SOUTHEAST ALASKA POWER AGENCY

Regular Board Meeting
AGENDA

(To be held Electronically[1])

December 10, 2020 SEAPA BOARD MEETING		
Time	**Event**	**For telephonic participation dial:** **1.888.475.4499[2] or 1.877.853.5257** **Meeting ID No. 972 9106 9624**
9 AM	Meeting Starts	
10:30 AM	15-Minute Break	
12 Noon	Lunch	
1 PM	Meeting Resumes	
2:30 PM	15-Minute Break	
5 PM	Meeting Adjourns	

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

2. Approval of the Agenda

3. Persons to be Heard

4. Review and Approve Minutes
- A. September 30, 2020 Minutes of Regular Board Meeting

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

6. New Business
- A. Executive Session Re CEO Evaluation and Hydrosite Analysis Update
- B. Consideration and Approval of Contract Award Re Tyee Tidewater Access Road Preliminary Design Project
- C. Consideration and Approval of Sole Source of Air Carrier Contract
- D. Consideration and Approval of Sole Source Re 2021 Safety Program Support Services and Training Contract
- E. Presentation, Consideration, and Approval of FY2021 SEAPA Budget
- F. Consideration and Approval of SEAPA's FY2021 Operations Plan

[1] Due to recommendations from the Center for Disease Control and its social distancing guidelines, this meeting of the Board of Directors of the Southeast Alaska Power Agency will be held electronically.
[2] In the event of a failure with Zoom connectivity, the meeting shall continue by telephonic participation by dialing 1.800.315.6338 (Code 73272#).

7. CEO Report

8. Staff Reports

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

9. Calendar Year 2021 Meeting Dates

10. Director Comments

11. Adjourn

Southeast Alaska Power Agency
Meeting Minutes

Location: Held Telephonically[1]

Date: September 30, 2020

Time: 9:00 a.m. AKDT

Agenda Items

1) Call to Order

A. *Roll Call*.

Chairperson Lynn called the regular meeting to order at 9:00 a.m. AKDT on September 30, 2020. The following directors and alternates were present, thus establishing a quorum of the board:

Directors	Present *Telephonic (T) In Person (IP)*	Alternates	Present *Telephonic (T) In Person (IP)*	Representing	
Karl Amylon	T[2]	Jeremy Bynum	T	Swan Lake	Ketchikan
Bob Sivertsen	T	Cliff Skillings		Swan Lake	Ketchikan
Bob Lynn	T	Tor Benson	T	Tyee Lake	Petersburg
Robert Larson	T	Karl Hagerman	T	Tyee Lake	Petersburg
Stephen Prysunka	T[3]	Lisa Von Bargen	T	Tyee Lake	Wrangell

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

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

B. *Communications/Lay on the Table Items* - None

C. *Disclosure of Conflicts of Interest* - None

2) Approval of the Agenda

➢ ***Motion***	M/S (Sivertsen/Von Bargen) to approve the agenda as presented. Motion approved unanimously by polled vote.	✓ **Action 20-845**

3) Persons to be Heard - None

[1] The meeting was held telephonically due to recommendations from the Center for Disease Control and its social distancing guidelines. An audio recording of this meeting is available on SEAPA's website at www.seapahydro.org

[2] Mr. Amylon departed the meeting at 11:40 a.m.

[3] Mr. Prysunka joined the meeting at 9:34 a.m.

4) Review and Approve Minutes

➢ *Motion*	M/S (Von Bargen/Sivertsen) to approve the minutes of the regular meeting of June 30, 2020 and special meetings of August 17, 2020 and September 4, 2020. Motion approved unanimously by polled vote.	✓ Action 20-846

5) Financial Reports

➢ *Motion*	M/S (Sivertsen/Larson) to accept year-to-date financial statements through August 2020 and disbursements for June, July, and August 2020 totaling $1,651,556.19, as presented. Mr. Acteson discussed actions that will be necessary to service new submarine cable replacement debt and noted that although both reservoirs have been spilling at the plants, sales tend to trend lower because Ketchikan and Petersburg can rely on their own hydro resources to meet load. Following further review of revenues and expenses, R&R project expenditures, grants, financial statements and disbursements, the motion was approved unanimously by polled vote.	✓ Action 20-847

6) Old Business

A. *Community Covid-19 Updates*

Mr. Acteson advised that the Agency has been following the Covid-19 Mitigation Plan filed with the State of Alaska which includes requirements for contractors to get tested prior to entry to any of SEAPA's facilities. Each of the board members spoke to their respective community Covid-19 protocols. Discussions evolved into a consensus that the next regular board meeting should still be held electronically.

B. *Capital Planning Review Process*

Mr. Bynum opened discussions voicing concerns that if there is going to be a potential rate increase in SEAPA's wholesale power rate then the utilities need time to plan and determine what impact it will have. He requested that if an increase is proposed that staff facilitate the process by developing talking points on the need for the increase, how it will be applied, how much the increase would be, and how it will impact future budgets, etc. Mr. Lynn concurred and questioned whether a rate study is prudent. Mr. Acteson advised that the 4R Plan included in the board packet is SEAPA's long-term planning document and that a rate increase would be needed if the Agency is unable to make payments into the R&R fund annually. He noted SEAPA has not raised its wholesale power rate to the communities for approximately 23 years. The Chair invited comments from the Board. Several comments acknowledged the need for additional revenue and the difficulty in balancing that with the financial impacts already being experienced by the member communities and burdens on the ratepayers due to Covid-19 shutdowns. There was no consensus on whether there will be a rate increase.

The meeting recessed at 10:39 a.m. and reconvened at 10:55 a.m.

7) New Business

A. *Consideration and Approval of R&R Project and Increase to FY2020 R&R Budget Re Submarine Cable - Woronkofski*

➢ *Motion*	M/S (Sivertsen/Larson) to approve R&R project, RR20349 Sub Cable Vank-Woronkofski, with an overall budget of $13,370,352, as presented at the September 30, 2020 board meeting. The motion was approved unanimously by polled vote.	✓ Action 20-848

B. *Consideration and Approval of Contract Award Re 2021-2023 Annual Transmission Line Maintenance Contract*

➢ ***Motion***	M/S (Sivertsen/Larson) to authorize staff to enter into a Contract with Electric Power Constructors, Inc. for SEAPA's 2021-2023 Annual Transmission Line Maintenance Contract for the lump-sum bid of $1,738,991, plus a 10% contingency for supplemental or emergency work of $173,899 for the total not-to-exceed value of $1,912,890. The motion was unanimously approved by polled vote.	✓ **Action 20-849**

C. *Consideration and Approval of Recruitment and Hiring Re Hydro Communications/SCADA Networking Engineer.*

➢ ***Motion***	M/S (Sivertsen/Prysunka) to authorize the Agency's CEO to recruit and hire a full-time Hydro Communications/SCADA Networking Engineer to provide support for all SEAPA facilities within the salary range of $98,357 to $133,071 annually based on the successful candidate's skills and experience. Mr. Acteson reviewed the need for the position and fielded various questions from the board. The motion was unanimously approved by polled vote.	✓ **Action 20-850**

D. *Discussions Re CEO Annual Review*

The Directors expressed their consensus with use of the SEAPA CEO Evaluation Form and timeline presented in the board packet, noting that the timeline will establish continuity in a process for future evaluations of the CEO.

8) CEO Report

Mr. Acteson announced that formalization of the Agency's advocacy outreach strategy is a deliverable under SEAPA's 2020 Strategic Plan and that the framework for typical advocacy strategy and focus areas for 2020/2021 were attached to his CEO Report in the board packet. Following a brief discussion of the focus areas, he reported that SEAPA's consultant, McMillen Jacobs, will have their hydrosite investigation complete by the end of October for discussions in executive session at the next board meeting, significant increases are anticipated for the Agency's insurance premiums based on broad losses across the U.S., and that new administrative policies are being drafted with the assistance of the Agency's HR legal consultant.

9) Staff Reports

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

The Chair announced the assumption that board members have read the staff reports provided in the board packet and opened the meeting to any questions. No questions were presented. Mr. Acteson announced that Mr. Siedman had prepared a video demonstration of activities at the Swan Lake Plant and requested that he have an opportunity to display that on the Zoom screen. Mr. Siedman presented a three-dimensional tour of the Swan Lake facility and part of the Agency's Swan Lake Station Service Switchgear Construction Project. He illustrated the effectiveness of the 3D video demonstration for a more in-depth understanding of activities and projects at the Agency's plants when travel to the plants is challenging.

10) Next Meeting Date

➢ ***Motion***	M/S (Sivertsen/Bynum) to hold the December 10, 2020 regular meeting of SEAPA's board of directors electronically. The motion was approved 4-1 by polled vote.	✓ **Action 20-851**

11) Director Comments

Directors exchanged various comments.

12) Adjourn

➢ *Motion*	M/S (Sivertsen/Bynum) to adjourn the meeting. The Chair declared the meeting adjourned after hearing several ayes.	✓ Action 20-852

The meeting adjourned at 12:37 p.m.

Signed: ***Attest:***

_____ _____

Secretary/Treasurer **Chairperson**

SOUTHEAST ALASKA POWER AGENCY
CEO FINANCIAL COVER MEMO

DATE: December 3, 2020

TO: SEAPA Board of Directors

FROM: Trey Acteson, Chief Executive Officer

SUBJECT: CEO Financial Cover Letter

It will be necessary for the Agency to begin drawing down reserves to cover interim milestone payments for the Stikine Submarine Cable Replacement Project. This will occur gradually over the next nine months but will diminish SEAPA's ability to respond to any other major events that might occur (see attached schedule). I recommend we seek bonding through the Alaska Municipal Bond Bank at the earliest opportunity. In recent discussions with the Debt Manager for the State of Alaska, he has indicated there are a couple of other larger projects in the state that they anticipate will require bonding next year. However, no date for the next round has been scheduled.

REVENUE & EXPENSES: Revenue from sales through the end of October was $8,815,079 actual vs. $9,031,059 budget.

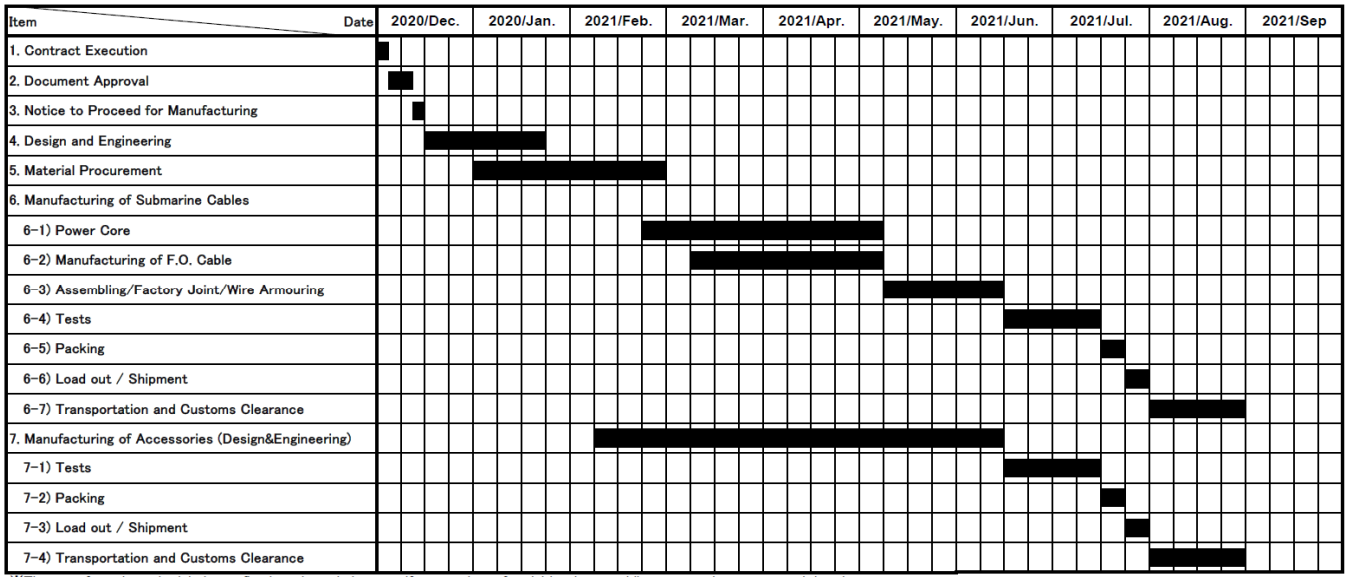
Expenses through the end of October were $4,860,410 actual vs. $6,382,170 budget. There is a lag in billing for some of the major maintenance activities already completed as reflected under November disbursements. Additionally, COVID 19 impacts have delayed portions of planned expense work and halted most travel and training.

RENEWAL & REPLACEMENT PROJECTS: Total R&R expenditures through the end of October were $2,208,573 actual vs. $6,107,400 total annual budget. Several projects came in under budget, some have not been billed yet, and others will carry over into 2021. Most notable are the timing of milestone payments associated with the submarine cable replacement and station service projects. We will review all R&R projects in detail during 2021 budget discussions.

GRANTS: The Agency has one open grant, the FY13 DCCED, with an open balance at the end of September totaling $338,454. The grant expires June 30, 2021, but staff is pursuing a one-year extension as progress was delayed due to COVID-19 and submarine cable-related issues.

Stikine Crossing
Milestone Payment Schedule

Milestone	Task	Cost	Date
MP1	Down payment	$384,242	Dec-20
MP2	NTC Engineering	$1,037,600	Dec-20
MP3	NTC Manufacturing	$768,484	Dec-20
MP4	Design Complete	$1,209,200	Feb-21
MP5	FAT Testing	$768,484	Jul-21
MP6	Delivery	$458,140	Aug-21
MP7	Mobilization Start	$1,744,830	Aug-21
MP8	Removal	$545,280	Aug-21
MP9	Transit	$1,241,200	Aug-21
MP10	Install Offshore	$2,204,029	Aug-21
MP11	Install Onshore	$392,120	Aug-21
MP12	Field Test	$61,320	Sep-21
MP13	Commissioning	$650,321	Sep-21
MP14	Completion	$235,070	Sep-21



SOUTHEAST ALASKA POWER AGENCY

CONTROLLER MEMO

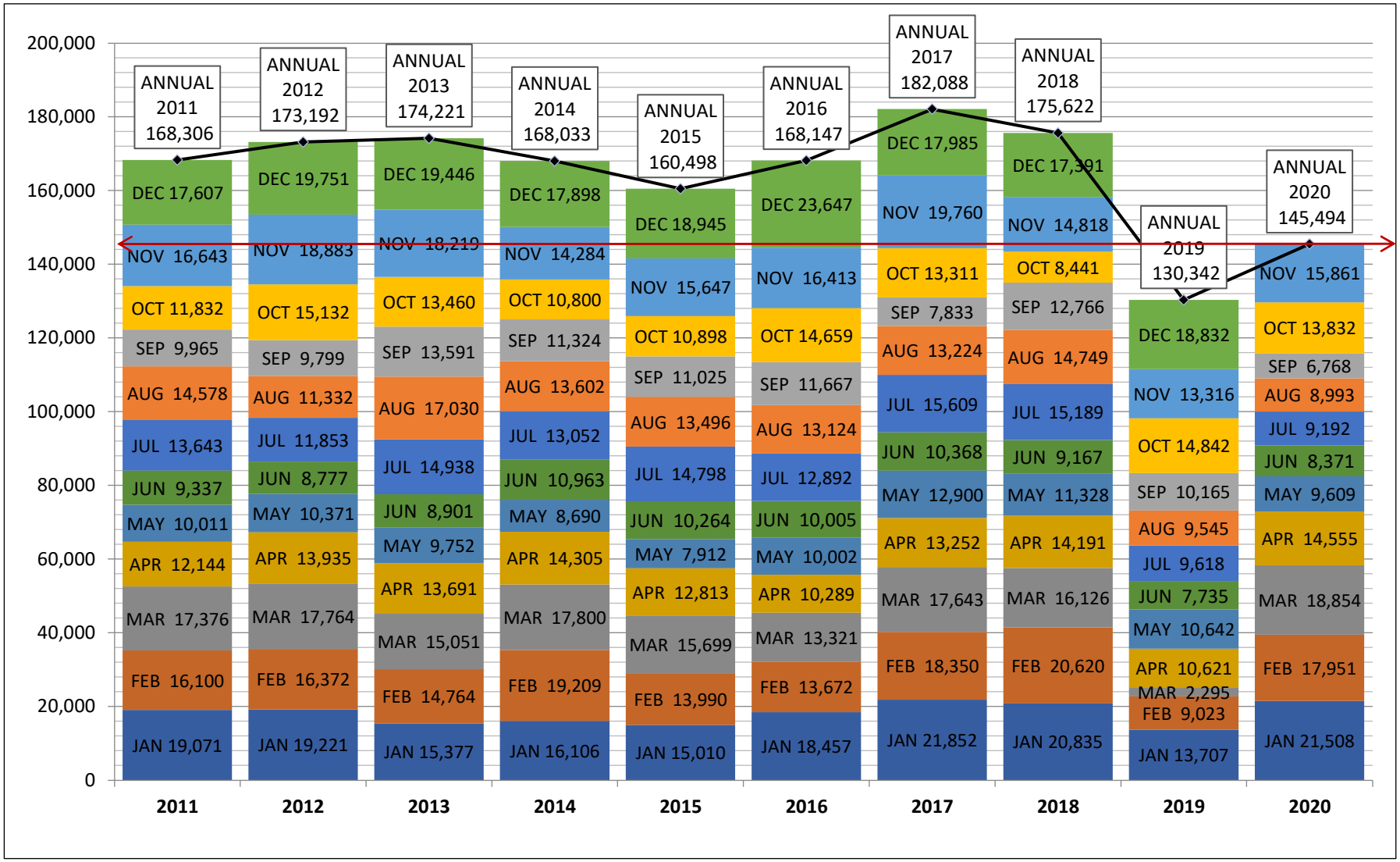
Date:	December 2, 2020	From:	Kay Key
To:	Trey Acteson	Subject:	**FINANCIAL STATEMENTS**

SUGGESTED MOTION
I move to accept year-to-date financial statements through October 2020 and disbursements for September, October, and November 2020 totaling $2,338,837.07, as presented.

Financial Statements in this board packet include:

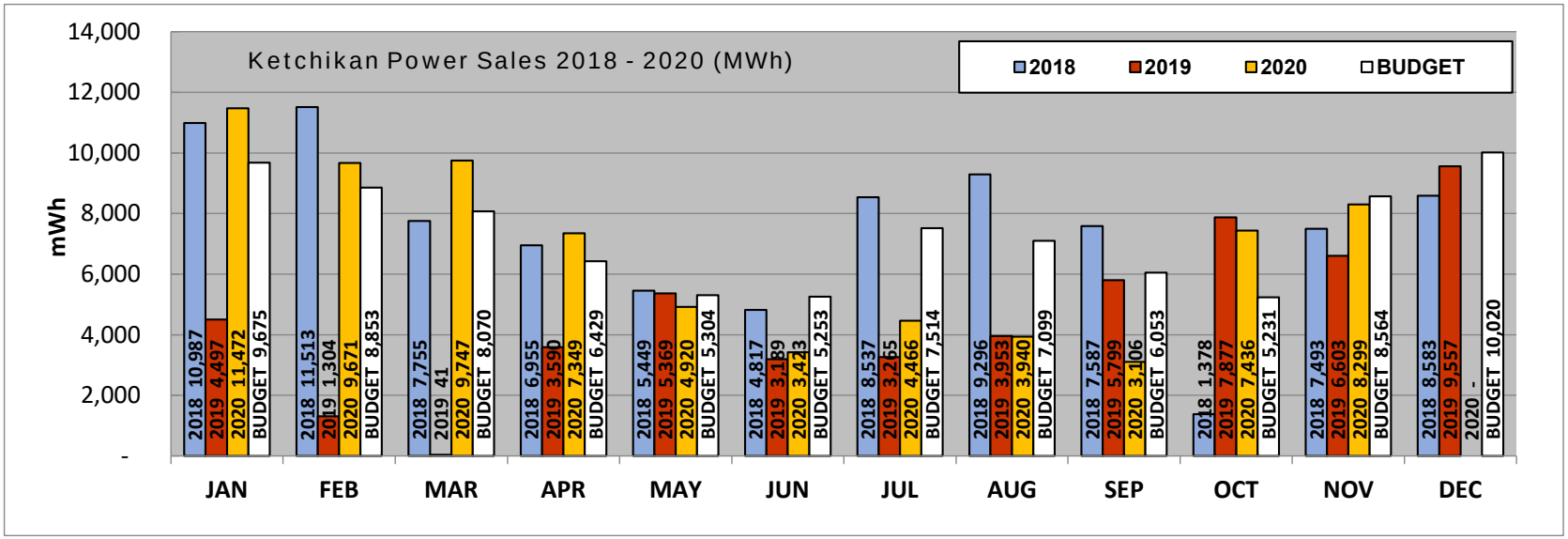
- **kWh Graphs** (Nov 2020)
- **Fund Allocation Graph** (Oct 2020)
- **Grant Summary** (Quarterly through September 2020)
- **Year-to-Date Financial Statements through Oct 2020**
  - ✓ Financial Overview
  - ✓ Statement of Financial Position – Year-to-date with prior year comparison
  - ✓ Statement of Activities – Summary of year-to-date expenses by FERC code, compared to budget and prior year
  - ✓ Statement of Activities – Line-item detail of actual expenses compared to budget by location
  - ✓ R&R Summary
- **Disbursements for September, October, and November 2020**

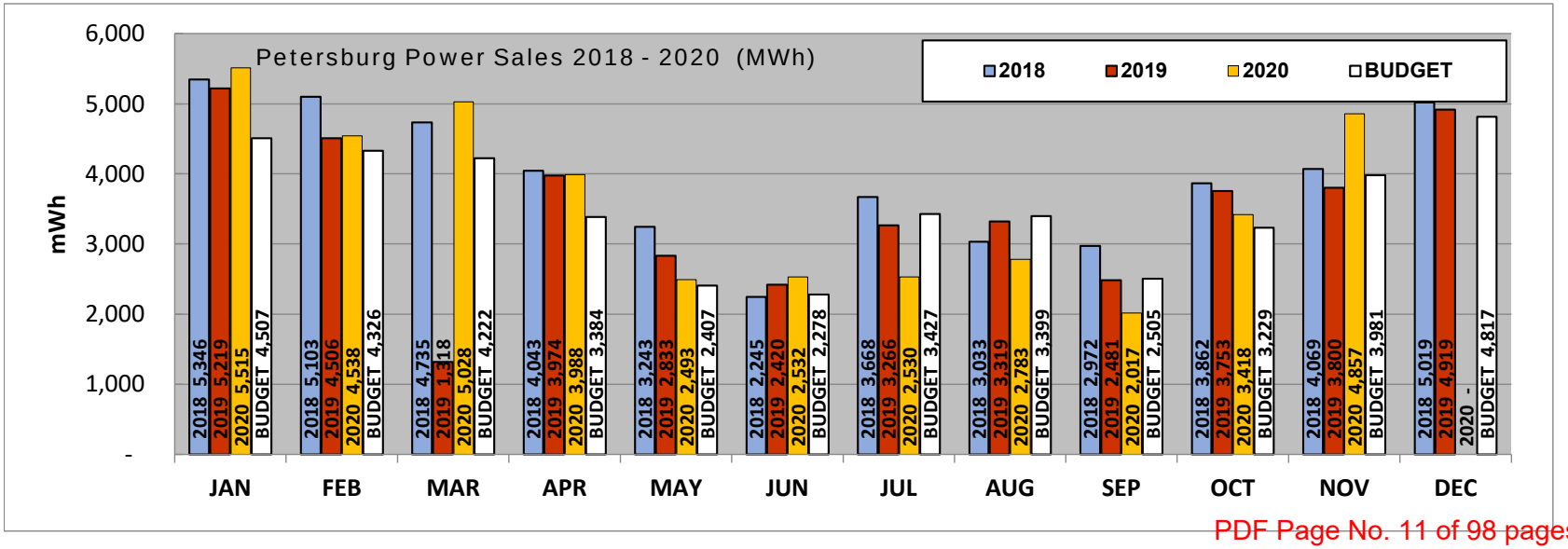
MWh Sales Year-to-Year Comparison



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

NOV 2020	2020 kWh HYDROPOWER SALES	CURRENT MONTH		YTD	
		Actual	Budget	Actual	Budget
	Ketchikan Power Purchases	8,298,688	8,564,233	73,828,901	78,044,127
	Petersburg Power Purchases	4,856,894	3,980,686	39,700,081	37,664,587
	Wrangell Power Purchases	3,807,770	3,315,759	33,067,890	32,961,627
	Total Power Purchases	16,963,352	15,860,678	146,596,872	148,670,341





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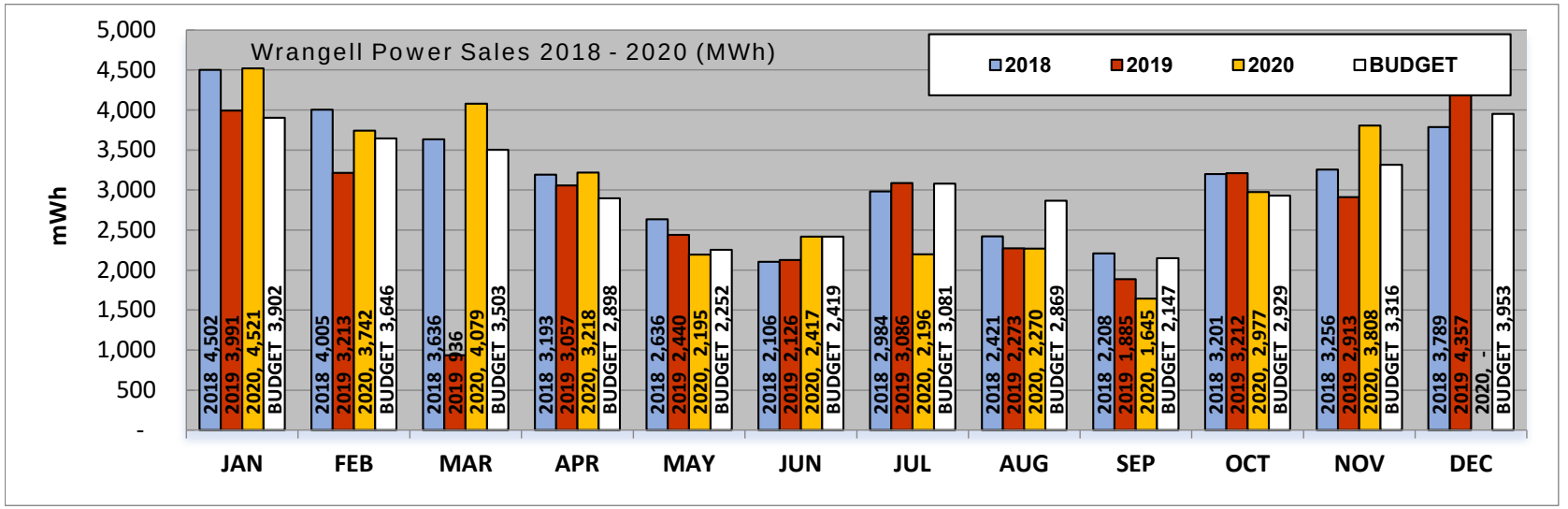

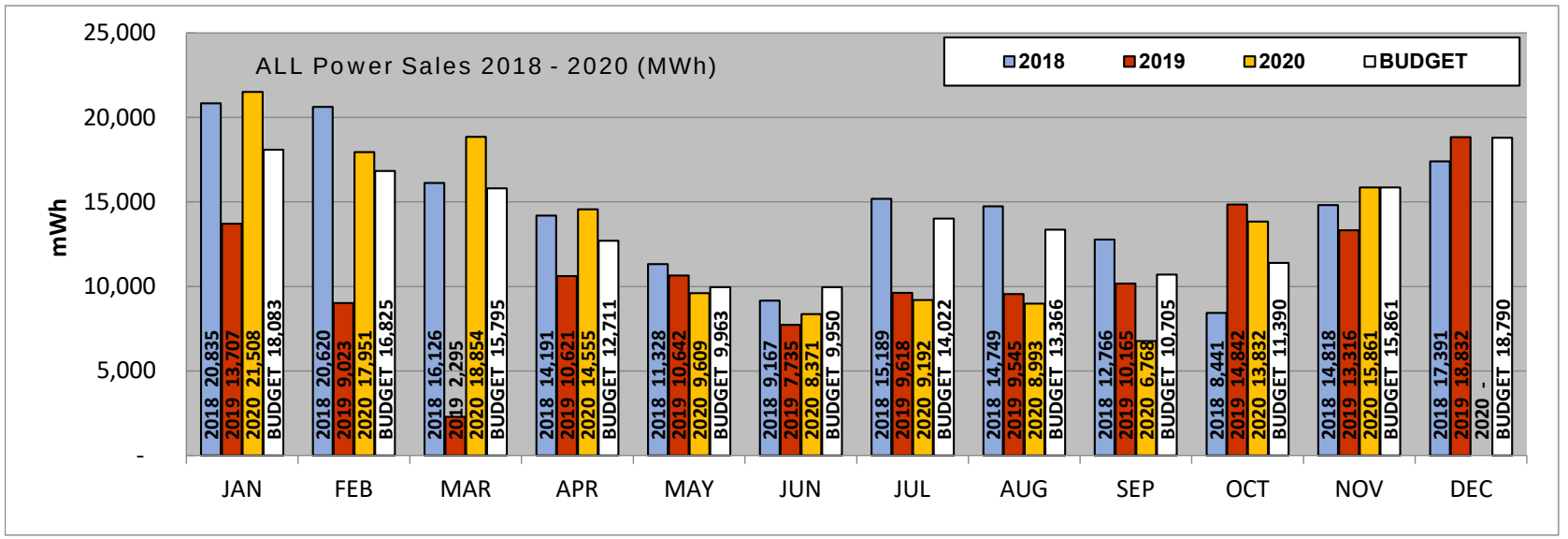

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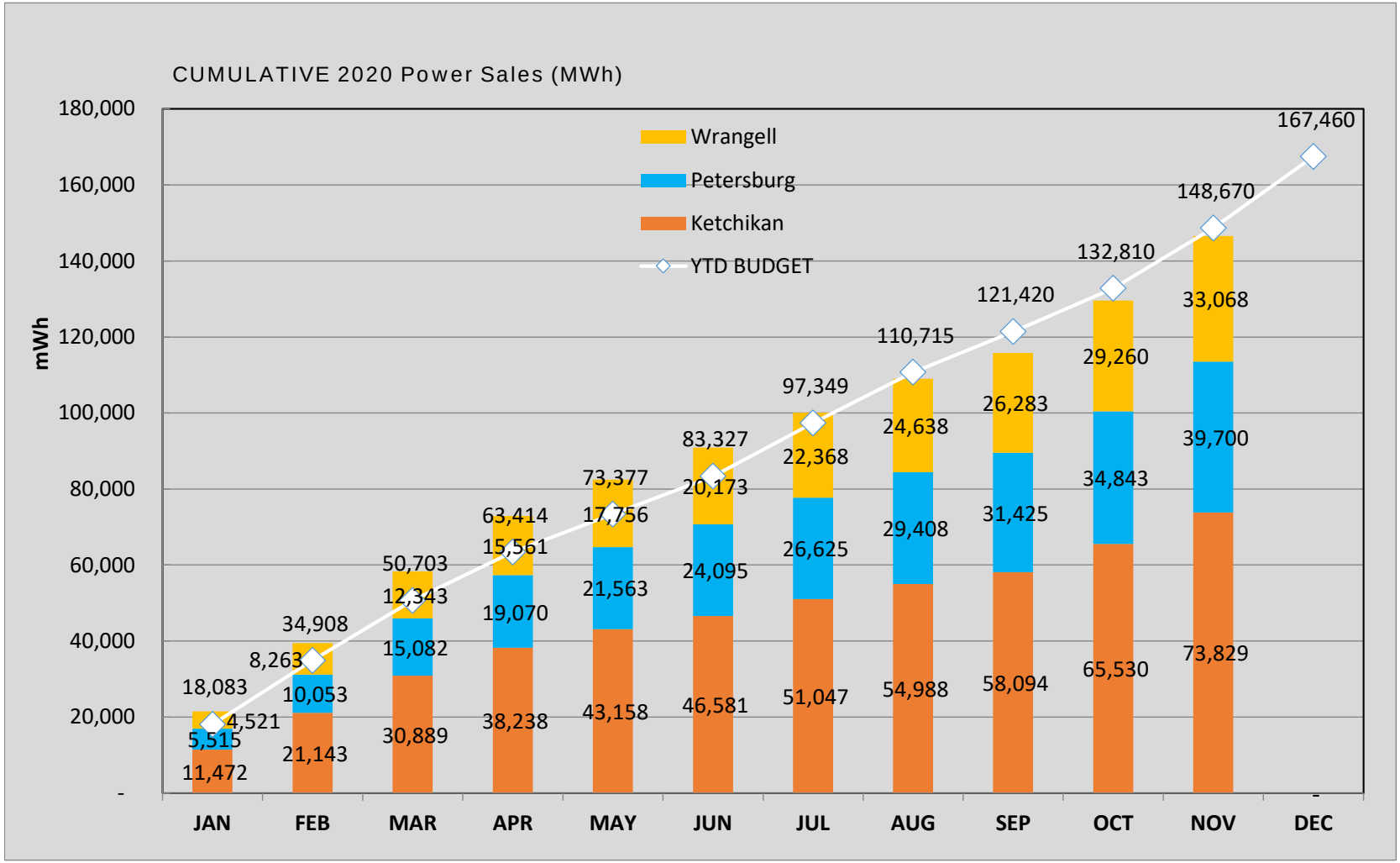
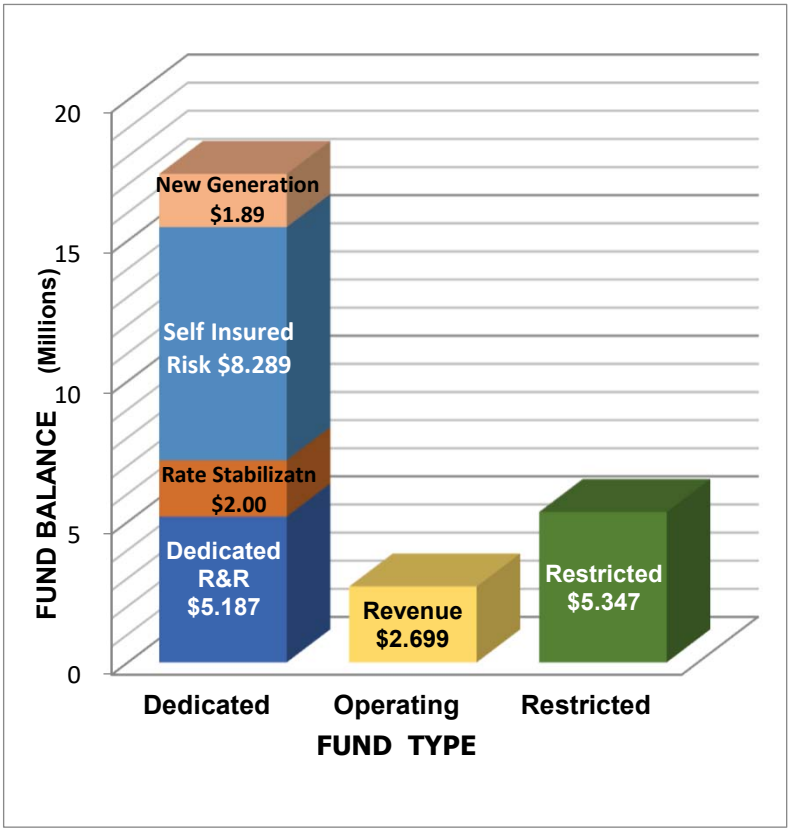


OCT 2020

Operations, Capital and Insurance Funds	
Revenue Fund	$ 2,697,778
Checking	1,000
Dedicated R&R Projects Fund	5,187,407
New Generation Fund	1,890,527
Rate Stabilization Fund	2,002,669
Self Insured Risk Fund	8,288,505
Total Operations, Capital and Insurance Funds	20,067,887
Trustee Funds	
2015 Series Bond Interest	$ 204,404
2015 Series Bond Reserve	205,309
2019 Series Bond Interest	780
2019 Series Bond Principal	402,911
2019 Series Bond Reserve	1,264,165
Total Trustee Funds	2,077,569
Other Restricted Funds	
STI - USFS CD	$ 21,636
DNR Reclamation Fund	1,268,282
Required R&R Fund	1,000,466
Total Other Restricted Funds	2,290,384
Total Agency Funds	$ 24,435,840



Dedicated Funds

New Generation = Project feasibility funding (hydro, wind, geothermal)
Self-Insured Risk = Coverage for uninsured transmission lines, submarine cables and insurance deductibles.
Rate Stabilization Fund = Reserve Fund governed by the Rate Stabilization Fund Policy.
Dedicated R&R = Funds 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 (50% SEAPA and 50% held in trust for Copper Valley and Kodiak)
USFS = USFS Land Remediation Certificate of Deposit

SOUTHEAST ALASKA POWER AGENCY
Grant Billing Summary

AK DCCED GRANT 13-DC-553

through SEPTEMBER, 2020

QUARTERLY BILLING

FY20 Grant Billing	Grant Budget	Billing thru FY20	Open Balance	Mar-20	Jun-20	Sep-20	Jun-19	Jan-Dec
1 - Hydro Storage	578,000	578,000	-	-	-	-	-	-
2 - G&T Site Evaluation	2,109,092	1,770,638	338,454	14,867	32,208	2,723	-	49,797
3 - Stability / Interconnecti	-	-	-	-	-	-	-	-
4 - Load Balance Model	9,181	9,181	-	-	-	-	-	-
5 - Project Mgmt	255,712	255,712	-	-	-	-	-	-
6 - Business Analysis / PSA	48,015	48,015	-	-	-	-	-	-
Total FY13 AK DCCED	3,000,000	2,661,546	338,454	14,867	32,208	2,723	-	49,797

This grant is billed to the DCCED for reimbursement on a quarterly basis and has been extended to June 30, 2021. Staff is currently applying to extend the grant to June 30, 2022. Progress on grant-related projects were delayed this year due to travel restrictions and a shift in focus to submarine cable-related issues.

OCTOBER 2020

YTD FINANCIAL OVERVIEW

OPERATING REVENUE

FIRM kWh SALES	JAN-OCT 2020	Budget	Prior Year
Ketchikan	$4,456,054	$4,724,634	$2,644,092
Petersburg	2,369,337	2,290,506	2,250,147
Wrangell	1,989,688	2,015,919	1,782,988
Total Revenue	$8,815,079	$9,031,059	$6,677,227

2019 Sales were low due to drought conditions. An $842K diesel payment to Petersburg and Wrangell (not reflected in these figures) further reduced 2019 Net Revenue.

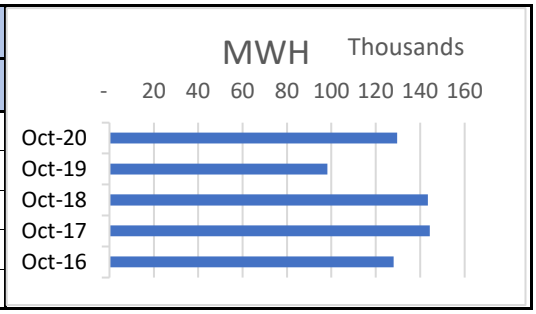
OPERATING EXPENSES

	JAN-OCT 2020	Budget	Prior Year
Hydro Facilities	$1,926,903	$2,361,735	$1,955,312
Transmission	621,194	1,587,260	1,440,155
G&A	2,312,313	2,433,175	2,217,546
Total Ops Exp	$4,860,410	$6,382,170	$5,613,013

Transmission line maintenance was budgeted for an earlier period than which it occurred.

MWH TREND

Year-to-Date MWH SALES	
Year	**MWH**
Oct-20	129,634
Oct-19	98,194
Oct-18	143,413
Oct-17	144,343
Oct-16	128,087



2019 drought.

Southeast Alaska Power Agency
Statement of Financial Position
as of **October 31, 2020**

	Month Ending 10/31/20	Month Ending 10/31/19
Assets		
Current Assets		
Agency Funds		
Operating & Reserve Funds	20,067,887	18,461,212
Restricted Trustee Funds	2,076,789	2,067,922
Restricted Other Funds	2,290,385	2,203,556
Total Agency Funds	**24,435,061**	**22,732,690**
Accounts Receivable		
1100-001 - Accounts Receivable	1,151,983	1,432,809
1100-003 - Other Misc Receivable	5,800	5,800
Total Accounts Receivable	**1,157,782**	**1,438,609**
Other Current Assets		
Accrued Interest Receivable		
1200-102 - Accrued Interest Receivable	42,977	44,798
Total Accrued Interest Receivable	**42,977**	**44,798**
Prepaid Fees		
1200-201 - Prepaid FERC Fees	15,013	-
1200-204 - Prepaid USFS Land Use Fees	17,598	17,437
1200-206 - Prepaid Admin Group Ben	10,211	903
1200-207 - Prepaid Admin Retirement	28,737	44,890
Total Prepaid Fees	**71,560**	**63,230**
Inventory Assets		
1200-300 - Inventory Spares-Stores	230,863	196,129
1200-301 - Inventory SWL Winding Replace	890,405	890,405
1200-302 - Inventory Flashboard Kickers	439,456	439,456
Total Inventory Assets	**1,560,724**	**1,525,990**
Total Other Current Assets	**1,675,261**	**1,634,019**
Total Current Assets	**27,268,103**	**25,805,318**
Capital Assets		
Capital Assets		
1300-100 - Swan Lake Capital Assets	32,614,772	31,919,950
1300-200 - Tyee Lake Capital Assets	32,705,407	32,380,901
1300-300 - Swan-Tyee Intertie Capital Assets	114,974,970	114,974,970
1300-400 - Ketchikan Capital Assets	1,379,333	1,379,333
Total Capital Assets	**181,674,482**	**180,655,154**
R&R WIP Capital Projects		
1320-100 - WIP Swan Lake	1,485,057	768,008
1320-200 - WIP Tyee Lake	875,354	315,085
1320-300 - WIP Swan-Tyee Intertie	1,810	-
1320-400 - WIP Ketchikan	159,224	49,414
Total R&R WIP Capital Projects	**2,521,445**	**1,132,507**
Accumulated Depreciation	(56,312,012)	(51,500,208)
Total Capital Assets	**127,883,915**	**130,287,453**
Deferred Assets (Feasibility)		
1830-004 - Tyee Marine Access	10,655	6,975
1830-006 - New Generation Integration	4,505	4,104
1830-007 - 2019 Bond Gain on 2009 Refund	81,342	104,043
1830-008 - Submarine Cable Stikine Strait	-	16,805
Total Feasibility	**96,502**	**131,926**
Total Assets	**155,248,521**	**156,224,698**

Southeast Alaska Power Agency
Statement of Financial Position
as of **October 31, 2020**

	Month Ending 10/31/20	Month Ending 10/31/19
Liabilities and Equity		
Liabilities		
Current Liabilities		
Accounts Payable		
2100-001 - Accounts Payable General	170,094	473,316
Total Accounts Payable	**170,094**	**473,316**
Other Current Liabilities		
2100-301 - Other Current Liabilities	24,964	8,135
2100-304 - Reserve Interest Payable	171,904	189,025
2100-340 - Wages Payable	110,095	87,740
2100-341 - PTO Payable	257,451	206,266
Total Other Current Liabilities	**564,414**	**491,166**
Payroll Liabilities	44,086	47,040
Total Current Liabilities	**778,595**	**1,011,523**
Long Term Liabilities		
2200-001 - PERS Unfunded Liability WRG	784,575	863,353
2200-002 - DNR Fund CVEA KEA Liability	634,141	590,858
2200-202 - Series 2015 Bonds	10,295,000	10,295,000
2200-203 - Series 2019 Bonds	3,475,000	4,245,000
2200-302 - 2015 Bond Issuance Premium	692,817	747,875
2200-303 - 2019 Bond Issuance Premium	285,852	422,250
Total Long Term Liabilities	**16,167,385**	**17,164,335**
Total Liabilities	**16,945,979**	**18,175,858**
Net Position		
3100-001 - Net Investment Capital Assets	114,172,481	115,404,716
3100-002 - Restricted for Debt Service	1,469,099	1,469,349
3100-003 - Restricted by External Agreement	1,212,104	1,203,349
3100-004 - Unrestricted	21,653,769	20,070,728
Total Net Position	**138,507,454**	**138,148,142**
Change in Net Position	**(204,913)**	**(99,301)**
Total Net Position	**138,302,541**	**138,048,840**
Total Liabilities and Net Position	**155,248,521**	**156,224,698**

Southeast Alaska Power Agency

Statement of Activities - Budget YTD

Year To Date as of October 31, 2020

	YTD FY20	YTD BUDGET	VARIANCE % of Budget	YTD FY19	ANNUAL Budget
OPERATING REVENUE					
400 - Hydro Facility Revenues	8,815,079	9,031,059	(2.39) %	5,835,442	11,387,294
454 - Rent-Electric Property	4,896	-	100.00 %	2,448	-
Net Operating Revenue	**8,819,975**	**9,031,059**	**(2.33) %**	**5,837,889**	**11,387,294**
OPERATING EXPENSE					
HYDRO FACILITY O&M					
535 - Operations Supervision	14,077	90,120	-84%	9,496	116,500
537 - Hydraulic Expense	6,417	10,000	-36%	11,979	10,000
538 - Electric Expenses	25,183	94,400	-73%	20,665	103,400
539 - Operations Misc Expense	340,045	458,940	-26%	287,823	529,000
540 - Rents	136,981	153,650	-11%	134,925	186,500
541 - Hydro Power Station Maintenance	33,656	42,700	-21%	58,664	51,000
543 - Dams Reservoirs Waterways	7,580	17,500	-57%	55,274	17,750
544 - Electric Plant Wages-Benefits	1,276,844	1,374,100	-7%	1,274,853	1,600,000
545 - Nonproduction Plant Maintenance	45,084	51,925	-13%	57,955	55,700
561 - Control System Maintenance	41,036	68,400	-40%	43,679	82,000
Total Hydro Facility Expense	**1,926,903**	**2,361,735**	**-18%**	**1,955,312**	**2,751,850**
TRANSMISSION O&M					
562 - Substation Expense	58,065	92,730	-37%	39,261	97,050
564 - XMSN Submarine Cable Expense	40,296	102,950	-61%	528,255	119,600
571 - XMSN Overhead Lines Expense	522,833	1,391,580	-62%	872,638	1,453,750
Total Transmission Expense	**621,194**	**1,587,260**	**-61%**	**1,440,155**	**1,670,400**
GENERAL & ADMIN EXPENSE					
920 - Admin Wages-Benefits	1,339,052	1,318,660	1.54 %	1,261,216	1,583,000
921 - Office Expenses	135,510	161,965	(16.33) %	130,231	191,850
923 - Professional Services	201,401	270,350	(25.50) %	225,447	316,700
924 - Insurance	387,384	395,000	(1.92) %	336,856	475,000
928 - Regulatory Commission Expense	80,413	86,525	(7.06) %	82,865	94,000
930 - General Expense	102,455	134,375	(23.75) %	106,126	155,325
931 - Admin Rent	66,097	66,300	(0.30) %	74,806	79,600
Total G&A Expense	**2,312,313**	**2,433,175**	**(4.96) %**	**2,217,546**	**2,895,475**
Total Operating Expense	**4,860,410**	**6,382,170**	**(23.84) %**	**5,613,013**	**7,317,725**
Nonoperating Revenue/(Expense)					
Nonoperating Income					
941 - Grant Income	49,797				
942 - Interest Income Misc	157,051				
944 - Gain/(Loss) Investments	128,983				
946 - Misc Nonoperating Income	-				
Total Nonoperating Income	**335,832**				
Nonoperating Expense					
951 - Interest Expense	-				
952 - Bond Interest Expense	424,921				
953 - Depreciation Expense	4,017,720				
954 - Grant Expense	49,886				
955 - Misc Nonoperating Expense	7,783				
Total Nonoperating Expense	**4,500,309**				
Total Nonoperating Revenue/(Expense)	**(4,164,478)**				
Change in Net Position	**(204,913)**				

1 *400 - FY19 Sales $4.9M less $841K diesel reimbursement to PSG & WRG*

2 *564 - Submarine cable inspection in FY19.*

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of **October 31, 2020**

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
OPERATING REVENUE										
400 - Hydro Facility Revenues										
4000-401 Hydropower Sales Ketchikan	4,456,054	4,724,634	4,456,054	4,724,634	-	-	-	-	-	-
4000-402 Hydropower Sales Petersburg	2,369,337	2,290,506	2,369,337	2,290,506	-	-	-	-	-	-
4000-403 Hydropower Sales Wrangell	1,989,688	2,015,919	1,989,688	2,015,919	-	-	-	-	-	-
Total 400 - Hydro Facility Revenues	**8,815,079**	**9,031,059**	**8,815,079**	**9,031,059**	**-**	**-**	**-**	**-**	**-**	**-**
454 - Rent-Electric Property										
4540-451 Rent Electric Property	4,896	-	4,896	-	-	-	-	-	-	-
Total 454 - Rent-Electric Property	**4,896**	**-**	**4,896**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
TOTAL OPERATING REVENUE	**8,819,975**	**9,031,059**	**8,819,975**	**9,031,059**	**-**	**-**	**-**	**-**	**-**	**-**
OPERATING EXPENSE										
535 - Operations Supervision										
0310 Contractor	294	77,500	-	-	49	32,500	245	45,000	-	-
0390 Software	89	-	-	-	-	-	89	-	-	-
0610 Office Equipment	949	840	-	-	460	420	489	420	-	-
0730 Office Supplies	1,508	1,680	-	-	709	840	799	840	-	-
0800 Materials-Minor Equip	9,236	10,100	-	-	9,236	8,000	-	2,100	-	-
0840 Furnishings	2,001	-	-	-	-	-	2,001	-	-	-
Total 535 - Operations Supervision	**14,077**	**90,120**	**-**	**-**	**10,454**	**41,760**	**3,623**	**48,360**	**-**	**-**
537 - Hydraulic Expense										
0330 Helicopters	6,417	8,000	-	-	2,611	4,000	3,806	4,000	-	-
0800 Materials-Minor Equip	-	2,000	-	-	-	1,000	-	1,000	-	-
Total 537 - Hydraulic Expense	**6,417**	**10,000**	**-**	**-**	**2,611**	**5,000**	**3,806**	**5,000**	**-**	**-**
538 - Electric Expenses										
0310 Contractor	4,195	55,000	-	-	3,085	10,000	1,109	45,000	-	-
0740 Operating Supplies	4,727	12,500	-	-	4,632	6,250	95	6,250	-	-
0800 Materials-Minor Equip	14,365	20,500	-	-	9,245	6,250	5,121	14,250	-	-
0850 Tools	1,896	6,400	-	-	743	3,200	1,153	3,200	-	-
Total 538 - Electric Expenses	**25,183**	**94,400**	**-**	**-**	**17,705**	**25,700**	**7,478**	**68,700**	**-**	**-**

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of **October 31, 2020**

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
539 - Operations Misc Expense										
0190 Medical	525	-	-	-	-	-	525	-	-	-
0300 Communication Services	97,420	96,600	-	-	10,664	11,600	86,756	85,000	-	-
0310 Contractor	13,061	31,850	-	-	5,862	21,000	7,200	10,850	-	-
0320 Flights	68,509	100,000	-	-	21,426	50,000	47,084	50,000	-	-
0330 Helicopters	6,561	-	-	-	-	-	6,561	-	-	-
0373 Rent-Other	1,328	1,800	-	-	1,328	1,800	-	-	-	-
0390 Software	4,800	-	-	-	2,400	-	2,400	-	-	-
0401 Training-Pro-Tech	16,502	45,000	-	-	7,264	22,500	9,238	22,500	-	-
0402 Training-Safety	32,079	63,400	-	-	19,410	29,200	12,669	34,200	-	-
0410 Transport-Other	11,512	28,000	-	-	3,000	14,000	8,512	14,000	-	-
0420 Utilities	744	750	-	-	744	750	-	-	-	-
0600 Phones, Radios, Video	8,358	3,000	-	-	5,661	-	2,697	3,000	-	-
0620 Satellite Hardware	1,835	-	-	-	1,835	-	-	-	-	-
0700 Clothing	1,228	-	-	-	978	-	250	-	-	-
0710 Food, Meals	3,082	4,600	-	-	257	1,700	2,825	2,900	-	-
0740 Operating Supplies	2,918	6,900	-	-	634	900	2,284	6,000	-	-
0750 Safety	15,019	18,400	-	-	7,256	9,200	7,763	9,200	-	-
0800 Materials-Minor Equip	3,066	1,340	-	-	52	840	3,014	500	-	-
0810 Rolling Stock Maint	22,396	7,100	-	-	7,866	5,000	14,530	2,100	-	-
0811 Marine Vessel Maint	2,786	1,700	-	-	2,733	1,700	53	-	-	-
0820 Fuels and Oils	19,499	30,000	-	-	10,413	21,000	9,086	9,000	-	-
0830 Fuels and Oils - Marine	6,385	18,500	-	-	4,440	5,000	1,944	13,500	-	-
0850 Tools	431	-	-	-	328	-	104	-	-	-
Total 539 - Operations Misc Expense	**340,045**	**458,940**	**-**	**-**	**114,550**	**196,190**	**225,495**	**262,750**	**-**	**-**
540 - Rents										
0010 Other Regulatory	334	15,000	-	-	-	-	-	-	334	15,000
0030 FERC Land Use	48,459	48,500	-	-	10,417	10,500	38,042	38,000	-	-
0050 USFS Land Use	88,189	90,150	-	-	-	-	23,095	25,150	65,093	65,000
Total 540 - Rents	**136,981**	**153,650**	**-**	**-**	**10,417**	**10,500**	**61,137**	**63,150**	**65,427**	**80,000**

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of October 31, 2020

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
541 - Hydro Power Station Maintenance										
0310 Contractor	200	8,400	-	-	200	4,200	-	4,200	-	-
0740 Operating Supplies	10,358	8,400	-	-	4,592	4,200	5,766	4,200	-	-
0750 Safety	135	-	-	-	135	-	-	-	-	-
0800 Materials-Minor Equip	8,919	8,400	-	-	7,729	4,200	1,190	4,200	-	-
0850 Tools	14,044	17,500	-	-	783	5,000	13,261	12,500	-	-
Total 541 - Hydro Power Station Maintenance	**33,656**	**42,700**	**-**	**-**	**13,439**	**17,600**	**20,216**	**25,100**	**-**	**-**
543 - Dams Reservoirs Waterways										
0330 Helicopters	2,951	7,000	-	-	-	-	2,951	7,000	-	-
0740 Operating Supplies	27	3,250	-	-	27	1,250	-	2,000	-	-
0800 Materials-Minor Equip	4,602	4,000	-	-	3,743	1,500	859	2,500	-	-
0820 Fuels and Oils	-	250	-	-	-	-	-	250	-	-
0850 Tools	-	3,000	-	-	-	-	-	3,000	-	-
Total 543 - Dams Reservoirs Waterways	**7,580**	**17,500**	**-**	**-**	**3,770**	**2,750**	**3,810**	**14,750**	**-**	**-**
544 - Electric Plant Wages-Benefits										
0110 Wages / PTO	862,392	869,600	-	-	478,750	445,600	383,642	424,000	-	-
* 0110-001 Wages C19 202003	6,898	-	-	-	3,449	-	3,449	-	-	-
* 0110-002 Wages C19 FFCRA Credits	(4,718)	-	-	-	(4,225)	-	(493)	-	-	-
0120 OT	155,183	130,600	-	-	62,949	72,200	92,234	58,400	-	-
0140 Taxes	76,734	84,200	-	-	40,855	43,800	35,879	40,400	-	-
0140-001 Mcr Tax Credit FFCRA	(68)	-	-	-	(49)	-	(20)	-	-	-
0150 H&W	161,568	171,900	-	-	84,797	95,300	76,771	76,600	-	-
0160 Retirement	113,025	117,800	-	-	59,815	65,200	53,210	52,600	-	-
0170 Capx-Grants	(94,170)	-	-	-	(77,723)	-	(16,447)	-	-	-
Total 544 - Electric Plant Wages-Benefits	**1,276,844**	**1,374,100**	**-**	**-**	**648,619**	**722,100**	**628,225**	**652,000**	**-**	**-**
545 - Nonproduction Plant Maintenance										
0310 Contractor	8,786	375	-	-	8,063	375	723	-	-	-
0373 Rent-Other	3,531	3,300	-	-	3,531	3,300	-	-	-	-
0410 Transport-Other	-	30,000	-	-	-	15,000	-	15,000	-	-
0740 Operating Supplies	6,908	13,100	-	-	1,119	5,000	5,789	8,100	-	-
0800 Materials-Minor Equip	8,081	500	-	-	1,290	-	6,791	500	-	-
0810 Rolling Stock Maint	650	375	-	-	-	-	650	375	-	-
0820 Fuels and Oils	332	-	-	-	-	-	332	-	-	-
0840 Furnishings	15,793	2,150	-	-	15,751	1,875	42	275	-	-
0850 Tools	1,003	2,125	-	-	-	250	1,003	1,875	-	-
Total 545 - Nonproduction Plant Maintenance	**45,084**	**51,925**	**-**	**-**	**29,755**	**25,800**	**15,329**	**26,125**	**-**	**-**

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of October 31, 2020

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
561 - Control System Maintenance										
0310 Contractor	39,436	65,000	-	-	19,936	32,500	19,499	32,500	-	-
0350 Licenses-Permits	-	3,400	-	-	-	1,700	-	1,700	-	-
0390 Software	678	-	-	-	339	-	339	-	-	-
0610 Office Equipment	35	-	-	-	35	-	-	-	-	-
0800 Materials-Minor Equip	888	-	-	-	-	-	888	-	-	-
Total 561 - Control System Maintenance	**41,036**	**68,400**	**-**	**-**	**20,310**	**34,200**	**20,727**	**34,200**	**-**	**-**
562 - Substation Expense										
0300 Communication Services	4,758	5,400	-	-	-	-	4,758	5,400	-	-
0310 Contractor	25,148	64,850	-	-	4	-	25,144	64,850	-	-
0320 Flights	3,021	4,200	-	-	-	-	3,021	4,200	-	-
0360 Lodging	-	700	-	-	-	-	-	700	-	-
0373 Rent-Other	1,612	-	-	-	806	-	806	-	-	-
0420 Utilities	9,943	10,000	-	-	-	-	9,943	10,000	-	-
0710 Food, Meals	-	250	-	-	-	-	-	250	-	-
0740 Operating Supplies	2,218	1,250	-	-	96	-	2,122	1,250	-	-
0800 Materials-Minor Equip	3,985	5,450	-	-	3,790	5,000	195	450	-	-
0820 Fuels and Oils	6,986	180	-	-	1,221	-	5,765	180	-	-
0850 Tools	396	450	-	-	396	-	-	450	-	-
Total 562 - Substation Expense	**58,065**	**92,730**	**-**	**-**	**6,312**	**5,000**	**51,753**	**87,730**	**-**	**-**
564 - XMSN Submarine Cable Expense										
0310 Contractor	38,250	95,000	-	-	-	-	38,250	95,000	-	-
0330 Helicopters	1,454	-	-	-	-	-	1,454	-	-	-
0410 Transport-Other	-	3,200	-	-	-	-	-	3,200	-	-
0600 Phones, Radios, Video	58	-	-	-	-	-	58	-	-	-
0740 Operating Supplies	534	850	-	-	-	-	534	850	-	-
0800 Materials-Minor Equip	-	1,800	-	-	-	-	-	1,800	-	-
0830 Fuels and Oils - Marine	-	700	-	-	-	-	-	700	-	-
0850 Tools	-	1,400	-	-	-	-	-	1,400	-	-
Total 564 - XMSN Submarine Cable Expense	**40,296**	**102,950**	**-**	**-**	**-**	**-**	**40,296**	**102,950**	**-**	**-**

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of **October 31, 2020**

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
571 - XMSN Overhead Lines Expense										
0110 Wages / PTO	101,509	96,500	101,509	96,500	-	-	-	-	-	-
* 0110-001 Wages C19 202003	2,759	-	2,759	-	-	-	-	-	-	-
0120 OT	272	12,000	272	12,000	-	-	-	-	-	-
0140 Taxes	8,430	10,570	8,430	10,570	-	-	-	-	-	-
0150 H&W	17,952	19,200	17,952	19,200	-	-	-	-	-	-
0160 Retirement	11,521	13,500	11,521	13,500	-	-	-	-	-	-
0300 Communication Services	1,113	-	1,113	-	-	-	-	-	-	-
0310 Contractor	47,332	1,125,650	-	-	17,332	301,550	15,000	420,500	15,000	403,600
0320 Flights	4,413	6,000	4,413	6,000	-	-	-	-	-	-
0330 Helicopters	50,550	70,000	50,550	70,000	-	-	-	-	-	-
0360 Lodging	6,154	10,500	6,154	10,500	-	-	-	-	-	-
0373 Rent-Other	1,429	1,250	1,429	1,250	-	-	-	-	-	-
0380 ROW Clearing	254,000	-	-	-	-	-	167,500	-	86,500	-
0402 Training-Safety	129	-	129	-	-	-	-	-	-	-
0410 Transport-Other	33	1,500	33	1,500	-	-	-	-	-	-
0420 Utilities	819	810	819	810	-	-	-	-	-	-
0700 Clothing	408	-	408	-	-	-	-	-	-	-
0710 Food, Meals	1,882	6,000	1,882	6,000	-	-	-	-	-	-
0740 Operating Supplies	3,071	7,000	3,071	7,000	-	-	-	-	-	-
0750 Safety	1,149	-	1,149	-	-	-	-	-	-	-
0800 Materials-Minor Equip	869	1,700	869	1,700	-	-	-	-	-	-
0810 Rolling Stock Maint	143	-	143	-	-	-	-	-	-	-
0811 Marine Vessel Maint	2,304	2,600	2,304	2,600	-	-	-	-	-	-
0820 Fuels and Oils	915	1,800	915	1,800	-	-	-	-	-	-
0830 Fuels and Oils - Marine	2,180	5,000	2,180	5,000	-	-	-	-	-	-
0850 Tools	1,499	-	1,499	-	-	-	-	-	-	-
Total 571 - XMSN Overhead Lines Expense	**522,833**	**1,391,580**	**221,501**	**265,930**	**17,332**	**301,550**	**182,500**	**420,500**	**101,500**	**403,600**

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of October 31, 2020

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
920 - Admin Wages-Benefits										
0110 Wages / PTO	780,796	763,000	780,796	763,000	-	-	-	-	-	-
* 0110-002 Wages C19 FFCRA Credits	(539)	-	(539)	-	-	-	-	-	-	-
0120 OT	649	1,660	649	1,660	-	-	-	-	-	-
0140 Taxes	58,047	54,000	58,047	54,000	-	-	-	-	-	-
0140-001 Mcr Tax Credit FFCRA	(8)	-	(8)	-	-	-	-	-	-	-
0150 H&W	185,450	185,000	185,450	185,000	-	-	-	-	-	-
0160 Retirement	314,657	315,000	314,657	315,000	-	-	-	-	-	-
Total 920 - Admin Wages-Benefits	**1,339,052**	**1,318,660**	**1,339,052**	**1,318,660**	**-**	**-**	**-**	**-**	**-**	**-**
921 - Office Expenses										
0300 Communication Services	17,925	18,400	17,925	18,400	-	-	-	-	-	-
0310 Contractor	52,794	76,250	52,794	76,250	-	-	-	-	-	-
0350 Licenses-Permits	94	125	94	125	-	-	-	-	-	-
0373 Rent-Other	249	-	249	-	-	-	-	-	-	-
0390 Software	28,389	16,500	28,389	16,500	-	-	-	-	-	-
0420 Utilities	7,892	27,500	7,892	27,500	-	-	-	-	-	-
0610 Office Equipment	10,977	840	10,977	840	-	-	-	-	-	-
0700 Clothing	440	-	440	-	-	-	-	-	-	-
0710 Food, Meals	1,356	1,250	1,356	1,250	-	-	-	-	-	-
0730 Office Supplies	8,586	6,800	8,586	6,800	-	-	-	-	-	-
0740 Operating Supplies	6	-	6	-	-	-	-	-	-	-
0750 Safety	4,573	6,300	4,573	6,300	-	-	-	-	-	-
0810 Rolling Stock Maint	1,055	2,000	1,055	2,000	-	-	-	-	-	-
0820 Fuels and Oils	826	1,000	826	1,000	-	-	-	-	-	-
0840 Furnishings	348	5,000	348	5,000	-	-	-	-	-	-
Total 921 - Office Expenses	**135,510**	**161,965**	**135,510**	**161,965**	**-**	**-**	**-**	**-**	**-**	**-**
923 - Professional Services										
0910 Audit-Accounting	29,800	31,000	29,800	31,000	-	-	-	-	-	-
0920 Banking-Trustee-Investment	32,805	20,600	32,805	20,600	-	-	-	-	-	-
0930 Legal	52,212	70,000	52,212	70,000	-	-	-	-	-	-
0940 Legislative	40,000	40,000	40,000	40,000	-	-	-	-	-	-
0950 Other Professional Services	46,584	108,750	46,584	108,750	-	-	-	-	-	-
Total 923 - Professional Services	**201,401**	**270,350**	**201,401**	**270,350**	**-**	**-**	**-**	**-**	**-**	**-**
924 - Insurance										
0960 Insurance	387,384	395,000	387,384	395,000	-	-	-	-	-	-
Total 924 - Insurance	**387,384**	**395,000**	**387,384**	**395,000**	**-**	**-**	**-**	**-**	**-**	**-**

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of **October 31, 2020**

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
928 - Regulatory Commission Expense										
0010 Other Regulatory	17,440	17,000	-	-	50	-	17,100	17,000	290	-
0020 FERC Admin	49,814	31,900	-	-	26,071	16,800	23,744	15,100	-	-
0040 FERC Other	13,058	37,625	-	-	13,058	37,625	-	-	-	-
0060 AK Agency	100	-	-	-	100	-	-	-	-	-
Total 928 - Regulatory Commission Expense	**80,413**	**86,525**	**-**	**-**	**39,279**	**54,425**	**40,844**	**32,100**	**290**	**-**
930 - General Expense										
0200 Advertising-Public Relations	25,994	25,000	25,994	25,000	-	-	-	-	-	-
0210 Association Dues	36,317	37,625	36,317	37,625	-	-	-	-	-	-
0220 Board Meeting Expense	27,229	20,000	27,229	20,000	-	-	-	-	-	-
0230 Professional Development	4,143	21,500	4,143	21,500	-	-	-	-	-	-
0240 Travel Expense (Admin)	8,222	29,000	8,222	29,000	-	-	-	-	-	-
0250 Non-Travel Incidental	371	1,250	371	1,250	-	-	-	-	-	-
0260 Recruitment	180	1,250	180	-	-	-	-	-	-	-
Total 930 - General Expense	**102,455**	**134,375**	**102,455**	**134,375**	**-**	**-**	**-**	**-**	**-**	**-**
931 - Admin Rent										
0371 Rent-Office Space	50,847	50,900	50,847	50,900	-	-	-	-	-	-
0372 Rent-Apartment	15,250	15,400	15,250	15,400	-	-	-	-	-	-
Total 931 - Admin Rent	**66,097**	**66,300**	**66,097**	**66,300**	**-**	**-**	**-**	**-**	**-**	**-**
TOTAL OPERATING EXPENSE	**4,860,410**	**6,382,795**	**2,453,402**	**2,612,580**	**934,553**	**1,442,575**	**1,305,239**	**1,843,415**	**167,217**	**483,600**
NET NONOPERATING REVENUE/EXPENSE	**3,959,565**	**2,648,264**								

Southeast Alaska Power Agency

Statement of Activities YTD Budget

as of **October 31, 2020**

	All Locations 10/31/20		No Location 10/31/20		Swan Lake 10/31/20		Tyee Lake 10/31/20		STI 10/31/20	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
NONOPERATING REVENUE/(EXPENSE)										
941 - Grant Income										
5410 Grant Income	49,797									
Total 941 - Grant Income	49,797									
942 - Interest Income Misc										
5010 Interest Earned Misc	15,724									
5020 Interest DNR Liability	(1,404)									
5030 Interest Investment Income	142,731									
Total 942 - Interest Income Misc	157,051									
944 - Gain/(Loss) Investments										
5200 Realized Gain(Loss) on Invest	26,514									
5210 Unrealized Gain(Loss) Investmt	102,469									
Total 942 - Interest Income Misc	128,983									
Total Nonoperating Revenue	**335,832**									
952 - Bond Interest Expense										
6120 Bond Interest Expense 2015 Series	319,496									
6130 Bond Interest Expense 2019 Series	105,424									
Total 952 - Bond Interest Expense	**424,921**									
953 - Depreciation Expense										
6300 Depreciation Expense	4,017,720									
Total 953 - Depreciation Expense	**4,017,720**									
954 - Grant Expense										
6520 Grant Contractual	49,548									
6560 Grant Materials & Supplies	338									
Total 954 - Grant Expense	**49,886**									
955 - Misc Nonoperating Expense										
6600 Other Misc Expense	7,783									
Total 955 - Misc Nonoperating Expense	**7,783**									
Total Nonoperating Expense	**4,500,309**									
NET NONOPERATING REVENUE/(EXPENSE)	**(4,164,478)**	-								
Change in Net Position	**(204,913)**	**2,648,889**								

* FFCRA Tax Credits - SEAPA qualified for federal payroll credits for employees who were unable to return to work because of state-mandated quarantine rules, but were still paid. These regulations went into effect on April 1 and extend through December 31, 2020. "C19 202003" refers to payroll prior to Apr 1 under a SEAPA-mandated quarantine.

Southeast Alaska Power Agency

R&R Summary - Capital Expenditures - Actual to Budget

as of **October 31, 2020**

	2020 EXPENDITURES	2020 BUDGET	PRIOR YRS EXPENDITURES	OVERALL EXPENDITURES	Overall Budget through 2020
* RR19301 - Discon Switch-Surge	57,183	66,394	25,981	83,163	92,375
* RR19305 - Governr PLC Mod TYL	112,232	93,302	-	112,232	93,302
RR19307 - Helipads Cleveland	-	-	18,626	18,626	18,626
* RR19308 - HPU TYL Gatehs	182,019	205,980	-	182,019	210,140
RR19314 - Statn Service Switch	58,388	1,286,893	185,565	243,953	1,300,000
RR19326 - Don Finney Ln Design	-	20,000	4,120	4,120	25,000
* RR19327 - Fire Protect Upgrade	48,845	54,500	-	48,845	54,500
* RR19329 - Security Upgrades	19,099	39,847	5,154	24,253	45,000
* RR19330 - Servers KTN	1,704	6,462	26,400	28,103	32,800
RR19331 - STCS-HMI-Historian	119,475	100,000	-	119,475	100,000
* RR19332 - Accounting Software	1,185	1,200	33,709	34,894	35,950
* RR19333 - 125V Battery Bank	25,448	97,750	-	25,448	97,750
* RR19335 - Stuffing Box Unit 2 SWL	150,068	125,000	-	150,068	125,000
* RR20336 - ATV-Snow Plow	28,688	30,000	-	28,688	30,000
RR20337 - Excitation Brush Vacuum SWL	33,389	50,100	-	33,389	50,100
RR20338 - Excitation Brush Vacuum TYL	46,779	59,700	-	46,779	59,700
RR20339 - Guy Thimbles STI Phase II	1,810	93,000	-	1,810	93,000
* RR20340 - HewesNet Structure	21,956	40,000	-	21,956	40,000
RR20341 - Intake Gate Refurbish TYL	120,904	251,300	-	120,904	251,300
* RR20342 - Mower Attachment for Excavator SWL	34,034	29,700	-	34,034	29,700
RR20343 - Partial Discharge Monitors SWL	86,519	98,230	-	86,519	98,230
RR20344 - Spillway Recovery Davit	-	12,500	-	-	12,500
RR20345 - Stationary Winch SWL	-	10,000	-	-	10,000
RR20346 - XFMR Dif Relay Bailey	3,420	22,000	-	3,420	22,000
* RR20347 - Marker Ball Tie Wrap Carroll Inlet	57,894	95,250	-	57,894	95,250
RR20348 - Cooling Water Pumps TYL	40,756	65,900	-	40,756	65,900
RR20349 - Submarine Cable Stikine Strait	202,607	2,371,917	-	202,607	793,800
* RR28618 - Housing SWL	754,170	780,475	13,318	767,487	793,800
Total All RR Projects	2,208,573	6,107,400	312,871	2,521,445	4,675,723

* R&R Projects completed in 2020

* Marker Ball Tie Wrap completed in Sep 2020

Overall budget is through December 2020 and does not include anticipated budget figures for 2021.

SOUTHEAST ALASKA POWER AGENCY

Revenue Fund	1,629,115.18
Dedicated R&R Fund	707,205.80
New Generation Fund	2,516.09
Commercial Checking	**$2,338,837.07**

DISBURSEMENTS
SEP-NOV 2020

VENDOR		REVENUE FUND	R&R FUND	NEW GEN FUND
ABB Enterprise Software Inc		7,172.00	-	
Admiralty Environmental LLC		173.25	-	
Alaska Dispatch News		278.94	-	
Alaska Marine Lines		1,048.87	207.76	
Alaska Permanent Capital, Inc		3,470.90	-	
Alaska Power Association		2,795.00	-	
All Around Tire Service		375.00	-	
Alpine Mini Mart		173.81	-	
Amazon.com		1,933.40	6,278.01	
Angerman's Inc		209.90	-	
Applied Industrial Technologies Inc	RR20341 Tyee gate replacement stems	-	82,201.69	
Arrowhead LP Gas WRG		73.94	-	
Ascent Law Partners LLP		13,085.00	5,425.00	
BAM LLC	RR19308 HPU Tyee Gatehouse install	-	83,000.00	
Bay Company		1,455.49	-	
Beckwith & Kuffel		-	38,031.00	
Ketchikan Gateway Borough		5,091.53	-	
Bernies		12,341.00	-	
Breakaway Adventures, LLC		2,000.00	2,700.00	
Byron Construction LLC	RR286 Housing SWL	-	242,334.00	
Cambria Properties LLC		4,575.00	-	
Center Marine Services Inc		-	4,950.00	
Channel Electric Inc		-	8,047.49	
Sunrise Aviation Inc		650.00	-	
City Market Inc		625.73	127.51	
CoastAlaska, Inc		2,301.00	-	
Core & Main LP		-	1,060.00	
Crowley Fuels LLC		732.48	206.18	
First City Electric, Inc		32.16	3,811.25	
Fjord Contractors		210.00	-	
Frontier Shipping & Copyworks		120.00	-	
G2 Risk Consulting		1,963.50	-	
Gage Tree Service LLC	Right-of-Way Clearing	167,500.00	-	
Gleason Reel		-	1,097.07	
Grainger		5,217.03	1,826.56	
Hammer & Wikan, Inc		109.80	-	
HDR Alaska, Inc		4,627.32	-	
Helicopter Air Alaska LLC		2,308.50	3,933.00	
Hydraulic Cylinders Inc		-	15,732.72	
Intandem, LLC		600.00	-	
Intellirent		1,475.75	-	
Jaco Analytical Lab, Inc		113.50	-	
Juneau Alaska Communications		2,565.30	-	
Kemppel Huffman and Ellis PC		1,756.00	-	
Ketchikan City of 334		568.92	-	
Ketchikan Daily News		381.35	-	

SOUTHEAST ALASKA POWER AGENCY

Revenue Fund	1,629,115.18
Dedicated R&R Fund	707,205.80
New Generation Fund	2,516.09
Commercial Checking	**$2,338,837.07**

DISBURSEMENTS
SEP-NOV 2020

VENDOR		REVENUE FUND	R&R FUND	NEW GEN FUND
Ketchikan Gateway Borough		10,183.06	-	
KP Performance		354.48	-	
Kuenz America Inc		5,700.00	-	
Landing Hotel		-	375.24	
Legacy Comm Services		750.00	-	
Les Schwab		1,897.92	-	
Litostroj Hydro Inc		-	48,320.55	
LNM Services		1,972.21	-	
Lynn, Bob		114.95	-	
Madison Lumber & Hardware Inc		1,719.89	440.71	
Mallory Safety and Supply		122.37	-	
Marble Construction		2,850.64	330.00	
Marsh USA Inc	Insurance premiums (Nov 2020 - Oct 2021)	562,538.00	-	
McMillen Jacobs Associates		8,438.50	-	
Mersen Canada Dn Ltd	RR20337-38 Carbon Dust Collectors	-	75,932.20	
Mersen USA PTT Corp		2,774.68	-	
NRECA Group Ins	NRECA - Administrative H&W benefits	56,287.23	-	
NRECA Group Ins Admin		4,998.63	-	
NRECA RSP Admin		2,635.20	-	
NRECA RSP Trust Contrib		63,660.92	-	
Ottesen's Inc		1,345.28	215.95	
Pacific Pride of Alaska, LLC		-	49.59	
PCE Pacific Inc		5,062.77	-	
Petro Marine Services-KTN		10,277.19	173.19	
Petro Marine Services-WRG		13,978.92	3,452.18	
Pilot Publishing, Inc		202.50	-	
PND Engineers		-	93.75	
Pool Engineering, Inc		10,060.98	-	
R&M Engineering-Ketchikan, Inc		960.00	-	
Ray Matiashowski		12,000.00	-	
Rocky's Marine Inc		90.02	-	
Samson Tug & Barge		841.17	3,823.97	
Satellite & Sound, Inc		3,080.00	-	
Scandia House Hotel		572.00	-	
Schmolck Mechanical KTN		7.32	40.80	
Schnabel Engineering LLC		6,450.00	-	
SE Business Machines		160.00	-	
Segrity LLC	RR19305 Governor PLC, RR19331 STCS HMI, SCADA Main	23,901.50	49,575.25	
Sentry Hardware & Marine		868.29	149.66	
Sentry Hardware and Marine		(4.40)	-	
Service Auto Parts		2,706.16	152.24	
Sockeye Business Solutions Inc		3,000.00	-	
Southeast Auto & Marine Parts, Inc		12,853.47	-	
Specialty Engineering, Inc		32,118.43	-	
Stikine Inn		-	206.03	
Sunrise Aviation Inc		23,250.00	7,025.00	

SOUTHEAST ALASKA POWER AGENCY

Revenue Fund	1,629,115.18
Dedicated R&R Fund	707,205.80
New Generation Fund	2,516.09
Commercial Checking	**$2,338,837.07**

DISBURSEMENTS
SEP-NOV 2020

VENDOR		REVENUE FUND	R&R FUND	NEW GEN FUND
Svendsen Marine LLC		1,567.80	175.27	
Tandemloc		2,426.30	-	
Taquan Air		5,475.60	2,390.40	
Temsco Helicopters Inc		23,063.43	9,487.20	2,516.09
TexRus LLC		13,624.64	356.85	
Therm-Tec Inc		296.05	-	
Tongass Business Center Inc		1,724.12	-	
TSS		9,330.00	-	
Tyler Industrial Supply		2,268.69	1,058.78	
Tyler Rental Inc		1,726.84	-	
Warstler, Richard		203.96	-	
Wells Fargo Bank-Corporate Trust	Bond Principal & Interest - 2015 and 2019 Series Bonds	364,674.00	-	
Wesco Distribution Incorporated		3,010.00	-	
Workforce Go		2,204.20	-	
Wrangell City & Borough		6,810.78	-	
Wrangell IGA Inc		277.77	-	
Wrangell Machine		-	1,507.00	
Wrangell Sentinel		162.00	-	
X2nSat		5,159.00	-	
Bank of America - August 2020		13,039.98	27.46	-
Bank of America - September 2020		13,517.98	877.29	-
Bank of America - October 2020		17,660.39	-	-

MEMORANDUM
ATTORNEY-CLIENT COMMUNICATIONS

TO: Chairperson
Southeast Alaska Power Agency

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

DATE: December 1, 2020

RE: Suggested Motion for Executive Session

The Board of Directors will enter into an executive session during a Regular Board Meeting to be held on December 10, 2020 to discuss the following matters:

(a) CEO Evaluation
(b) Update on Hydrosite Analysis

I recommend the following motion be made:

> I move to recess into Executive Session to be conducted pursuant to SEAPA's Bylaws consistent with Alaska Statute 44.62.310 for discussions on: (a) evaluation of the Agency's CEO, which discussions may involve subjects that tend to prejudice the reputation and character of a person, and (b) update on hydrosite analysis as the discussions may involve matters that have a clear impact on the Agency's finances.

SOUTHEAST ALASKA POWER AGENCY

Date: December 1, 2020

To: SEAPA Board of Directors

From: Trey Acteson, CEO

Subject: Preliminary Design for Tyee Tidewater Access Road Contract

The Tyee Marine Access feasibility project was initiated to assess options to improve marine access to the Tyee facility. The Board directed staff to pursue a road option in December 2017. Precursory studies have been performed to evaluate a preferred route and a rough order of magnitude cost estimate.

A Request for Proposals for Preliminary Design for SEAPA's Tyee Tidewater Access Road Project was advertised on August 26, 2020. The following bids were received on October 30, 2020:

Bidder	City/State	Bid Amount
R&M Engineering-Ketchikan, Inc.	Ketchikan, Alaska	$115,300.00
PND Engineers, Inc.	Juneau, Alaska	$129,895.00
PEAK Engineering, LLC	Sitka, Alaska	$204,953.91

At this time, staff recommends that all activity on this feasibility project cease and will elaborate on the reasons during the meeting. If the feasibility project is abandoned, all expenditures to date ($10,655 under account 1830-004) will be expensed, and the project account will be closed. No funds have been included in the FY2021 Draft Budget for this project.

SUGGESTED MOTION
I move to abandon the Tyee Marine Access Feasibility Project and close the project account 1830-004.

If the Board desires to continue with the project at this time, it would be appropriate to select a bidder for preliminary design and to add funding to the FY2021 budget.

SOUTHEAST ALASKA POWER AGENCY

Date: December 1, 2020

To: Trey Acteson, Chief Executive Officer

From: Clay Hammer, Operations Manager

Subject: Consideration and Approval of Sole Source of Tyee Air Carrier Contract

Sunrise Aviation, Inc., located in Wrangell, has facilitated most of the air transportation between Wrangell and the Tyee Hydroelectric Facility for the past several years. The current contract with Sunrise expired on August 31, 2020 and has been extended until December 15th pending consideration of a new contract or alternate forms of transportation.

Sunrise Aviation has submitted the attached proposal to SEAPA listing the changes it seeks from the existing contract, which is also attached for your reference. The contract would be effective as of December 1, 2020 through December 31, 2021 with an evergreen clause for automatic renewal unless terminated otherwise by either or both of the parties.

As indicated in the attached proposal, the pilot/owner of Sunrise does not currently have a backup if he is unable to provide the services. SEAPA must plan for transportation for crew changes and other trips that may be necessary to/from the Tyee plant. Optional transportation includes:

- SEAPA vessel (must have accommodating tides)
- Charter Vessel (must have accommodating tides)
- Jet boat (effective for crew changes however there may be weight/size limitations for freight)
- Helicopter
- Charter Island Air Express Caravan from Prince of Wales Island
- Issue an RFP for Air Carrier or Jet Boat Services

Staff seeks the Board's direction on whether to proceed with an Air Carrier Contract under the proposed terms or extend the existing contract until an alternate form of transportation can be established.

Section 8.1 of SEAPA's Procurement Policy provides that competitive bidding is not required when the contractual services can be furnished only by a single dealer. Sunrise Aviation is the only air carrier in the Wrangell vicinity with the capacity to provide the regular, scheduled services between Wrangell and Tyee other than during the times stated in the attached proposal. If the Board elects to authorize staff to enter into a new sole-source contract with Sunrise Aviation, please consider the following suggested motion:

SUGGESTED MOTION
I move to authorize staff to enter into a sole source Air Carrier Contract with Sunrise Aviation, Inc. for a term from December 1, 2020 through December 31, 2021 with an evergreen clause automatically renewing the contract unless it is terminated otherwise by one or both parties for fixed wing flight services at the base rate of $500 for each contracted, scheduled, completed flight between Wrangell and the Tyee Hydroelectric facility, estimated to be about 104 flights annually, with the option for Sunrise Aviation to revise its rate on November 1 each year for insurance and fuel cost adjustments.

Attachments:

- Sunrise Aviation Proposal
- Current Air Carrier Contract Between SEAPA and Sunrise Aviation

Attachment to Agenda Item 6C

Re: Consideration and Approval of Sole Source of Air Carrier Contract

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Sunrise Aviation Proposal

Sharon Thompson

From: Sunrise Aviation, Inc. <sunriseaviation@gci.net>
Sent: Monday, September 21, 2020 10:32 AM
To: Trey Acteson
Cc: Sharon Thompson
Subject: Air Carrier Contract

Trey,

As per our conversation, here are the changes I am proposing for the Air Carrier Contract between Sunrise Aviation and SEAPA.

Flight Services-

Part 2, E – the Bonanza is currently insured for 4 seats total, and the 185 for 3 seats.

Part 2, I - With increasing fuel, insurance, and maintenance costs, I am proposing $500 per flight between Wrangell and the Tyee Lake facility.

Replacement Aircraft –

7 – There are no other suitable replacement aircraft in the immediate area to cover Sunrise Aviation in the event we are unable to fly. In the past, Pacific Wings LLC in Petersburg has covered any flights that Sunrise Aviation was unable to do. As they are no longer in business, they are no longer an option. There are no other Part 135 operators in Petersburg or Wrangell that can fulfill that role.

As we now have two aircraft, if one aircraft is down for maintenance, we do have a backup. However, if for any reason the pilot is unable to fulfill the flight, due to sickness, injury, or any other emergency, there is no one available to replace him. In the event that this occurs, Sunrise Aviation will contact SEAPA as soon as reasonably possible to allow them to make any changes necessary.

As the sole pilot of Sunrise Aviation, I would like to be able to have the option to go on vacation for two weeks in December of 2020, with the option of taking another week or two off during the winter months (November-March). SEAPA will be given a minimum 30 day notice of any vacation plans. Any other time off will be negotiated with SEAPA as early as possible.

8 – Representations and Warranties-

Sunrise Aviation plans on adding another pilot in the future. I would like to allow for a pilot with a minimum of 1000 Alaska hours to fill this duty. Said pilot would go through a thorough procedures and training program, only being allowed to conduct flights upon being accepted by SEAPA.

As for aircraft emergency exits, Sunrise Aviation's 185 has only two.

11 – Indemnification-

B – Sunrise Aviation will not be held accountable for any damages or liabilities that are the direct result of the action or inaction of one of SEAPA's employees, contractors, or any individual under their hire. As we have previously discussed, I believe that Sunrise Aviation needs reasonable financial protection from any events beyond their control.

These are my proposed changes to the existing contract, dated and signed 9-29-15 by Tyler Robinson and accepted by myself June of 2018.

James Michael Lane, president

Sunrise Aviation Inc

Sharon Thompson

From: Sunrise Aviation, Inc. <sunriseaviation@gci.net>
Sent: Tuesday, September 22, 2020 10:47 AM
To: Trey Acteson
Cc: Sharon Thompson
Subject: Air Carrier Contract

Trey,

One thing I would like to add somewhere in the contract.

Currently SEAPA and Sunrise Aviation have a verbal agreement that if any scheduled contract flights are to be cancelled, that Sunrise is to be given 24 hour notice of said cancellation. I would like to extend that to a minimum of 48 hours. During the summer, I have multiple clients that tend to want to fly early Wednesdays, and I would like to have as much notice as possible if SEAPA is cancelling. I think that giving me notice on Monday for a Wednesday contract flight would be sufficient.

On another note, if the SEAPA Board has any questions concerning my proposed changes to the existing contract, I would be more than happy to address them during their board meeting.

Thank you,

-Mike

Attachment to Agenda Item 6C

Re: Consideration and Approval of Sole Source of Air Carrier Contract

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Current Air Carrier Contract between SEAPA and Sunrise Aviation, Inc.

KETCHIKAN - PETERSBURG - WRANGELL SEAPA Southeast Alaska Power Agency	**SUNRISE AVIATION, INC.**

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

The parties to this Air Carrier Contract ('Contract') are **THE SOUTHEAST ALASKA POWER AGENCY**, a Joint Action Agency, formed under Alaska Statutes §§ 42.45.300, *et seq.*, of 1900 First Avenue, Suite 318, Ketchikan, Alaska 99901 ('SEAPA' or 'Agency') and **SUNRISE AVIATION, INC.,** an Alaska corporation, doing business in the State of Alaska, of Post Office Box ~~1318,~~ 1440 Wrangell, Alaska 99929 ('Contractor').

RECITALS

A. Agency desires to obtain air carrier services.

B. Contractor is capable of performing and desires to provide air carrier services to Agency.

CONTRACT

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

1. Term of Contractor Services. Contractor agrees to provide SEAPA with fixed wing flight services for one (1) five (5) year period commencing September 1, 2015 through August 31, 2020.

Both parties agree the contract may be opened April 1st each year during the life of the contract for the sole purpose of contract rate adjustment directly related to insurance or fuel costs. Contractor agrees that all agreed rate increases will be accompanied by supporting documents and will be effective July 1st each year that this contract is in place.

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

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

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

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

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

E. Each flight shall be capable of carrying a minimum of five (5) passengers, mail, freight, and supplies.

F. Provisions shall be made by the Contractor for the holding of perishable food, and dry goods prior to flight time.

G. During the times the aircraft is partially loaded on trips to the Tyee Hydroelectric Plant, the Contractor may use the trip for the purpose of familiarizing a relief pilot with the area, or for sightseeing.

H. At times, people other than employees of the Tyee Hydroelectric Plant personnel may wish to travel to the Tyee Hydroelectric Plant on regular scheduled flights. In the event this situation arises and only if there is room on this flight after passengers, mail, freight, and supplies are accounted for, the Contractor will contact SEAPA's Operations Manager for verbal approval before anyone is allowed to fly. SEAPA will pay for the full regular scheduled flights. At times there may be a seat fare of $120 imposed; this is up to the discretion of SEAPA's Operations Manager. SEAPA's Operations Manager must approve any non-employee flying to the Tyee Hydroelectric Plant location.

I. Expenses for each contracted scheduled completed flight will be $400.00.

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

3. Flight Scheduling.

A. Authorized persons to change any flight scheduled on behalf of SEAPA are the SEAPA Operations Manager, Tyee Plant Foreman, and SEAPA Administrative Assistant.

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

4. Inclement Weather.

A. The Contractor is required to use a float plane during weather conditions of visibility of less than one thousand (1,000) feet elevation or five (5) miles in distance.

B. Either or both conditions will cause use of the float plane. Contract rates shall not apply to the float plane.

5. Delayed Flights.

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

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

6. Payment Terms.

The Contractor will submit, on a monthly basis, an invoice showing flights completed and the billings for each flight. Payment shall be made by SEAPA within thirty (30) days following receipt of the invoice.

7. Replacement Aircraft.

In the event the Contractor has no aircraft available for scheduled flights, the Contractor shall be responsible for obtaining suitable replacement aircraft at no additional cost to SEAPA.

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

- qualified pilots with at least two thousand (2,000) hours year-round flight time in Southeast Alaska
- names and addresses of its qualified pilots upon request by SEAPA
- qualified pilots familiar with local operating conditions, and in all other ways qualified to perform services under this Contract, consistent with all local, State and Federal regulations

and shall:

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

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

- a minimum of four (4) emergency cabin exits
- stretcher configuration capability

and that:

- aircraft offered under this Contract present a good appearance, including, but not limited to, a neat and clean interior with no visible corrosion or damage, and no fuel or oil leaks

- pilots offered under this Contract possess exemplary safety records, and have current FAR part 135 approval for each make and model of aircraft to be used to fulfill this Contract
- pilots are responsible for the safety of the aircraft, occupants and cargo, and shall comply with all applicable local, State and Federal regulations regarding safety. The pilot shall refuse any flight of situation which he/she considers hazardous or unsafe
- pilots shall not allow smoking, consumption of alcohol, or the use of any judgment impairing substance by any occupant during flights under this Contract. Pilots may refuse passage to anyone that, in his/her opinion, is under the influence of any judgment impairing substance.

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

10. Insurance.

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

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

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

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

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

D. Primary Insurance. Such insurance afforded to Agency as additional insured

under Contractor's policies shall be endorsed where necessary to be primary insurance and not excess over, or contributing with, any insurance purchased or maintained by Agency.

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

11. Indemnification.

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

B. The Contractor agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Agency, its officers, directors, and employees against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, including but not limited to expert witness fees, to the extent caused by the Contractor under this Contract or anyone for whom the Contractor is legally liable.

The Agency agrees to indemnify and hold harmless the Contractor, its officers, directors, and employees against damages, liabilities or costs, including reasonable attorneys' fees and defense costs, including but not limited to expert witness fees, regarding damage to tangible property, personal injury or death to the extent caused by the Agency in connection with Project(s) under this Contract, or Agency's contractors, subcontractors, or Contractors.

C. If: (1) a party makes a general assignment for the benefit of its creditors, files a voluntary petition in bankruptcy or any petition or answer seeking, consenting to, or acquiescing in reorganization, arrangement, adjustment, composition, liquidation, dissolution or similar relief, (2) an involuntary petition in bankruptcy, other insolvency protection against a party is filed and not dismissed within sixty (60) days, then the other party may: (i) terminate this Contract or any part thereof in which event such party shall have no further duties or obligations hereunder, and/or (ii) subject to Section 8(A) pursue any remedies the party may have under this Contract, at law or in equity.

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

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

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

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

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

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

17. Acceptance of Facsimile and Scanned Signatures. The parties agree that this Contract, Contracts ancillary to this Contract, and related documents to be entered into in connection with this Contract, will be considered signed when the signature of a party is delivered by facsimile transmission or delivered by scanned image (e.g., .pdf or .tiff file extension name) as an attachment to electronic mail (email). Such facsimile or scanned signature must be treated in all respects as having the same effect as an original signature.

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

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

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

APPROVED:
THE SOUTHEAST ALASKA POWER AGENCY **SUNRISE AVIATION, INC.**

By _____
Trey Acteson, CEO

Date: 10/2/2015

By _____
Tyler Robinson, President

Date: 9-29-15

RECEIVED
JUN 02 2015

EXHIBIT A

CERTIFICATE OF AIRCRAFT INSURANCE

DATE (MM/DD/YYYY): 5/29/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
AirSure Limited
25548 Genesee Trail Road
Golden, CO 80401

CONTACT NAME: AirSure Limited
PHONE (A/C, No, Ext): 303-526-5300 FAX (A/C, No): 303-526-5303
E-MAIL ADDRESS:
PRODUCER CUSTOMER ID #:

INSURED
Sunrise Aviation, Inc.
Pacific Wings, LLC
PO Box 1440
Wrangell AK 99929

INSURER(S) AFFORDING COVERAGE	%	NAIC #
INSURER A : Old Republic Insurance Company		
INSURER B :		
INSURER C :		
INSURER D :		
INSURER E :		
INSURER F :		

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

POLICY INFORMATION

CERTIFICATE NUMBER: 24885942 REVISION NUMBER:

POLICY TYPE						LINE OF BUSINESS SUBCODE											
	INDUSTRIAL AID	✓	PLEASURE & BUS	✓	COMMERCIAL	✓	AIRPLANE		HELICOPTER		MIXED FLEET		EXCESS		QUOTA SHARE		
	NON-OWNED	✓	Charter				LIABILITY ONLY	✓	HULL & LIABILITY		HULL ONLY						

AIRCRAFT INFORMATION

YEAR	MAKE	MODEL	SERIAL NUMBER	REGISTRATION NUMBER
	See AC Schedule			

TERRITORY: Unites States of America, Canada or Mexico or while being transported between ports thereof.

AIRCRAFT COVERAGES

SURER LETTER	POLICY NUMBER	EFFECTIVE DATE	EXPIRATION DATE	ADDITIONAL INSURED? (Y / N)	SUBROGATION WAIVED? (Y / N)
A	AVC00293605	6/1/2015	6/1/2016	Y	N

COVERAGE		OPTIONS		LIMIT	APPLIES TO	LIMIT	APPLIES TO
AIRCRAFT HULL				$		$	
				$			
AIRCRAFT LIABILITY				$ 2,500,000	EA OCC	$ 300,000	EA PER
				$	EA PASS	$	AGGR
MEDICAL PAYMENTS	✓	INCLUDING CREW		$ 10,000	EA PER		
		EXCLUDING CREW					

COVERAGE CODE	COVERAGE DESCRIPTION	OPTIONS		LIMIT	APPLIES TO	LIMIT	APPLIES TO
				$		$	
				$		$	
				$		$	
				$		$	
				$		$	
				$		$	

DESCRIPTION OF OPERATIONS / REMARKS (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Certificate Holder is included as an additional insured but only as respects operations of the Named Insured.
We won't cover the Certificate Holder for claims arising out of their liability as manufacturer, seller, handler, distributor or service facility of any product or service sold, handled, distributed or provided.
This form does not constitute a contract between the issuing insurer(s), authorized representatives or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter coverage afforded by the policies listed thereon.

CERTIFICATE HOLDER

Southeast Alaska Power Agency
Attn: Sharon Thompson
1900 1st Avenue, #318
Ketchikan AK 99901

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

(CO) Rob Wetzig

ERTIFICATE OF INSURANC
ADDENDUM (Schedule of Aircraft)

DATE ISSUED
5/29/2015

NAMED INSURED:

Sunrise Aviation, Inc.
Pacific Wings, LLC
PO Box 1440
Wrangell AK 99929

CERTIFICATE HOLDER:

Southeast Alaska Power Agency
Attn: Sharon Thompson
1900 1st Avenue, #318
Ketchikan AK 99901

This is to certify that the following policy(s), subject to the terms, conditions, limitations and endorsements contained therein, and during their effective period, have been issued by the company(s) indicated below. In the event of material change or cancellation of said policy(s), the company will endeavor to notify the certificate holder, but failure to do so shall impose no liability or obligation of any kind upon the undersigned or the company(s) involved.

N Number	Year	Make	Model	Serial No.	Crew	Pax	Liability Limit
N1178R	1953	DHC	Beaver		1	6	$2.5M / $300K
N38FG	1979	Cessna	185		1	3	$2.5M / $300K
N50159	1973	Cessna	206		1	4	$2.5M / $300K
N63TC	1972	Beech	36		1	5	$2.5M / $300K
N9468Q	1972	Beech	36		1	5	$2.5M / $300K
N9863Q	1978	Cessna	185		1	3	$2.5M / $300K

AIRSURE LIMITED

AirSure Limited
25548 Genesee Trail Road
Golden, CO 80401

303-526-5300
303-526-5303

AIRSURE LIMITED. AVIATION ADDENDUM (Schedule of Aircraft)

SOUTHEAST ALASKA POWER AGENCY

Date: December 3, 2020

To: SEAPA Board of Directors

From: Trey Acteson, Chief Executive Officer

Subject: SEAPA 2021 Safety Program Support Services and Training Contract

The contract for SEAPA's Safety Support Services and Training Program expires at the end of this month. The contract was competitively bid in July 2019. Only one bid was received from TSS, Inc. of Ketchikan, Alaska. The Board awarded the contract to TSS on a time and materials basis at their proposed hourly rates for the total not-to-exceed value of $96,000 for the contract period from October 1, 2019 through December 31, 2020.

Staff recommends the Board award the contract as a sole source to TSS, Inc. for the Agency's 2021 Safety Support Service and Training Program based on the following:

- Interested vendors from Anchorage and Seattle did not submit a bid because logistics, labor and travel are cost-prohibitive for a consultant to travel from those venues monthly to each of the Agency's plants for in-person training and testing.
- COVID-19 quarantine requirements for intra and inter-state travel would add to labor and travel costs for a consultant and may present more risk of exposure than a local vendor who has not traveled.
- TSS, Inc. is a qualified, local, and properly licensed vendor with a Certified Occupational Safety Specialist available to conduct the training at less cost for travel and labor and, TSS advises their T&M rates will not increase if awarded the contract for 2021 services.
- Section 8.1 of the Agency's Policy Handbook provides that competitive bidding is not required when the " ... contractual services can be furnished only by a single dealer and have a uniform price when purchased." TSS was the sole bidder for these services when competitively bid.

The proposed FY2021 operating budget for SEAPA's Safety Program is $76,000. Additional funds for safety training will be requested, if necessary, for the FY2021 budget.

Please consider the following suggested motion:

SUGGESTED MOTION
I move to authorize staff to enter into a sole-source contract amendment to SEAPA's Task Order No. 20055 for SEAPA's 2021 Swan and Tyee Lake Safety Program Support Services and Training, with TSS, Inc., for the not-to-exceed value of $76,000.

Agenda Item 6E

New Business

Presentation, Consideration, and Approval of FY2021 SEAPA Budget

(Draft Budget already distributed to Directors)

Date: December 2, 2020

To: Trey Acteson, Chief Executive Officer

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

SEAPA 2021 Operations Plan Report

Every year SEAPA presents the Operations Plan (Ops Plan) for Board approval in accordance with Section 5 of the Power Sales Agreement[1] (PSA). The annual plan forecasts expected reservoir levels for Tyee Lake and Swan Lake for the upcoming year by maximizing output from SEAPA facilities and optimizing water resources. Pursuant to the PSA, the Ops Plan gives first priority to the dedicated Firm Power Requirements of each Utility and optimizes Additional Dedicated Output as a second priority for additional power requirements. Optimization of water resources is achieved by an algorithmic math model as represented in Figure 1.

1.0 Water Resource Algorithmic Math Model Process

Step 1: Current lake levels

Step 2: Inflow Forecasts
1. NOAA
2. USGS
3. NINO3.4

Step 3: Load Forecast
1. Temperature Forecasts
2. Scheduled Maintenance
3. STICS/Historic Loads

Step 4: Iterative Math Model
1. Case Reservoir Plots
2. Optimized Water Resources

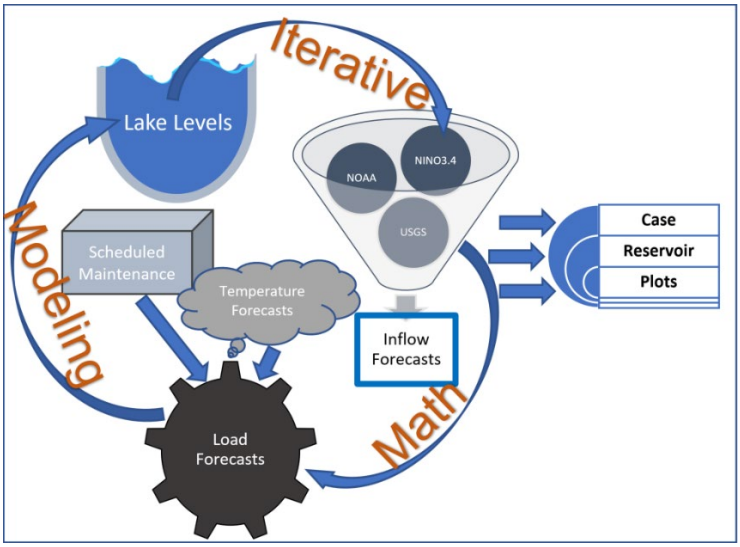


Figure 1: Math Modeling: Optimizing Water Resources

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

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

2.0 Current Lake Levels

The lake levels as of December 2, 2020 were average at 1387.8 feet for Tyee and 340.9 feet for Swan. This is due to above average precipitation for June-September and average precipitation occurring in the remaining months (ensuing the 2018-2019 drought). Although parts of Alaska are experiencing Abnormally Dry conditions, Southeast Alaska has seen average to above-average precipitation levels throughout 2020. Beginning in August 2020, Southeast Alaska began transitioning from a moderate El Nino to ENSO-neutral and is now entering a La Nina phase with south Sea Surface Temperatures (SST) below average. NOAA is predicting a 3-Month outlook to be below average temperatures with below average precipitation.

June-November of 2020 offered a significant amount of inflows with approximately 95.6 inches of rain (for the period). Precipitation was 70.4% above the previous 5-year average of 56.1 inches (data from Swan Lake weather station). Above average rainfalls allowed KPU to increase hydro-generation, subsequently reducing net loads on SEAPA hydro. In addition to above-average rainfalls, temperatures in Southeast Alaska were moderate, further reducing loads. As a result, Tyee and Swan lake fill rates increased significantly, and spill occurred in August.

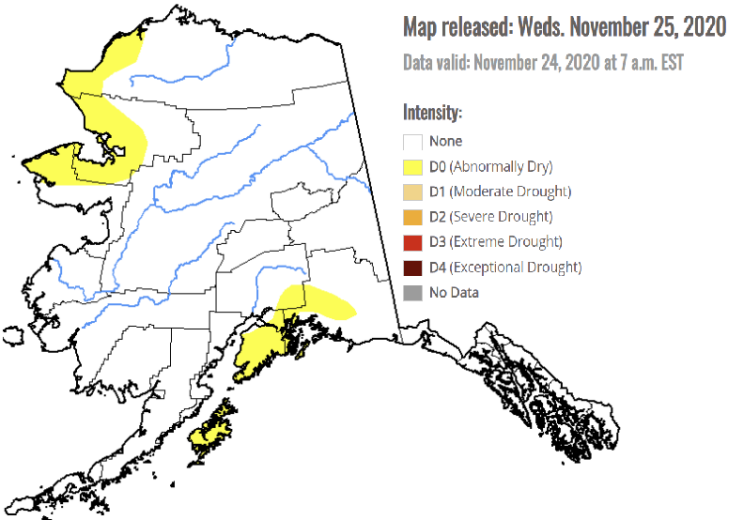


Figure 2: U.S. Drought Monitor-Alaska

The first half of the 2020 water cycle had an average precipitation rating. As a result, Tyee generation was not curtailed for sales to the South. A diesel campaign in Ketchikan did not occur in 2020. Draft limits were lowered before the snow melt season however the use of reserves at Tyee was not required. With the information acquired from the recently installed Snow Pillows, SEAPA was able to definitively predict inflows and minimize risk of curtailments. Operations at Swan Lake prior to the low draft period focused on maximum efficiency which maximized hydro generation and contributed to the success of the 2020 low draft operational period.

3.0 Rain Fall – Inflows for 2020

As discussed in the preceding section, rainfalls for 2020 were average for the first half of the year and above average for the latter half. The Swan Lake weather station recorded approximately 152 inches of rain from January-December, far exceeding the previous 5-year average.

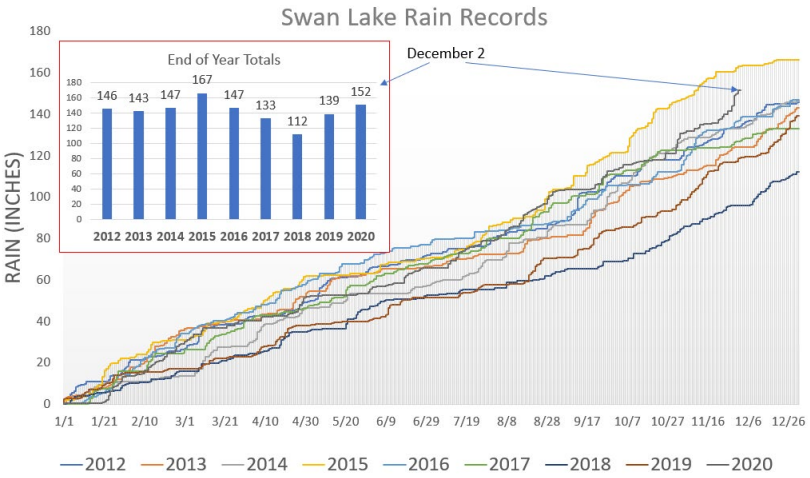


Figure 3: 9-Year Historical Rainfall: Swan Lake

The chart on the left (Figure 3) illustrates a 9-year graph of precipitation recorded at Swan Lake. As evidenced in this chart, 2020 precipitation was very average from January through June. In July, the accumulative 2020 rainfall (blackline) began to rise rapidly above all previous years except 2015. If the trend from the previous four months continues, 2020 precipitation may reach a 9-year high ending the year with near 2015 precipitation and inflow values.

4.0 Inflow Forecasts

Inflow predictions for calendar year 2021 were performed by utilizing NOAA, NINO3.4, Pacific Decadal Oscillation charts and historic USGS inflow data. NOAA 3-month forecasts for the months of December-January-February are predicting below average precipitation and below-normal temperatures. Figure 4 (below) illustrates NOAA's three-month outlook.

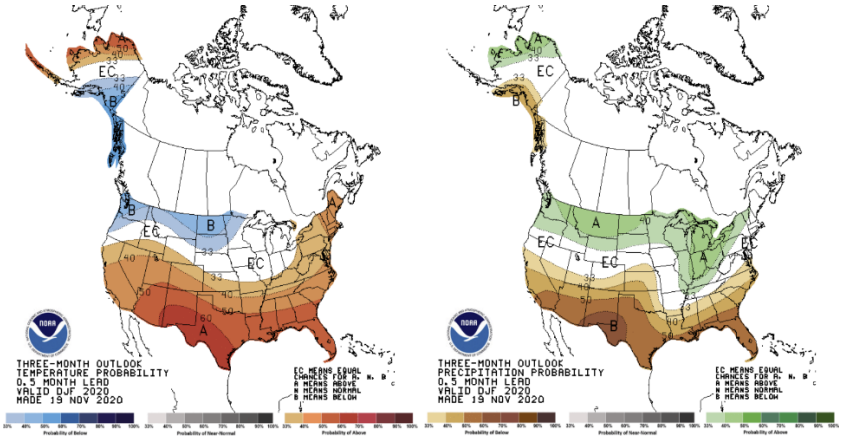


Figure 4: NOAA Dec-Jan-Feb Outlook

NOAA is predicting a La-Nina through Spring of 2021. The predicted La-Nina will likely cause a decrease in precipitation for Southeast Alaska.

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

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

Figure 5 illustrates the International Research Institute (IRI) and Climate Prediction Centers (CPC) ENSO model. Apparent to all participating institute forecasts is a continued average ocean temperature (neutral). Although forecasts are predicting average ocean temperatures, they are predicting above-average precipitation and temperatures for Southeast.

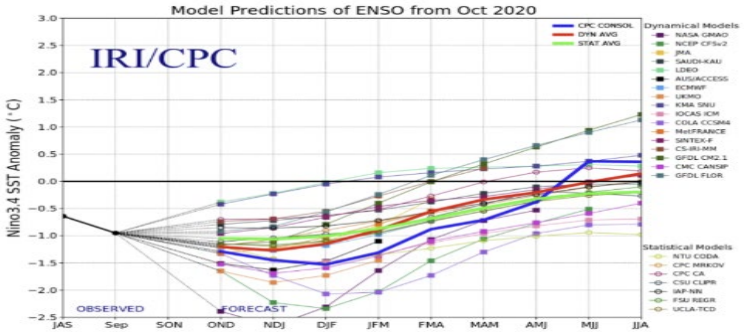


Figure 5: 2021 ENSO Model

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

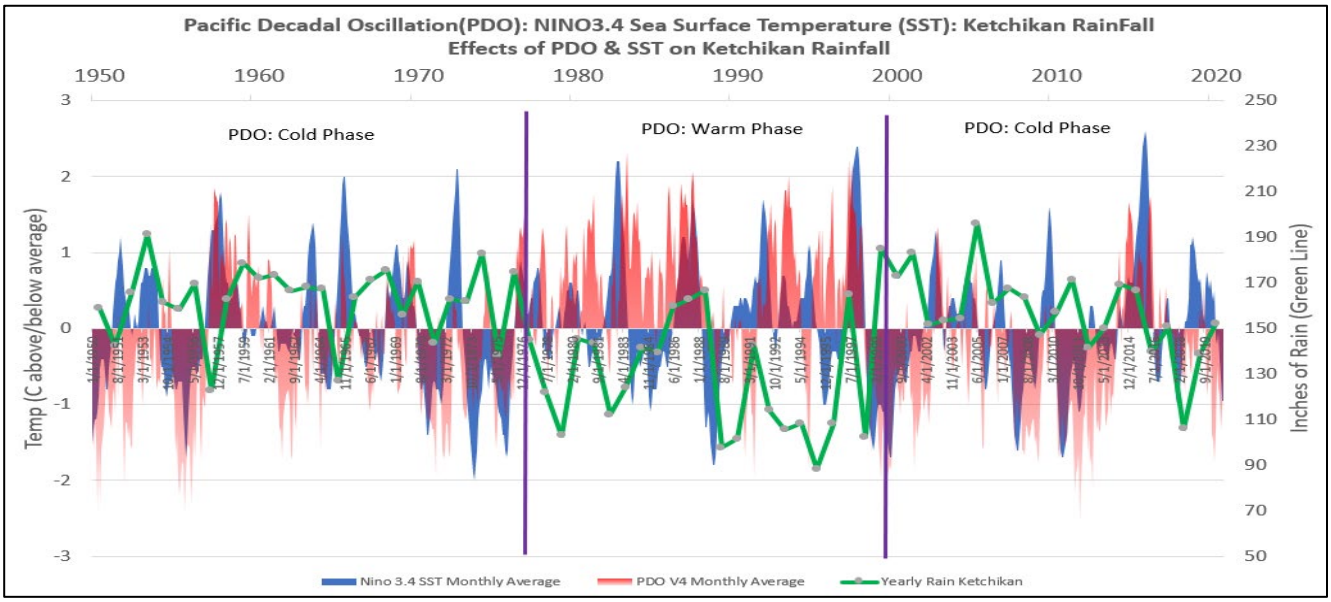


Figure 6: PDO Shifting of Average Rainfalls on 20-Year Cycles

If predictions from the PDO/ENSO models and historical trends hold true as discussed in previous

sections, inflows will fluctuate up and down around approximately 22% below the previous 20-year averages. Figure 6 in the PDO/ENSO records also explain with a certain degree of confidence the reason for the 2018 and first half of 2019 low inflows. It is therefore prudent for SEAPA to consider inflow cases that are reflective of a Warm PDO phase for developing sales and curtailment curves.

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

Table 1: SEAPA Inflow Cases for 2021

4.1 Average Inflow (2013-2017) Cases

Table 1 illustrates SEAPA's predicted inflow cases that were used for the Swan Lake and Tyee Lake reservoir level models. As discussed previously, the inflow cases were selected based on NOAA and PDO predictions for 2021. The average annual cfs for this inflow case at Swan Lake was 387.3 cfs and the average annual cfs for Tyee Lake was 147.5 cfs.

4.2 Low Inflow (2018) Cases

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

5.0 Load Forecasts

Load forecasts and subsequent SEAPA deliveries were estimated for the 2021 calendar year with consideration to the NOAA December-January-February outlook (cooler average temperatures) and the 3-year SEAPA delivery schedule (2014-2016). This delivery schedule was chosen to not include outliers (2018-2019 drought) and still include loss of SEAPA generation due to Whitman generation in Ketchikan. The 2021 budget for January 1 through December 31 was developed by using 3-year average Ketchikan, Petersburg & Wrangell loads, with a 5% bias (higher) in January and February to account for NOAA predictions of cooler temperatures. Considering current lake levels and recent NOAA 3-month outlooks (below average rainfall with below average temperatures), SEAPA does not anticipate curtailment of Tyee in 2021 however it may still occur. Focusing on maximizing utilization and output by lake balancing and maximizing efficiency operations at Swan Lake, SEAPA believes curtailment is possible but unlikely. Firm Power Requirements are well known, documented by historical load profiles. Firm Power Requirements for all three communities are anticipated to be met by SEAPA generation.

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

follows:

Swan Lake Expected Generation: **61,832.2 MWh (Dedicated Output)**

Ketchikan Loads: **87,721.0 MWh (Firm Power Requirements)**

Tyee Lake Expected Generation: **115,364.8 MWh**

PTG & WRG Loads: **79,446.9 MWh (Firm Power Requirements and Dedicated Output)**

Table 2 illustrates the load forecasts for 2021 (starting in January) which demonstrates the required 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. SEAPA will continue to review lake levels weekly and discuss the Operations Plan every Tuesday during Operation Meetings.

	KTN			Swan Lake		STI		WRG-PSG			Tyee Lake	
	Expected Delivery	Required Generation	Required Generation	Expected Gen from Inflow	Expected Gen from Inflow	STI Expected (balance)	STI Expected (balance)	Expected Delivery	Required Generation	Required Generation	Tyee Expect Generation	Tyee Expected Generation
	MWh	MWh	Avg MW	Avg MW	MWh	MWh	Avg MW	MWh	MWh	Avg MW	Avg MW	MWh
JAN	9284.9	9842.0	13.2	5.2	3890.0	5952.0	8.0	8065.7	8549.7	11.5	19.5	14501.7
FEB	8341.0	8841.5	13.2	6.2	4137.5	4704.0	7.0	8063.6	8547.4	12.7	19.7	13251.4
MAR	8330.0	8829.8	11.9	3.9	2877.8	5952.0	8.0	7276.4	7713.0	10.4	18.4	13665.0
APR	6233.9	6607.9	9.2	1.2	847.9	5760.0	8.0	6235.0	6609.1	9.2	17.2	12369.1
MAY	4790.2	5077.6	6.8	6.8	5077.6	0.0	0.0	4078.1	4322.8	5.8	5.8	4322.8
JUN	5679.1	6019.9	8.4	8.4	6019.9	0.0	0.0	4731.5	5015.4	7.0	7.0	5015.4
JUL	6897.3	7311.1	9.8	9.8	7311.1	0.0	0.0	6683.5	7084.5	9.5	9.5	7084.5
AUG	6584.2	6979.2	9.4	9.4	6979.2	0.0	0.0	6823.3	7232.7	9.7	9.7	7232.7
SEP	6199.6	6571.6	9.1	9.1	6571.6	0.0	0.0	5138.9	5447.2	7.6	7.6	5447.2
OCT	6113.6	6480.4	8.7	8.7	6480.4	0.0	0.0	6005.6	6366.0	8.6	8.6	6366.0
NOV	8318.9	8818.0	12.2	6.2	4498.0	4320.0	6.0	7129.0	7556.7	10.5	16.5	11876.7
DEC	10948.3	11605.2	15.6	9.6	7141.2	4464.0	6.0	9215.4	9768.3	13.1	19.1	14232.3
Total	**87721.0**	**92984.2**	-	-	**61832.2**	**31152.0**	-	**79446.0**	**84212.8**	-	-	**115364.8**

Table 2: SEAPA 2021 Load Forecast

5.1 Scheduled Maintenance

SEAPA anticipates only minor outages for Petersburg to replace the submarine cable in 2021. Typical line maintenance, generator unit annual maintenance and substation maintenance were considered when developing the load forecasts. Swan Lake station service switchgear upgrades, Swan Lake turbine runner repairs, and Stikine Strait submarine cable replacement(s)/repair(s) are anticipated in 2021. However, all three of these projects require either single unit outages or short durations that SEAPA does not anticipate affecting load profiles.

6.0 Iterative Math Model

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

6.1 Swan Lake Reservoir Plot (Expected Inflows)

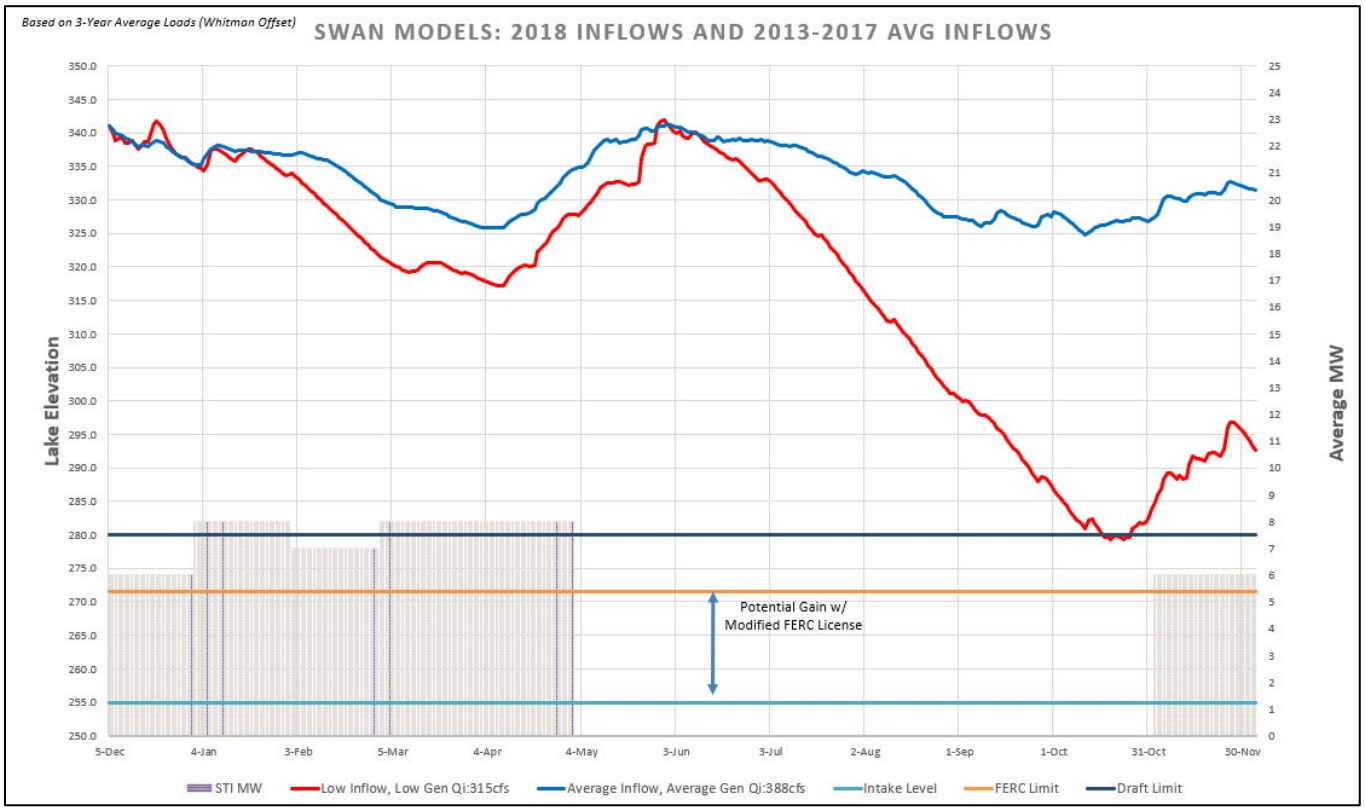


Figure 7: Swan Lake Reservoir Plot

The 2021 Swan Lake reservoir model as illustrated in Figure 7 above illustrates the two case scenarios as discussed in preceding sections. Both scenarios were modeled to illustrate recovery scenarios, draft rates and maximum drafts for Swan Lake utilizing Additional Dedicated Output from Tyee across the STI. Modeling inflows using average inflows (2013-2017 averages) (blue line) illustrate that Swan Lake will moderately draft and fully recover towards the end of 2021. In the case of using 2018 average inflows (worst case scenario; red line), Swan Lake will likely drop below the draft limit of 280ft in 2021. Additional Dedicated Output from Tyee as modeled are illustrated in the bar graphs.

6.2 Coordination of KPU Supplemental Diesel Generation

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

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

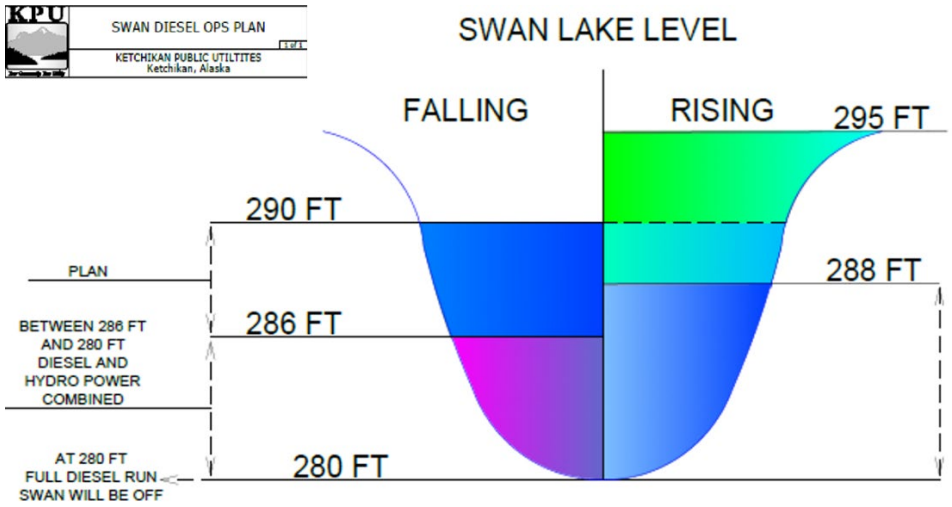


Figure 8: KPU Swan Diesel Ops Plan

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

6.3 Tyee Lake Reservoir Plot (Operations Plan)

The 2021 Tyee Lake reservoir model (Figure 9) demonstrates 2 case scenarios, a guide/curtailment curve and a sales curve. All models represent Petersburg/Wrangell loads and Additional Dedicated Output as illustrated in Table 2, with two inflow cases. The Tyee 2018 inflow case (minus 5ft) with average loads represents the guide curve and will be considered as a curtailment curve (red line). If Tyee Lake elevations fall below this curve, Additional Dedicated Output will be considered unavailable and net sales from Tyee to Ketchikan will be curtailed. Tyee will remain curtailed until Tyee Lake levels have reached the sales curve (green line). The area between the sales curve and curtailment curve is considered the Tyee Operations Band. Once the elevation of Tyee Lake has reached the sales curve (green line), Additional Dedicated Output will be made available to Ketchikan for as long as Tyee Lake levels remain above the curtailment curve (red line). The Balancing Lakes section discusses optimizing Swan Lake efficiencies during curtailment periods, where Tyee may be used to provide frequency support under certain conditions. This Operations Plan is conservative, using 2018 low inflow data minus 5ft and will maintain 20 feet in Tyee Lake (to the Draft limit) for the sales and curtailment curves.

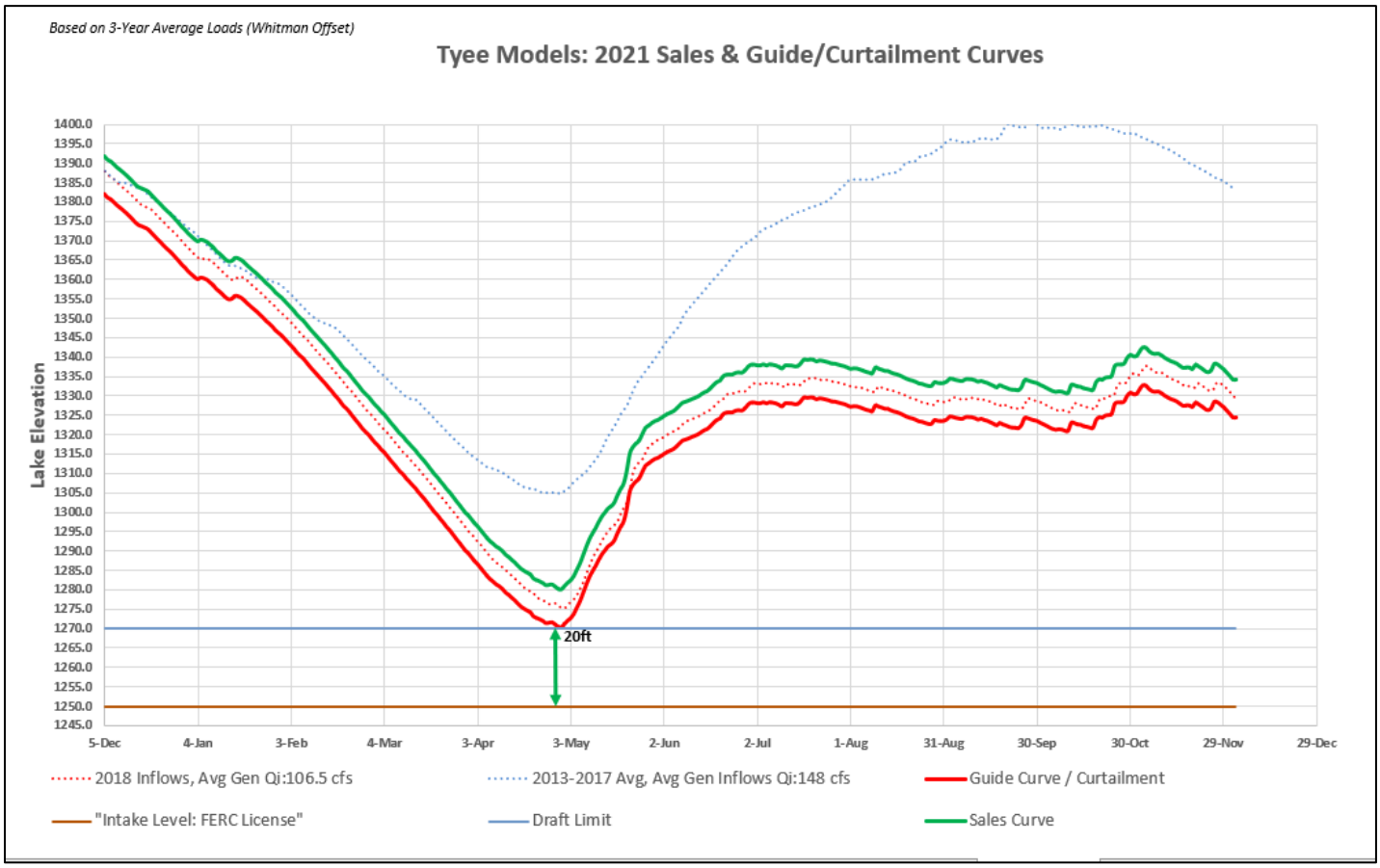


Figure 9: Tyee Lake Reservoir Plots

6.4 Coordination of Petersburg & Wrangell Supplemental Diesel Generation

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

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

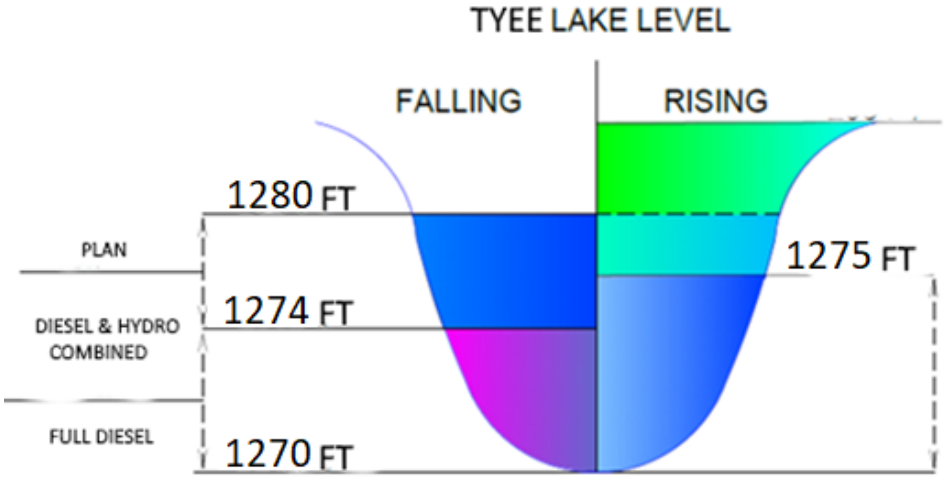


Figure 10: PTG & WRG Tyee Diesel Ops Plan

During a drafting period of Tyee Lake (typically early Spring), at an elevation of 1274ft, Petersburg and Wrangell may utilize supplemental diesel generation to slow the draft rate at Tyee Lake until the Draft Limit of 1270ft is reached. Once the Draft Limit of 1270ft has been reached, Tyee Lake generators may remain off and Petersburg and Wrangell may utilize full diesel generation to meet Petersburg and Wrangell's Full Power Requirements until an elevation of 1275ft is reached. During a rising recovery period, Petersburg and Wrangell diesel generation should be terminated at elevation 1275ft and Tyee Lake should be utilized to meet the Firm Power Requirements of Petersburg and Wrangell if Tyee Lake has generating capacity to do so. At elevations above the curtailment curve (once the sales curve is reached) in Figure 9 (red line), SEAPA may utilize Tyee Lake for Additional Dedicated Output to maximize utilization by sending power from Tyee Lake, across the STI, to Ketchikan (see Balancing Lakes section for further details).

7.0 Balancing Lakes

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

7.1 Load Tables

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

Figure 11: STCS Load Table

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

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

7.2 Efficiency Curves

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

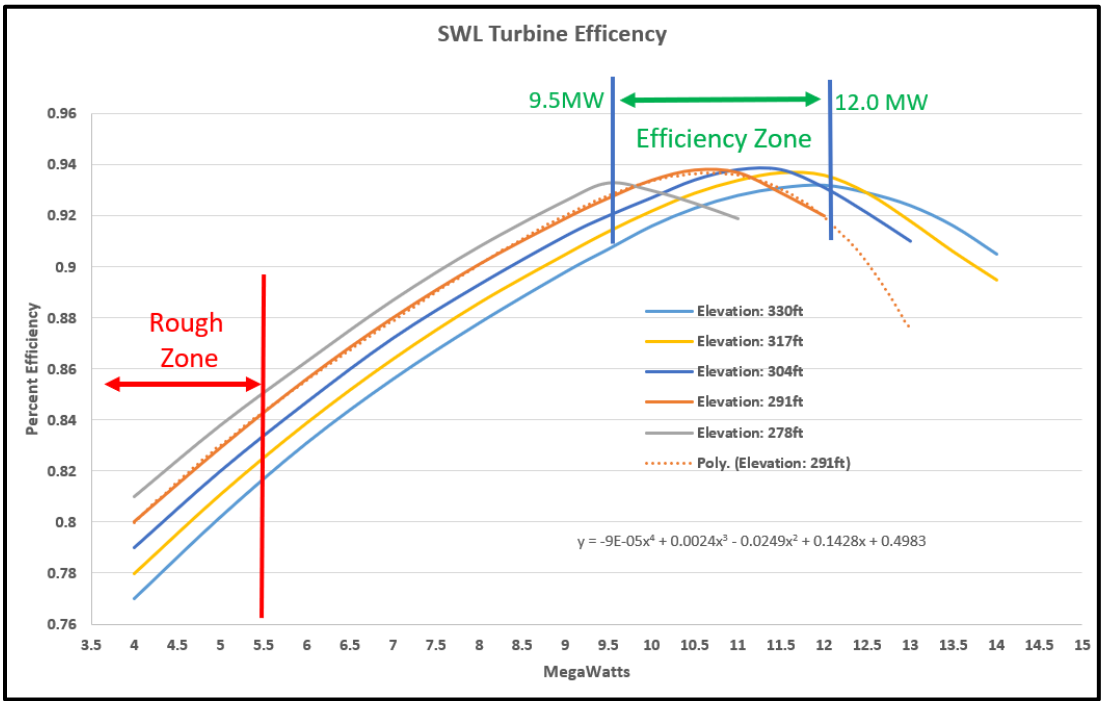


Figure 12: Swan Lake Turbine Efficiency Curves

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

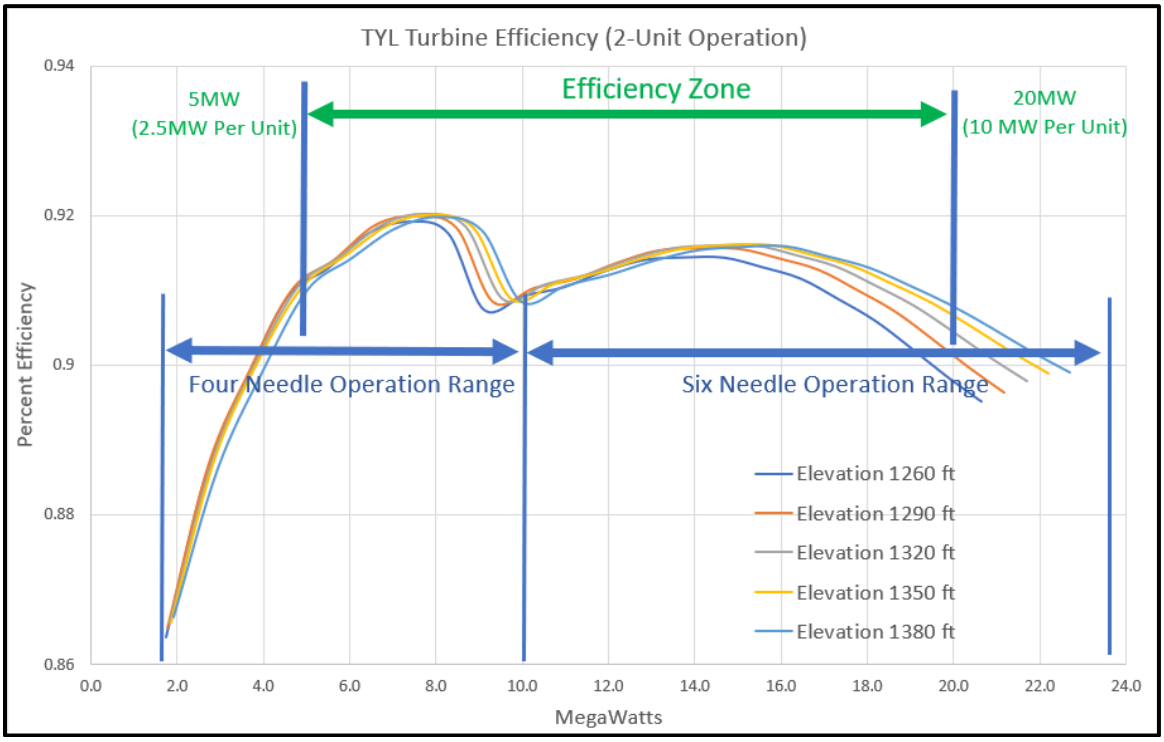


Figure 13: Tyee Lake Turbine Efficiency Curves'

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

7.3 Optimizing Output

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

7.3.1 Example: Optimizing Output by Increasing Efficiency

Start Date of Operations Plan: July 1

Swan Lake Elevation (on start date): 290ft

Average Inflows: 288cfs

Average MW to match Inflows: 5MW

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

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

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

7.4 Maximizing Utilization

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

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

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

7.4.1 Draft Limits

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

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

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

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

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

7.4.2 Tyee Lake Draft

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

The curtailment curve in Figure 9 illustrates utilizing a worst-case scenario (a repeat of 2018). For this inflow case, Tyee will have 20 feet of water in the lake at maximum draft. 20 feet in Tyee lakes is approximately equivalent to 8,300 MWh of available capacity.

7.4.3 Swan Lake Spill

The maximum Swan Lake reservoir height was raised from elevation 330 ft to elevation 345 ft at the end of 2016. Calendar year 2017 was the first year that the benefits of this effort were realized. In September 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.

7.4.4 Tyee Dedicated Output

As stated in preceding sections, Petersburg and Wrangell typically require approximately 200 feet of water from Tyee Lake a year to meet their Firm Power Requirements for that respective year. Tyee Lake has a capacity to only hold 148 feet of water (Elevation 1250ft to 1398ft) before it spills. Because Petersburg and Wrangel require more water from Tyee lake to meet their Firm Power Requirements than the lake has capacity for, any sales to Ketchikan could potentially be Dedicated Output. For example, consider the following scenario:

> *Tyee has a lake level elevation of 1398 feet. The lake is completely full whereas a single inch of rain would cause it to spill. If SEAPA dispatches one MWhr from Tyee to Ketchikan and there is no rain for the rest of the year, that one MWhr would have been dispatched as Dedicated Output and not Additional Dedicated Output.*

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

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

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

8.0 Emergency Operations Plan Deviation

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

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

- Supermajority vote of the Board of Directors dictates otherwise

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

9.0 Communication

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

10.0 2021 Operations Plan Summary

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

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

For the reasons demonstrated in the proposed Operations Plan and pursuant to the Power Sales Agreement, SEAPA staff proposes guide/curtailment curve elevations be used by the scheduling group as guides. If lake levels fall below the guide/curtailment curves, SEAPA will manage water resources, in consideration of current conditions, with an overall objective of restoring lake levels to their respective guide/curtailment curves. As lake levels approach the annual minimum Board approved draft limits (Tyee: 1270ft. and Swan: 280ft.), SEAPA and the dedicated resource holder(s) will enter into discussions as to whether draft limits should be adjusted. Guide/Curtailment curve elevations and minimum draft limits for Swan Lake and Tyee Lake are listed in Figure 7 and Figure 9 and correspond with the table below.

SEAPA 2021 Operations Plan Guide Curve Values

Mth/Day	12/5	1/5	2/5	3/5	4/5	5/5	6/5	7/5	8/5	9/5	10/5	11/5	12/5
SWL Guide Curve Elevation (ft)	341.0	335.3	332.2	320.3	317.6	328.6	339.5	331.6	314.3	299.2	284.3	288.4	292.7
TYL Guide/Curtailment Curve Elevation (ft)	1381.91	1360.39	1340.99	1314.32	1284.53	1275.33	1316.16	1327.94	1326.62	1324.02	1321.36	1331.69	1324.32

For reference, past Operations Plan minimum draft limits are listed below. With the predicted inflows for CY2021, the 2021 Operations Plan proposes that Swan Lake and Tyee Lake draft limits be 280ft and 1270ft respectively.

SEAPA Historical Draft Limits								
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	2020	**2021**
Swan Lake	275 ft	285 ft	275 ft	273 ft	273 ft	280 ft	280 ft	280 ft
Tyee Lake	1265 ft	1280 ft	1270 ft	1261 ft	1261 ft	1260 ft	1280 ft	1270 ft

Please consider the following suggested motion:

SUGGESTED MOTION
I move to approve the 2021 SEAPA Operations Plan as presented in the December 10, 2020 Board packet.

SOUTHEAST ALASKA POWER AGENCY
CEO REPORT

DATE: December 2, 2020

TO: SEAPA Board of Directors

FROM: Trey Acteson, Chief Executive Officer

SUBJECT: CEO Report

CORONAVIRUS (COVID-19) UPDATE:

The entire White Cliff building was closed to the public for several weeks due to rising infection rates. Cases have since tapered off and the building was reopened to the public on December 1st. I remain especially concerned regarding employees who have traveled out of state, as this appears to pose one of the highest risks for exposure and eventual spread.

SEAPA's hydroelectric projects remain closed to the public, except for the dock facilities. Contractors are required to submit a detailed screening questionnaire and gain SEAPA Management approval prior to visitation. Contractors traveling from out of state are still required to provide negative test results within three days prior to flying. COVID-19 travel restrictions and personal safety concerns have resulted in deferral of certain work into 2021.

COVID-19 supply chain issues have remained relatively minimal.

Guidance by Governor Dunleavey and the CDC continues to change with conditions on the ground and as they learn more about the virus. The most recent discussions are centered around prioritizing distribution of a vaccine and how that may play out. Employers will not be able to force employees to take the vaccine because it is being approved under an emergency use authorization, meaning that it has not been through the typical multi-year review process. As a vaccine becomes available to the general population, Employers may want to consider a different approach such as incentivizing participation.

SAFETY:

We unfortunately had an employee report an injury that occurred during lifting. This is a recordable lost-time incident. The employee is anticipated to return on light duty prior to the end of the year and will return at full capacity when cleared by their doctor. Due to HIPAA regulations, I am unable to elaborate further. SEAPA provides comprehensive safety training to employees throughout the year, including proper lifting techniques. We encourage the use of mechanical means when appropriate and seek to implement engineered solutions to eliminate hazards whenever possible.

STIKINE SUBMARINE CABLE REPLACEMENT PROJECTS:

We have successfully executed the submarine cable replacement contract with Sumitomo. I would like to recognize the other members of our core negotiating team Sharon, Robert, and Joel for their months of tenacious work. Through this outstanding effort, the Agency was able to significantly lower overall costs and minimize project execution risk. The lengthy production process may push installation into the latter part of summer next year, but this should help ensure that shoreside work is accomplished well in advance.

GOVERNMENTAL AFFAIRS & EXTERNAL INDUSTRY ACTIVITIES:

The Alaska Power Association (APA) is the statewide trade association that represents the electric utilities that supply power to more than a half-million Alaskans from Utqiagvik to Unalaska, through the Interior and Southcentral, and down the Inside Passage. I have served several years as APA's Chairman of the Manager's Forum and Vice-Chair of the Hydropower Committee. I am honored and humbled to inform the Board that I was elected as the Alaska Power Association's new President during their Annual Conference. Serving as APA's President will further enhance SEAPA's strategic relationships with the Alaska Energy Authority, State Legislators, and key contacts at the Federal Level.

Engagement on legislative issues has been difficult in this contentious election year and travel restrictions due to COVID-19 have exacerbated the situation. Fortunately, SEAPA's strong relationships with State, Regional, and Federal advocacy groups have been extremely helpful in maintaining a presence with decision makers. It is important to recognize the enhanced value of APA, NWHA, and NHA during these challenging times.

There may be much work ahead if the new administration seeks to reverse progress achieved over the last few years. This may include the Waters of The United States (WOTUS), Roadless Rule, and hard-fought hydropower regulatory reforms. There will also be several new incoming legislators at the State level that may change political alignment on influential committees.

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

The joint ADNR Reclamation Fund is a holdover issue from restructuring. An attempt was made at that time to cleanly separate the FDPPA project owners, including acknowledgement of the FDPPA's name change to SEAPA, release of joint liability, insurance requirements, and performance guarantees. This effort was through what was referred to as the *Second Amendment to Lease and Easement Documents for the Tyee Lake, Swan Lake, Terror Lake and Solomon Gulch Hydroelectric Projects* (Amendment #2). However, this amendment was never finalized by the parties and annual reclamation contributions have continued to be collected and held jointly. Complicating matters is the fact that SEAPA owned projects are under the Juneau ADNR office jurisdiction and Kodiak Electric and Copper Valley Electric projects are under the Anchorage office. There has also been turnover in those offices and loss of institutional knowledge on the issues since restructuring.

Disentanglement remains a priority for SEAPA. The Agency re-engaged the latest decision makers at ADNR earlier this year and we have since resumed discussions on Amendment #2. SEAPA reviewed alternatives such as a bond or letter of credit in lieu of our annual $37,500 payment but have confirmed these alternatives would be much more expensive. We are currently working to finalize Amendment #2 and anticipate an additional side agreement to memorialize

SEAPA continuing an annual payment of $37,500 under a separate dedicated reclamation reserve account.

HYDROSITE INVESTIGATION (HSI) UPDATE:

An update will be provided in executive session.

BEST PRACTICES AND PROCESS IMPROVEMENTS:

Staff has further refined the Budget format to enhance information available to the Board and streamline the review process. I look forward to a detailed discussion on the Budget.

The update to administrative policies is slowly progressing as time allows. Many of these policies must address a broad spectrum of scenarios specific to the Agency and the Collective Bargaining Agreement. SEAPA does not have a dedicated Human Resources person so this time-consuming effort must be driven by Kay and me, with significant support from our HR legal consultant. We have proposed additional funding in this area for 2021 to help advance this important initiative. The Board will be provided individual sections for consideration and approval as content is developed.

PERSONNEL:

The new SCADA Network Architect position has been broadly advertised but interest has been extremely low. Most people in the electric utility industry are considered critical infrastructure and therefore have remained actively employed. Hopefully, the lack of interest is just the typical year-end slowdown and will pick up after the first of the year. Prior to the pandemic, I used conferences as an additional recruitment conduit, which has not been possible this year.

Brent Mill has given written notice of his retirement date of January 20, 2021. The Agency extends its gratitude for Brent's dedicated years of service. We have subsequently posted and filled his position at Tyee with an in-house applicant. This vacated the Roving Relief Position, which was also posted and filled in-house. That has left us with a vacant Operator/Mechanic position at Swan Lake which we are now actively recruiting.

SOUTHEAST ALASKA POWER AGENCY

Date: December 1, 2020

To: Trey Acteson, Chief Executive Officer

From: Clay Hammer, Operations Manager

Re: Report for December 10, 2020 Board Meeting

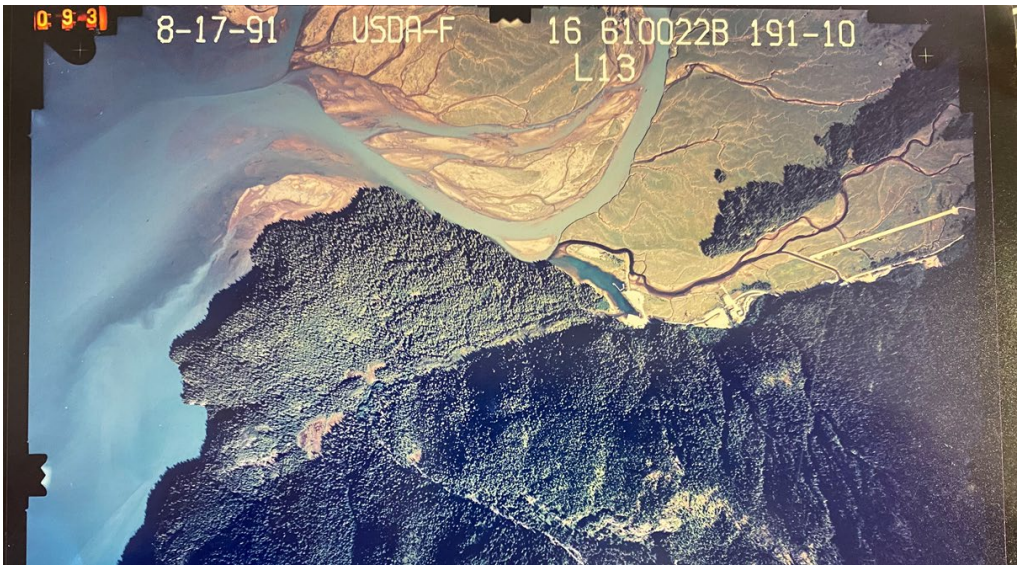
MAJOR CONTRACTS and PROJECTS

Tyee Road Access to Tidewater Project

Access to the Tyee facility continues to be problematic given the only two means of access are by air utilizing contract aircraft and runway or by boat through a shallow tidal river estuary. This presents complications when weather and tides are not favorable creating serious logistical challenges for getting crew and goods to and from the plant as well as any form of outside assistance in the event of an emergency.

A road route to deeper tide water has been identified that would include a small dock option and a place to unload goods and materials without having to maintain or transit the narrow river channel. What remains is Preliminary Design work to firm up the road route and design, quantify material amounts, and identify permitting costs and requirements.

A Request for Proposals issued on August 26, 2020 for Preliminary Design work and three bids were received. Staff will seek the Board's direction under New Business in the Agenda on whether to complete this next increment of work or shelve the project and explore other options.



Tyee Access Route by water (circa 1991)
Bradfield River Delta and current Tyee Plant Access Route

Tyee Cooling Water Pump Project

Age, corrosion, and capacity concerns expedited the need for a complete cooling pump replacement at the Tyee Plant. The current model and design were no longer supported by the manufacturer, so a new off-the-shelf replacement had to be found. Beckwith and Koppel, a Seattle supplier, was able to locate replacements that were as close to an original fit as possible. The newer pumps have a full range of parts availability and are well supported in the industry. The pumps were delivered to the Tyee Plant at the beginning of October and the crew has been fitting the installation into their regular work schedule with completion expected by the end of this month.

Cooling Water Pumps on their way to Tyee

Brushing Program

SEAPA's Brushing Crew wrapped up the 2020 brushing season with some finish-up work within the Woronkofski Island right-of-way. This right-of-way is made up primarily of bush pines, small conifers, and muskeg, however in some locations, there are stands of Alder that grow at a phenomenal rate. Favorable weather has accelerated growth the last few seasons causing these areas to begin encroaching on the line. The crew used the Argo to access these areas to perform necessary clearing.

The Agency’s Vegetation Management Plan continues to evolve into a formal document and program with a predictive cut schedule. What remains is some final editing of the right-of-way spreadsheets and consultation with a forester who can review video footage collected by staff to

help assign the cut schedule based on vegetation type and height. This would facilitate an educated assessment of the entire right-of-way to use as a brushing benchmark.

A brushing schedule is drafted for 2021 with areas of contract work scheduled to go out to bid for Vank and Revillagigedo Islands pending the Board's approval of this work in the budget.

Sections of completed Woronkofski work

Land Slide Wrangell Service Spur

Also known as The Forgotten Line this spur connects the Wrangell Switchyard to the Wrangell Substation. A local resident noted the slide while out hunting and reported to staff at Wrangell's SEAPA office. A site visit revealed that a land slide originating 1800 feet up the hillside had come down through a creek bottom blocking the service road with wood and debris for about 200 feet with an average depth of about 4 feet. The transmission line in this location is approximately 15 feet off the ground here and it will require a local outage to safely open the service road again. SEAPA is currently waiting on a quote from a local contractor whose company is located two pole spans away along the service road to do the work. Given that this area is not open to public vehicular traffic, this work can wait until the annual maintenance outage to be completed.

Aerial Photo of Wrangell Landslide

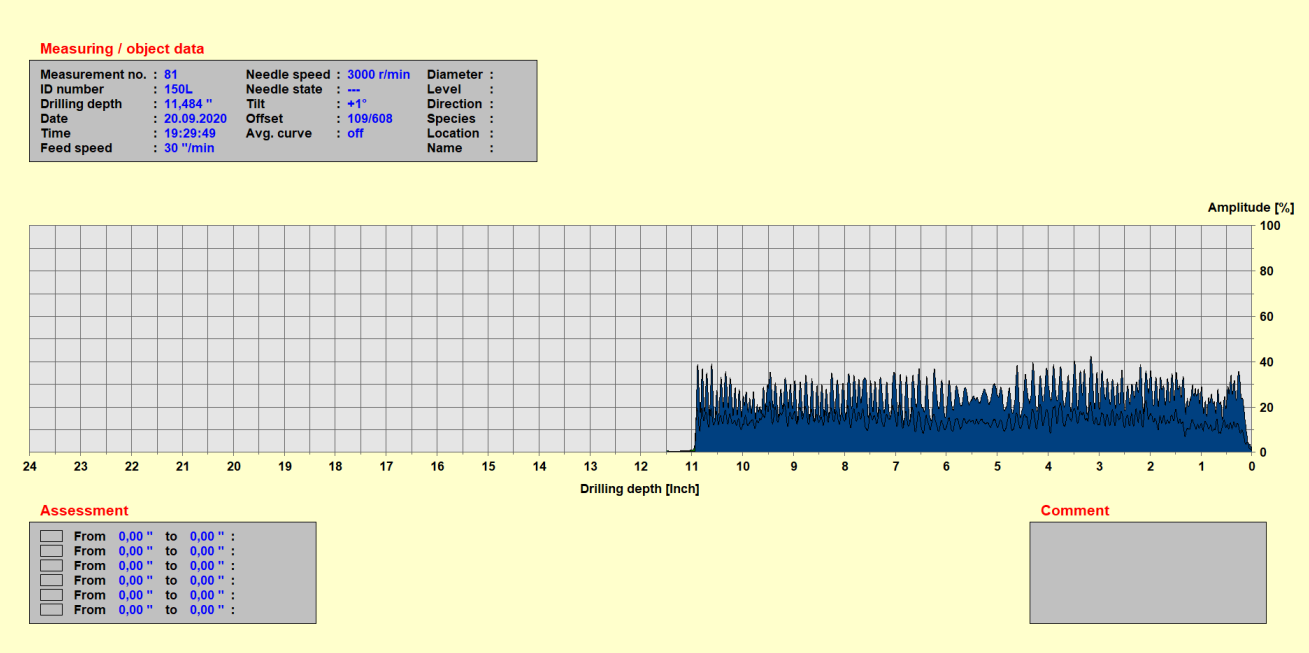
On-site View of Wrangell Land Slide

View of Wrangell Land Slide looking up towards Point of Origin

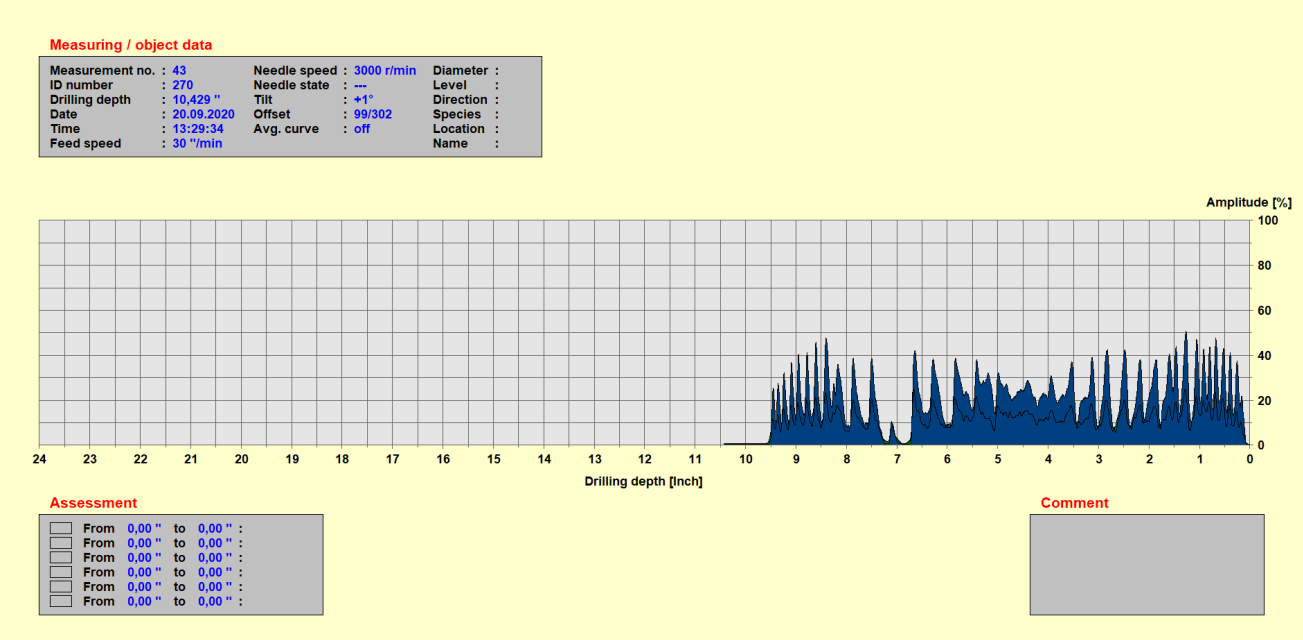
Swan/Bailey Transmission Line Wood Pole Inspections

As part of the annual line maintenance work this fall, wood pole testing was included with climbing inspections on 15 T-line structures along the Swan/Bailey line. These line structures consist of two to three wooden poles each and were tested using SEAPA's IML Resistograph tool. Each of the poles were sampled in three locations in the upper 1/3 of the pole which is the most common area for decay to occur in the southeast region. In total 15 structures totaling 36 poles were sampled and reviewed by SEAPA staff.

Of the 108 test samples reviewed, a total of seven came back for further investigation for possible rot or decay. These samples have been forwarded to IML for review and interpretation. Currently, however, none of the samples indicate imminent failure of any particular pole.



Resistograph Sample of Pole 150 (Solid pole)



Resistograph Sample of Pole 270 (Potential Rot indicated at 7” Mark)

IML Resistograph Tool

Final Heavy Freight Run of the Season

At the end of October, the last heavy freight run of the season was conducted using Breakaway Adventures latest vessel, the Rainforest Islander. The Islander is a 75-foot landing craft style vessel with a hauling capacity of 45,000 pounds. Based out of Wrangell, the boat is also a 28-passenger ferry with a foam-based fire suppression system that allows it to haul bulk fuel per Coast Guard regulations. There were various heavy materials delivered on this run including Tyee Gate Stems, a heavy potential transformer for the Tyee substation, drums of oil, and tires for the front-end loader. This was the first trip of its kind using this vessel. It is a cost-effective alternative that fills the gap between a large tug and barge combination and SEAPA’s own crew boat.

Rain Forest Islander Loaded with Freight and Supplies for Tyee

Tyee Lake Report

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

- Winterize Forest Service Administrative Cabins
- Install traction strips on Tyee Dock
- Rebuild Plant PRV valves
- Pre-wire generators 1-2 for Dust Collector Systems
- Prep and paint Tyee Gate Stems for Gate House Project
- Replace 36’ section of potable water line in Plant
- Assist contractor with Wrangell Sub LTC service

Last quarter’s scheduled Safety Training included:

- Cold weather Operations/Slips Trips and Falls
- Eye and Face Protection
- Hearing tests and Hearing Conservation training
- Safe Lifting and Scaffolding training

Tyee Air Strip, 19.6-foot Tide

SOUTHEAST ALASKA POWER AGENCY

Date: December 2, 2020

To: Trey Acteson, CEO

From: Ed Schofield, Power System Specialist

Subject: Board Packet Report for December 10, 2020 SEAPA Meeting

Tyee Intake Gate

As reported in my September SEAPA Board report, the Tyee Intake Gate Refurbishing Project was delayed on September 19th to recondition the intake gate hydraulic cylinder. Reconditioning of the gate cylinder required it to be removed from the gate shaft and transported via helicopter to the VIGOR shipyard machine shop in Ketchikan. Due to weather delays this did not occur until September 28th.

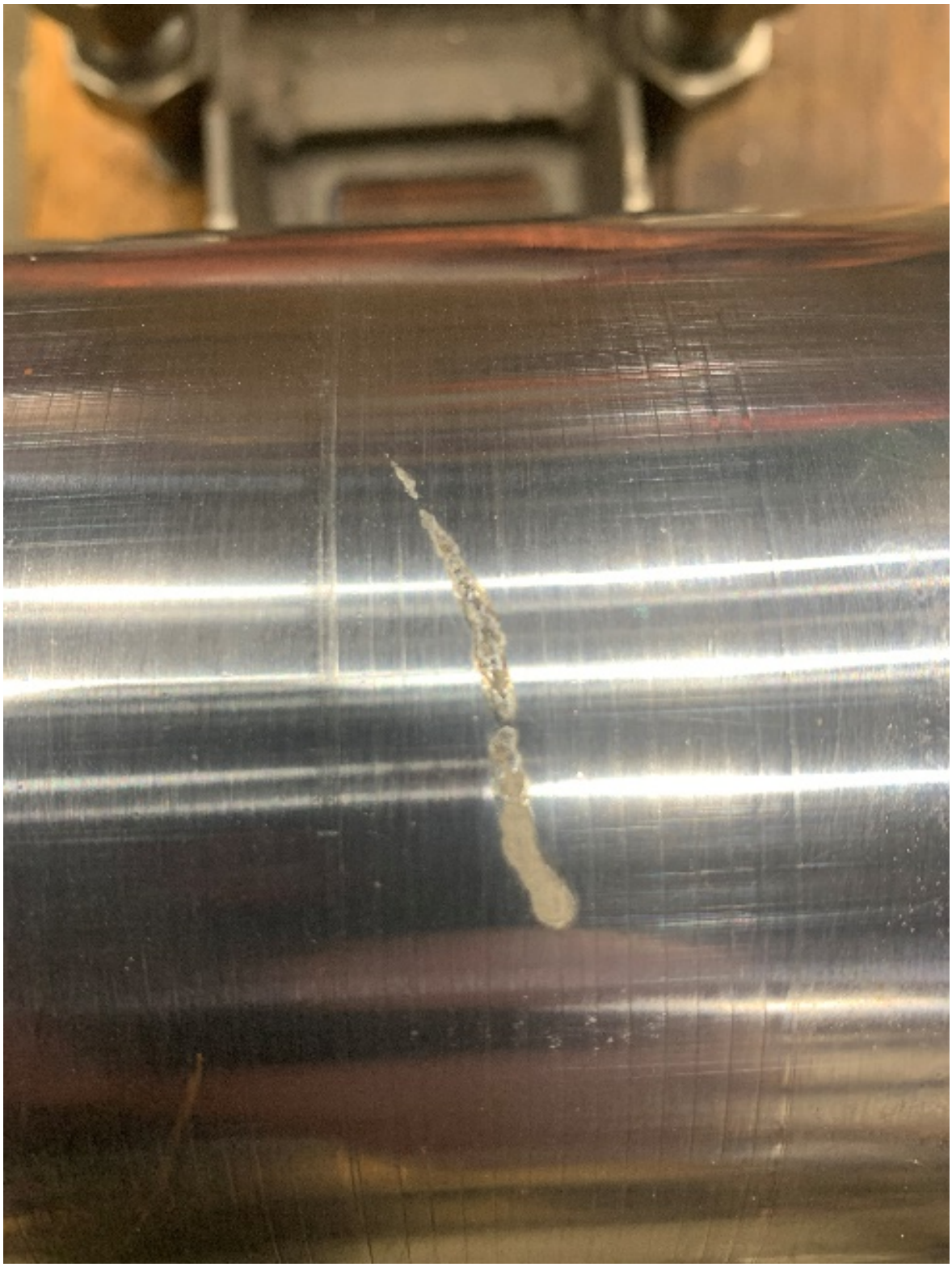
An inspection of the disassembled cylinder components determined that the cylinder rod chrome finish had been compromised due to water erosion and welding electrode arcing. The arcing damage apparently occurred during original construction. The original cylinder manufacturer we contacted about re-chroming the rod discouraged re-chroming. The type of steel stock used for the original rod requires a two-part plating process with a base plating of nickel and then chrome to withstand high moisture conditions. The cylinder manufacturer stated that because of nickel-plating requirements, re-chroming would be more costly than replacement. The manufacturer recommended replacement with a stainless-steel rod which would be the appropriate material for this application and less costly. A new stainless-steel rod was ordered on October 5th and VIGOR completed the assembly and bench testing of the cylinder operations on November 16th. The cylinder was transported back to the Tyee Gatehouse on November 18th and reinstalled in the gate shaft. Due to winter weather conditions this project will be deferred until spring of 2021.

Phase 1 of this project is complete, which is 65% of the total project. Items completed in Phase 1 incudes reconditioning and relocation of the HPU, including all electrical, hydraulic piping and new enclosure.

Phase 2 of this project will include the following tasks:

- Pull intake gate from power tunnel
- Replacement of cylinder to stems that interconnect gate
- Reconditioning of twelve gate guide rollers
- Recondition gate slow fill valve
- Replacement of gate seal
- Application of Coal-Tar protective coating
- Reinstall gate in power tunnel

- Adjust gate control limit switch



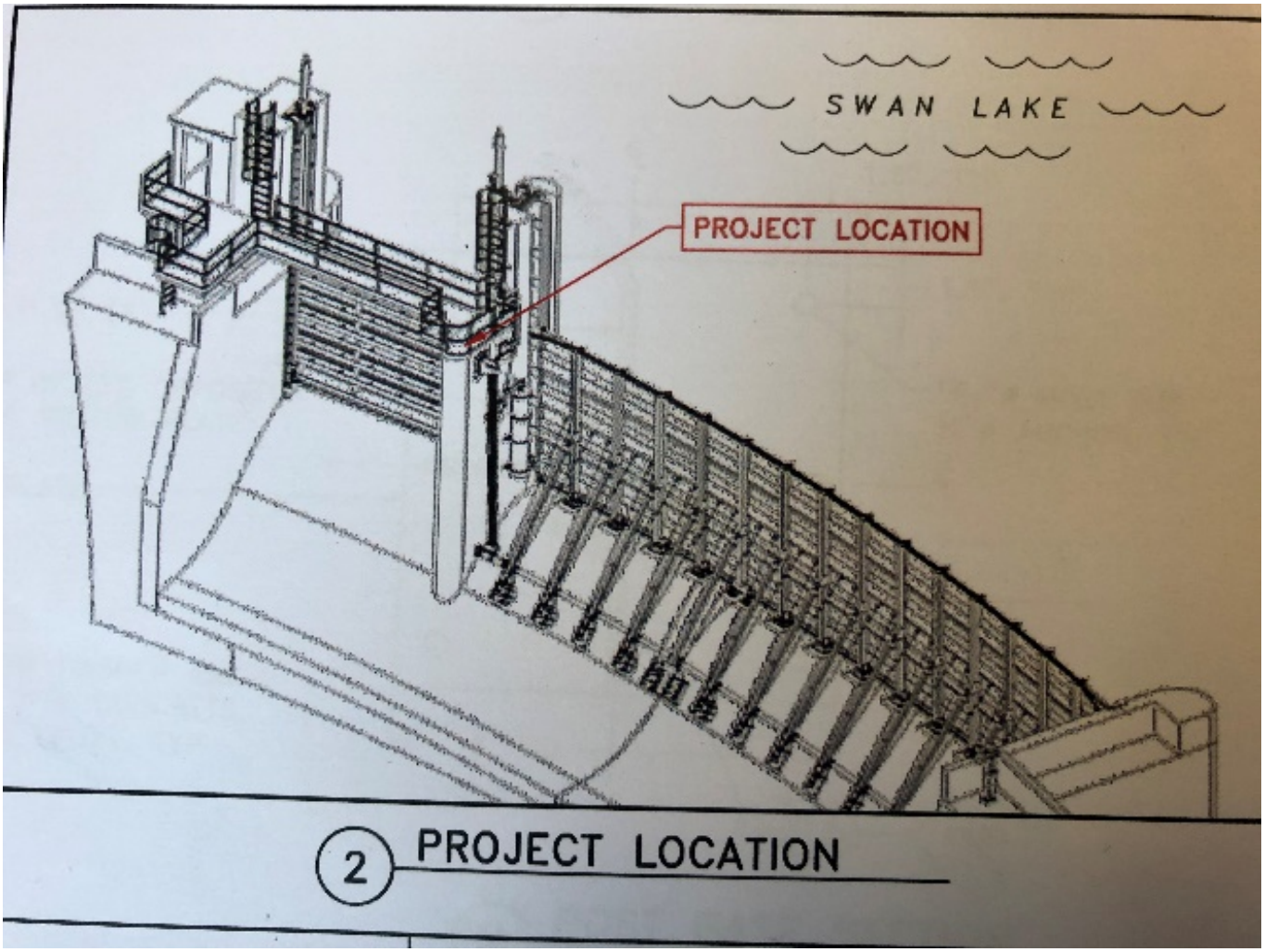
Cylinder Rod Chrome Damage

Moving Cylinder from Staging Deck into Gatehouse

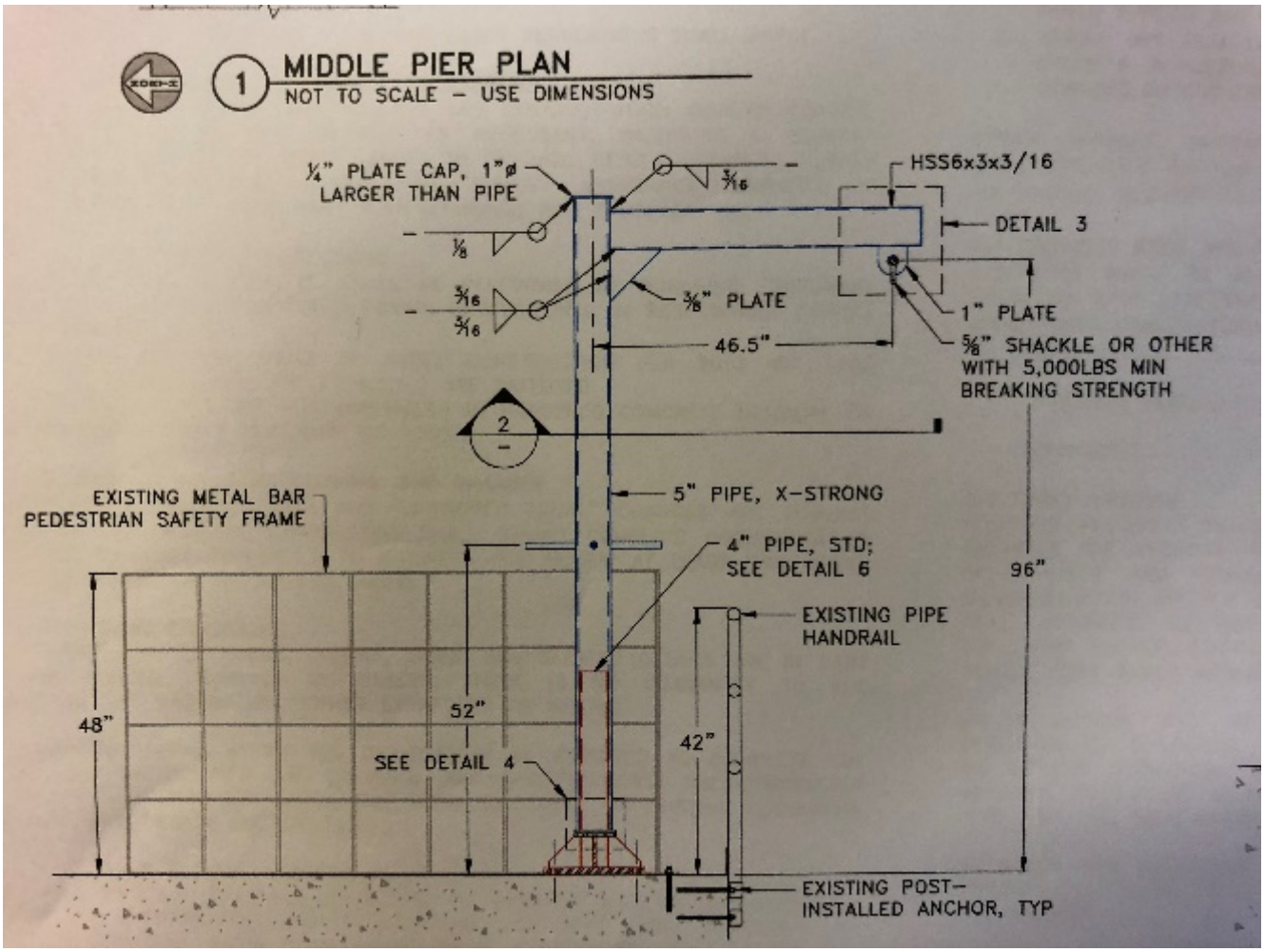
Cylinder started down Gate Shaft

Swan Lake Dam Spillway Davit

Engineering and design drawings are complete for construction of the Swan Lake Dam Spillway Personnel Recovery Davit Project (RR20344). The next phase includes manufacturing of the davit by a welding fabrication shop. Swan Lake staff will install the davit on top of the Swan Lake Dam's middle spillway pier. The davit's intended use is as an emergency personnel lifting device. The Swan Lake spillway is only accessable via a man ladder and there is no mechanical means in place to remove an injured person from the spillway. This project will be completed by Spring 2021.



Location of Davit Installation



Davit Design

Swan Lake Operations & Maintenance Report

The majority of SEAPA's generating facilities' daily scheduled maintenance activities are dictated by an automated Preventative Maintenance (PM) Program known as MAPCON. MAPCON auto generates work tasks for each SEAPA fixed asset. The Work Orders are generated on a time-driven basis, with each work order having an assigned work task determined by industry's best maintenance practices. Each month throughout the year, Work Orders are generated and assigned by the plant foreman to each journeyman. The number of generated Work Orders varies from month-to-month, averaging around 100 Work Orders per worker classification.

In addition to scheduled preventive maintenance Work Orders, there are always unscheduled maintenance activities. The following is a list of tasks performed in the last quarter of this year that were not scheduled PM activities:

- Swan Lake reservoir shore access ladder completed
- Dam "Public Danger / Warning" signage installed
- Dam air compressor building ventilation system upgrades
- Plant Scheduled Maintenance Outage

- New employee housing four-plex communications installed
- Plant floors painted
- Power supply installed for new generator brush vacuum
- Ford F-150 timing chain replaced
- New electrical system installed for response skiff
- New maintenance shop mezzanine access stairs installed
- Annual maintenance of Swan Lake landing craft performed

Federal Energy Regulatory Commission (FERC) Related Activities

- Swan Lake's Part 12 Report and Standard Technical Information Document (STID) were submitted to a FERC engineer for review. Both documents underwent major updates in 2019 due to SEAPA's Swan Lake Reservoir Expansion Project. Following its review, FERC requested that a stress analysis be provided for each Flash Board Gate (FBG) component and added to the STID. This request was above the original engineering requirements from FERC at the time the design of the Flash Board Gate was done by Kuenz engineers. Kuenz engineers were able to develop a stress analysis for each FBG component using the original modeling software. This information will now be submitted to FERC for approval prior to adding the stress analysis information to the STID.
- An onsite Owner's Dam Safety Audit (ODSA) was completed in October at both of SEAPA's hydroelectric facilities. This task is required every 5 years. The audit is performed by a third-party engineer familiar with dam and water conveyance safety. The engineer performs separate in-person interviews with SEAPA management and Plant staff to assure that the FERC licensee (SEAPA) is operating the facilities in the safest manner possible. The ODSA Report has been submitted to FERC for review and comment.
- The Swan Lake annual onsite FERC facility inspection has historically been performed by FERC in June each year. Due to COVID-19 pandemic travel restrictions, the FERC in-person inspection for 2020 did not occur. FERC, in leu of performing an onsite inspection, required SEAPA to perform the inspection and submit an Owner’s Inspection Form (OIF), submitted as a written report covering all traditionally inspected items. After FERC reviewed the OIF, it followed up with a teleconference to assure that both FERC's and SEAPA's expectations are met to assure continued safe operations of the facility.
- Swan Lake Annual Consultation letters addressed to the Alaska Department of Fish & Game and the U.S. Fish & Wildlife Service regarding the status of fish populations in the Swan Lake Reservoir were issued. This consultation is required annually under Article 401 of SEAPA's license for Swan Lake issued by FERC. Both agencies must respond by January 15, 2021 if they find any adverse impacts to the fish populations of Swan Lake. To date, no impacts have been reported.

SOUTHEAST ALASKA POWER AGENCY

Date: December 2, 2020

To: Trey Acteson, CEO

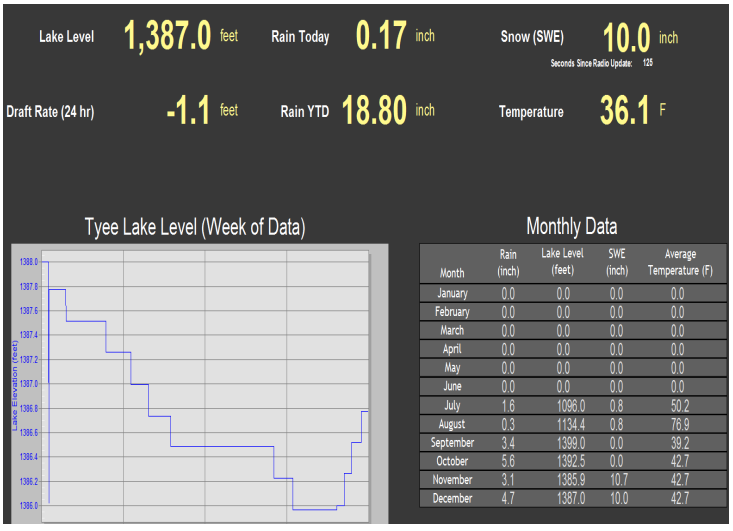
From: Robert Siedman, P.E., Director of Engineering & Technical Services

Subject: Report for December 10, 2020 Board Meeting

Tyee and Swan Lake Snow Pack

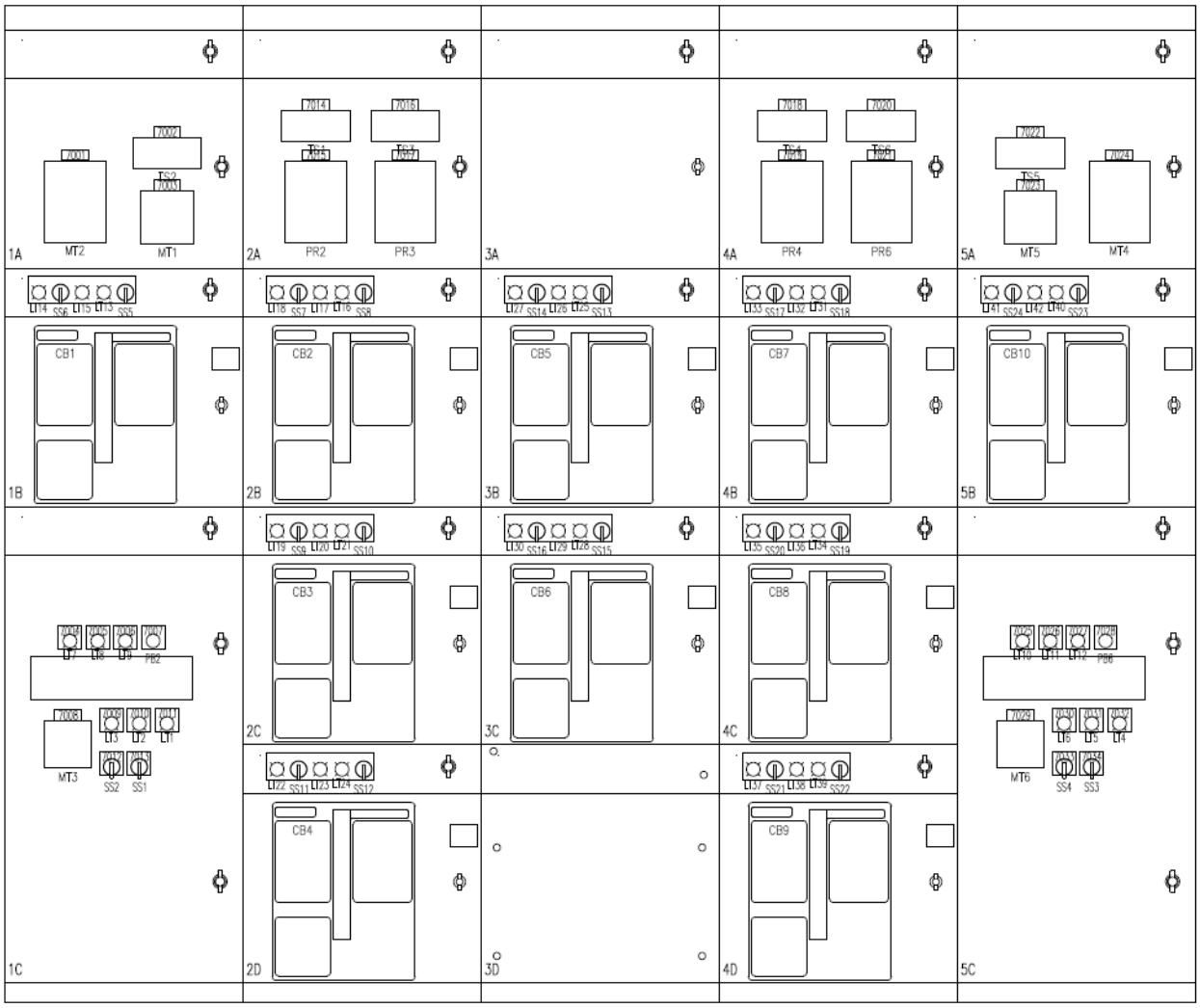
Inflows for the 2020 precipitation season have been average to above average. Swan Lake currently has 160 inches of recorded precipitation for the year. Tyee has approximately 80 inches of recorded precipitation (snow not included).

The snow pillow at Tyee is functioning well and reporting back to SCADA approximately 10 inches of Snow Water Equivalent (SWE). With an approximate 30% density rating, 10 inches of SWE equates to approximately 3 feet of snow or 22 feet of water storage. The snow season is currently in full effect at Tyee. Swan Lake snowpack is minimal with most of the recent precipitation falling in the form of rain. Both lakes are nearly at full capacity (approaching spill) which is ideal as we head into the winter season.



Month	Rain (inch)	Lake Level (feet)	SWE (inch)	Average Temperature (F)
January	0.0	0.0	0.0	0.0
February	0.0	0.0	0.0	0.0
March	0.0	0.0	0.0	0.0
April	0.0	0.0	0.0	0.0
May	0.0	0.0	0.0	0.0
June	0.0	0.0	0.0	0.0
July	1.6	1096.0	0.8	50.2
August	0.3	1134.4	0.8	76.9
September	3.4	1399.0	0.0	39.2
October	5.6	1392.5	0.0	42.7
November	3.1	1385.9	10.7	42.7
December	4.7	1387.0	10.0	42.7

Swan Lake Station Service Switchgear



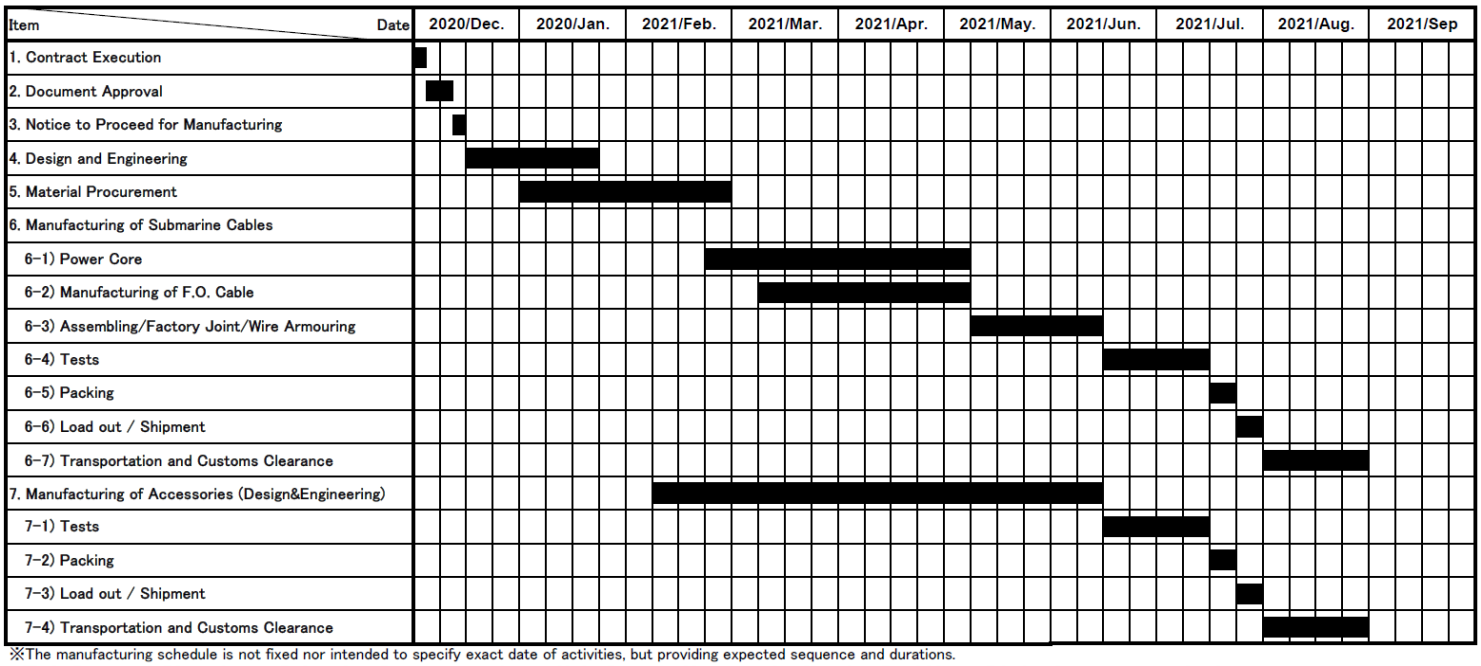
Electric Power Constructors, Inc. (EPC) has submitted 21 Transmittals for SEAPA's approval to date. Approvals have been granted for manufacturing of panelboards, automatic transfer switches, conduit, cable, and most accessories. Testing plans, commissioning plans and miscellaneous other plans required for installation have also been submitted and approved as of December 2020. The 480V major switchgear (above) is currently under review for approval. The contract is currently on schedule with an anticipated installation timeframe to occur in late June 2021.

Stikine Crossing Submarine Cables

SEAPA completed negotiations with Sumitomo in August 2020 and delivered a draft contract to their project manager for review in September. After multiple rounds of contract negotiations, a final contract was signed and awarded to Sumitomo on November 20.

Approximately 100 items were negotiated over the lengthy and rigorous negotiation period. Most notably was the contract cost. The original bid proposal from Sumitomo for a Double-Armored 3-Phase Submarine Cable (including removal and installation) was $13,941,085. After negotiations, the final not-to-exceed price agreed to was $11,700,320 for a total negotiated savings of $2,240,765 (excluding contingency).

A tentative schedule (below) demonstrates cable manufacturing beginning in late February 2020 with a proposed manufacturing completion milestone of early July 2021. If manufacturing milestone dates are on schedule as proposed, installation of the new cable should occur in late August or early September 2021.



※The manufacturing schedule is not fixed nor intended to specify exact date of activities, but providing expected sequence and durations.
Final adjustment shall be made accordingly at time of contract execution considering factory backlog at that time. Note that all activities are linked to the contract execution date.

Tyee Main Generator Governor PLCs

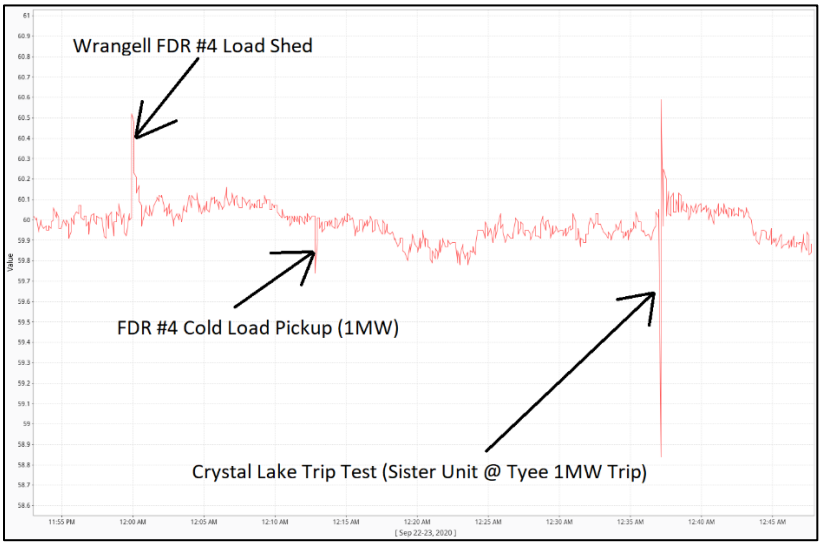
RR19305 required replacing existing Modicon Programmable Logic Controllers (PLC) hardware with Woodward Flex 500 hardware specifically designed for turbine control applications. The Tyee Modicon hardware was at the end of its useful life. A failure on the Unit 1 Governor PLC in November 2019 required installation of the spare PLC and therefore put a critical timeline on replacement.

In late August 2020, SEGRITY completed the design portion of the project to include modeling the frequency response of the new Governor PLCs.

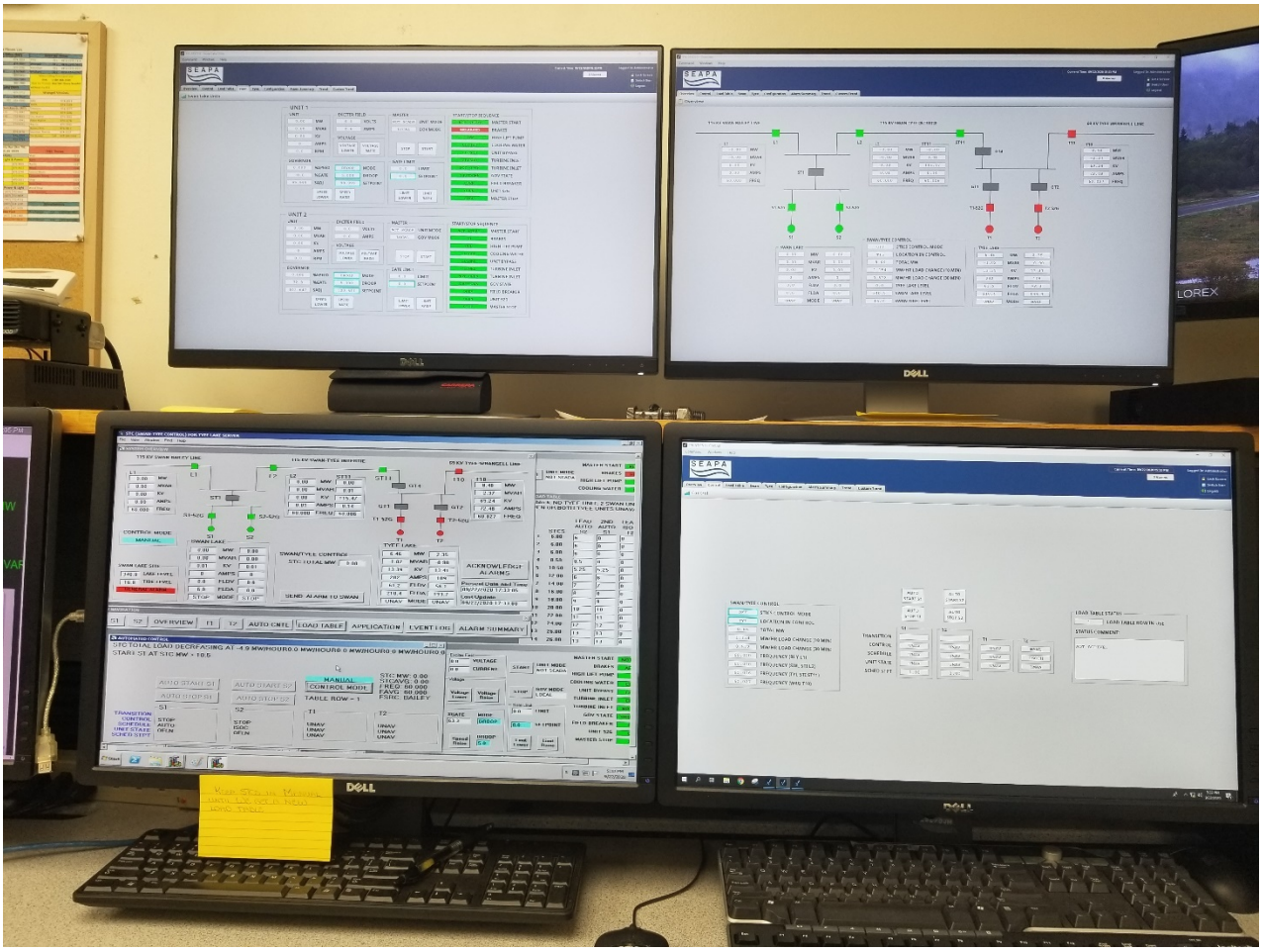
Installation of the first governor PLC (Flex 500 by Woodward) began on September 2. Due to inaccurate as-built drawings, unlabeled wiring, and unanticipated troubleshooting of existing circuits, the first unit was more challenging than anticipated. Completion of the first unit governor PLC installation occurred on September 7; however, due to the scheduled outage for annual maintenance at Tyee, testing and commissioning was postponed until September 22.

On September 22, Tyee Unit 1 was tested at full functionality to include wastewater mode, needle transitioning, droop functionality and isochronous frequency mode. A load rejection test was performed at midnight September 22 to minimize impact to Wrangell Municipal Light & Power customers on Feeder #4.

The results of the load rejection test (1MW of power dropped from Feeder #4) was extremely successful demonstrating that the new governor programming is highly responsive. As of December 2020, both Tyee Units have been commissioned and the project is 100% complete.

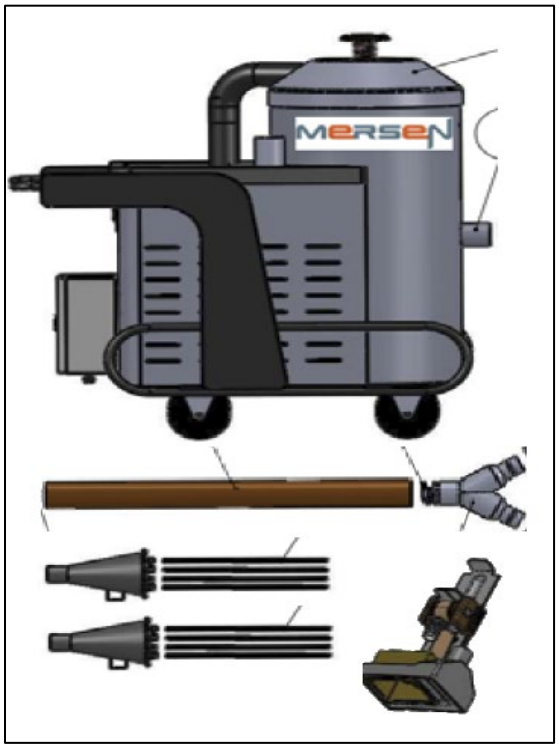


STCS Modernization (STCS II)



The existing Tyee Control System (STCS) is running on a software platform developed in 2001 known as VBA.net (Visual Basic Application). The program software (or hardware) has not been updated since it was commissioned in 2011. Operating on a Windows XP machine with software that was compiled with now unsupported programs, updating STCS became a priority to SEAPA. STCS II is currently complete regarding the design phase and is currently operating in parallel (at Swan and Tyee) to the old STCS program for testing purposes. Final commissioning is currently in progress.

Exciter Carbon Dust Collectors

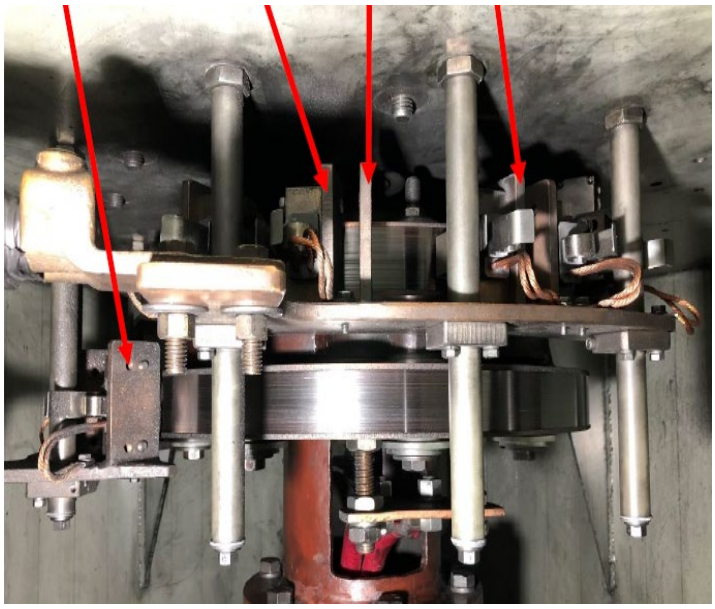


The Tyee and Swan Lake exciter carbon dust collectors have been procured and delivered to each respective site.

The design for each plant is complete and preliminary work to include installation of conduit and receptacles for power to the dust collector system(s) is also complete.

Installation (3 days) was scheduled to occur on November 17, 2020 however due to a spike in Covid-19 cases and increased heating loads in November, installation was postponed.

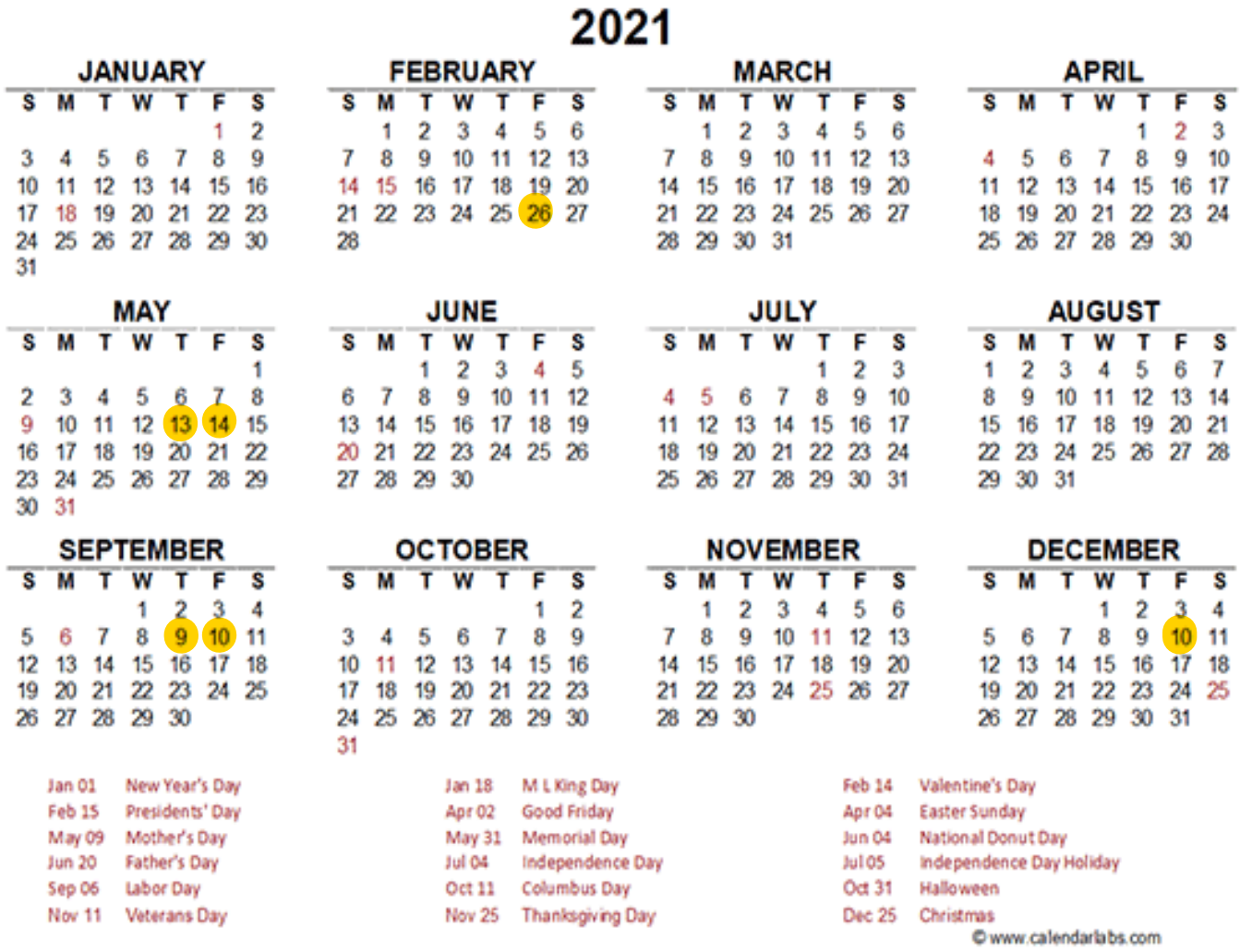
Installation requires sequential single unit outages to perform the work, estimated at 4 to 6hrs per unit. Considering the status of current Municipality loads, single unit outages are not realistic until Spring 2021. SEAPA will continue to monitor total loads and Covid-19 restrictions and schedule this project when appropriate measures are met.



End of Report

SEAPA 2021 BOARD MEETING DATES

Date(s)		Weekday(s)	Location[1]	Comments
February	**26**	Friday	Virtual	Regular Board Meeting
May	**13-14**	Thursday-Friday	Wrangell	"
September	**9-10**	Thursday-Friday	Petersburg	"
December	**10**	Friday	Ketchikan	"



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

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

2021 MEETING DATES | EVENTS

DATE	ORGANIZATION/EVENT	LOCATION
	JANUARY	
1	**SEAPA Holiday (New Year's Day)**	**N/A**
4	Petersburg Borough Assembly	Petersburg
7	Ketchikan City Council	Ketchikan
12	City & Borough of Wrangell Assembly	Wrangell
19	Petersburg Borough Assembly	Petersburg
21	Ketchikan City Council	Ketchikan
26-28	APA Manager's Forum, State Legis. Conf & Board of Directors Mtgs	Virtual
	FEBRUARY	
1	Petersburg Borough Assembly	Petersburg
4	Ketchikan City Council	Ketchikan
9	City & Borough of Wrangell Assembly	Wrangell
9-10	SE Conference Mid-Session Summit	Virtual
15	**SEAPA Holiday (President's Day)**	**N/A**
16	Petersburg Borough Assembly	Petersburg
17-18	NWHA Camp & Annual Conference (& FERC Meeting?-TBD)	Virtual
18	Ketchikan City Council	Ketchikan
23	City & Borough of Wrangell Assembly	Wrangell
26 (Friday)	**SEAPA BOARD MEETING**	**VIRTUAL**
	MARCH	
1	Petersburg Borough Assembly	Petersburg
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	Wrangell
	APRIL	
1	Ketchikan City Council	Ketchikan
5	Petersburg Borough Assembly	Petersburg
8-9	NWHA Strategic Planning Meeting	TBD
13	City & Borough of Wrangell Assembly	Wrangell
TBD	SEAPA Audit	SEAPA Office
15	Ketchikan City Council	Ketchikan
19	Petersburg Borough Assembly	Petersburg
27	City & Borough of Wrangell Assembly	Wrangell
28--30	NHA Water Power Week	Virtual
	MAY	
3	Petersburg Borough Assembly	Petersburg
6	Ketchikan City Council	Ketchikan
11	City & Borough of Wrangell Assembly	Wrangell
13-14 (T-F)	**SEAPA BOARD MEETING**	**WRANGELL**
17	Petersburg Borough Assembly	Petersburg
20	Ketchikan City Council	Ketchikan
25	City & Borough of Wrangell Assembly	Wrangell
31	**SEAPA Holiday (Memorial Day)**	**N/A**
	JUNE	
3	Ketchikan City Council	Ketchikan
6-11	APA Federal Legislative Conference	Washington, DC
7	Petersburg Borough Assembly	Petersburg
8	City & Borough of Wrangell Assembly	Wrangell
17	Ketchikan City Council	Ketchikan
21	Petersburg Borough Assembly	Petersburg
22	City & Borough of Wrangell Assembly	Wrangell
	JULY	
1	Ketchikan City Council	Ketchikan
5	**SEAPA Holiday (Independence Day)**	**N/A**
6	Petersburg Borough Assembly	Petersburg
13	City & Borough of Wrangell	Wrangell
15	Ketchikan City Council	Ketchikan
19	Petersburg Borough Assembly	Petersburg
19-22	AEGIS POLICY HOLDER'S CONFERENCE	Las Vegas
27	City & Borough of Wrangell Assembly	Wrangell

AUGUST		
2	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
SEPTEMBER		
2	Ketchikan City Council	Ketchikan
6	**SEAPA Holiday (Labor Day)**	**N/A**
7	Petersburg Borough Assembly	Petersburg
9-10 (T-F)	**SEAPA BOARD MEETING**	**PETERSBURG**
14	City & Borough of Wrangell Assembly	Wrangell
14-16	Southeast Conference Annual Meeting	Haines
16	Ketchikan City Council	Ketchikan
20	Petersburg Borough Assembly	Petersburg
28	City & Borough of Wrangell Assembly	Wrangell
OCTOBER		
4	Petersburg Borough Assembly	Petersburg
7	Ketchikan City Council	Ketchikan
12	City & Borough of Wrangell Assembly	Wrangell
18	Petersburg Borough Assembly	Petersburg
21	Ketchikan City Council	Ketchikan
26	City & Borough of Wrangell Assembly	Wrangell
NOVEMBER		
1	Petersburg Borough Assembly	Petersburg
4	Ketchikan City Council	Ketchikan
9	City & Borough of Wrangell Assembly	Wrangell
11	**SEAPA Holiday (Veteran's Day)**	**N/A**
15	Petersburg Borough Assembly	Petersburg
18	Ketchikan City Council	Ketchikan
23	City & Borough of Wrangell Assembly	Wrangell
25-26	**SEAPA Holiday (Thanksgiving & Day After)**	**N/A**
DECEMBER		
2	Ketchikan City Council	Ketchikan
6	Petersburg Borough Assembly	Petersburg
10 (F)	**SEAPA BOARD MEETING**	**KETCHIKAN**
14	City & Borough of Wrangell Assembly	Wrangell
16	Ketchikan City Council	Ketchikan
20	Petersburg Borough Assembly	Petersburg
23-24	**SEAPA Holidays (Christmas Eve and Christmas Day)**	**N/A**
28	City & Borough of Wrangell Assembly	Wrangell

(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