional sealing of rock voids beneath and adjacent to the Tyee Lake concrete weir were completed in July of 2018. At this time additional rock void sealing, if required, will most likely be minor in scope and will be considered standard annual maintenance of the weir.

This project is considered completed at this point. Final expenditures were far below estimates due to an extensive change in scope of work pertaining to the filling of rock voids and the inability to transmit and receive satellite signals.

CLOSED R&R 241-13

STREAM GAGE

PROJECT COST ESTIMATE		EXPENDITURES	
BREAKDOWN	**ROM COST**	FY13	$37,845
Logjam removal, weir, helipad, sealing	632,831	FY14	562,635
Emergency shelter, clearing	87,493	FY15	22,753
Stream gage install & communications equipment	141,700	FY16	106,528
		FY17	75,368
		FY18	(139)
Total	862,024	FY19	9,299
		Total	**$814,289**

Project Cost Discussion

Overall budget of $1,467,758 was initially approved in FY13. Budget was reduced according to changes in the scope of work. Actual expenditures by year are listed above. In FY18, communications equipment that was not used for this project was moved to inventory.

Weir spill – June 2016

Foam Filling Voids in Weir Rock Foundation Abutments

Tyee Lake Emergency Shelter and Helicopter Pad for Weir Access

CLOSED FY19: R&R281-18
BULKHEAD REPAIR - SWL

Project:	**BULKHEAD REPAIR – SWAN LAKE**		
Description:	Swan Lake Marine Bulkhead Repairs.		
Cost Estimate:	**$171,893**	Completion: **JUL 2018**	Project Mgmt: **E. Schofield**

Project Discussion

The Swan Lake Marine Bulkhead is designed to accommodate deep-draft barge loading and unloading. The bulkhead is required to accommodate transporting of large Swan Lake equipment such as generator stators, transformers and cranes necessary for the removal and replacement of the large equipment. The Swan Lake Marine Bulkhead was constructed under contract No. 1 in 1980. This Swan Lake Bulkhead project was awarded to Pool Engineering of Ketchikan. The project started on June 26 and was complete by July 11, 2018. The project entailed the installation of a new ground anchor waler, new ground anchor tensioning bolts and seven new 12" inch galvanized steel fenders piles. The renovations to the bulkhead are expected to extend the bulkheads useful life for an additional 30 years.

PROJECT COST

DESCRIPTION		BUDGET	EXPENDITURES	
Engineering		$28,230	FY18 Expenditures	$23,552
Waler & Fender Replacement		81,000	FY19 Expenditures	148,341
Anchor Repair-Inspection		22,500		
Mobe-Demobe-Cleanup		40,000		
Contingency		51,270		
	Total	$223,000	BUDGET TOTAL	$171,893

281-18 Bulkhead Repair SWL			**$223,000**
	$ 23,552	*FY18 Expenditures*	
11/08/17	4650	Landing Hotel & Restaurant	131
12/04/17	7047	McMillen LLC	6,396
01/17/18	7150	McMillen LLC	13,176
02/26/18	34685	Ketchikan Daily News	90
02/28/18	7279	McMillen LLC	1,265
03/01/18	3334191	Daily Journal of Commerce	81
03/16/18	65541	Wrangell Sentinel	90
03/20/18	65562	Pilot Publishing, Inc.	113
04/09/18	7342	McMillen Jacobs Associates	1,505
06/08/18	7511	McMillen Jacobs Associates	705
07/03/18	103768	Pacific Airways Inc	440
07/03/18	581208	Petro Marine Services-KTN	236
07/10/18	103871	Pacific Airways Inc	440
07/11/18	103896	Pacific Airways Inc	440
07/12/18	2018133	Pool Engineering, Inc.	30,000
07/12/18	2018133	Pool Engineering, Inc.	31,500
07/12/18	2018133	Pool Engineering, Inc.	22,500
07/25/18	Bulkhead#2	Pool Engineering, Inc.	49,500
07/25/18	Bulkhead#2	Pool Engineering, Inc.	10,000
07/25/18	Bulkhead#2	Pool Engineering, Inc.	1,700
07/27/18	1800118	Marble Construction	1,585
Total 281-18 Bulkhead Repair SWL			171,892

Renovated Swan Lake Marine Bulkhead July 11, 2018

Bulkhead Prior to Renovation

CLOSED FY19 - RR289-18
GOVERNOR MODERNIZATION - SWL

Project:	**GOVERNOR MODERNIZATION - Swan Lake**		
Description:	Update Governor control hardware and software		
COST:	**$95,397**	In Service: **JUL 2018**	Project Mgmt: R. Siedman

PROJECT DISCUSSION

The digital governors at SWL are over 10 years old. The program that was in service had a dither function that was causing oscillations in the distributing valve servo. (Dither is a low-amplitude, relatively high-frequency periodic electrical signal sometimes superimposed on the servo-valve input signal.) Jitter can cause actuator failures due to over-compensation and continuous actuations. The Programmable Logic Controllers (PLCs) that were installed by L&S were no longer supported and spare parts were not available.

This project consisted of replacing the PLC hardware to one designed specifically for turbine control applications that will be supported for 15-20 years into the future. In addition, one application was developed that can be implemented at both Swan Lake and Tyee Lake. The previous governor program was proprietary to L&S, hindering access and reliability. Replacement programming now belongs to SEAPA and dithering can be tuned correctly to ensure a stable, robust and reliable system.

FY18 – The new governor PLC hardware was in the lab and being programmed for installation.

FY19 – Installation, testing and commissioning performed July 2018. Drawings and O&M documentation submitted.

PROJECT COST

Line #	BREAKDOWN	BUDGET	EXPENDITURES	
1	Programming	$18,000	FY18 Expenditures	45,440
2	Drawings	6,000	FY19 Expenditures	49,957
3	Hardware	50,380	**Total Expenditures**	**$95,397**
4	Install-Commissioning	10,800		
5	Project Management	6,820		
	Total	$92,000		

Project Cost Discussion

Line item 1 is a direct engineering labor cost for programming the PLCs; Line 2 is the cost to develop removal, installation, and as-built drawings; line 3 covers the direct procurement cost for the hardware; line 4 is for onsite commissioning and installation costs; and line 5 is project oversite and travel costs.

CLOSED FY19 - RR289-18

GOVERNOR MODERNIZATION - SWL

Date	Num	Source Name	Amount	Balance
289-18 Governor Moderniztn SWL				
02/09/18	18283	Segrity LLC	2,175.00	2,175.00
03/02/18	18289	Segrity LLC	6,675.00	8,850.00
03/02/18	18291	Segrity LLC	3,115.66	11,965.66
03/28/18	18296	Segrity LLC	31,261.97	43,227.63
04/20/18	18305	Segrity LLC	1,312.46	44,540.09
04/20/18	18302	Segrity LLC	900.00	45,440.09
06/15/18	18312	Segrity LLC	12,825.00	58,265.09
06/22/18	S445KET38N	Samson Tug & Barge	72.94	58,338.03
07/09/18	18317	Segrity LLC	2,274.16	60,612.19
07/10/18	53571	Taquan Air	146.00	60,758.19
07/10/18	103871	Pacific Airways Inc	146.67	60,904.86
07/11/18	6525	Landing Hotel & Restaurant	51.40	60,956.26
07/11/18	6524	Landing Hotel & Restaurant	51.40	61,007.66
07/11/18	103896	Pacific Airways Inc	146.67	61,154.33
08/02/18	PH201807	Ketchikan City of 2933 P&H	28.00	61,182.33
08/08/18	18326	Segrity LLC	34,214.60	95,396.93
Total 289-18 Governor Moderniztn SWL			95,396.93	95,396.93

CLOSED R&R290-18

HELIPAD RAMPS/STAIRS - STI

Project:	**HELIPAD RAMPS – Swan Tyee Intertie**		
Description:	Build and install ramps for personnel access to helipads installed on the STI.		
Cost:	**$27,528**	Completion: **AUG 2018**	Project Mgmt: Hammer

PROJECT DISCUSSION

Many of the helipads on the STI were placed in locations with extremely steep grades, and ramps are needed for personnel to ascend and descend from the platforms. Metal grating was cut to size in the field and mounted to existing I-beams. Design based upon one in use by AEL&P (show below). Installation took place in August 2018 and was performed by in-house labor (brushing crew).

PROJECT COST

BREAKDOWN	Budget Estimate	EXPENDITURES	
Materials	$12,000	FY18 Expenditures	$0
In House Labor & Expenses	10,000	FY19 Expenditures	$27,528
Helicopter	20,000		
Total	$42,000		**$27,528**

Project Cost Discussion

Materials pricing obtained from McNichols Metal Products' online store; helicopter and in-house costs were estimated.

HELIPAD RAMPS EXAMPLES

CLOSED R&R290-18

HELIPAD RAMPS/STAIRS - STI

290-18 Helipad Ramps STI			
	$ -	*FY18 Expenditures*	
	$ 27,528	*FY19 Expenditures*	
07/17/18	1572317	McNichols Company	5,769
07/19/18	S452WRA17N	Samson Tug & Barge	290
07/23/18	430258	Ottesen's Inc	11
07/25/18	430352	Ottesen's Inc	146
07/26/18	32493	Temsco Helicopters, Inc.	3,375
07/30/18	2858321	Madison Lumber & Hardware Inc	865
08/01/18	47546	Petro Marine Services-WRG	440
08/06/18	32613	Temsco Helicopters, Inc.	4,057
08/07/18	32574	Temsco Helicopters, Inc.	4,460
08/15/18	32617	Temsco Helicopters, Inc.	3,827
08/21/18	32684	Temsco Helicopters, Inc.	3,759
08/31/18	713	Payroll	528
Total 290-18 Helipad Ramps STI			27,528

CLOSED RR298-18

UNIT CONTROL PLCs and RTDs – SWL

Project:	**UNIT CONTROL PLC-RTD Upgrade – Swan Lake**		
Description:	Update PLC backplanes and RTDs and Swan Lake		
Cost:	**$67,328**	Completion: **AUG 2018**	Project Mgmt: R. Siedman

PROJECT DISCUSSION

Two of the three backplanes for the Unit-Control Programmable Logic Controllers (PLCs) and 9030s and the 9030 hardware were at end-of-life. Support had been discontinued and spare parts were unavailable. This project integrated up-to-date hardware, added spares and increased unit PLC reliability. As part of this project, Resistance Temperature Detectors (RTDs) were updated with IO enclosures to isolate the modules. The existing stator and bearing RTDs had noise interference due to lack of cable shielding and were displaying temperatures on bearings that varied between RTDs by as much as 20-degree Celsius. This discrepancy could have prompted operators to react to an event that was not real, causing unneeded shutdowns. Improved temperature reading accuracy has improved trending accuracy for better life-cycle analysis.

FY18 – All hardware was ordered and delivered onsite. Programming complete.

FY19 – Testing and commissioning complete. Drawings and O&M documentation submitted.

PROJECT COST

Line Item #	BREAKDOWN	BUDGET	TOTAL EXPENDITURES	
1	Engineering/Drawings	$6,000	FY18 Expenditures	$53,518
2	PLC Programming	12,000	FY19 Expenditures	13,810
3	Unit Control PLC Hardware	4,400	TOTAL	**$67,328**
4	Remote IO Nodes	19,980		
5	Project Mgmt	17,620		
	Total	$60,000		

Project Cost Discussion

Line item 1 was an estimate of the cost for engineering and drawing updates that included system design, removal, install and as-built drawings in hard copy, pdf and autocad formats. Item 2 was for engineering time required to program the programmable logic controllers. Items 3 and 4 were direct procurement costs for materials and Item 5 was the cost for onsite commissioning, management and troubleshooting.

298-18 Unit Control PLC-RTD SWL			**$8,271**
	$ 53,518	*FY18 Expenditures*	
	$ 13,810	*FY19 Expenditures*	
02/09/18	18282	Segrity LLC	225
03/02/18	18288	Segrity LLC	26,898
03/28/18	18297	Segrity LLC	160
04/20/18	18303	Segrity LLC	22,950
04/20/18	18304	Segrity LLC	1,337
06/15/18	18313	Segrity LLC	1,875
06/22/18	S445KET38N	Samson Tug & Barge	73
07/09/18	18316	Segrity LLC	1,207
07/10/18	53571	Taquan Air	146
07/10/18	103871	Pacific Airways Inc	147
07/11/18	6525	Landing Hotel & Restaurant	51
07/11/18	6524	Landing Hotel & Restaurant	51
07/11/18	103896	Pacific Airways Inc	147
08/08/18	18323	Segrity LLC	12,060
Total 298-18 Unit Control PLC-RTD SWL			67,328

CLOSED - RR19302
Drone (Infrared Utility)

Project:	Drone (Infrared Utility)		
Description:	High Definition, Infrared, Inspection-Mapping, Thermal Drone		
Cost:	**$28,771**	Purchased: **AUG 2019**	Project Mgmt: **R. Siedman**

PROJECT DISCUSSION

A utility-grade, infrared drone that can be used for inspecting transmission lines, insulators, substations, parapet walls, spillway ogees, power poles, lakes, flashboards, and much more was delivery in August 2018. Heat-sensing infrared images with electromagnetic field-blocking provide the ability to inspect transmission lines while still being in-service (energized), which normally requires a line outage. Provides reduced outage times, reduced risk, increased safety of personnel and high-quality, recorded-video inspection footage coupled with thermal imagery. Transmission line marker balls, insulators, transformers and circuit switchers are all examples of equipment that typically exhibit increased heat prior to catastrophic failure. The drone would allow for routine inspections of critical infrastructure and increased safety for personnel who would normally require climbing gear to carry out inspections. Certification that is scheduled for later this fiscal year is required for operation.

PROJECT COST

BREAKDOWN	ESTIMATE	EXPENDITURES	
Drone	$18,596	**FY2019 Expenditures**	$28,771
Infrared Camera	11,750		
Shipping	50		
Total	$30,396	G7-TOTAL	$28,771

Project Cost Estimate Discussion

Cost is for purchase and shipping only; it was based upon a quote that included:

Matrice 210-RTK- (1) MATRICE 200 ZENMUSE X3/X5/XT/Z3 Gimbal Mounting Bracket- (2) MATRICE 200 180W Power Adapter- (8) MATRICE 200 TB50 Intelligent Flight Battery- (1) MATRICE 200 Remote Controller- (6) MATRICE 200 1760S Quick Release Propeller Kit (CW/CCW)- (1) MicroSD Card (16G)- (2) MATRICE 200 180W Power Adapter Cable- (2) Matrice 200 Charging Hub- (2) Remote Controller Lanyard- (1) Matrice 200 Go Professional Rugged Hardshell Case- (1) Hoodman Launch Pad 5ft- (2) Hoodman Aviator Remote Controller Hood- (1) Tablet - iPad, 32GB, Wi-Fi- (1) Coiled Lightining Cable- (1) CrystalSky 7.85"- (1) Cendence Remote Controller (1) DJI Zenmuse XT (R, 640x512, 13mm, 30Hz)

19302 Drone - Infrared Utility Drone			
08/20/18	1010514400	Gresco Utility Supply, Inc.	28,771
Total 19302			28,771

MEMORANDUM
ATTORNEY-CLIENT COMMUNICATIONS

TO: Steve Prysunka, Chairman
Southeast Alaska Power Agency

FROM: Joel R. Paisner, Ascent Law Partners, LLP

DATE: December 3, 2018

RE: Suggested Motion for Executive Session Re: Discussions Relating to Agency's Union Contract Negotiations, Hydrosite Analysis, Swan Lake Transition of Operations and Maintenance, RCA Matters, and CEO Annual Evaluation

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To the extent that the Board of Directors will enter into an executive session during a Regular Board Meeting to be held on December 12-13, 2018 for discussions relating to the Agency's union contract negotiations, hydrosite analysis, Swan Lake transition of operations and maintenance, RCA matters and the CEO's annual evaluation, 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 the following matters: Agency's Union Contract Negotiations, which will include subjects the immediate knowledge of which would clearly have an adverse effect upon the Agency Projects; Hydrosite Analysis and RCA matters, which will clearly have an adverse effect on the finances of the Agency, and the Swan Lake Transition of Operations and Maintenance and CEO Annual Evaluation, both of which may include subjects that could tend to prejudice the reputation and character of an individual.

SOUTHEAST ALASKA POWER AGENCY

Date: December 5, 2018

To: Board of Directors

From: Trey Acteson, CEO

Subject: Consideration and Approval of Roving Relief Operator

In order to facilitate transition of the Swan Lake operations and maintenance and standardize work schedules across SEAPA facilities, the Agency will require a qualified individual to function as a roving relief operator to supplement manning at the Swan and Tyee plants. This will be a mobile position in which the individual will reside part time at Swan Lake and part time at Tyee Lake. I recommend the Agency hire an individual for this position.

Please consider the following suggested motion:

SUGGESTED MOTION
I move to authorize the Agency's CEO to recruit and hire a full-time Roving Relief Operator to supplement manning at the Tyee Lake and Swan Lake Hydroelectric Facilities.

SOUTHEAST ALASKA POWER AGENCY

Date: December 3, 2018

To: Trey Acteson, Chief Executive Officer

From: Ed Schofield, Power System Specialist

Subject: Swan Lake and Tyee Lake Fabric Covered Equipment Storage Building Packages Project

A Request for Quotes for the Swan Lake and Tyee Lake Fabric Covered Equipment Storage Building Packages Project ("Project") was advertised on October 15, 2018. Two (2) bids were received on October 31, 2018 as follows:

Bidder	City/State	Lump-Sum Bid Amount
Legacy Building Solutions, Inc.	**South Haven, Minnesota**	**$104,562.00**
ClearSpan Fabric Structures International, Inc.	**Dyersville, Iowa**	**$111,210.90**

The proposals were primarily evaluated on availability and proposed delivery schedule, competitive pricing, manufacturer's warranty, ability to meet specifications, and completeness and quality of bid proposal documents. Based upon the evaluation, staff recommends award of this Project to Legacy Building Solutions, Inc. $133,990 was authorized in the FY2019 R&R Budget for the building packages and shipping portion of this Project. Staff recommends a 10% contingency to cover fees not included in the bid for the manufacturer's Tech Rep to assist with project quality assurance inspections on-site as required under the manufacturer's warranty.

Please consider the following suggested motion:

SUGGESTED MOTION

I move to authorize staff to enter into a Purchase Order Contract with Legacy Building Solutions, Inc. for SEAPA's Swan Lake and Tyee Lake Fabric Covered Equipment Storage Building Packages Project for the lump-sum bid amount of $104,562, plus a 10% contingency of $10,456 for the total not-to-exceed value of $115,018 for this Project.

Proposed RR19321
Flashboard Gate Trigger Assembly

Project:	**Flashboard Gate Trigger Assembly SWL**	
Description:	Design, build and install replacement flashboard gate trigger assembly	
Cost Estimate: **$61,000**	Sched. Completn: **JUN 2019**	Project Mgmt: **Schofield**

PROJECT DISCUSSION

During a scheduled preventative maintenance exercise for the Swan Lake Flashboard Gate (FBG), an abnormal condition of the FBG's triggering system was identified. The abnormal trigger condition was corrected by SEAPA staff. Kuenz design engineers, who are the original designers of the FBG, are determining the cause of the abnormal condition and how to prevent a reoccurrence. Preliminary findings indicate that thermal expansion due to warmer and dryer-than-normal conditions are at fault. The expansion of the dam is thought to have been greater this fall due to record low reservoir elevations and extended days of continuous sun. The thermal expansion resulted in decreased FBG panel forces on the trigger assembly. The FBG trigger assembly is in its design safety lock-out position until the engineers' analysis is complete.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Design Trigger Assembly	$11,000	FY2019 Budget Request	$61,000
Manufacturing & Shipping	$30,000		
Installation	$20,000		
Total	$61,000		$61,000

Project Cost Estimate Discussion

Kuenz engineers suggest that in order to pretension the FBG, a feather package be installed between the left bank side kicker and the concrete building, which applies a horizontal force of ap. 50 kN to the kickers and the load cell. Kuenz will design, manufacture and ship a FBG trigger assembly to Ketchikan. SEAPA will ship the assembly to Swan Lake and contract the work out for installation.

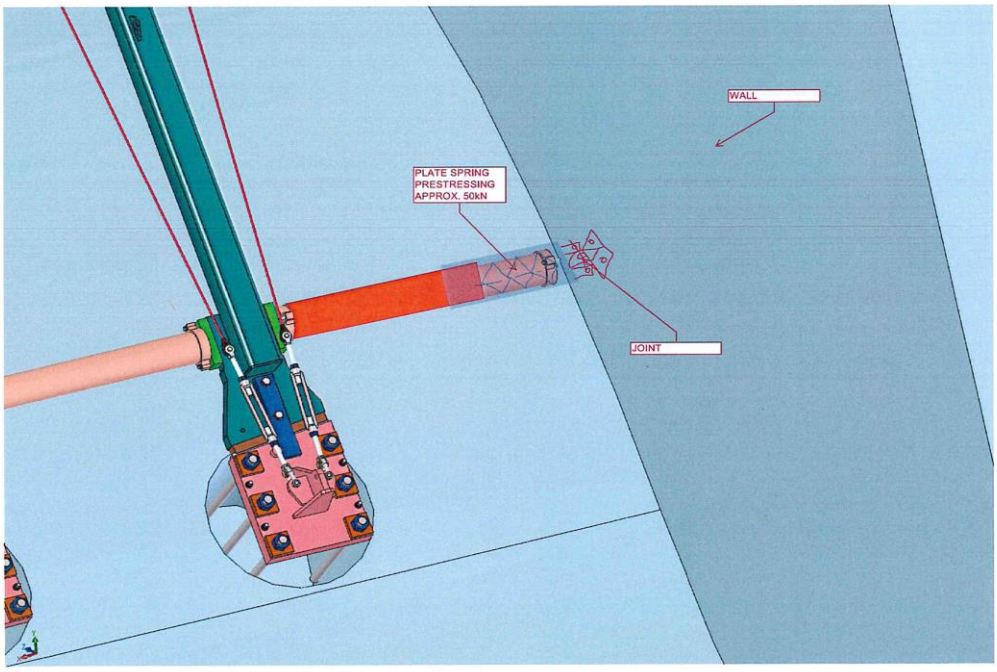
Please consider the following suggested motion:

SUGGESTED MOTION

I move to increase the FY2019 R&R Budget by $61,000 for Project RR19321 for the design, manufacture, and installation of a Flashboard Gate Trigger Assembly at Swan Lake.

Proposed RR19321
Flashboard Gate Trigger Assembly

Swan Lake Flashboard Gate System



Concept Drawing for Accumulator Design to keep Flashboard Gate kicker forces on the Trigger Assembly

SOUTHEAST ALASKA POWER AGENCY

FY18 AUDITED FINANCIAL STATEMENTS

Date:	**December 5, 2018**	From:	**Trey Acteson**
To:	**Board of Directors**	Subject:	**Audited Financial Statements**

An audit of SEAPA's financial statements for the fiscal year ending June 30, 2018 took place the week of October 15 with auditors from BDO USA, LLP on site at the Ketchikan office. A draft copy of the resulting audited financial statements for the fiscal year ending June 30, 2018 will be distributed in a separate communication. Joy Merriner, Assurance Partner with BDO, is scheduled to present the audited financial statements via teleconference and will be available to answer any questions.

SUGGESTED MOTION
I move to accept the Southeast Alaska Power Agency Fiscal Year 2018 Audited Financial Statements as presented in the December 12-13, 2018 SEAPA Board packet.

SOUTHEAST ALASKA POWER AGENCY

Date: December 3, 2018

To: Board of Directors

From: Trey Acteson, CEO

Subject: Consideration and Approval of Staff Bonuses

I would like to recognize staff's contributions to the Agency this past year by recommending a bonus for their efforts and seek the board's consideration and approval of the total not-to-exceed amount of $7,500 to be distributed proportionately to staff as deemed appropriate.

Please consider the following suggested motion:

SUGGESTED MOTION
I move to authorize SEAPA's CEO to issue staff bonuses not to exceed the total amount of $7,500 payable on or before December 31, 2018.

SOUTHEAST ALASKA POWER AGENCY
FY18 REBATE DISTRIBUTION

Date:	**December 5, 2018**	From:	**Trey Acteson**
To:	**SEAPA Board of Directors**	Subject:	**FY2018 Rebate**

The SEAPA Board approved a FY2018 rebate in the amount of $800,000 on June 20. The rebate was recorded as a reduction to FY2018 hydro power revenues. Payment of the rebate was conditional upon the successful completion of the FY18 audit and contingent upon satisfying bond covenant requirements including debt service ratio compliance.

I am pleased to report that the FY18 audit by BDO USA, LLC is complete and will be presented for your consideration and approval at this meeting. We are compliant with the debt service ratio requirements of the bond indenture, and therefore are in a position to approve distribution of the rebate at this meeting.

As in the past, the rebate share for each utility is based upon the last three years' average of firm kWh purchases from SEAPA. This includes the years FY2016 – FY2018 and is summarized in the table below:

kWh Purchases	Ketchikan	Petersburg	Wrangell	Total
FY2016	83,316,376	40,762,959	36,474,130	160,553,465
FY2017	100,506,084	47,214,701	39,047,190	186,767,975
FY2018	96,361,492	45,768,998	37,860,210	179,990,700
Total kWh	280,183,952	133,746,658	113,381,530	527,312,140
Percentage	53.1344%	25.3638%	21.5018%	100%
Rebate Allocation	**$425,074.91**	**$202,910.80**	**$172,014.29**	**$800,000.00**

This rebate represents a four-tenths-cent reduction in the Wholesale Power Rate for FY2018. The Wholesale Power Rate of 6.8 cents/kWh has remained the same for the last 21 years. The Board's approval is being requested to formally award the rebate amounts as allocated above. A suggested motion follows:

SUGGESTED MOTION

I move to authorize the distribution of a $800,000 rebate with a pro rata share to each Member Utility based on an average of the last three years' firm kWh purchases from SEAPA as specified in the FY18 Rebate Memo dated December 5, 2018.

Date: November 29, 2018

To: Trey Acteson, Chief Executive Officer

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

SEAPA 2019 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.

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

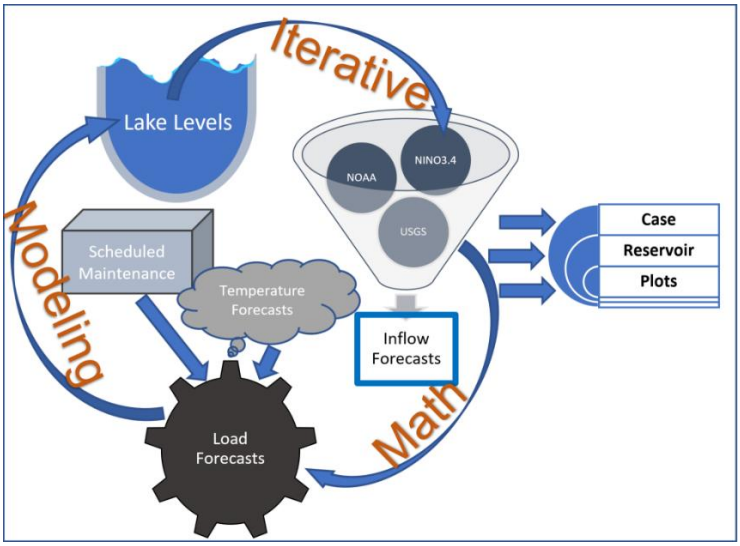


Figure 1: Math Modeling: Optimizing Water Resources

The iterative process utilized in the algorithm to optimize water resources was applied to a variety of cases. Each case was further analyzed, and a guide curve was developed. Special consideration was

[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.

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.

Current Lake Levels

The current lake levels as of November 29, 2018 were much lower than the estimated 2018 Ops Plan. This is due to record low rain and inflows for the season. According to the latest Drought Monitor analysis, Southeast Alaska is in a "Severe Drought" condition. Although we are transitioning from a moderate La Nina to an El Nino with Sea Surface Temperatures (SST) well above average, a long-lasting high-pressure system over Alaska has caused typical September and October storms to be diverted.

As a result of the recent extreme upper atmospheric pressures (Figure 2), September rainfalls were only 2.54 inches (normally 11.2) and October rainfalls were only 5.96 inches (normally 12). In November, the high-pressure system began to subside and resulted in near average rainfalls of 9.9 inches (normally 10.7). November inflows provided some recovery of lake levels. However, as discussed in the subsequent sections, current lake levels and predicted inflows do not support Tyee Lake's ability to meet additional power requirements of Ketchikan. As a result, a diesel campaign in Ketchikan is likely in the early Spring.

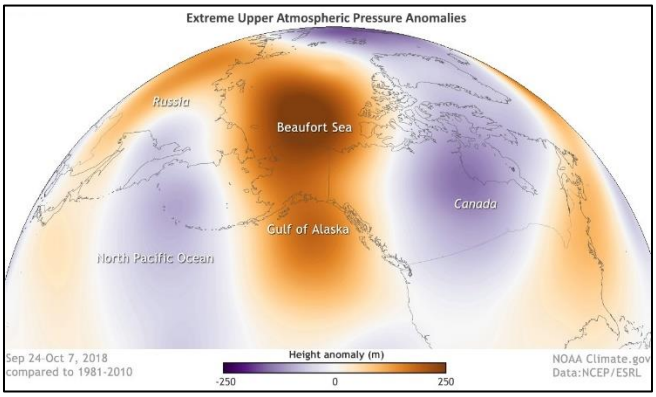
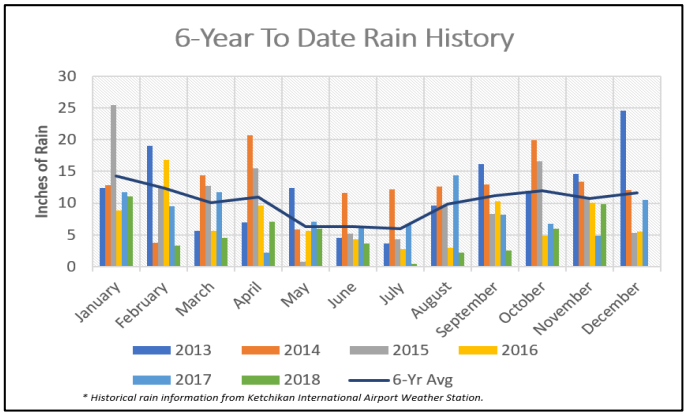


Figure 2: NOAA Climate pressure map

Rain Fall – Inflows for 2018

As discussed in the preceding section, rainfalls have been extremely low. The Ketchikan International Airport Weather Station recorded a 40-year record low rainfall of only 56.55 inches to date.

Figure 3: 6-Year to Date Rain History



The chart to the left (Figure 3) illustrates a 6-year comparison of rainfall by month. As evidenced in this chart, the months of July-August-September-October were far below the 6-year running average. The 2018 Operations Plan predicted an extremely low inflow year however a record low was unforeseen to both SEAPA and Weather Forecasters. As a result, on September 17, SEAPA began limiting sales from Tyee to Ketchikan. This will likely continue into the 2nd quarter of next calendar year.

Inflow Forecasts

Inflow predictions for calendar year 2019 were performed by utilizing NOAA, NINO3.4 and historic USGS inflow data. NOAA forecasts for the months of December-January-February are predicting above normal precipitation and above normal temperatures. Figure 4 illustrates that NOAA is predicting with an 80-90% probability confidence an above normal three-month outlook.

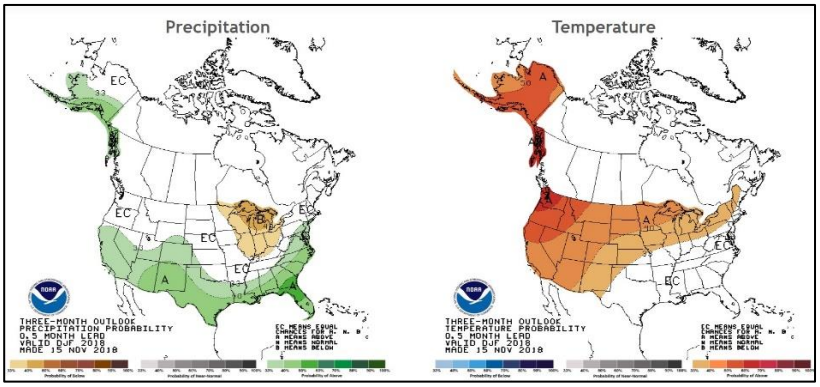


Figure 4: NOAA Dec-Jan-Feb Outlook

NOAA is also predicting (80% probability) that an El Nino is expected. The duration of the predicted El Nino is what SEAPA is mostly interested with because this information can be used to model an expected inflow season.

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 moving from a moderate La Nina into a Moderate El Nino. Ocean temperatures are currently 0.4–1.0 ˚C above average temperatures. Warmer ocean temperatures correlate to warmer weather and higher 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 above average ocean temperature. Coupled with a near average precipitation in November of this year, an El Nino is currently active and highly probable to continue.

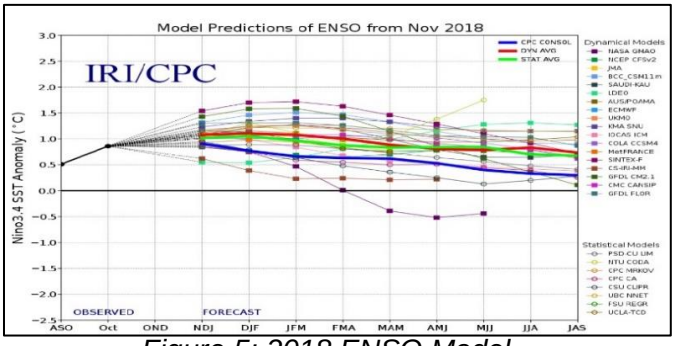


Figure 5: 2018 ENSO Model

Inflow seasons are cyclical and have a close correlation with ocean temperatures. As evident in Figure 6, ocean temperatures have been increasing over the past 50 years however the increase in temperatures appear to be consistent and predictable. The ocean's cyclical warming, and cooling patterns are termed El Nino and La Nina respectively. Between the years 2014 and 2016 the largest El Nino in history was recorded.

The second largest El Nino in recorded history occurred between the years 1996 and 1998. As evidenced in Figure 6, typically after a strong El Nino season, there is a reactively strong La Nina period that follows. Due to the lack of 2018 inflows (during this past La Nina period), Swan Lake and Tyee Lake reservoir elevations were recorded at nearly the lowest in history. Neither reservoir recovered by September of this season, resulting in suspended additional output from Tyee to Ketchikan.

Figure 6 illustrates the NINO3.4 SST for the past 68 years. The red jagged line illustrates the ENSO model for 2019 with current ocean temperature conditions supporting the model predictions, indicating a warmer and wetter forecasted season. The SSTs displayed and forecasted are cyclical and predictable to a certain degree of confidence. Given NOAAs 80-90% confidence level, SEAPA predicts the upcoming El Nino season will be comparable to 2014 (as shown in figure 6).

The 2014 El Nino season was slightly above average for inflows and for the purposes of modeling, was chosen as the probable inflow case year for Swan Lake and Tyee Lake models.

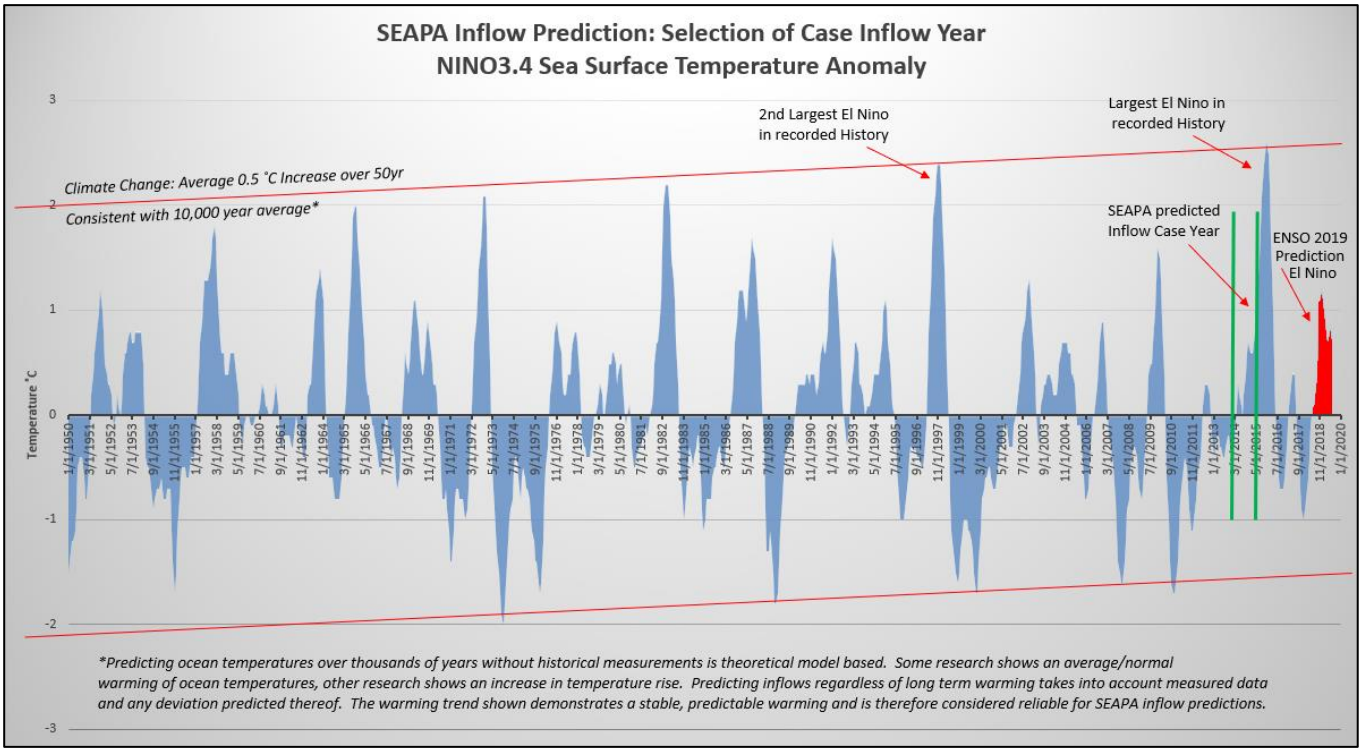


Figure 6: SEAPA Inflow Prediction – Case Year

SEAPA's predicted low inflows for both Swan Lake and Tyee Lake reservoirs were also modeled. It is highly unlikely that there will be below average inflows for the 2019 season and therefore the probable (2014) & average (IECo & CAI)[2] cases were used to determine the respective guide curves.

[2] The International Engineering Company (IECo) performed a study to determine hydrologic data necessary for the design of Tyee Lake. The results included Tyee Lake inflow average estimates. Commonwealth Associates Inc. (CAI) developed an inflow average for Swan Lake based on rain gauges and river gage data of the area as part of the STI planning effort.

Case / Month	SWL CAI Inflow (avg cfs)	SWL 2014 Inflow	TYL IECo Inflow (avg cfs)	TYL 2014 Inflow (avg cfs)
jan	372.0	466.3	48.8	117.7
feb	191.0	52.0	36.4	22.9
mar	240.0	372.0	32.5	54.2
apr	374.0	646.0	68.8	120.7
may	537.0	564.9	199.4	309.6
jun	489.0	355.9	324.7	275.2
jul	313.0	434.4	291.7	234.7
aug	346.0	480.0	241.2	133.7
sep	539.0	666.1	227.9	222.8
oct	526.0	944.2	245.6	242.3
nov	365.0	467.0	126.4	65.3
dec	419.0	435.5	76.1	87.1
Average Annual	394.0	493.0	159.0	257.0

Table 1: SEAPA predicted Inflow Cases for 2018

Average Inflow Cases

Table 1 illustrates the inflow inputs that were used for the Swan Lake and Tyee Lake reservoir level models. As discussed previously, the inflow cases were selected based on NOAA predictions for 2019. The annual cfs for Swan lake was 392.6 cfs and the average annual cfs for Tyee Lake was 160.0 cfs.

2014 Inflow Cases

The probable inflow case for Swan Lake was inserted into the model with an average annual cfs value of 521.9 cfs. Probable inflows were based on 2014 inflows. The probable inflow case for Tyee Lake was inserted into the model with a cfs value of 157.2 cfs. This was based on ongoing and predicted warmer and wetter conditions.

Load Forecasts

Load forecasts and subsequent SEAPA deliveries were estimated for the 2019 calendar year with consideration to the NOAA December-January-February outlook (warmer average temperatures) and the 7-year SEAPA delivery schedule (2011-2018). Typically, the Operations Plan considers multiple load cases to balance the lakes across the STI (Swan-Tyee Intertie) transmission line and maximize the outputs of Tyee and Swan lake per the PSA. Under current lake level conditions however, balancing the lakes is not possible. Tyee Lake's Dedicated Output, pursuant to the PSA, will be reserved and remain dedicated to Petersburg and Wrangell to meet Firm Power Requirements of the respective Utilities until reservoir conditions support change. As a result, net power transferred across the STI will not occur for the foreseeable future. The forecasted Firm Power Requirements for the respective Utilities, based on 2014 loads, are as follows:

Ketchikan Expected Loads: **87,923MWh**

Petersburg/Wrangell Expected Loads: **78,221MWh**

SEAPA Total Expected Loads: **166,144MWh**

Low Inflow Load Case:

Table 2 illustrates the load forecasts for 2019 which demonstrates zero 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 current net zero STI power transfer conditions, SEAPA will continue to review lake levels weekly and recommends that the Operations Plan be revisited once lake levels support Additional Dedicated sales.

	KTN			Swan Lake		STI		WRG-PSG			Tyee Lake	
	Expected	Required	Required	Expected Gen	Expected Gen	STI Expected	STI Expected	Expected	Required	Required	Tyee Expect	Tyee Expected
	Delivery	Generation	Generation	from Inflow	from Inflow	(balance)	(balance)	Delivery	Generation	Generation	Generation	Generation
	MWh	MWh	Avg MW	Avg MW	MWh	MWh	Avg MW	MWh	MWh	Avg MW	Avg MW	MWh
JAN	8558.0	9071.5	12.2	12.2	9071.5	0.0	0.0	7166.2	7596.2	10.2	10.2	7596.2
FEB	10649.0	11287.9	15.2	0.0	0.0	0.0	0.0	7407.9	7852.4	11.7	11.7	7852.4
MAR	10018.0	10619.1	14.3	9.0	6696.0	0.0	0.0	4960.6	5258.3	7.1	7.1	5258.3
APR	7191.0	7622.5	10.2	4.0	2976.0	0.0	0.0	5480.6	5809.4	8.1	8.1	5809.4
MAY	5397.0	5720.8	7.7	7.7	5720.8	0.0	0.0	7510.4	7961.0	10.7	10.7	7961.0
JUN	5953.0	6310.2	8.5	8.5	6310.2	0.0	0.0	8333.4	8833.4	12.3	12.3	8833.4
JUL	6200.0	6572.0	8.8	8.8	6572.0	0.0	0.0	7697.4	8159.2	11.0	11.0	8159.2
AUG	6687.0	7088.2	9.5	9.5	7088.2	0.0	0.0	7315.3	7754.2	10.4	10.4	7754.2
SEP	6023.0	6384.4	8.6	8.6	6384.4	0.0	0.0	7247.6	7682.4	10.7	10.7	7682.4
OCT	4868.0	5160.1	6.9	6.9	5160.1	0.0	0.0	6251.1	6626.2	8.9	8.9	6626.2
NOV	7723.0	8186.4	11.0	11.0	8186.4	0.0	0.0	3968.4	4206.5	5.8	5.8	4206.5
DEC	8656.0	9175.4	12.3	12.3	9175.4	0.0	0.0	4882.3	5175.3	7.0	7.0	5175.3
Total	87923.0	93198.4	-	-	73340.9	0.0	-	78221.3	82914.6	-	-	82914.6

Table 2: SEAPA 2019 Load Forecast

Scheduled Maintenance:

SEAPA does not anticipate any extended outages in calendar year 2019. Typical line maintenance, generator unit annual maintenance and substation maintenance were considered when developing the load forecasts. Swan Lake station service switchgear upgrades and Swan Lake turbine runner repairs are anticipated in the future. However, for CY2019, typical outage durations and times were modeled.

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 model was run. Once inflow predictions are developed, manipulation of generation inputs is typically performed to maximize utilization of the outputs for Tyee and Swan. Guide curves are generally developed by averaging the probable inflow and low inflow cases, with a slight bias towards the low inflow case for early spring months. Under current conditions and until conditions change, the guide curves do not reflect balancing the lakes across the STI. It is therefore again prudent to revisit the Operations Plan once conditions change.

Swan Lake Reservoir Plot (Expected Inflows):

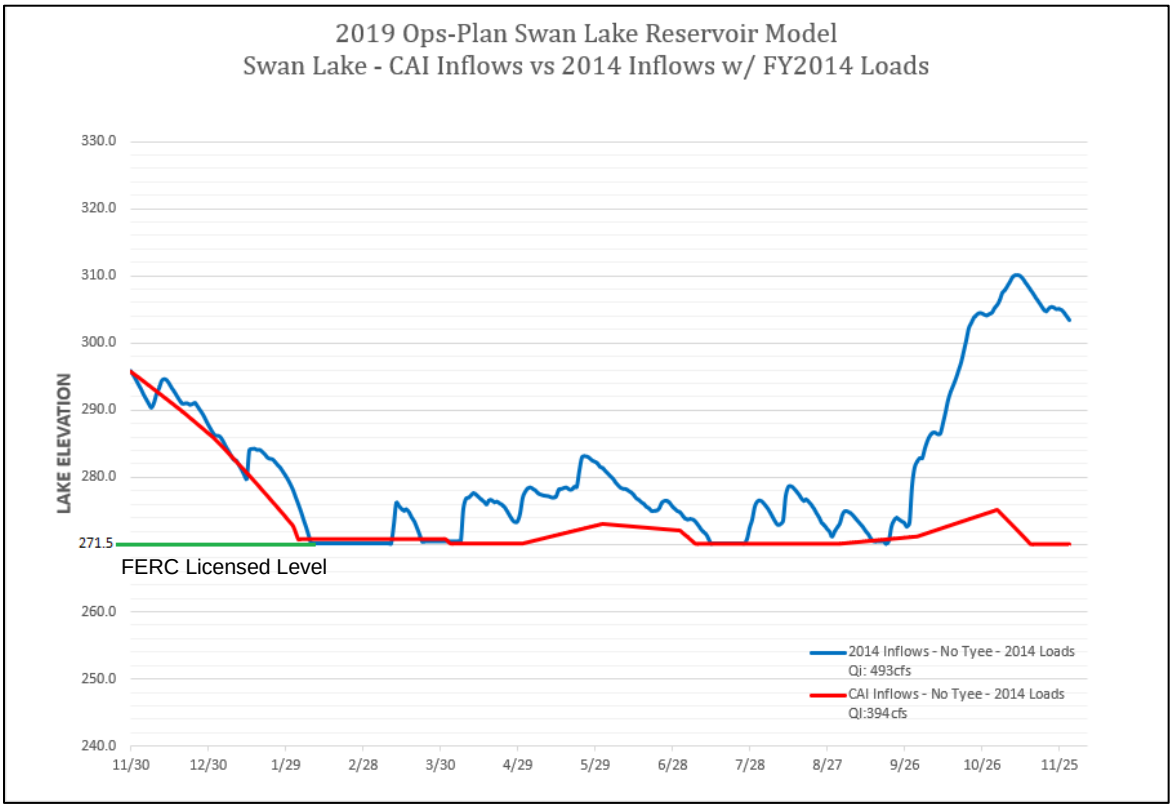


Figure 7: Swan Lake Reservoir Plot:

The 2019 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 for Swan Lake without the STI or other methods of supplemental generation to meet Ketchikan's Firm Power Requirements. Modeling inflows using the CAI inflow case (yellow line) illustrate that Swan Lake will not recover for the duration of the 2019 calendar year if all available inflows into the lake are used to support Ketchikan loads without Additional Dedicated Output from Tyee. In the case of using 2014 inflows (as predicted), Swan Lake recovers partly in the Spring however lake levels drop back down in the Summer under the same conditions.

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 the current conditions, SEAPA hosted a meeting with KPU's Electric Division Manager on November 29. The intent of the meeting was to discuss KPU Supplemental Diesel Generation case scenarios to minimize overall use of Diesel, maximize utilization of Swan Lakes output and avoid future spill. The outcome of coordinating KPU Supplemental Diesel Generation is discussed below.

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, under the current water conditions, Tyee does not currently have Additional Dedicated Output available. It was therefore prudent to formalize integration of KPU Supplemental Diesel Generation to ensure compliance with the Power Sales Agreement.

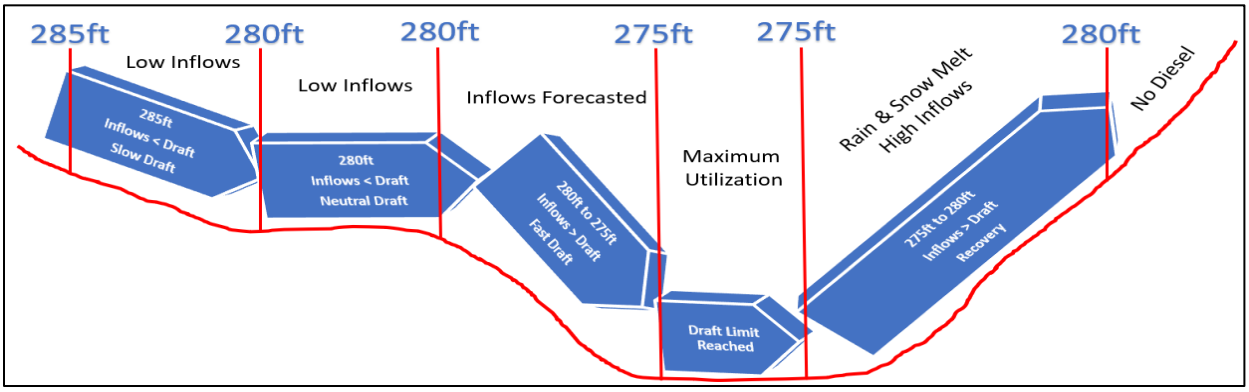
If draft rates at Swan Lake are high enough that the Maximum Draft Limit approved by the Board of Directors will likely be reached, SEAPA will issue a curtailment notification for each lake level instance and circumstance as listed below. Upon notification, the following KPU Supplemental Diesel Generation plans can be used:

Lake Elevation 285ft (Slow Draft): Whereas draft rates at Swan Lake and SEAPA 10-day rain inflow forecasts are apparent to not be great enough to maintain a Swan Lake elevation of 285ft, KPU Supplemental Diesel Generation may be used to reduce the rate of draft with intent of drafting Swan Lake to elevation 280ft.

Lake Elevation 280ft (Neutral Draft): Whereas draft rates at Swan Lake and SEAPA 10-day rain inflow forecasts are apparent to not be great enough that Supplemental Generation is required to maintain an elevation of 280ft, KPU Supplemental Diesel Generation may be used to maintain Swan Lake Elevation at 280ft until SEAPA 10-day rain inflow forecasts demonstrate that inflows will be greater than draft rates.

Lake Elevation 280ft to 275ft (Fast Draft): Whereas SEAPA 10-day rain inflow forecasts demonstrate that inflows will be greater than draft rates, KPU Supplemental Diesel Generation shall be reduced to allow that the Board of Directors approved Maximum Draft Limit of Swan Lake may be reached, ensuring that SEAPA hydrogeneration is not displaced by KPU Supplemental Diesel Generation.

Lake Elevation 280ft and Rising (Recovery): Whereas the Swan Lake elevation is below 280ft and SEAPA 10-day rain inflow forecasts demonstrate Swan Lake levels are rising, KPU Supplemental Diesel Generation shall terminate at Swan Lake elevation 280ft, as continued KPU Supplemental Diesel Generation directly displaces SEAPA hydrogeneration**.**



Coordination of KPU Supplemental Diesel Generation Chart

Swan Lake Reservoir Plot (With KPU Supplemental Diesel Generation):
A model was developed to demonstrate Swan Lake levels if KPU decides to coordinate KPU Supplemental Diesel Generation (Figure 8). The model was developed for illustrative purposes. Lake level elevations as described above were used to demonstrate in this scenario the likely recovery of Swan Lake in the late Spring of 2019 (with KPU Supplemental Diesel Generation). As discussed, Additional Dedicated Output from Tyee will not be available to Ketchikan until approximately that date and therefore SEAPA is recommending to the Board of Directors that the Operations Plan be revisited during a future Board Meeting in 2019 to discuss Reservoir Model plots and Additional Dedicated Output from Tyee.

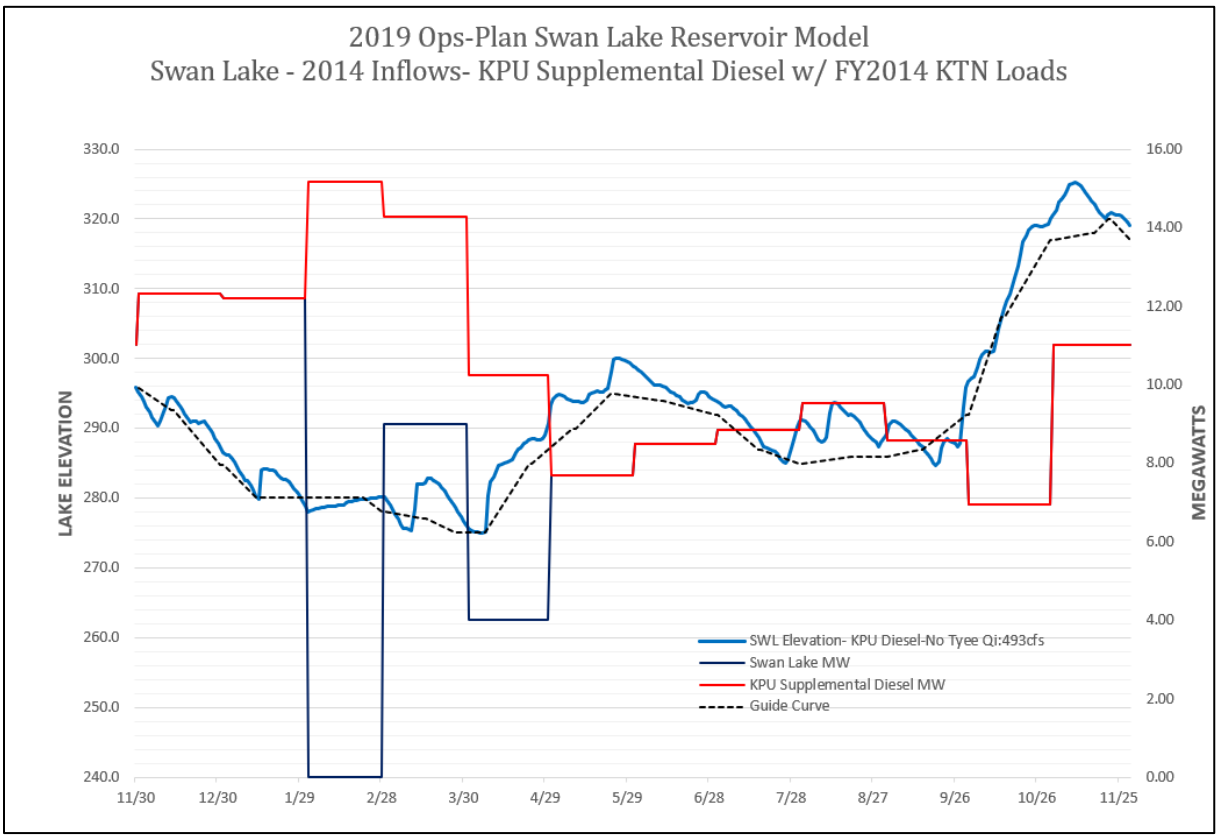


Figure 8: Swan Lake Reservoir Plot with KPU Supplemental Diesel

Tyee Lake Reservoir Plot (Operations Plan):

The 2019 Tyee Lake reservoir model (Figure 9) demonstrates 2 case scenarios. Both models represent Petersburg and Wrangell loads only, with two inflow cases. The Tyee 2014 inflow case with 2014 loads represents the probable case with Tyee Lake draft elevations drafting to elevation 1265 ft. The Tyee IECo inflow case with 2014 loads represents the worst-case scenario with lake elevations drafting to the FERC licensed elevation limit of 1250 ft.

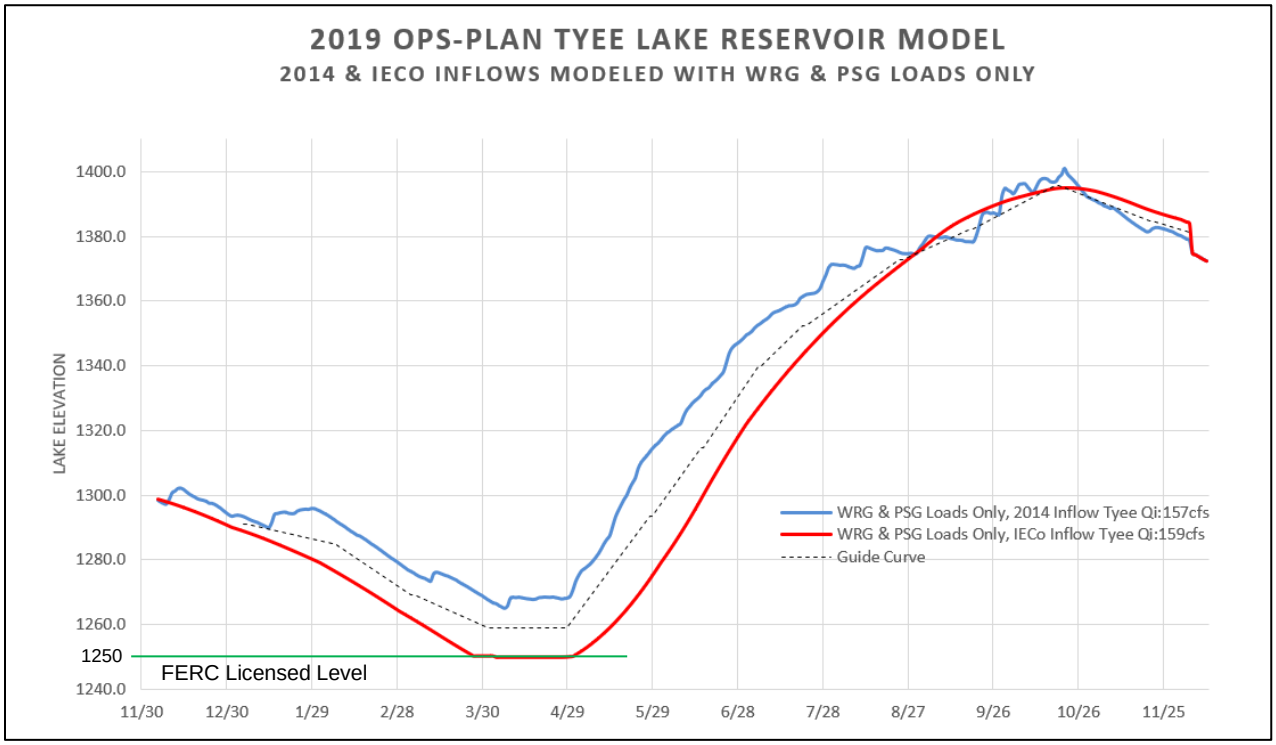


Figure 9: Tyee Lake Reservoir Plots

Optimizing Water Resources:

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 licensed 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 August-September of 2018, SEAPA continually developed Tyee Lake models using Petersburg and Wrangell loads only. The models illustrated that Tyee Lake's Additional Dedicated Output would not be available to Ketchikan after the end of September and throughout the Winter of 2018-2019 to meet the Firm Power Requirements of Petersburg and Wrangell. On September 17, 2018, SEAPA began a net-zero transfer of energy across the STI. Since implementation of the net-zero operations strategy, the total balance of megawatts sent South from Tyee to Ketchikan has been nearly zero with the same subsequent energy transfer from Swan Lake to the North. The overall result is dedication of remaining Tyee Lake Capacity to Petersburg and Wrangell and Swan Lake to Ketchikan until conditions support otherwise.

Swan Lake Spill:

The Swan Lake reservoir was raised from elevation 330 ft. to elevation 345 ft. Calendar year 2017 was the first year that the benefits of this effort were realized. In September of 2017, Swan Lake reached an elevation of 335.8 ft. This added 3,723MWh of energy captured, that would have otherwise been lost to spill. With recent water conditions, the energy captured in 2017 has already and will in the future continue to displace Diesel Generation (up to the maximum energy captured). Similar to that of the 2018 Ops Plan, SEAPA plans to operate Swan Lake above elevation 330 ft. in the following manner:

- Elevations 330 ft. to 339 ft. - Both generating units will be fully available and the vertical gate will be operable. Water will be stored for future use.
- Elevations 339 ft. to 342 ft. - Both units will operate to their highest levels that loads permit to draft the reservoir back down to 339 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 335.8 ft. as seen in September 2017, there were little signs of Flashboard leakage. Testing is still required at higher elevations. Flashboards automatically release at elevation 347 ft.

2019 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 curve elevations be used by the scheduling group as guides. If lake levels fall below the guide curves, SEAPA will manage water resources, in consideration of current conditions, with an overall objective of restoring lake levels to their respective guide curves. As lake levels approach the annual minimum Board approved draft limits (Tyee: 1260 ft. and Swan: 275 ft.), SEAPA and the dedicated resource holder(s) will enter into discussions as to whether curtailments will be issued by SEAPA. Guide curve elevations and minimum draft limits for Swan Lake and Tyee Lake are listed in Figure 8 and Figure 9 and correspond with the table below.

SEAPA 2018 Operations Plan Guide Curve Values

Mth/Day	12/5	1/5	2/5	3/5	4/1	4/28	5/28	6/15	7/5	7/21	8/24	9/18	10/18	11/20	12/4
SWL Guide Curve Elevation (ft)	295.8	284.8	295	280.0	275.0	285.0	295.0	296	292.0	287.0	286.0	287.0	287.0	318.0	317.0
TYL Guide Curve Elevation (ft)	1297	1291.2	1285.1	1269.3	1261	1260	1280	1293.6	1314.7	1352.4	1372.8	1382.2	1395.7	1384.7	1381.2

For reference, past Operations Plan minimum draft limits are listed below. With the predicted low inflows for CY2019, the proposed 2019 Operations Plan proposes that Swan Lake and Tyee Lake draft limits be consistent with 2016 & 2018 draft limits respectively.

SEAPA Historical Draft Limits						
	2014	**2015**	**2016**	**2017**	**2018**	**2019**
Swan Lake	275 ft.	285 ft.	275 ft.	273 ft.	272 ft.	275 ft
Tyee Lake	1265 ft.	1280 ft.	1270 ft.	1261 ft.	1260 ft.	1260 ft

Please consider the following suggested motion:

SUGGESTED MOTION
I move to approve the 2018 SEAPA Operations Plan as presented in the December 12-13, 2018 Board packet.

CEO Report

[To be provided as handout at Board Meeting]

SOUTHEAST ALASKA POWER AGENCY

Date: December 3, 2018

To: Trey Acteson, Chief Executive Officer

From: Clay Hammer, Operations Manager

Re: Report for December 12, 2018 Board Meeting

MAJOR CONTRACTS and PROJECTS

Tyee Road Access to Tidewater Project

Access to the Tyee plant has always been problematic in that the primary land-based access point is a tidal estuary further complicated by silting influences from the Bradfield River.

In order to keep the channel open, periodic dredging has been required but even with dredging, access by boat or barge is still a tidal prospect with certain times of the day or month being inaccessible. As a long-term solution to this problem a road out to tide water has long been considered the most promising option. There are a number of expensive alternatives for this option. Staff reached out to qualified engineering firms seeking quotes for the following three alternatives:

- Overland Route. This route is one mile long and presents logistical challenges because of the steepness of the terrain.
- Shoreside Route. This route is 1.5 miles long and presents permitting and tidal challenges.
- Status Quo. This alternative is to continue dredging for the foreseeable future.

At this time three out of four firms have responded to our solicitation with only one rendering a quote for services. A follow up has been made with two of the other respondents and additional quotes are expected.

Once a qualified engineering firm has given a credible price tag to the above options, those figures will be brought before the Board for further consideration. If the Board finds the potential cost worthy of additional effort, then a more detailed feasibility study would be followed up on the preferred option.

ATV Use on the Tyee Transmission System

What started as a simple Forest Service Special Use Permit Amendment for ATV use associated with Transmission Line right-of-way maintenance within Forest Service lands has unfortunately evolved into a multi-year effort involving not only the amendment but also updates to the original Special Use Permit itself. Fortunately, the end is near.

I have reached out to Meridian Environmental, the contractor charged with updating the permit and processing the amendment as well as local District Ranger Bob Dalrymple and permit administrator, David Rak. As of this writing, all exhibits required for the ATV amendment have been submitted to the local Forest Service for review. Forest Service staff here has indicated that they are motivated to wrap this up. I requested that if possible, they sign by the time of our upcoming board meeting. This request touched off a flurry of activity with both local Forest Service and Meridian putting in additional effort get the reviews done and back to Meridian for any changes needed in time to meet that timeline.

TSV Actuator Pistons

SEAPA has contracted with Austrian firm, Andritz Hydro Limited, to build and replace the two TSV actuator pistons for the Tyee Lake facility. A recent project update from Andritz indicates that as of mid-November the pistons are in the process of being forged and are expected to be delivered to the machine shop in mid-December. Current expectations are that work will be complete in time to have both the pistons and seals replaced in the actuators during the annual Spring Maintenance outage.

Submarine Cable ROV inspection.

SEAPA awarded the contract for ROV submarine cable inspections to ITB Subsea Ltd. (ITB) of Vancouver, BC. As of this writing, ITB has submitted three different drafts of their report but are still lacking the substance required to fully demonstrate the condition of the cables and meet the requirements of the RFP. Following staff's contact with ITB about the deficiencies, ITB General Manager, Mike Shaw, responded by phone call to that review indicating that they have received it and will be getting to work to bring it up to our expectations.

Of note and potential concern is an initial evaluation of one of the large spans located in the Stikine Strait crossing. At over 350 meters in length, the concern has been raised by ITB's consultant that the weight of the vegetation on the cable has exceeded the rated loading for that cable. It is unknown if the spanning is a recent development from seismic activity in recent years or a result of how the cable was originally laid. Original as-built surveys do not indicate the presence of large spans in this location. Staff continues to press for a full and complete report of their findings as well as suggested plans and costs for required remediation of noted deficiencies. We have also located the original June 1983 film prepared by Mitsui & Co. from when the cables were initially laid and will have that film digitized to compare with videos of the recent inspection.

Helipads Cleveland Peninsula

Funds were budgeted this fiscal year for repairs to the decks of a number of helipads located along the Cleveland Peninsula. A brief site visit to those locations revealed that most of the pads in question are well beyond repair and need to be replaced. We currently have 22 new helipad kits in our inventory which will be more than adequate for the necessary replacements. A more detailed assessment will be done as soon as weather and scheduling permits to determine exactly how many pads need to be replaced and their locations so work can be contracted out. This will be done as soon as weather and scheduling permits.

MET Tower Data Collection

In an attempt to validate the potential for wind generation within the SEAPA service area, staff installed our first data collection module at the south end of Mitkof Island at the transmission marine terminal. This location is unique in that it is close to SEAPA owned transmission lines and is exposed to prevailing winds from the Stikine River. The first SD card of data from this site has been pulled and will be evaluated. A second MET data collection module has been ordered and will be located in the Ketchikan area. A number of potential sites have been identified as good prospects and additional collection modules may be required to fully vet the area in a reasonable time frame.

Wooden Pole Testing

SEAPA received the IML PD-600 Resistograph purchased used from a pole testing contractor. This is a $9,500.00 tool we acquired for $2,500.00. It is a three-year-old model in a like new condition and considered a more reliable means of pole testing over all others currently available. Staff will pursue IML's free online, web-based training for operation of the device.

For those not familiar with Resistograph based testing, it basically consists of using a drilling device that is able to measure and record the effort required to drill a very small hole in a pole or tree. That information can be read directly from the tool and or downloaded for future reference. Staff plans to begin testing the wood poles on Mitkof Island during next year's service outage with testing of wooden poles on the Swan line to follow beginning in 2020.

An inventory of wood poles in service on the Mitkof and Swan lines has been done. For reference purposes, there 211 wooden poles in service along the roaded areas of Mitkof Island and 301 wooden poles in service on the Swan line. Each pole will need to be climbed to test failure-prone areas.

Marine Terminal Radio Monitoring System

The monitoring system for the submarine cable crossing has experienced communication problems off and on for some time now. Under normal circumstances the solar powered radio monitoring system provides daily updates of cable oil pressures to an annunciator panel at the Wrangell Warehouse that is then relayed to the Tyee Plant Scada system. Batteries for three of the four terminals were scheduled for replacement this year. That work was done as scheduled and the solar panel circuits were checked. Communications continued to be problematic requiring that SEAPA contract with 4RF, the company that designed and built the communications package. Their system engineer made site visits to each of the crossings as well as the Burnett Peak repeater site that relays the data from the Bradfield crossing to town. Several different problems were discovered and repaired and for the first time in a long time we have reliable communications with our cable crossings.

Tyee Lake Barge Run

In October, the Fall fuel re-supply and barge service was contracted out to Lorne Enright and Ketchikan Ready Mix and Quarry Inc. This is a critical re-supply run for the plant enabling SEAPA to replenish fuel stocks at Tyee for the winter, and also afforded an opportunity to transport items too large for the SEAPA landing craft to transport. Major housecleaning was done around the plant with literally tons of scrap iron and obsolete equipment being shipped back on the barge to Wrangell for disposal.

In addition to our regular fuel and scrap haul, we were able to partner with TEMSCO Helicopters to assist them in getting their onsite fuel supply topped off. The gasoline and diesel fuel that are delivered to the site must be shipped in different trucks due to volatility differences in the fuel. The Jet-A fuel used by TEMSCO is very similar to #1 diesel and can be shipped in the same truck as #2 diesel. Since there was an empty compartment available in the diesel supply truck, TEMSCO was also able to get their fuel delivered. Ordinarily there is a substantial fuel surcharge attached to any work done by TEMSCO if an on-site refuel is required. By partnering with them, that surcharge has been reduced from $9.00 per gallon to $4.00 making it the same as an in-town refuel.

Transmission Line Brushing Program

As SEAPA transitions from in-house line clearing to contracting out major work, an effort is being undertaken to map out all of SEAPA's transmission lines and enter that data into an excel type spread sheet. Everything pertinent to a good brushing plan is going into the spreadsheet, including but not limited to: Structure numbers, distance between structures, elevation change, ROW width, acres of cleared ROW, brush type and date last cut. The intent is to have a predictable vegetation management plan that can be easily tracked and maintained.

So far data has been established for Woronofski and Vank Islands. The Swan and Mitkof lines will be done next, followed by the STI and Cleveland Peninsula.

Tyee Lake Report

All PM's and Work Orders are up-to-date. In addition to scheduled work, the Tyee Crew performed the following tasks:

- repaired cooling water leaks on Generator #1 and #2
- winterized Forest Service Administrative Cabins
- installed and put a new Control Room admin computer into service
- completed brush mowing including the East approach to the airport and sides of all major service roads
- rebuilt station service air compressors
- serviced all snow removal equipment and chained it up to prepare for winter
- upgraded Tyee Switchyard and Wrangell Warehouse lighting to LED
- ordered the critical spare Governor hydraulic pump; the critical spares list continues
- serviced and/or replaced fire extinguishers at the Tyee Plant and Wrangell warehouse
- replaced batteries at the marine cable crossings
- TSS, Inc. provided safety training which included ladder safety, rigging safety, and forklift training

At the end of September, the SEARCH Alaska Crossings group had plans to be in the Tyee/Bradfield area and reached out to see if a tour of the facility was possible. Arrangements were made and the Tyee crew provided a tour of the plant, which was very well received by both the Crossings' staff and the students. A phone call from the program administrator was followed up by a Thank You card to the crew, signed by the group, expressing their gratitude to them for taking the time to show off the Plant.

Swan Lake Report

See attached KPU report.

Staff will be available at the meeting to discuss any questions or concerns.

KETCHIKAN PUBLIC UTILITIES

Swan Lake Project Report

Andy Donato, Electric Division Manager | Dec. 2018

SAFETY | ENVIRONMENTAL |SECURITY

- SEAPA EAP Action Plan updated 10-8-2018, new flowcharts A-C & Appendix D-1 made.
- On October 16, 2018 the dam flash board trigger was noted as tripped. Each kicker leg has since been locked-out. The flash board system is now inoperative.
- Visitors include KPU Telecom, BAM Construction, BLM Surveyors, Bear and Duck hunters, EPC Line crew, and Satellite & Sound personnel.
- All three surveillance cameras remain in-service.
- Intake building alarm field wiring remains incomplete. Waiting on PLC inputs for the intrusion alarm and outputs for the plant horn.
- The auxiliary log boom remains broken, waiting on a lake level to re-float it for repair
- BAM has installed a cable across the dam spillway for fall protection
- Additional dam abutment ladder sections have arrived for BAM to complete when on site (tentatively for waste water project)

OUTAGES | UNIT CONSTRAINTS | RESERVOIR LEVEL

- Unstable Swan Unit #2 ISOC operation, KPU system outage Sept. 29, 2018,
- STI Line outage Nov. 14 thru 18, 2018 due to a land slide, 6 days of KPU diesel support followed for both frequency support and lake level mitigation
- For information, KPU's earlier diesel campaign started Feb. 27th and ended April 13th, two record low lake levels were reached, March 5th, 277.7' and April 2nd, 276.1' (Intake at 271.5')
- KPU's 2nd diesel campaign started Sept. 24, 2018 and ended Nov. 2, 2018 due to low Swan Lake level and suspended additional dedicated generation from Tyee Lake. Swan Lake level reached 280.2' on Sept 24, 2018
- Swan Lake level as of Dec. 3, 2018 was 292.7' and falling.

MAINTENANCE (routine)

- Runner inspections (10-9-18)
- Intake gate inspections
- Exciter brush replacement
- RTD replacement on Unit #2 upper guide bearing
- New communications with KPU Telecom
- Rittmeyer penstock flow meter upgrade

- Unit #1 upper guide/thrust bearing oil leak repairs

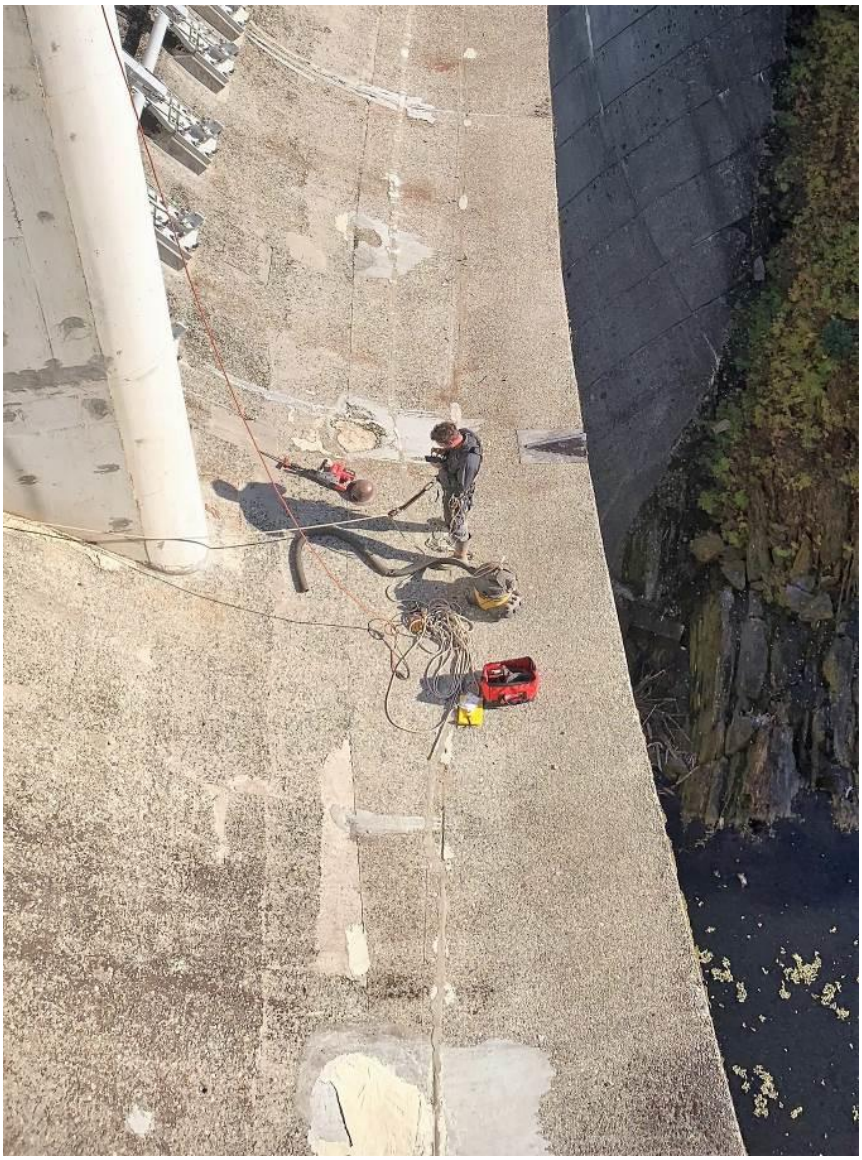
Project Support (continued)

- New septic drain field
- DC System Upgrade – No hydrogen gas detector yet
- Lake bubbler equipment support, holding on the actual PLC install
- New station (LVSG) switch gear project in review
- Governor/PLC upgrades, ISOC configuration being reviewed

COMPLIANCE

- Quarterly Dam deflection surveys made with R&M, Sept. 19, 2018
- Seepage pin review/log Sept. 19, 2018
- Spillway gate/standby power tested monthly
- Fire extinguisher inspections Nov. 28, 2018
- Intake gate inspections October 22, 2018

Attachments/Images



Above: installing fall protection on dam spillway

Above/Below: intake gate inspections

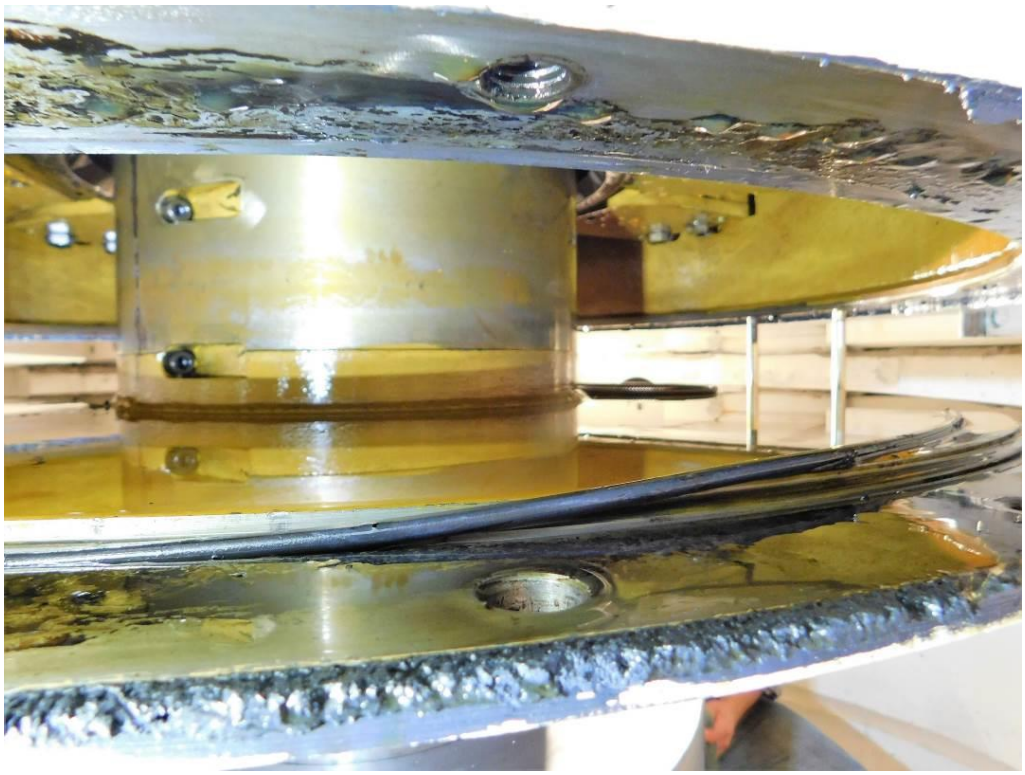
Above: a broken aux. log boom along the lake bank. Higher lake level needed for recovery

Above: Existing waste water system with new septic field outline.

Above/Below: Parts (primary tank & foam sheets) for new septic field system arrive

Above: Portable fuel tank fabrication

Below: Turbine main bearing oil leak discovery/repair



. . . . Drought hits SE Alaska (Swan Lake on Oct. 16, 2018)

SOUTHEAST ALASKA POWER AGENCY

Date: November 15, 2018

To: Trey Acteson, CEO

From: Ed Schofield, Power System Specialist

Subject: Report for December 12-13, 2018 Board Meeting

Tyee Lake Intake Gate

On October 2 & 3, 2018, the Tyee Intake Gate was re-installed back into service after being removed from the gate slot to provide remotely operated vehicle (ROV) access to the Tyee power tunnel for surveying. As previously reported, this was the first time the intake gate had been removed and inspected since commissioning in 1983. The original intent after the gate was removed was servicing of all rotating mechanical items as well as replacement of gate seals prior to placing the gate back in service. The mechanical deficiencies identified and the hours required to correct them were far greater than originally anticipated. The gate stems required sandblasting and painting. All the gate guide roller bearings need replacement, and the slow fill valve needs reconditioning. It was determined that it would not be possible to complete all the required gate repairs before the onset of winter. For this reason, once the gate stems were reconditioned, the gate was reinstalled without completing the remainder of the repairs this season. The gate is presently fully functional to perform, as intended, in the event emergency closure of the power tunnel becomes necessary. The gate will again be pulled next spring during the scheduled Hydraulic Power Unit relocation project to complete the identified repairs.

Tyee Intake Gate out-of-gate Guide for Inspection

Swan Lake Wastewater Treatment System Modifications Project

At the time of this writing, the Swan Lake Wastewater Treatment System Modifications Project is on track for completion by the end of November or early December 2018. The contractor is BAM, LLC of Ketchikan. The project consists of the replacement of the ocean outfall for an uplands' drain field.

Swan Lake Wastewater Treatment Plant

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Swan Lake Reservoir Access Ladder Extension Project

At the time of this writing, the Swan Lake Reservoir Access Ladder Extension Project is on track for completion by mid-December. The contractor is BAM, LLC of Ketchikan. The project consists of extending the present reservoir access ladders located on the north and south dam abutments down an additional 30 feet.

Swan Lake Dam Access Ladders / Right & Left Abutments

[Remainder of page intentionally left blank.]

Swan Lake Flash Board Gate (FBG)

During a scheduled preventative maintenance exercise for the Swan Lake FBG, an abnormal condition of the gate's triggering system was identified. The abnormal trigger condition was corrected by SEAPA staff. The design engineers are determining the cause of the abnormal condition and how to prevent a reoccurrence. Preliminary findings indicate that thermal expansion due to warmer and dryer-than-normal conditions are at fault. The expansion of the dam is thought to have been greater this Fall due to record low reservoir elevations and extended days of continuous sun. The thermal expansion resulted in decreased FBG panel forces on the trigger assembly. The FBG trigger assembly is currently in its design safety lock-out position until the engineers' analysis is complete. Current lake levels are well below the FBG and will remain that way for several months.

Swan Lake Flash Board Gate System

End of Report

SOUTHEAST ALASKA POWER AGENCY

DATE: December 4, 2018

TO: Trey Acteson, CEO

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

RE: December 12-13, 2018 SEAPA Board Report

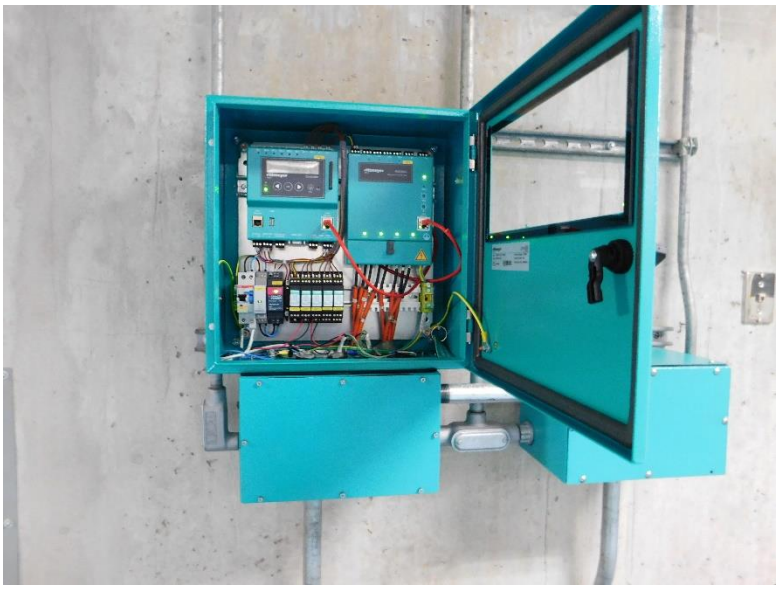
SWL Satellite

The Swan Lake communications for internet, telephones and SCADA to the SEAPA office have been transmitting all traffic over the new Hughes net satellite dish for over six months. Parallel to the Hughes net dish was the old X2nSat dish, which was left in place as a contingency to insure reliability. After six months of operation through heavy storms and environmental events, the Hughes net satellite has proven to be reliable.

With the cost of the new Hughes net dish being 1/6 that of the old X2nSat and network speeds realized at over 10 times (huge improvement), reliability was the only factor that was left to assess. In November 2018, SEAPA decided it would terminate the X2nSat contract for a savings of $1,315 per month. After termination, X2nSat offered SEAPA a $72/month (previously $1,590) contract to utilize them as a contingency backup for the Hughes net service. SEAPA is currently developing a contract to implement the new plan which will ensure three sources of communication for Swan Lake. The total cost for Swan Lake Satellite communications will be $347 per month for a total savings of $1,243 per month.

Swan Lake Satellite

Swan Lake Rittmeyer Flow Meters



The Swan Lake Penstock Flow meters were inoperable for years. RR project 19-310 was approved for engineering, installation and commissioning of new Rittmeyer flow meters. The new Risonic-2000 flow meters were delivered, and installation was performed by in-house personnel with SEAPA oversight. The Installation performed by Swan Lake personnel was a success.

Programming and commissioning of the new Risonic-2000 flow meters was performed in-house by SEAPA engineering eliminating the need for Switzerland Engineers. The total cost savings was approximately $25,000. The project was a success and is now complete.

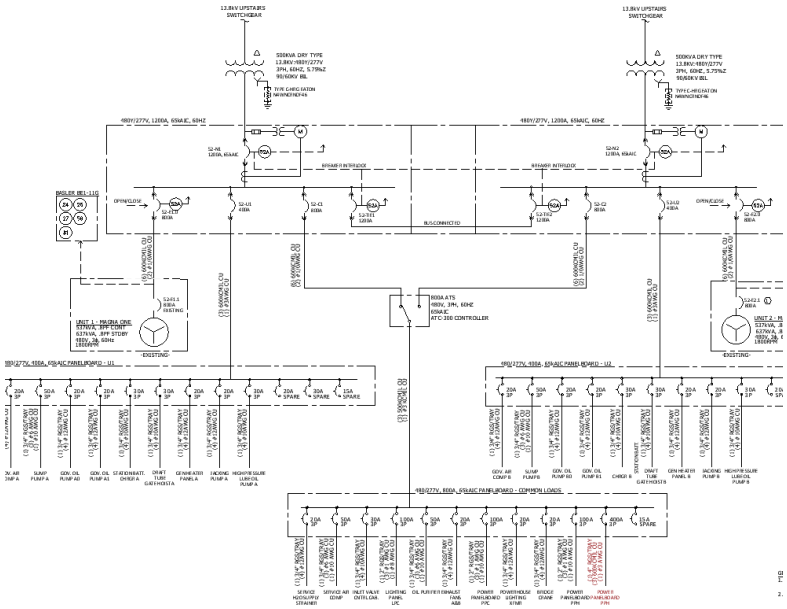
Governor Pressure System(s)

The Tyee and Swan Lake Governor Pressure System RR projects 19303 and 19304 are currently in the engineering phase. These projects will replace the old site glasses with level sensing integrated sight glasses and level switches. Installation is scheduled to occur in July 2019.

Swan Lake Distribution Valve Controller & Manifold

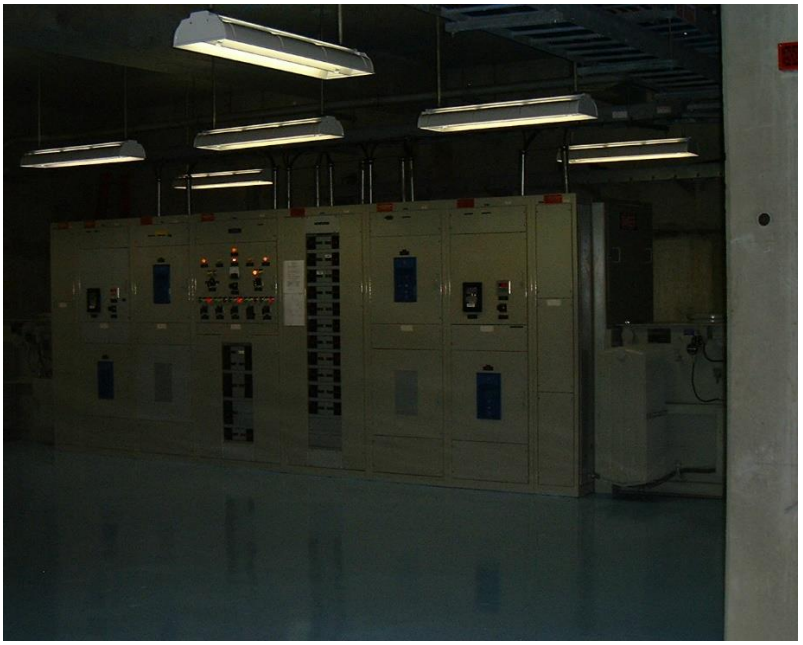
RR Project 19319 to replace the distributing valve controller assembly and governor manifold is currently in the engineering phase. The RR project will replace the Bosch/Rexroth proportional valves with an upgraded model similar to the one that is currently at Tyee, adding spare parts and reliability. Coincidentally, in November, the 65SD shutdown solenoid failed to operate at Swan Lake which resulted in a tear down to refurbish it. The unit is currently in operation however the assembly is showing signs of the end of its useful life. Installation of the new system is planned to occur in July 2019.

Swan Lake Station Service Switchgear



The Swan Lake Station Service Switchgear project is currently in the pre-engineering design phase. SEAPA is developing a Request for Proposal(s). The first phase of the project will be a complete engineering design. During the engineering design phase, long lead time items such as transformers will be ordered for Phase 2 (installation).

As discussed in the RR writeup (19314), the Swan Lake 38-year-old switchgear is at the end of its useful life and currently has a breaker that is non-operable and remains fixed in the racked-in position. A Request for Proposals is anticipated to be released sometime in the first quarter of next calendar year.



Tyee Lake Level Remote RF-Modem

The Tyee Lake Level Project design was completed in September 2018 by SEAPA utilizing in-house engineering. Installation at the lake was completed on October 3rd. The lake level sensor is located 50 feet below the intake thereby allowing accurate measurements for the entire draft range.

The biggest challenge with remotely sending Tyee Lake level information with radios using Modbus-TCP is the distance and geography of the lake. The signal had to transmit down the canyon and around the corner from the gatehouse to the Tyee powerhouse (miles away). After installation of the Master Modem at the lake was complete, the Slave Modem was installed at the Tyee Satellite Platform. The project was a success and lake level values are now currently available remotely. The next phase of the project is to integrate the values into the SCADA system.

Swan-Tyee Intertie (STI) Landslide

At 2:39AM on Wednesday, November 14th, a landslide near Structure 096 on the STI (Neets Bay area) caused a 400Amp phase-to-phase fault. The SEL 311C relays at Tyee and Swan Lake cleared the line in three cycles with minimal impact to the system. There were no underfrequency load sheds for this event. SEAPA had Electric Power Constructors (EPC), its contractor for the Agency's annual trans-mission line maintenance contract, mobilize for emergency repairs. The landslide broke the uphill guy wire. Logs were jammed against the downhill guy wires, which caused the uphill pole to swing downhill and cause the fault.

None of the poles on the structure were damaged. EPC removed the debris from the guy wires that were under tension and the uphill pole relaxed into its normal upright state. A new guy wire was installed, and the emergency repairs were complete at 3PM on Saturday. Due to weather delays (fog), the line was inspected Sunday afternoon on November 18th and the STI was returned to service at 4PM.

KETCHIKAN - PETERSBURG - WRANGELL

SEAPA

Southeast Alaska Power Agency

SEAPA 2019
BOARD MEETING DATES

Date(s)	Location	Comments
February 28, 2019 (Thursday)	Ketchikan	9 – 5 PM
June 19-20, 2019 (Wed-Thurs)	Wrangell	Wed 1-5 / Thurs 9-2
September 26-27, 2019 (Thurs-Fri)	Petersburg	Thurs 1-5 / Fri 9-2
December 12, 2019 (Thursday)	Ketchikan	9 – 5 PM

2019

January

S	M	T	W	T	F	S
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
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27	28	29	30	31		

February

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March

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31						

April

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May

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June

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July

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August

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September

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October

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November

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December

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22	23	24	25	26	27	28
29	30	31				

(See attached for additional information on 2019 meeting dates and events)

2019 MEETING DATES | EVENTS

DATE	ORGANIZATION/EVENT	LOCATION
	JANUARY	
1	SEAPA Holiday (New Year's Day)	N/A
3	Ketchikan City Council	Ketchikan
7	Petersburg Borough Assembly	Petersburg
8	City & Borough of Wrangell Assembly	Wrangell
17	Ketchikan City Council	Ketchikan
22	Petersburg Borough Assembly	Petersburg
29	City & Borough of Wrangell Assembly	Wrangell
29 – 31	APA Manager's Forum & Legislative Conference	Juneau
	FEBRUARY	
4	Petersburg Borough Assembly	Petersburg
7	Ketchikan City Council	Ketchikan
12	City & Borough of Wrangell Assembly	Wrangell
12-13	Southeast Conference Mid-Session Summit	Juneau
18	SEAPA Holiday (President's Day)	N/A
19	Petersburg Borough Assembly	Petersburg
21	Ketchikan City Council	Ketchikan
19-22	NWHA Annual Conference & FERC Meeting	Portland
26	City & Borough of Wrangell Assembly	Wrangell
28 (Thursday)	**SEAPA BOARD MEETING**	**Ketchikan**
	MARCH	
4	Petersburg Borough Assembly	Petersburg
7	Ketchikan City Council	Ketchikan
12	City & Borough of Wrangell Assembly	Wrangell
18	Petersburg Borough Assembly	Petersburg
21	Ketchikan City Council	Ketchikan
26	City & Borough of Wrangell Assembly	Wrangell
	APRIL	
1	Petersburg Borough Assembly	Petersburg
1-3	NHA Waterpower Week (hydro/marine energy)	Washington DC
4	Ketchikan City Council	Ketchikan
9	City & Borough of Wrangell Assembly	Wrangell
15	Petersburg Borough Assembly	Petersburg
18	Ketchikan City Council	Ketchikan
23	City & Borough of Wrangell Assembly	Wrangell
	MAY	
2	Ketchikan City Council	Ketchikan
6	Petersburg Borough Assembly	Petersburg
14	City & Borough of Wrangell Assembly	Wrangell
15-16	NWHA Strategic Planning Meeting	Ketchikan
16	Ketchikan City Council	Ketchikan
20	Petersburg Borough Assembly	Petersburg
27	SEAPA Holiday (Memorial Day)	N/A
28	City & Borough of Wrangell Assembly	Wrangell
	JUNE	
3	Petersburg Borough Assembly	Petersburg
4-6	APA Federal Legislative Conference	Washington, D.C.
6	Ketchikan City Council	Ketchikan
11	City & Borough of Wrangell Assembly	Wrangell
17	Petersburg Borough Assembly	Petersburg
19-20 (W-T)	**SEAPA BOARD MEETING**	**Wrangell**
20	Ketchikan City Council	Ketchikan
23-25	HydroVision International	Conference – Portland
25	City and Borough of Wrangell Assembly	Wrangell

JULY		
1	Petersburg Borough Assembly	Petersburg
4	SEAPA Holiday (Independence Day)	N/A
8	Ketchikan City Council	Ketchikan
15	Petersburg Borough Assembly	Petersburg
15-18	AEGIS Policy Holder's Conference	Boston
18	Ketchikan City Council	Ketchikan
23	City & Borough of Wrangell Assembly	Wrangell
AUGUST		
1	Ketchikan City Council	Ketchikan
5	Petersburg Borough Assembly	Petersburg
15	Ketchikan City Council	Ketchikan
19	Petersburg Borough Assembly	Petersburg
19-23	NHA (19-20) / Alaska Power Assoc. (20-23) Annual Mtg	Juneau
27	City & Borough of Wrangell Assembly	Wrangell
SEPTEMBER		
2	SEAPA Holiday (Labor Day)	N/A
3	Petersburg Borough Assembly	Petersburg
5	Ketchikan City Council	Ketchikan
10	City & Borough of Wrangell Assembly	Wrangell
16	Petersburg Borough Assembly	Petersburg
19	Ketchikan City Council	Ketchikan
24	City & Borough of Wrangell Assembly	Wrangell
26-27 (T-F)	**SEAPA BOARD MEETING**	**Petersburg**
OCTOBER		
3	Ketchikan City Council	Ketchikan
7	Petersburg Borough Assembly	Petersburg
8	City & Borough of Wrangell Assembly	Wrangell
10-11	APA Accounting & Finance Workshop	Anchorage
17	Ketchikan City Council	Ketchikan
21	Petersburg Borough Assembly	Petersburg
22	City & Borough of Wrangell Assembly	Wrangell
TBD	SEAPA Annual Audit	Ketchikan
NOVEMBER		
4	Petersburg Borough Assembly	Petersburg
7	Ketchikan City Council	Ketchikan
11	SEAPA Holiday (Veteran's Day – Observed)	N/A
12	City & Borough of Wrangell Assembly	Wrangell
18	Petersburg Borough Assembly	Petersburg
21	Ketchikan City Council	Ketchikan
26	City & Borough of Wrangell Assembly	Wrangell
28-29	SEAPA Holiday (Thanksgiving & Day After)	N/A
DECEMBER		
2	Petersburg Borough Assembly	Petersburg
5	Ketchikan City Council	Ketchikan
10	City & Borough of Wrangell Assembly	Wrangell
12 (Thursday)	**SEAPA BOARD MEETING**	**Ketchikan**
12-13	APA Annual December Meeting Series	Anchorage
16	Petersburg Borough Assembly	Petersburg
19	Ketchikan City Council	Ketchikan
24-25	SEAPA Holiday (Christmas Eve and Christmas Day)	N/A

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

- Petersburg Borough Assembly Meetings — 1st & 3rd Monday every month
- City & Borough of Wrangell Assembly Meetings — 2nd & 4th Tuesday every month
- Ketchikan City Council Meetings — 1st & 3rd Thursday every month