



City Manager/General Manager | 334 Front Street, Ketchikan AK 99901 | (907)228-5603

TRANSMITTAL MEMORANDUM

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TO: The Honorable Mayor & City Council

FROM: Delilah A. Walsh, City Manager

Initials:

DATE: November 9, 2022

File #: MGR22-017

RE: **Electric Division Manager's Report, October 2022**

Attached for the City Council review is the project status report from the KPU Electric Division for the month of October 2022. Should the City Council have questions regarding the division managers' report, staff can respond accordingly.

DRAFT MANAGER'S REPORT

ELECTRIC DIVISION

October 2022

Electric Shop and Meters

- Meters. During the month, there were fifty-six (56) meter exchanges/installs.
- Operations. Investigated, performed troubleshooting, made repairs, performed maintenance and/or installed equipment at KPU facilities:
 - No. 1 Intake level transducers.
 - No. 1 Intake trash rack pump.
 - Cap bank No. 3 communication.
 - Cap bank No. 5 communication.
 - Carlanna lake level transducer.
 - Port west feeder No. 3 relay 951 communication and testing.
 - Recloser fiber switch 24VDC power.
 - Bailey BAG No. 3 oil mist detector.
 - Bailey overhead lighting contactor.
 - Bethe feeder No. 4 outage.
 - Silvis upper lake level transducer.
 - Silvis ball head motor.
 - Silvis substation upgrade.
 - Silvis substation fiber reroute.
 - Silvis substation 4-D controller.
 - Whitman dam breaker trip.
 - Whitman Unit 2 exciter/generator trip.

Continued the metering upgrade for the Yukon system with Eaton/Cooper. Service disconnects and reconnects, system print updates, and station readings.

- SCADA Operations. Coordinated ongoing projects, investigated, performed troubleshooting, made repairs and/or installed equipment at KPU facilities:
 - Data Radio Testing (RipEx).
 - Telecom network redundancy meetings.
 - Security System Upgrades.
 - NOAA data updates.
 - New Operator city workstation setup for SCADA data reports.

SCADA file server maintenance, system password verifications, and NTP server configurations. Supported SCADA upgrade meetings. Coordinated and worked with the electric shop on SCADA networks. Continuing training in the SCADA system and PLC's (Programmable Logic Controllers). Records management activities and SCADA upgrade planning.

- Water Department. Installed, Investigated, performed troubleshooting for Water Department soda ash alarm, and chlorination plant heaters.
- Harbors. Conducted work on harbor pedestals, lights, and cleared thirteen (13) harbor trouble tickets.

- Telecommunications. No new activities.

Outages and Events

- On Wednesday October 12, 2022, at 7:14 AM, an outage affected all electric services Along Tongass Avenue. This outage was caused by failed equipment on Bethe T4 Feeder. Initially 2,246 customers were affected by the outage. Within one hour forty-one minutes (1:41), power was restored to all customers.
- On Thursday October 13, 2022, at 11:59 AM, an outage affected electric services from five substations and seven feeders. This outage was caused by a loss of generation from SEAPA. Initially 3,644 customers were affected by the outage. Within nineteen minutes (0:19), power was restored to all customers.
- On Monday October 31, 2022, at 4:28 PM, an outage affected electric services from four substations and five feeders. This outage was caused by a system fault in Petersburg due to a landslide. Initially 2,852 customers were affected by the outage. Within twenty-six minutes (0:26), power was restored to all customers.

Powerhouse & Fleet Maintenance

- Beaver Falls Hydro Project:
 - Beaver Falls Powerhouse
 - Repaired 3&4 Intake blow down valve.
 - Cleaned 3&4 Intake.
 - Completed Unit 3 governor oil change.
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 - Silvis Powerhouse
 - Fabricated & installed new air filters/brackets.
 - Repaired Louvers.
 - Serviced turbine wicket gates.
 - Completed seasonal powerhouse PMs.
 - Completed annual facility freeze protection measures.
 - Repaired Silvis Lake sign.
 - Cleaned access road ditches & culverts.
- Whitman Hydro Project:
 - Cleared logs from reservoir.
 - Troubleshoot oxygen saturation issue.
 - Conducted general brushing within project boundaries.
 - Cycled valves.
 - Modified air filtration system.
- Ketchikan Hydro Project:
 - Continued annual brushing w/in project boundary.
 - Conducted maintenance of Unit 4 bearing oiler cooler.
 - Rebuilt Unit 4 governor.
 - Cycled valves.
 - Completed penstock inspections.
- Bailey Powerhouse
 - BAG3
 - Repaired a rocker arm assembly.

- Began work to replaced oil-mist detector (OMD).
 - Repaired crankcase access hatches.
 - Powerhouse air compressor oil changes.
 - Serviced the station's emergency standby generator.
 - Painted powerhouse floor.
- Diesel generation outage support.
- Fleet maintenance, including:
 - Linkbelt excavator brusher motor repair.
 - Telephone Division bucket truck hydraulic hose replacements.
- Contract 22-19 Flatbed Truck & Contract 22-20 Pickup Truck: No bids received for either contract; Electric is in contact with a Ford dealer regarding other procurement options.

Regulatory and Dam Safety

- Filled Beaver Falls Final License Application.

SEAPA

- The next regular board meeting is scheduled for December 8, 2022, in-person in Ketchikan, Alaska.
- For additional information please visit SEAPA's web site at: <https://www.seapahydro.org/>

Transmission & Distribution Work

- In-house tree trimming efforts on North Tongass Highway continued due to no bids being received for contracts No. 22-04 or No. 22-07.
- Continued replacement of 35kV insulators.
- Completed a multitude of service upgrade disconnect/reconnects.

Division Staffing

- There are no changes in staffing, the Electric Division continues to be short staffed; the Division is currently staffed at 33.4 Full Time Equivalent (FTE) of the authorized 43.4 FTE, or seventy-seven percent (77%).
- Staffing by Department/Section:

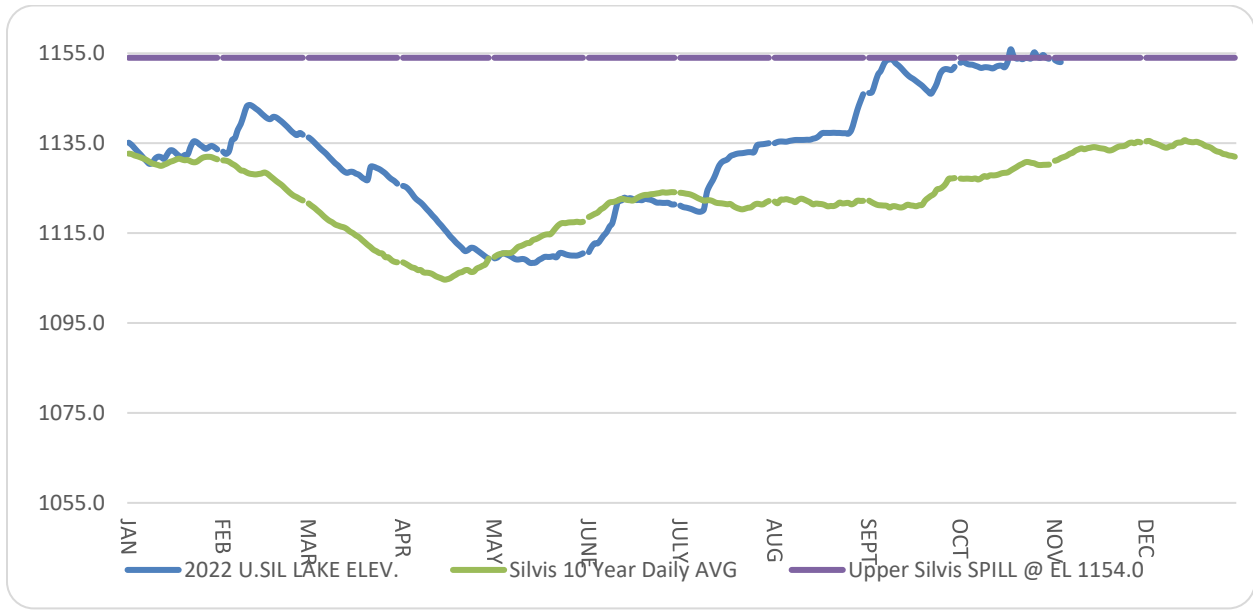
FTE	Authorized	Current	
Management, Front Office, and			
Regulatory	6	5	83.3%
Operations	8	5	62.5%
Metering and Generation	7.5	5.5	73.3%
Service and Line	8	6	75.0%
Maintenance	9	7	77.8%
GIS/CADD	1.4	1.4	100.0%
Warehouse	1.5	1.5	100.0%
SCADA	2	2	100.0%
	43.4	33.4	77.0%

- For the month, with scheduled vacations and sick leave, the Division operated with an effective capacity of fifty-nine percent (59%) of the authorized FTE not including overtime (OT).
- There were 359.5 hours of required OT for the month. Year-to-date OT is 2,796.5 hours.
- Interviewed two (2) system operator and two (2) mechanic candidates.
- The Division continues to work with the City Human Resources (HR) Department for employee recruitments.

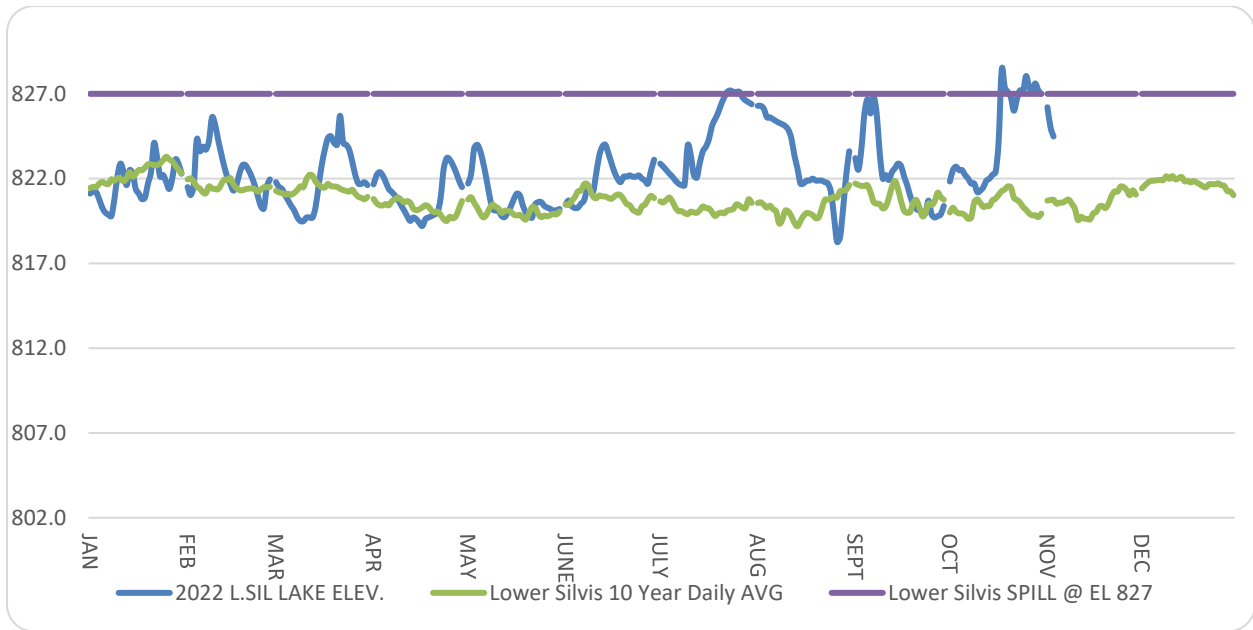
System Loads and Weather

- KPU loads for the month were equal to the 10-year average. The 10-year average total system load is 13.6 GWh; this month was 13.6 GWh, Equal to the 10-year average.
- The diesel generation total was 0.06 GWh, diesel was used for system restoration.
- The normal monthly precipitation is 18.37 inches; this month was 21.53, 17.8% above the normal value.
- The normal monthly degree days heating is 583 (a measure of how cold the temperature is in a given month); this month was 471, 19.2% below the normal value. This indicates a warmer month than normal or less heating required.
- Note: Values are from NOAA Climate Observed Weather.

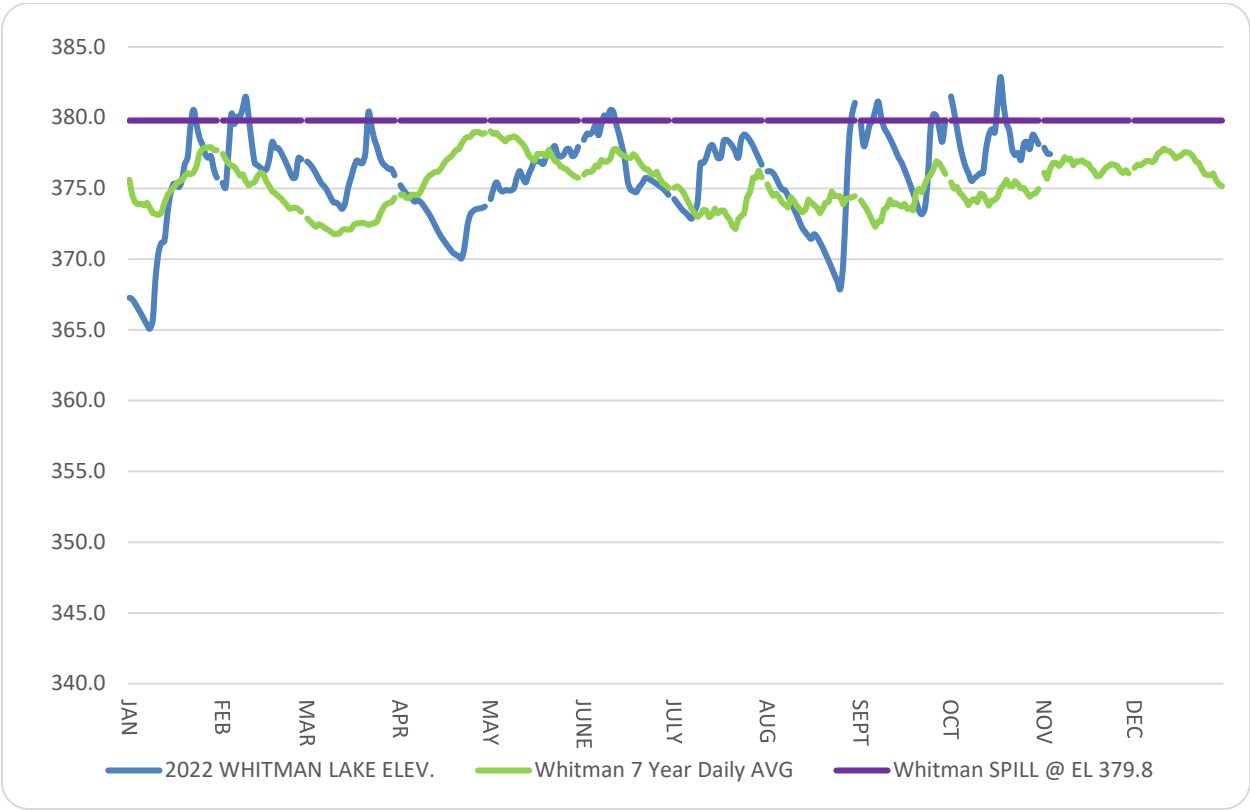
October 2022 KPU Lake Graphs



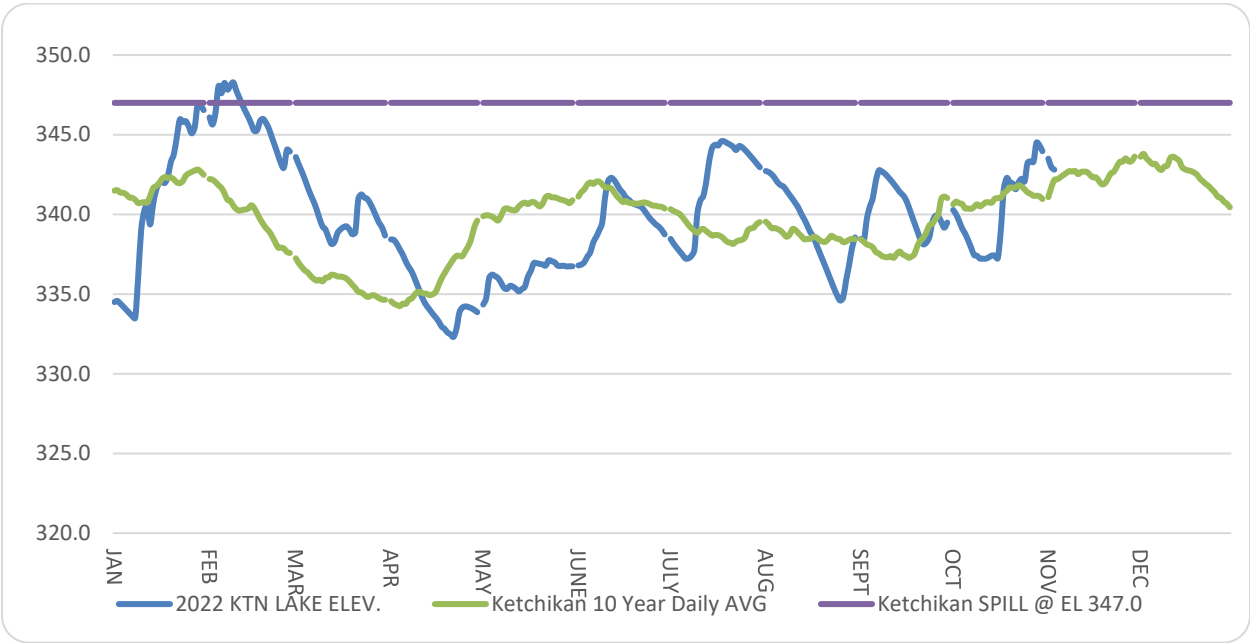
Upper Silvis Lake



Lower Silvis Lake



Whitman Lake



Ketchikan Lake