



HURRICANE CITY

UTAH

Mayor
Nanette Billings

City Manager
Kaden C. DeMille

Power Board
Mac J. Hall, Chair
Jerry Brisk
Pam Humphries
Dave Imlay
Joseph Prete
Charles Reeve

Power Board Meeting Agenda

10/4/2023

3:00 PM

Power Department Meeting Room – 526 W 600 N

Notice is hereby given that the Power Board will hold a Regular Meeting in the Power Department Meeting room located at 526 W 600 N, Hurricane, UT. A silent roll call will be taken, along with the Pledge of Allegiance and prayer by invitation.

AGENDA

1. Pledge of Allegiance
2. Prayer
3. Approval of minutes from September 2023

STAFF REPORTS

Scott Hughes/Power Director
Brian Anderson/Transmission & Distribution Superintendent
Mike Ramirez/Service Superintendent
Jared Ross/Substation & Generation Superintendent

BUDGET

1. Budget

OLD BUSINESS

1. Capacity Update
2. Update regarding purchase of Sky Ranch Area assets from Rocky Mountain Power

NEW BUSINESS

1. Discussion regarding pole attachments and fees
2. UAMPS Updates

ADJOURNMENT

The above notice was posted to the Hurricane City website, the Utah State Public Notice Website, and at the following locations:

1. Hurricane City Office – 147 North 870 West, Hurricane, UT
2. US Post Office – 1075 West 100 North, Hurricane, UT
3. Washington County Library (Hurricane Branch) – 36 South 300 West, Hurricane, UT





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1 The Hurricane City Power Board met on September 6, 2023, at 3:00 p.m. at the Clifton Wilson Substation on
2 526 W 600 N.

3
4 In attendance were Mac Hall, Jerry Brisk, Pam Humphries, Charles Reeve, Dave Imlay, Joseph Prete, Scott
5 Hughes, Michael Ramirez, Mike Vercimak, Dayton Hall, Crystal Wright, Bruce Zimmerman, and Linda
6 Zimmerman.

7
8 Mac Hall welcomed everyone to the meeting; Scott Hughes led the Pledge of Allegiance and Mac Hall offered
9 the prayer. Pam Humphries motioned to approve minutes from the August 2023 meeting after two
10 modifications. Charles Reeve seconded the motion. Dave Imlay abstained. Motion passed unanimously.

11
12 **Scott Hughes:** Scott Hughes explained that our organization structure has changed and introduced Mike
13 Vercimak, Public Works Director. The Power Department has been restructured underneath the Public Works
14 Department. Jared Ross and Brian Anderson will be absent from the meeting as they are representing
15 Hurricane City Power at the IPSA meeting. Jordan Steglich is being tested the next two days as he attempts to
16 pass his Journeyman test and officially complete his apprenticeship. We are still down one employee and need
17 to update the job description to get that position posted. Public Power Day is coming up on October 3, 2023,
18 from 4-7 pm.

19
20 **Brian Anderson:** Mike Ramirez reported for Brian Anderson. Provided the update for the 1150 West upgrade.
21 The Line Crew is working on reinsulating and reconductoring that line. Provided an update on the 700 West
22 road project that Interstate Rock has been completing. We have been laying conduit as Interstate Rock digs
23 trenches to install the power in the area where they're working. This will be an ongoing project. There was a 3-
24 phase vault that was cut-in by both the Line Crew and Service Crew in an area off 100 North 228 West. The
25 crews came in late and worked through the night to alleviate the impact on large businesses and a bank in that
26 area. The crews worked together again on another project to change out a switch on Old Highway 91 due to a
27 new trucking business coming in. It was another after-hours outage due to the impact on the large industrial
28 companies in that area.

29
30 **Mike Ramirez:** Mike Ramirez reported that we are going to make additional changes to the Standards &
31 Specifications before taking it back for approval to the City Council. The Service Crew has been very busy with
32 multiple projects throughout the city.

33
34 **Jared Ross:** Mike Ramirez reported for Jared Ross with an update on the Three Falls Substation. One of the big
35 projects completed over the last month is the installation of the control panels. The back of the panels is an
36 open frame making them very accessible. The control building is almost complete. Battery banks still need to
37 be installed. Jared has been working on the welding for the aluminum bussing. It takes a great deal of time.
38 Dave Imlay replied that it is a very specialized skill and we're lucky to have him. They've been steadily working



39 with a shortage of guys in their crew. Reported on a failure of Capacitor #17 which is located near 3700 West.
40 The equipment has been ordered to replace that, but the lead time was quoted at 120 days for delivery. That
41 capacitor has been taken down until the replacement comes in. Generator #5 has been shipped out for repair.
42 We haven't received a report on what the damage is yet. Reported on some fleet equipment repairs that are
43 being taken care of.
44

45 **Budget:** Scott Hughes presented the regular monthly graphs and numbers. He feels a lot better overall about
46 the status of the finances as months progress. We're not losing on the cost of power and the existing project
47 costs have mostly already been spent. The department is taking very seriously the position we're in and not
48 spending money on anything we absolutely don't need. We're not fully funding operational costs yet and will
49 need to research a rate increase to get that operation margin back to where it needs to be. Dave Imlay
50 requested a chart prepared for the next meeting showing power costs vs revenues so we can determine where
51 those rates need to be. Scott Hughes stated he had a chart that he will refresh for the next meeting. That chart
52 showed that an approximate 30% operating margin has historically been enough to cover operations cost.
53 Charles asked where we were with AMI metering. Mike Ramirez replied that he had requested updated pricing
54 from a few different companies. With the budget this year being so tight, we are waiting to see how power
55 prices go during the winter and then try to add this project back into the next budget year.
56

57 **Capacity Update:** Scott Hughes explained Circuit 101 is the one that goes south that is having the issue with
58 capacity. We started a project to get more capacity to that area using Circuit 103. Dayton Hall helped work up
59 an agreement for developments. These included developments received approved preliminary plats but had a
60 condition placed on the approval not allowing signed construction plans until the capacity issue was resolved
61 in their area. The cost for us to complete the work to get the Circuit 103 project done was calculated with a
62 cost per included developments based on various factors. Developers were contacted with that information,
63 and all were interested in participating. The City Manager, Kaden DeMille, requested us to obtain bids from
64 outside contractors for the project to compare their cost to ours for completion of the project. Once we have
65 all the bids in, we will determine which direction to proceed.
66

67 **Update regarding Sky Ranch Area Buyout from Rocky Mountain Power:** Scott Hughes reported we have
68 moved forward with the purchase of the Sky Ranch area asset purchase. We have delivered the check to them
69 for payment. We met with the Rocky Mountain Power staff to coordinate communication to the residents in
70 that area. Their letter went out last week and we plan on sending our notification letter tomorrow. The Utility
71 Office is working on creating vacant accounts for all those residents. Those residents are coming in to fill out
72 applications currently. We will start switching out meters in the middle of October. They will receive their first
73 Hurricane City bill at the beginning of December. We will be scheduling in-person orientations with the solar
74 customers in that area to help the transition.
75

76 **Discussion and possible recommendation of approval for Steel 1A Solar Project Second Amended and**
77 **Restated Transaction Schedule:** Scott Hughes gave a quick recap on the Steel Solar project. This project is in
78 Box Elder County. We have signed up for roughly 2.5MW of power from this project. It is priced well at
79 \$34.66/MW. The company that is building the project has an opportunity to take advantage of a production
80 tax credit, but to do that the existing transaction schedule has to be modified. The amended transaction
81 schedule will need to be signed approving some changes. Scott Hughes explained what the transaction
82 schedule changes that were proposed would be. The project is stating that without an approved amended
83 transaction schedule the project will fail. Pam Humphries asked that if we were to choose to curtail our
84 entitlement would another member be allowed to pick up that amount to prevent an actual curtailment. Scott

85 Hughes stated he was unsure but would bring it up at the next UAMPS meeting. Charles Reeve would like us to
86 continue looking for pumped storage. It is unlikely we would curtail our entitlement because it is such a low
87 amount of energy. Dave Imlay made a motion to recommend approval of the amended transaction schedule.
88 Charles Reeve seconded the motion. All voted aye.

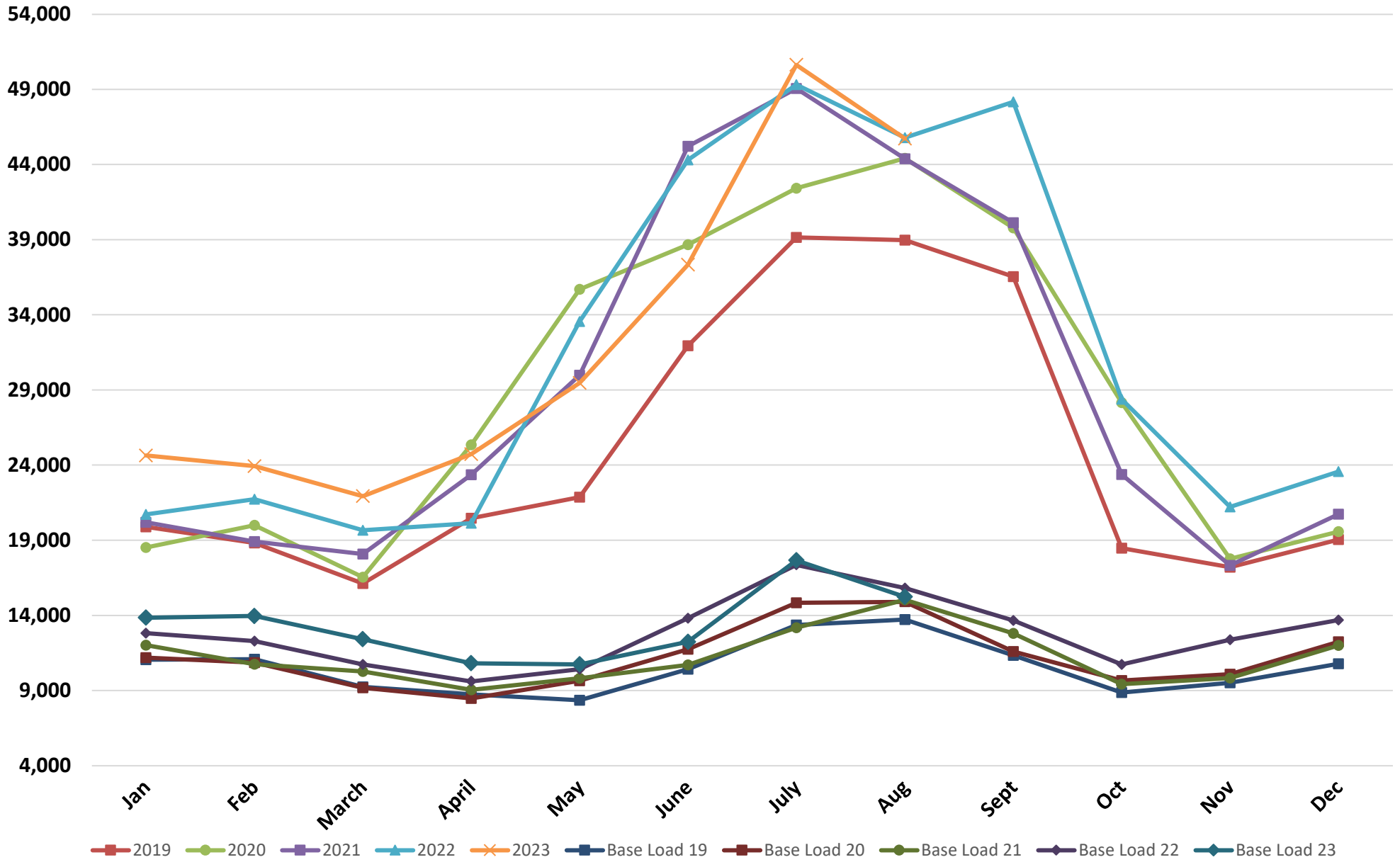
89
90 **Discussion of Cyrq Geothermal Study Project Agreement:** Scott Hughes stated that we joined as a UAMPS
91 group to look for a geothermal project. A Request for Proposal (RFP) was completed, and a grading system was
92 created to look at existing projects. Cyrq Geothermal, located in Winnemucca/Fallon, NV, scored the highest
93 on the grading system and had the lowest cost. Commercial operation date is anticipated to be December
94 2027. The price came in the \$75/MW range. We would need to express our interest in moving forward to
95 investigate this project more. Dave Imlay recommended that we continue to diversify our portfolio as much as
96 possible. We will move forward and express our interest in joining the study project.

97
98 **UAMPS Updates:** Scott Hughes provided an update on the failure of the Muddy Creek project. We recently
99 learned that the Sunnyside waste coal project was shut down as well. This is a pattern we have seen repeated
100 several times in recent years where projects have a difficult time coming to completion for a variety of
101 reasons. The market volatility has made things infinitely more difficult for resource projects. We are still
102 moving forward with CFPP. Everything on the project side looks good. They submitted a request for a Limited
103 Work Authorization (LWA) so they could begin moving forward on non-nuclear aspects of construction. Joseph
104 Prete asked what the status of the Inflation Reduction Act (IRA) money is. Scott Hughes replied that it looks
105 like we won't qualify for as much as they originally thought. Question about how the subscription progress is
106 going for this project. Possible reasons for hesitation to new subscription include concern about potential cost
107 overruns, overall risk, and nuclear power as a resource. Overall, we feel like there is interest in this project and
108 it's likely that many people are waiting for others to join. As soon as one does, it will hopefully be a domino
109 effect with subscription. Pam Humphries repeated something that Nanette Billings, mayor, had suggested at
110 the last meeting, which is that the newly elected City Councilmembers need to be invited to our November
111 and December meetings to come up to speed with our projects so they can make more educated decisions.
112 Mac Hall asked how the UAMPS Member Conference went. Dave Imlay reported that the topics were great,
113 and the presenters were fantastic. Scott Hughes reported about some points from the finance presentation
114 that he felt were important. Charles Reeve reported the information he found interesting regarding the EV
115 charging presentation.

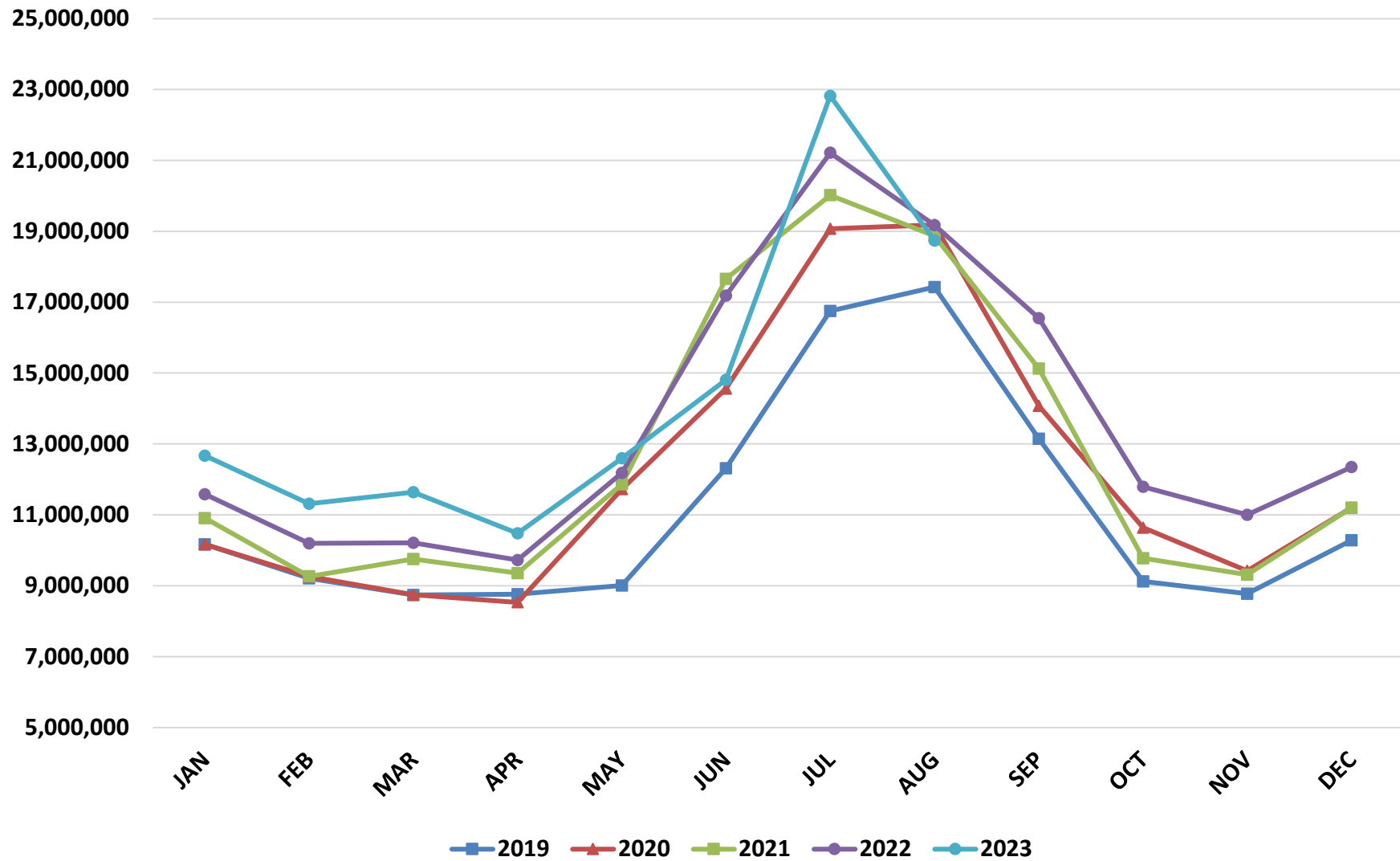
116
117 Power Board adjourned at 4:45 p.m. The next Power Board Meeting is scheduled for October 4, 2023, at 3:00
118 p.m.

BUDGET

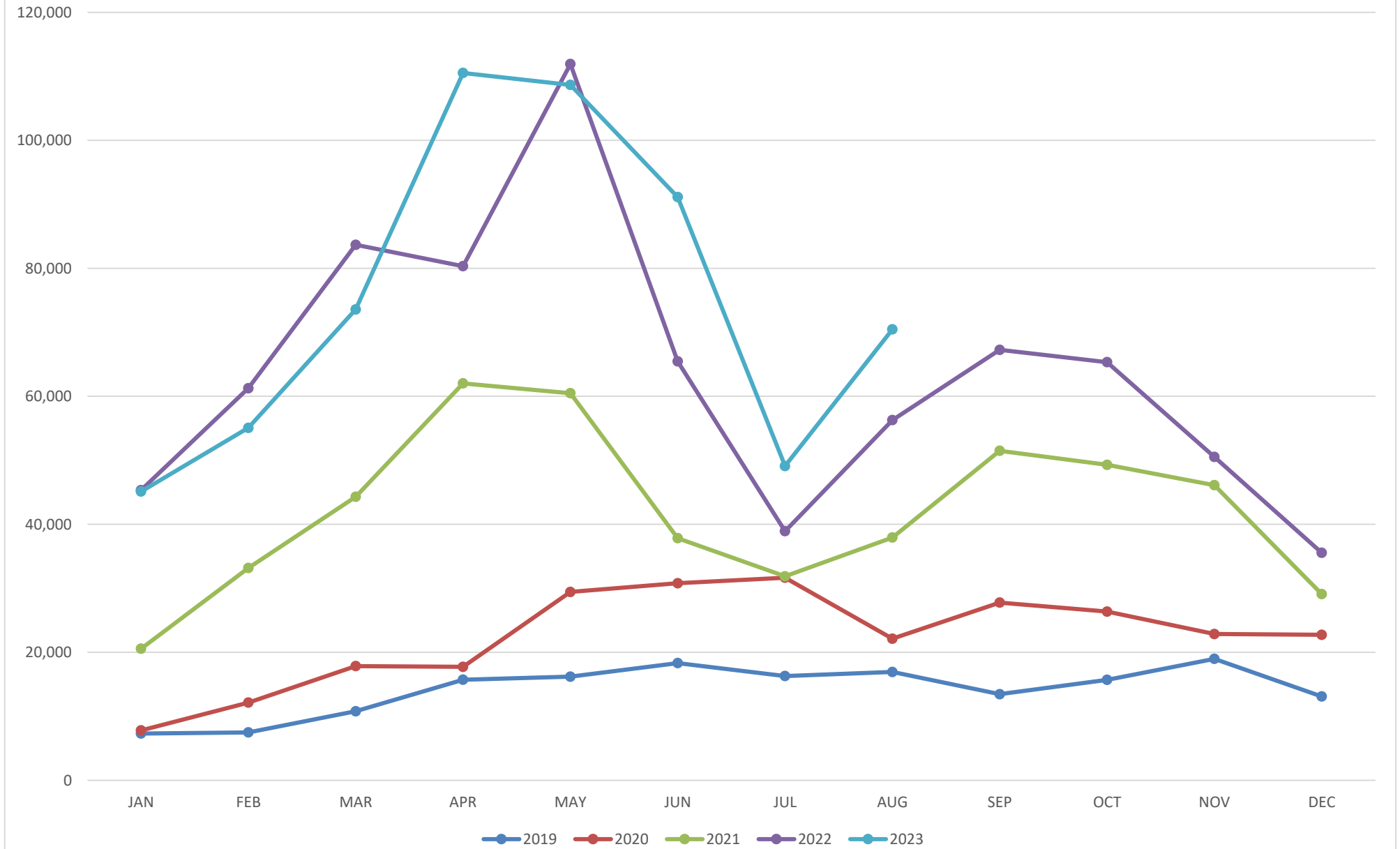
2019 - 2023 KW LOAD



2019 - 2023 KWH LOAD



Solar Kwh



AVERAGE YEARLY POWER PRICES

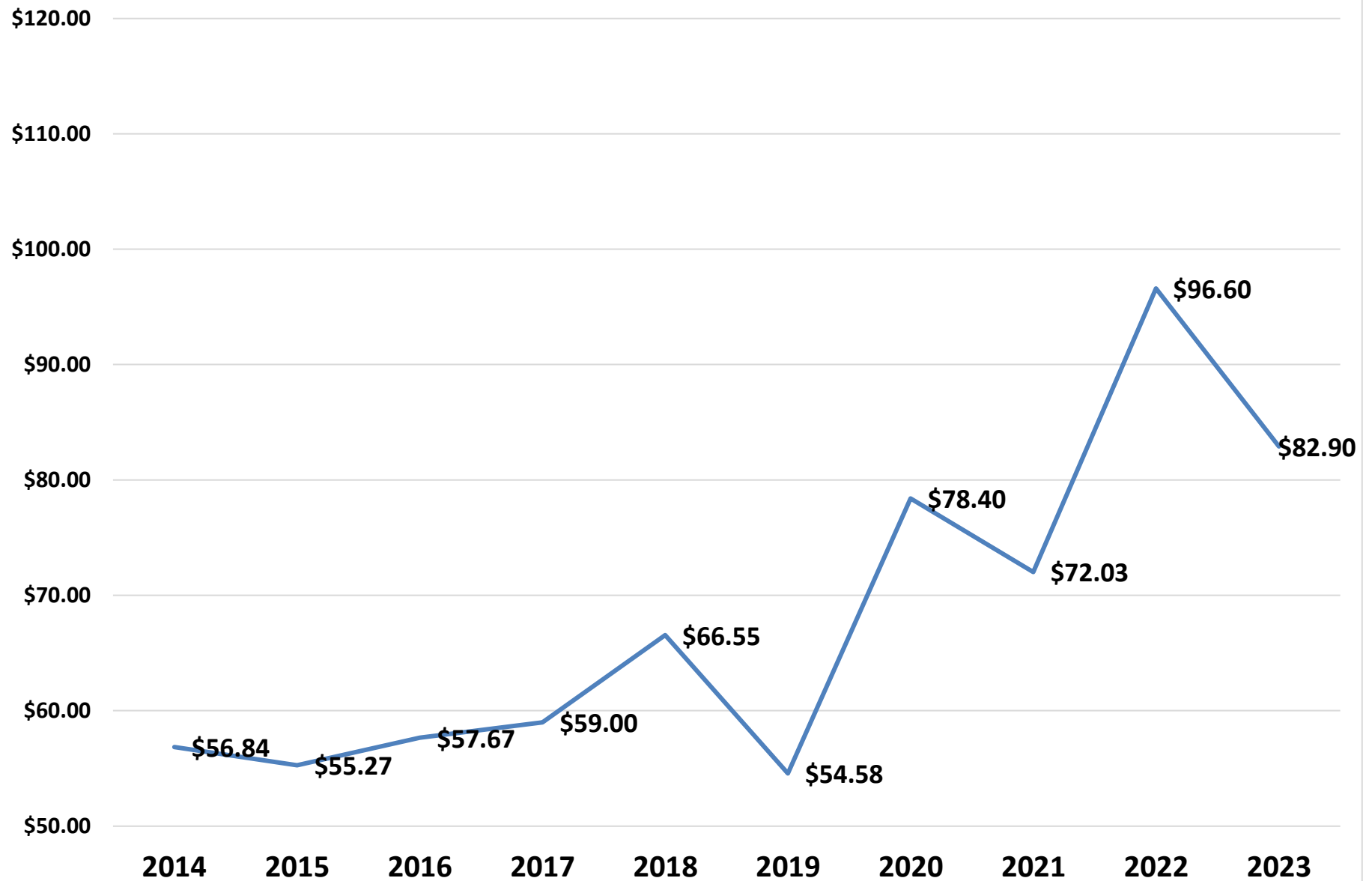
22-23 bdgt amount (not avail yet) **\$0.00**
 BDGT Year to Date **\$86.81**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<i>Jan</i>	\$56.66	\$60.76	\$58.36	\$59.86	\$57.87	\$59.07	\$60.62	\$59.75	\$57.76	\$60.14	\$68.25	\$132.00
<i>Feb</i>	\$59.78	\$58.15	\$64.45	\$65.94	\$62.38	\$63.04	\$60.96	\$67.00	\$60.67	\$63.19	\$70.88	\$85.08
<i>Mar</i>	\$57.28	\$63.50	\$60.83	\$62.03	\$61.77	\$60.99	\$60.09	\$65.17	\$64.67	\$63.64	\$67.28	\$81.89
<i>Apr</i>	\$55.43	\$63.77	\$63.75	\$61.88	\$59.71	\$59.49	\$55.02	\$55.44	\$55.92	\$61.86	\$82.63	\$71.74
<i>May</i>	\$53.31	\$60.28	\$61.64	\$64.71	\$65.51	\$60.32	\$58.86	\$58.55	\$58.55	\$59.69	\$72.66	\$67.01
<i>June</i>	\$50.09	\$56.05	\$59.15	\$58.30	\$65.51	\$58.54	\$52.17	\$55.30	\$53.44	\$86.91	\$77.60	\$69.40
<i>Jul</i>	\$51.16	\$55.62	\$56.85	\$56.91	\$56.95	\$58.29	\$67.87	\$54.29	\$55.98	\$81.04	\$85.31	\$90.02
<i>Aug</i>	\$51.57	\$55.49	\$56.84	\$55.27	\$57.67	\$59.00	\$66.55	\$54.58	\$78.40	\$72.03	\$96.60	\$82.90
<i>Sep</i>	\$54.79	\$58.80	\$59.46	\$56.06	\$56.97	\$62.36	\$55.00	\$54.34	\$64.93	\$82.38	\$127.29	
<i>Oct</i>	\$62.68	\$60.35	\$61.42	\$56.97	\$59.23	\$59.79	\$59.36	\$59.70	\$62.82	\$75.92	\$83.45	
<i>Nov</i>	\$63.37	\$61.65	\$63.03	\$59.68	\$64.18	\$62.14	\$64.60	\$63.80	\$63.60	\$70.47	\$96.34	
<i>Dec</i>	\$56.02	\$58.37	\$60.91	\$57.90	\$61.51	\$58.80	\$61.61	\$58.55	\$60.33	\$70.07	\$161.27	
<i>Yr Avg</i>	\$56.01	\$59.40	\$60.56	\$59.63	\$60.64	\$60.15	\$60.23	\$58.87	\$61.42	\$70.61	\$90.80	\$85.00
<i>Weighted Avg</i>	\$55.22	\$58.80	\$60.34	\$58.99	\$59.55	\$59.90	\$60.56	\$58.11	\$61.98	\$72.46	\$92.09	\$85.30

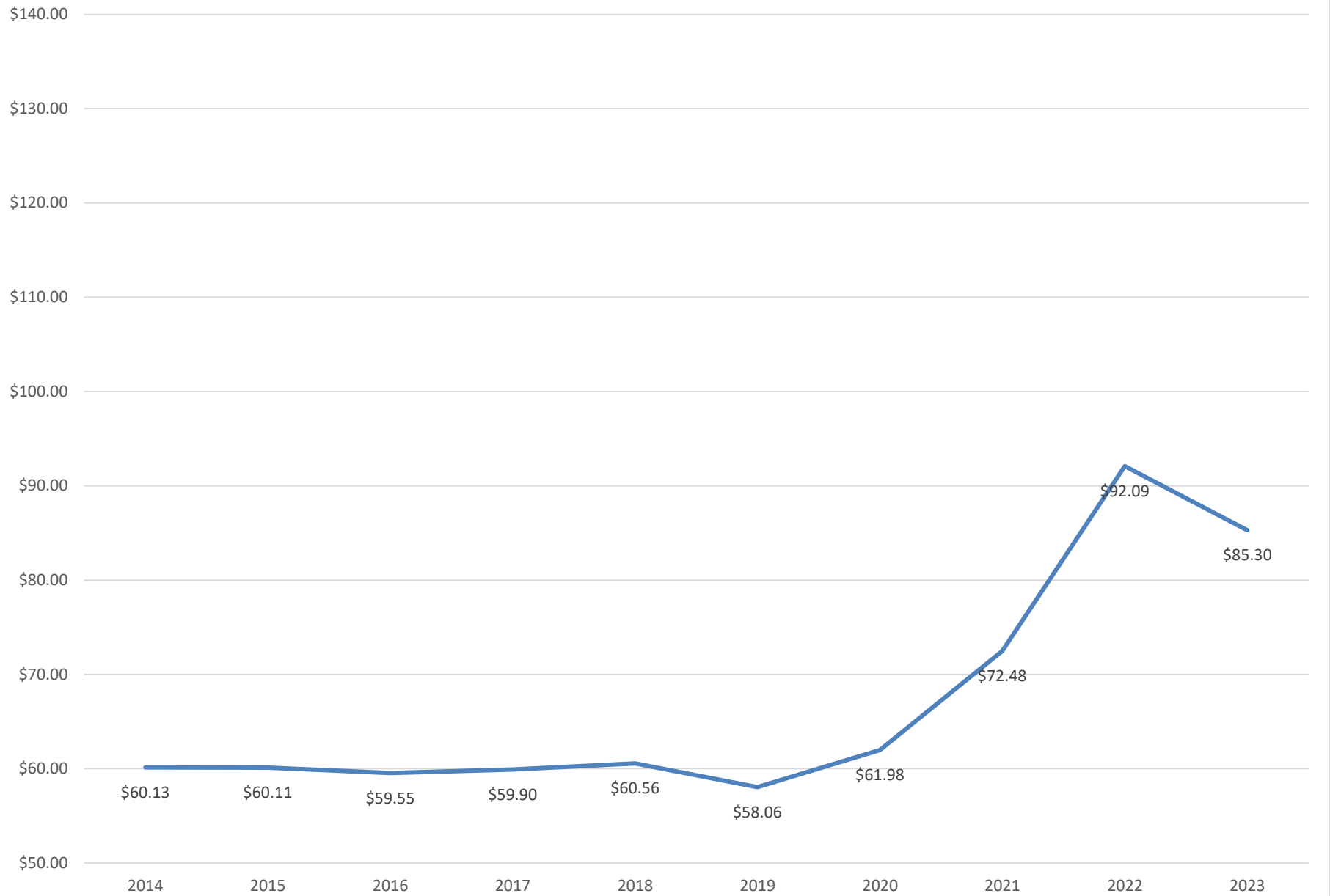
**Cy to
Date**

These figures capture the total cost of power to the power department. The power department uses costs only associated with the purchasing and generation of power and includes debt payments and interest associated with power resources.

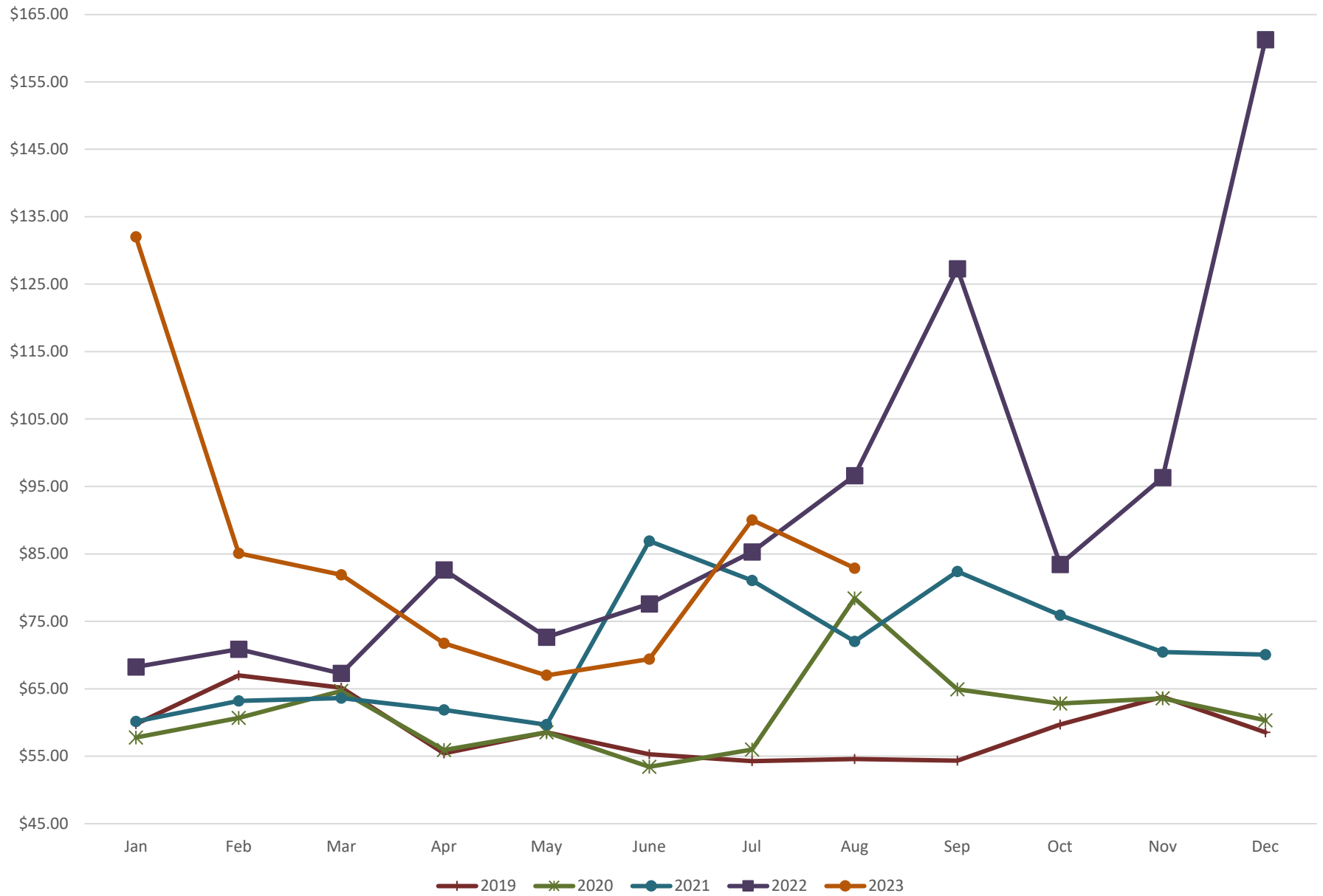
Aug



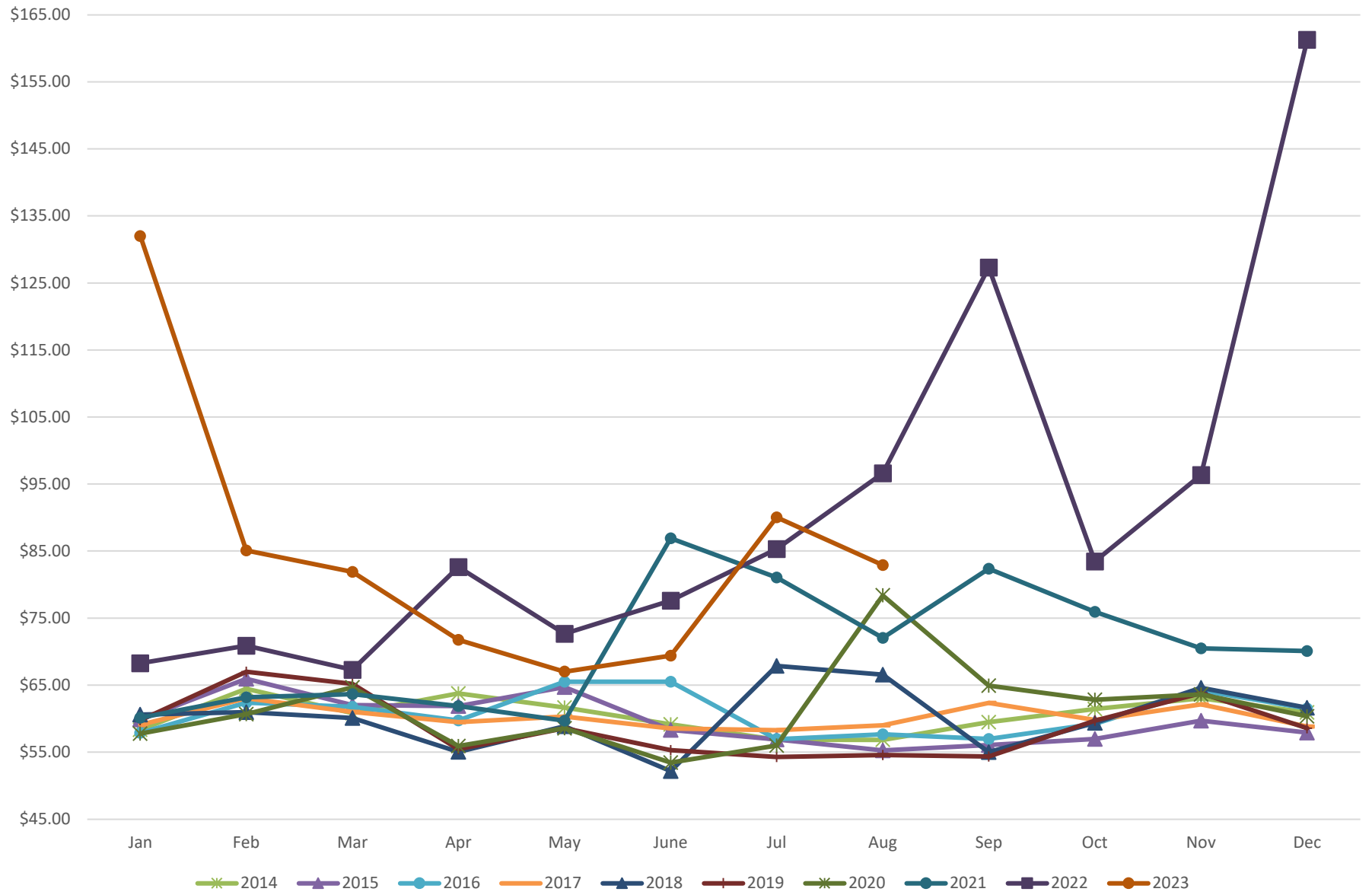
Weighted Average



Avg Monthly Price (5 Yrs)



Avg Monthly Price



Operations Report

Board of Directors



Rachel Stanford

Topic Discussions

- Natural Gas
 - Storage
 - CPUC Storage Increase
- Industry News
 - CAISO EDAM/DAME Filing
 - SPP Markets+ Participants
- Seasonal Outlook
 - Seasonal Outlook
- Transmission
 - “BIG WIRES” Act
 - SOO Green Line



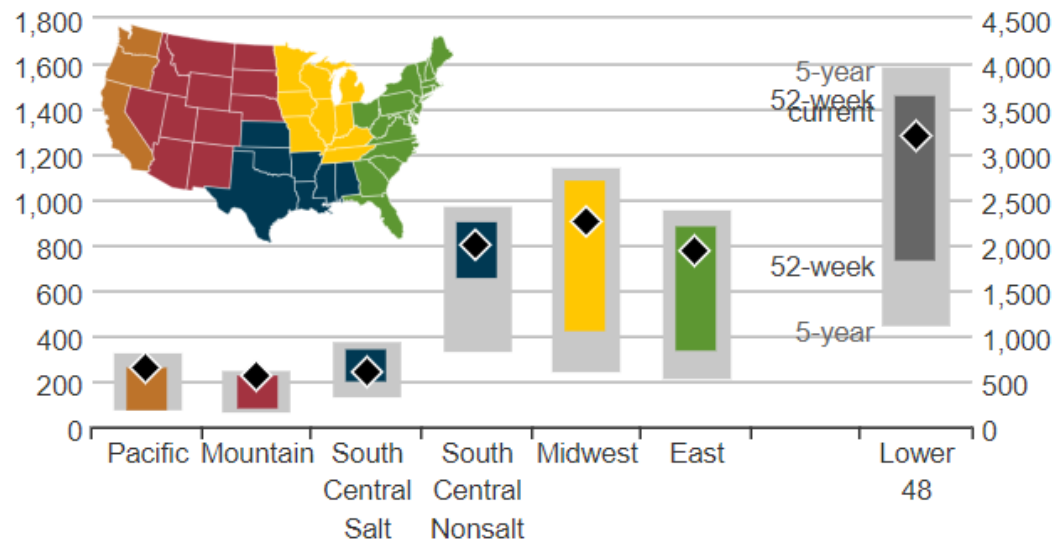
Natural Gas

National Gas Storage

Underground working natural gas storage
summary as of September 8, 2023

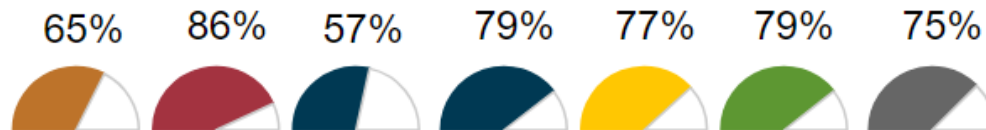


billion cubic feet



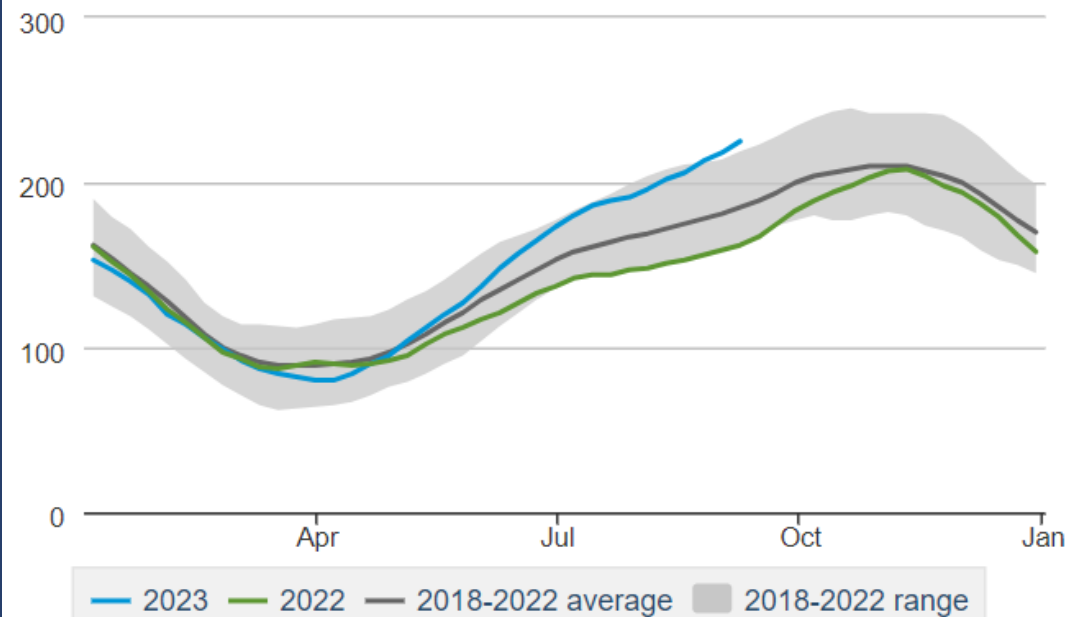
❖ Pacific region saw 7% increase & Mountain region saw %11 increase from the previous month's reporting

Underground storage capacity utilization



Mountain region weekly working gas in underground storage

billion cubic feet

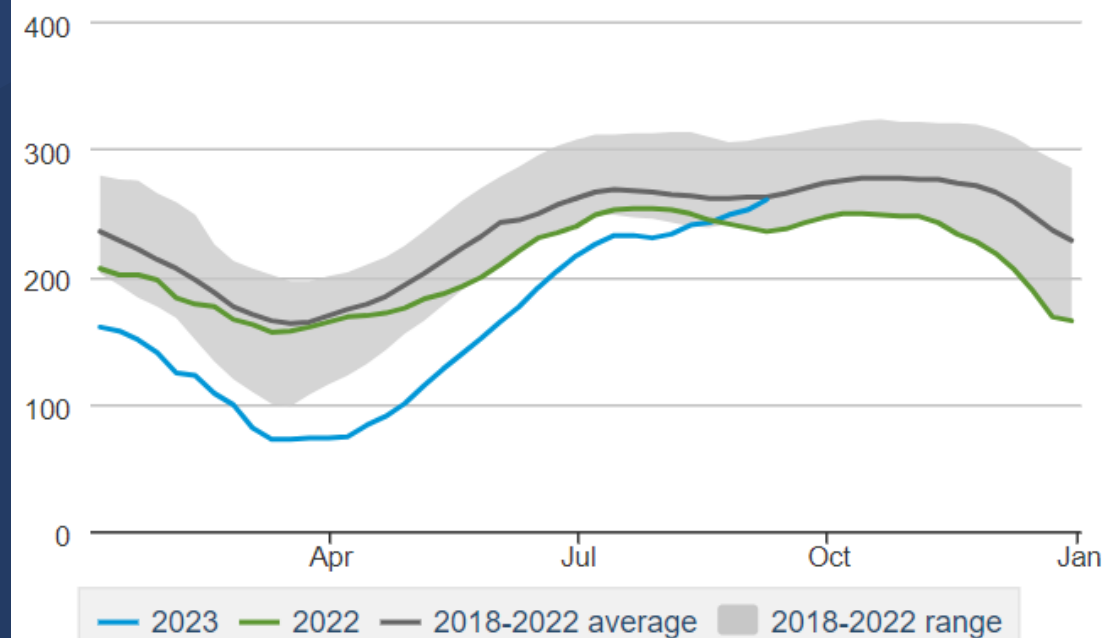


Mountain Region

Pacific Region

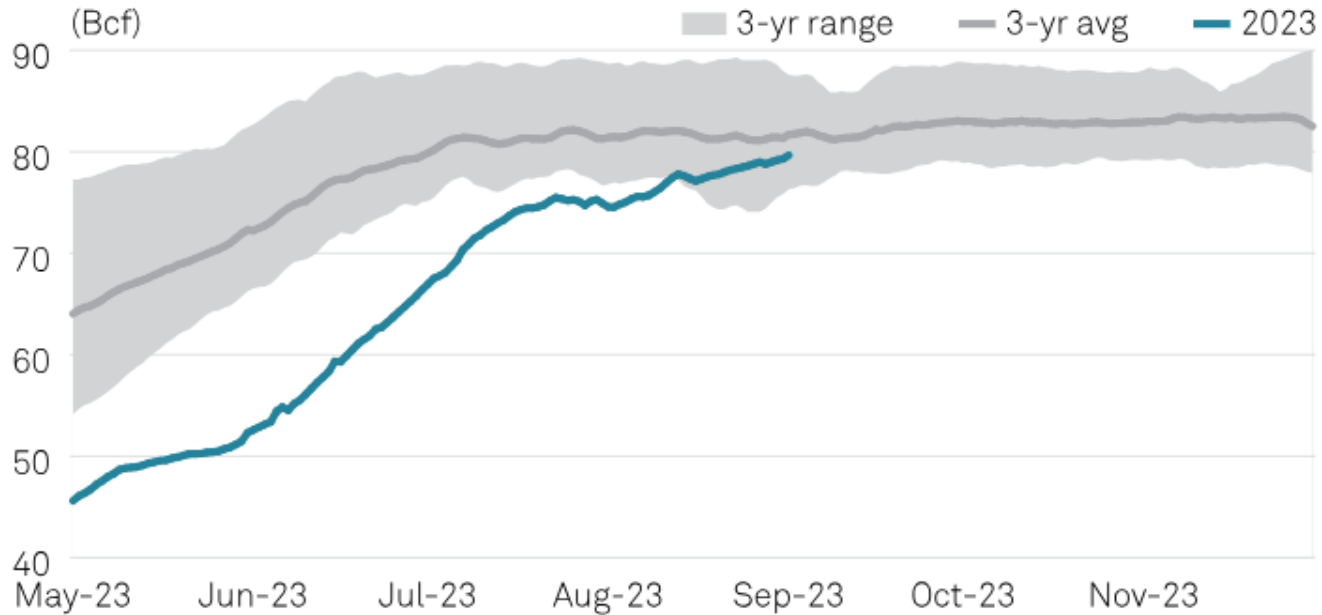
Pacific region weekly working gas in underground storage

billion cubic feet



California PUC Approves Storage Increase

SoCal Gas storage



- August 29, 2023, ruling increases SoCalGas max storage capability from 41.16 Bcf to 68.6 Bcf (65% increase) at Aliso Canyon
- Existing withdrawal protocols have been terminated
- Will mitigate gas price spikes and volatility experienced Winter 2022



Industry News

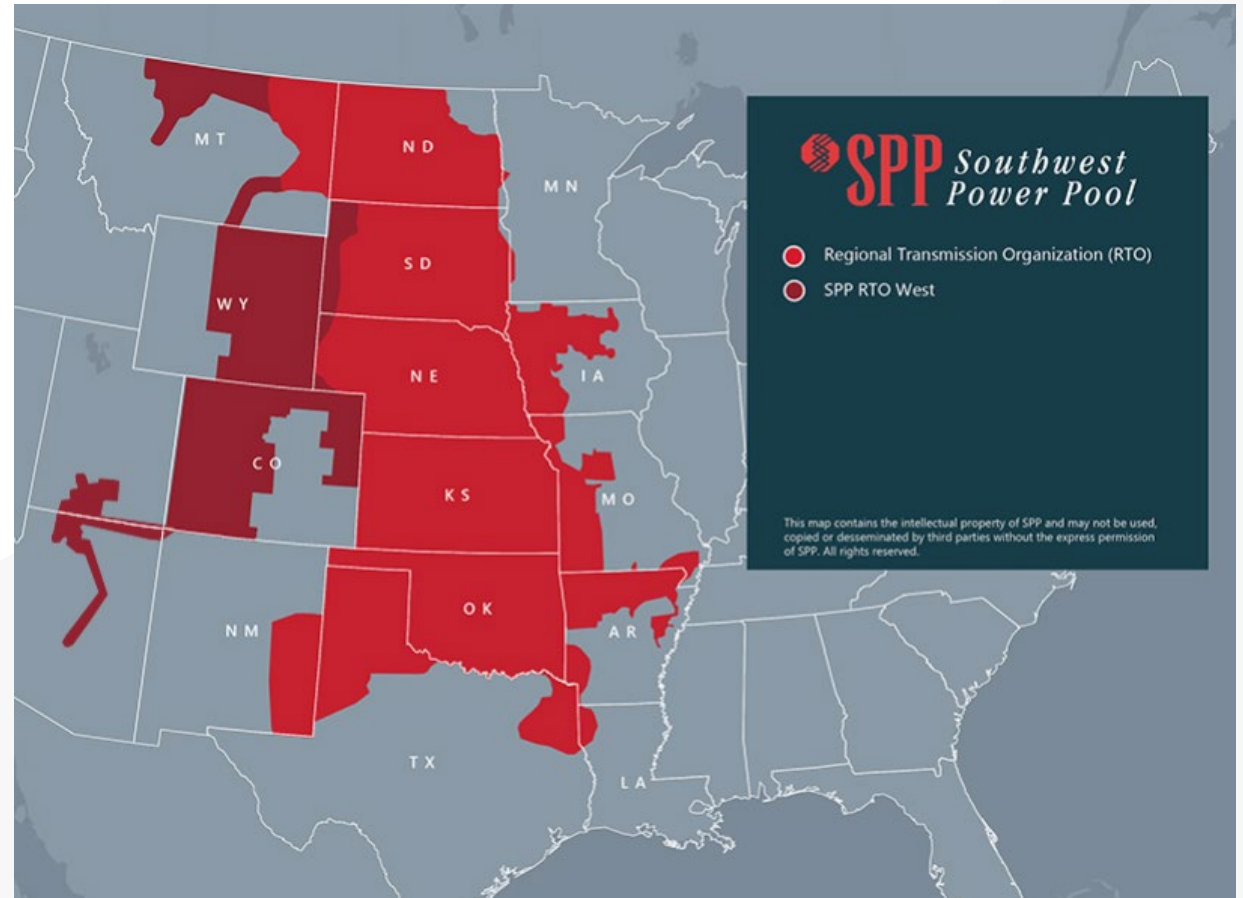
CAISO EDAM & DAME TARIFF FILED

- August 22, 2023, CAISO submitted the EDAM & DAME Tariffs in a combined filing with FERC
- DAME intended to better align day-ahead market outcomes with real-time conditions by way of ‘imbalance reserves’ and ‘reliability capacity’
- **Filing will most likely be rejected**
 - Support for EDAM but DAME is highly problematic due to intermittent resources and extreme temperatures
 - Numerous protests to the filing are anticipated
- PacifiCorp stakeholder process to begin upon FERC acceptance



SPP Markets+

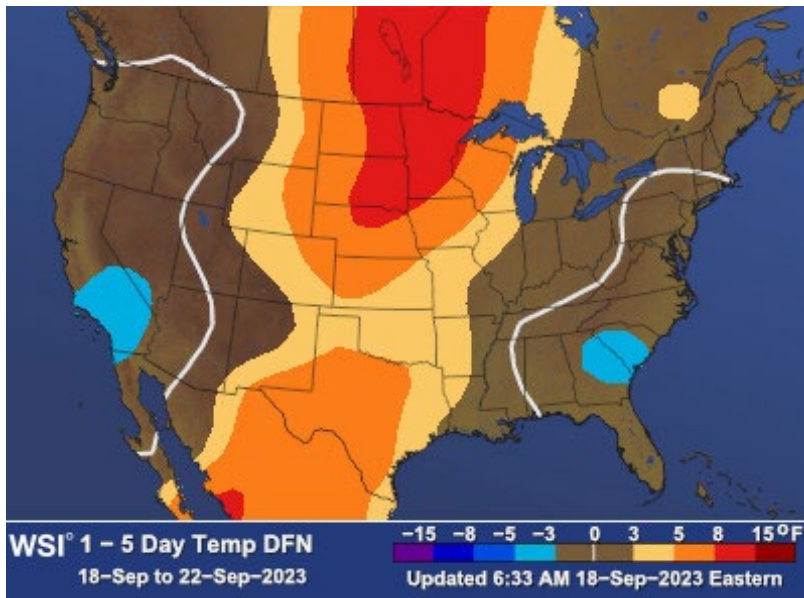
- Colorado Springs Utilities
- Deseret Generation & Transmission
- Municipal Energy Agency of Nebraska
- Platte River Power Authority
- Tri-State Generation & Transmission
- **Western Area Power Administration*
- **Basin Electric Power Coop*



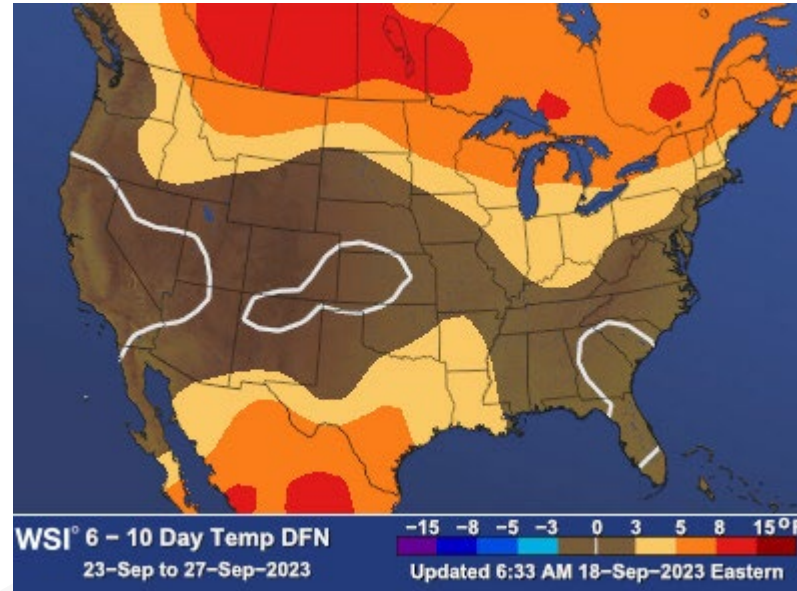
Seasonal Outlook



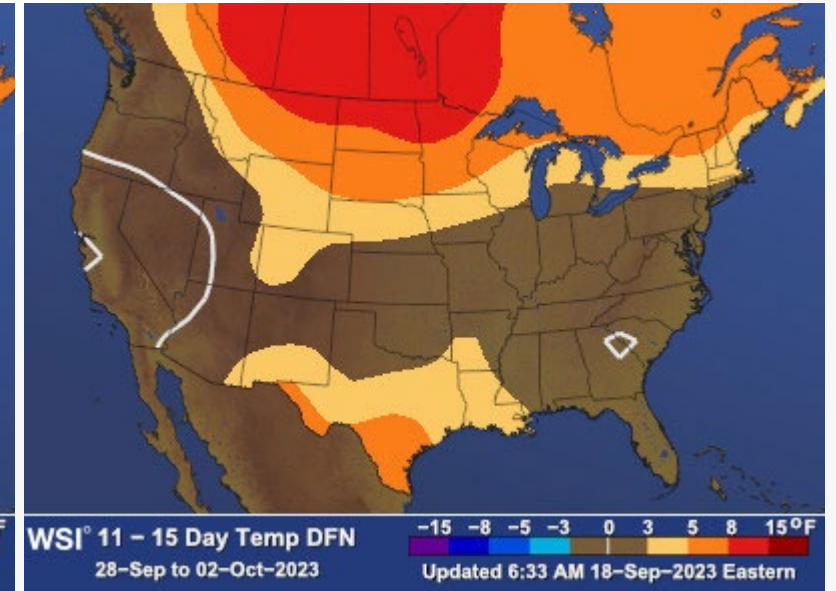
September Forecast



1-5 Day Forecast

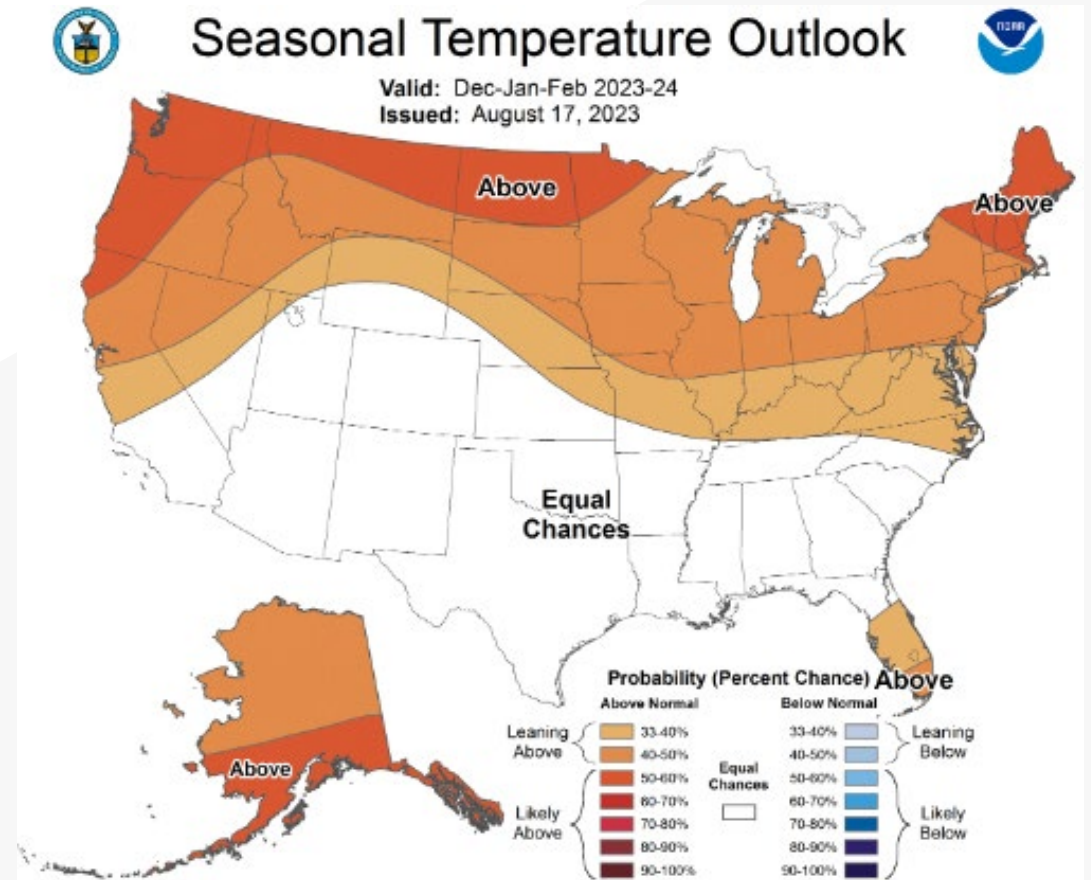
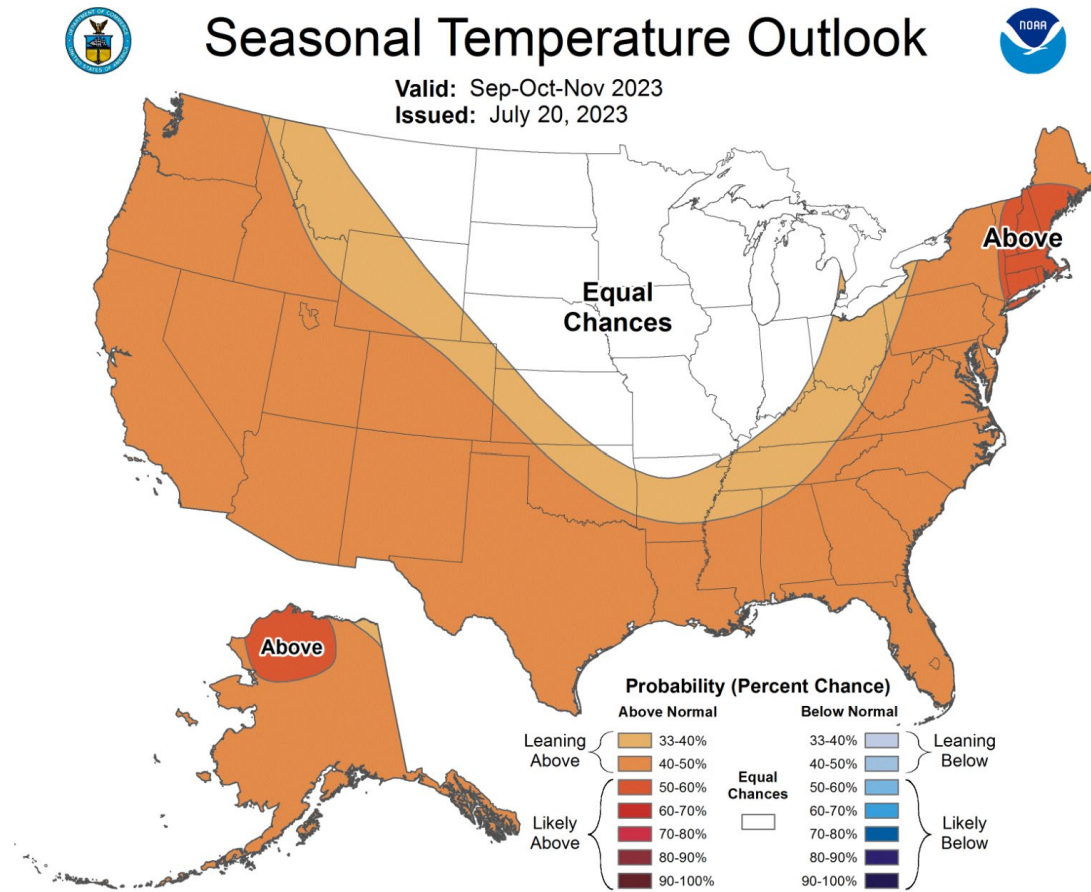


6-10 Day Forecast



11-15 Day Forecast

Seasonal Outlook From Prior Month



Transmission



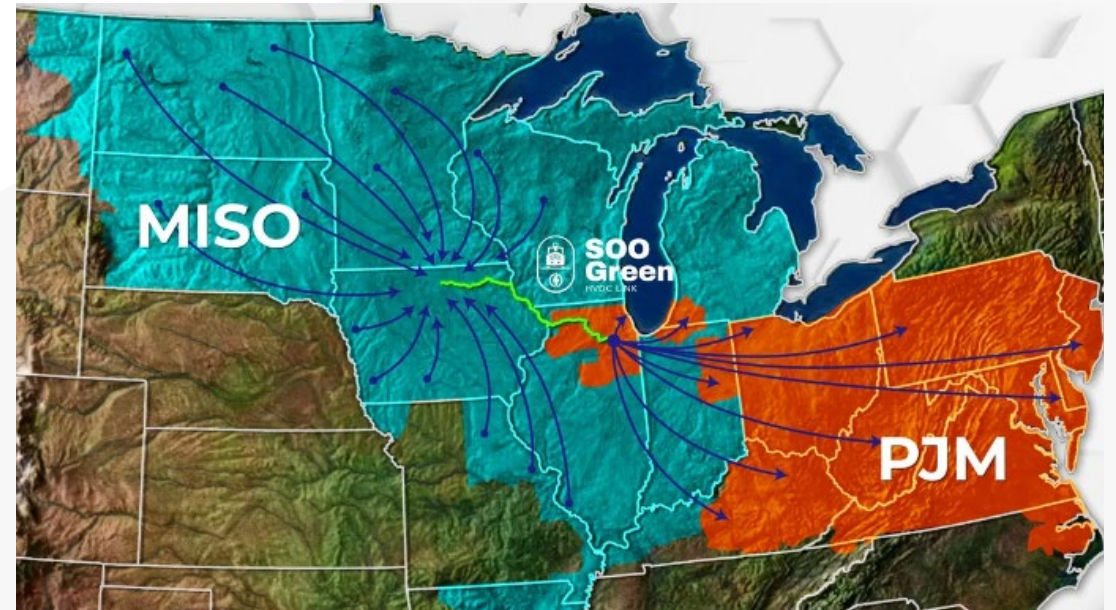
Interregional Transmission Transfers

- Senator Hickenlooper (Co) & Representative Peters (Ca) introduced the Building Integrated Grids With Inter-Regional Energy Supply “BIG WIRES” Act
- Bill would direct FERC to better coordinate construction of an interregional transmission system supporting transfers 30% of peak electric loads
- Will close current gaps in the current ‘electric highway’ and provide new off-ramps where needed
- Provides reliability during extreme weather events
- Reduces pricing volatility in constrained regions

“By requiring that FERC establish a minimum interregional transfer capability standard, this important legislation will dramatically improve our country’s ability to move power between regions where and when it’s needed most, enhancing grid reliability for all Americans,” fmr FERC Chairman Chatterjee.

SOO Green Transmission Line

- 350-mile, 525kV DC line
- Underground line utilizing adjacent rail line ROW
- Adds 2,100 MWs of transfer capacity between MISO & PJM
- Estimated in-service mid-2029



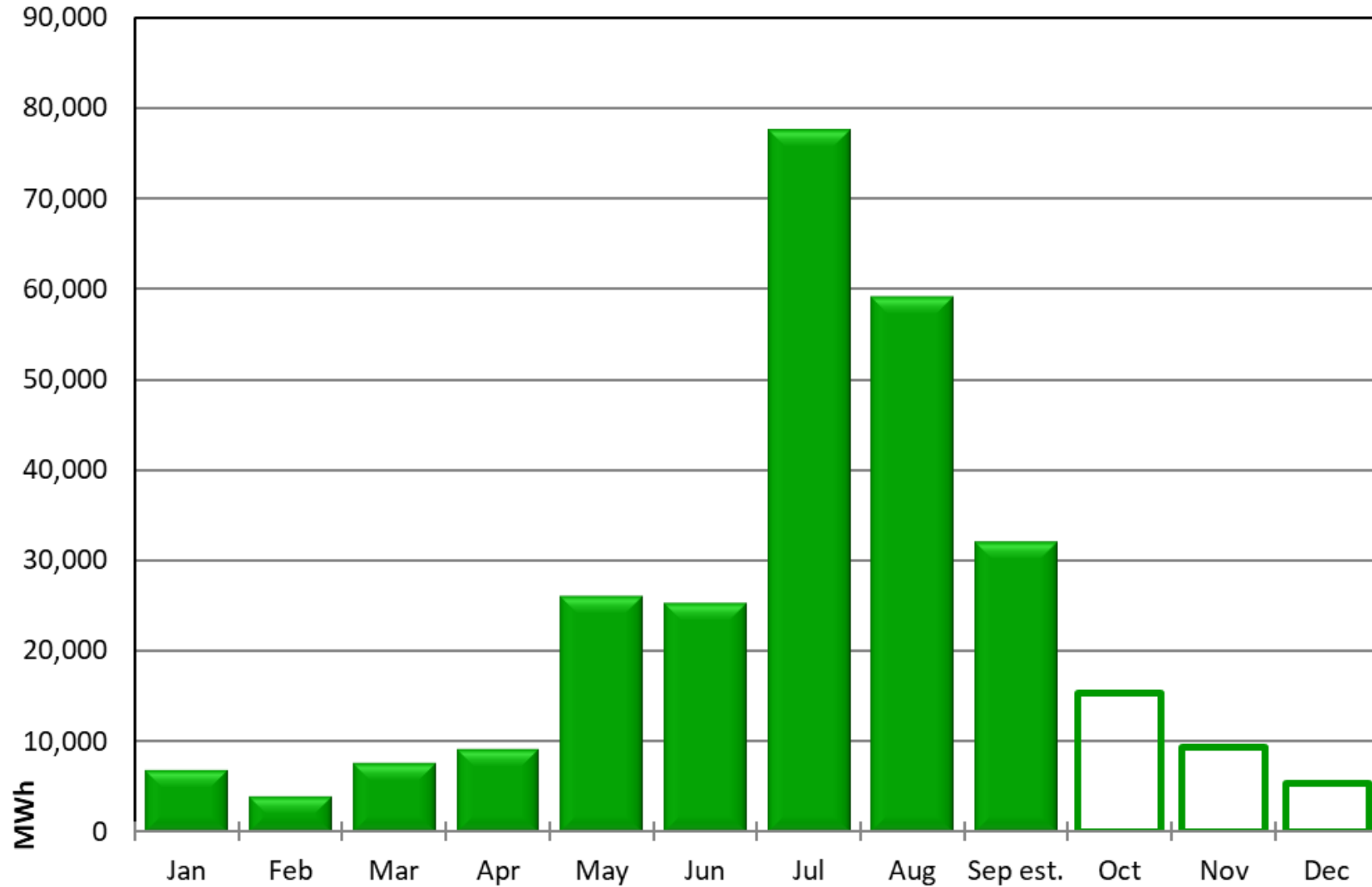
PX & Scheduling Report August 2023

Pool Project

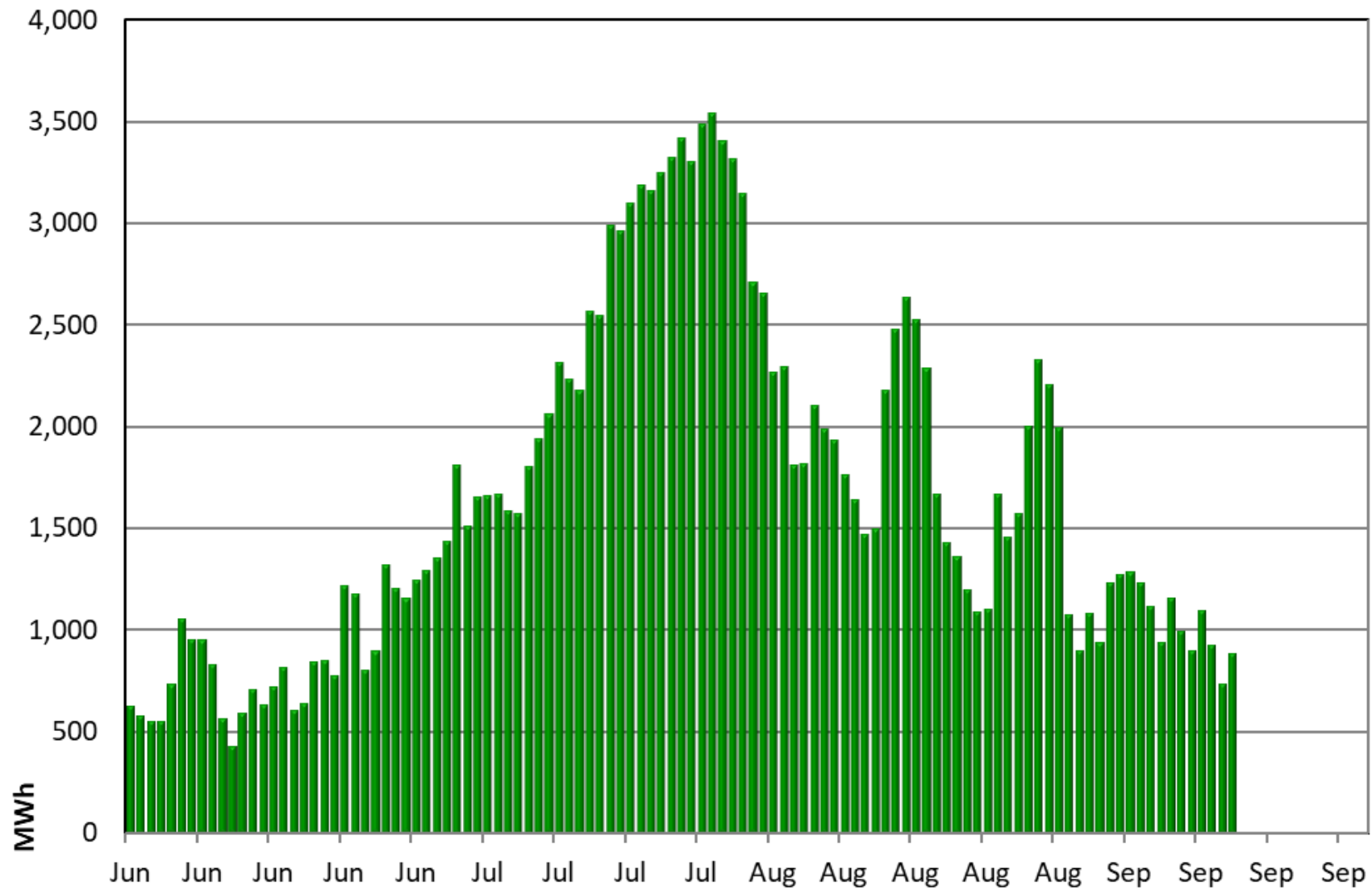


Kelton Andersen

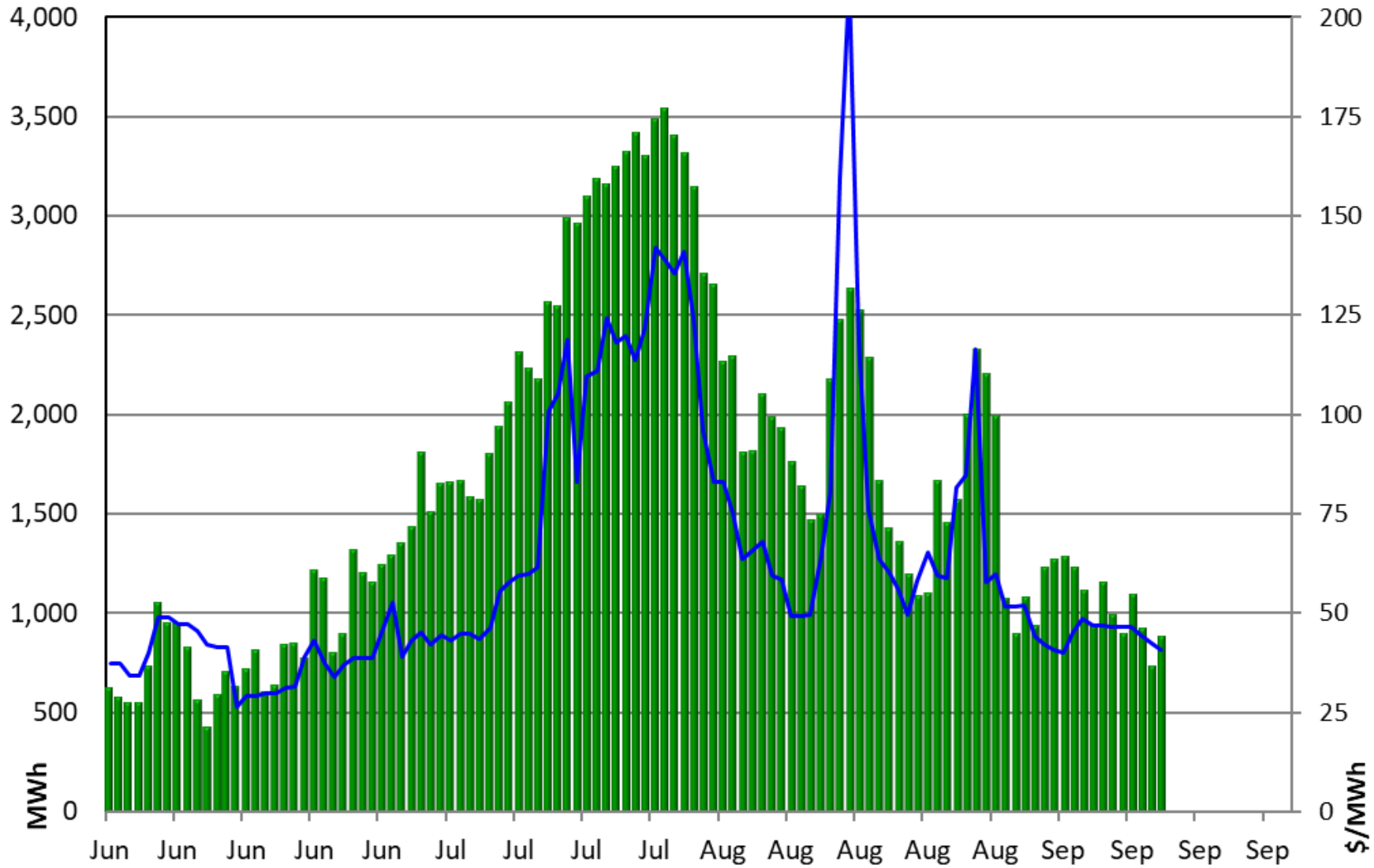
Member Internal Generation - Monthly 2023

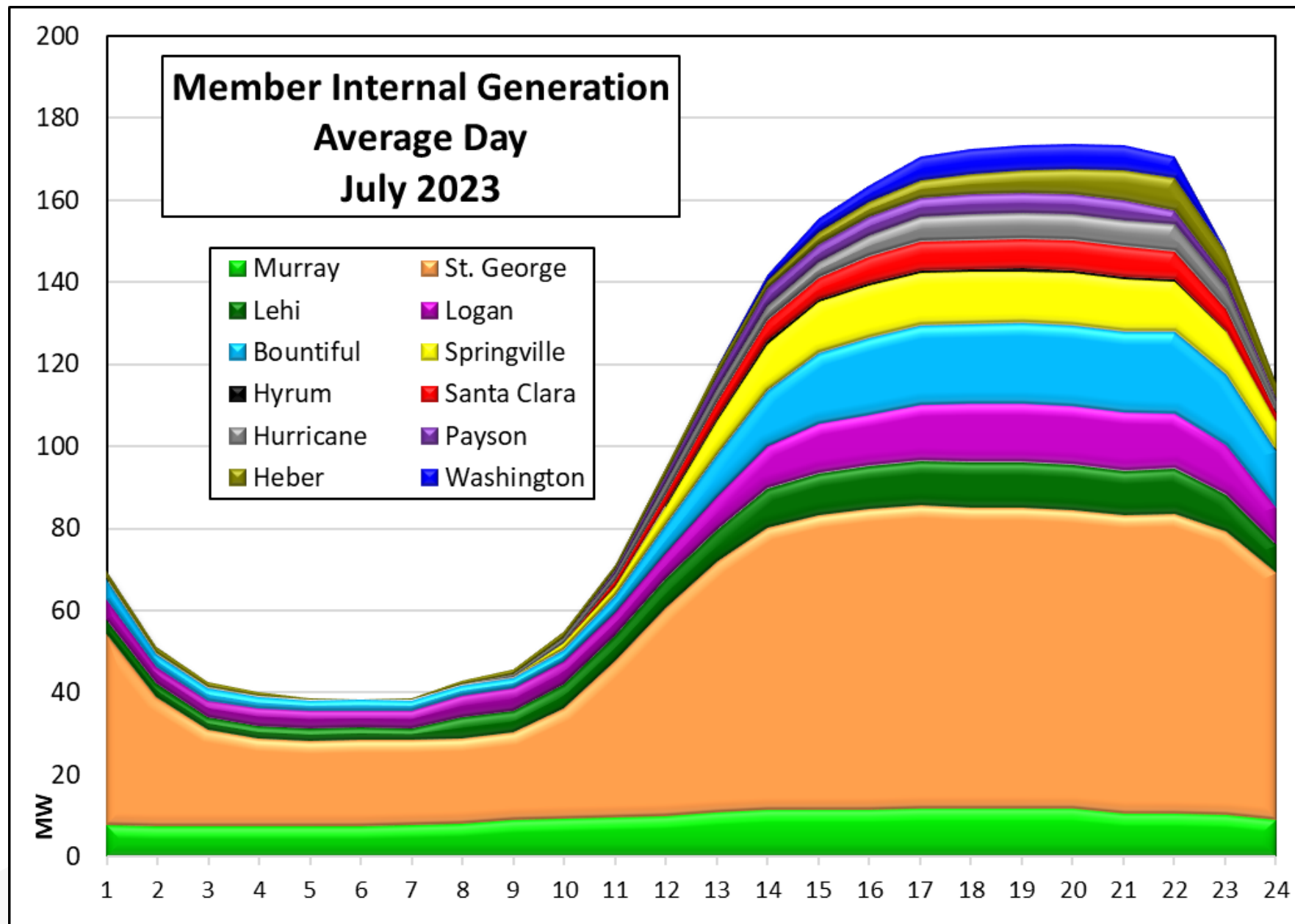


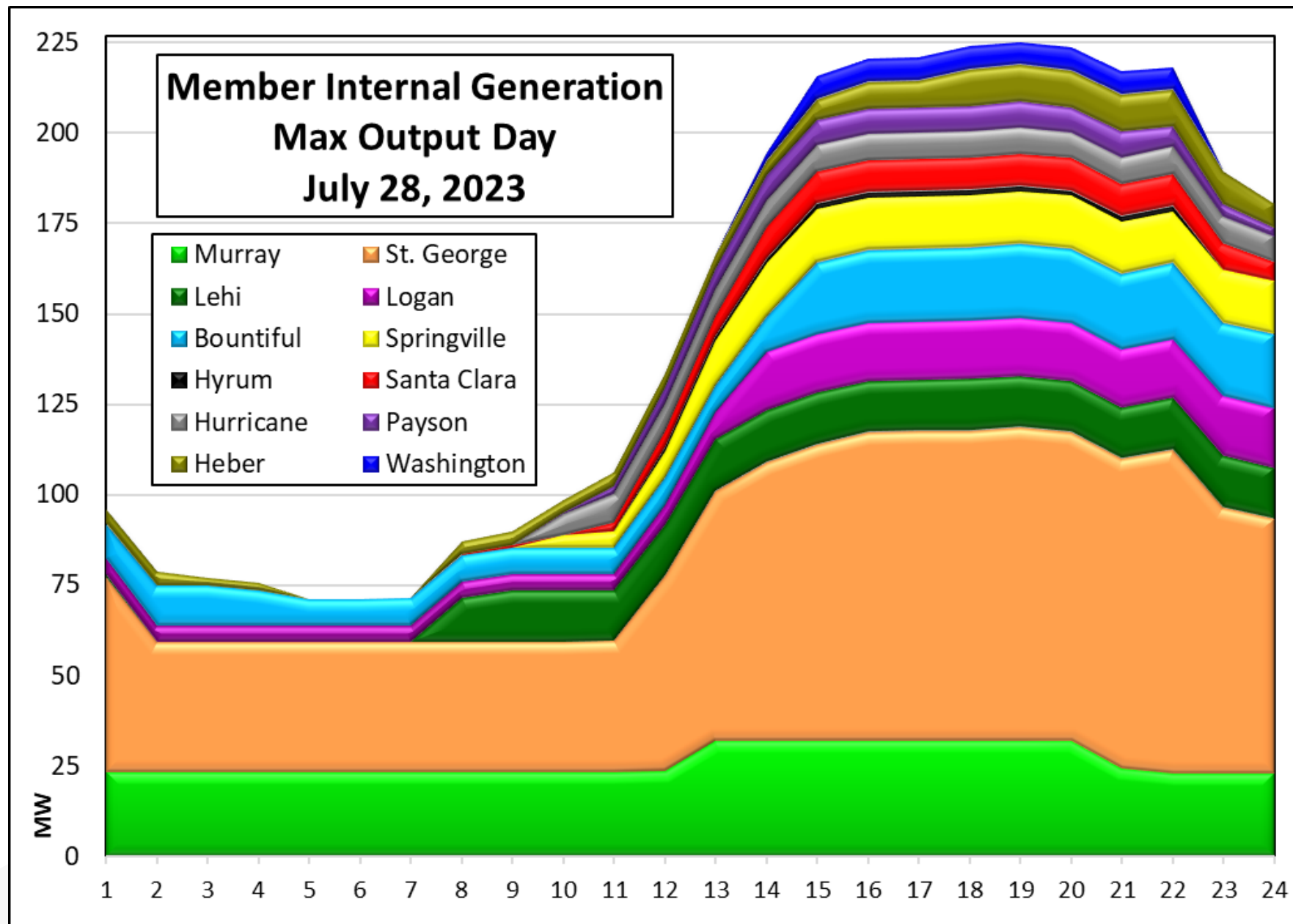
Member Internal Generation - Daily Jun-Sep 2023



Member Internal Generation - Daily Jun-Sep 2023







Payson Project



August Project Update
Update 2023



August Statistics

• Equiv. Availability Factor	100.00%
• Net Plant Heat Rate	8522
• Net Capacity Factor	86.78%
• CTG Starts	0
• Days Plant Ran	31
• Hours of Operations	744
• Average Hours/Day	24.0
• Average Plant Load	112.99
• Total Net MWh Output	84,061

Maintenance Item Highlights

- **Thermocouple TE2225B has been showing unusual low readings. Found to have some damaged wiring going to Thermocouple. Wiring will be replaced during next opportunity.**
- **Cooling Tower pH probe failed for chemical control. New pH probe was installed and calibrated.**
- **Gas Turbine IsoPur lube oil filter skid has been taken out of service in preparation to fall outage work being conducted in Accessory Compartment.**
- **New ARC valve was installed on BFP A. Removed ARC valve was found to have material stuck in sealing surfaces.**
- **5 Ton crane PLC modification started. This switches out, out of country controller for something that can serviced locally.**
- **New level sensor installed on Sodium Hypochlorite tank. This will allow us to monitor tank levels remotely in the control room.**
- **Metering chemical pump failed. New pump from stock was installed and primed.**
- **Logic changes were applied to DCS system. This will allow us to have Automatic VAR control on both the Gas & Steam Turbine during Premix Steady State.**
- **Warehouse forklift was found to have operational problems. After some short diagnosis it was found to have a faulty Alternator. Forklift technician will be on site to repair soon.**

Regulatory/Safety Highlights

- **AEGIS Insurance Risk Analysis completed for 2023.**
- **2023 Pipeline Public Awareness Survey Completed with good Results.**

Historical Generation Records

Yearly Generation

1st	Place 2007	@703552MWh
2nd	Place YTD 2023	@618158MWh
3rd	Place 2021	@562579MWh

Continuous Online Time

1st	2023	1944hrs June-Sep
2nd	2021	1464hrs June-Aug
3rd	2020	504hrs July-Aug

Executive Summary:

	August FY 2024				Fiscal Year -to -date		
	Actual	Budget	Variance		Actual	Budget	Variance
Plant Starts	0	4	(4)		38	20	18
Avg. On -line hours	24.00	24	0.00		22.21	24	(1.79)
CTG On -line hours	744.00	744.00	0		3336.45	3672.00	(336)
Average Plant Load	112.99	122	(9.01)		109.36	112	(2.84)
Net MWh Produced	84,061	90,520	(6,459)		366,250	411,752	(45,502)
Net Capacity Factor	86.78%	81.11%	5.67%		73.25%	74.71%	-1.46%
Availability	100.00%	100.00%	0.00%		98.22%	92.20%	6.02%
Net Heat Rate	8,522	8,500	(22)		8,484	8,500	(16)
MMBtu Consumed	716,377	769,420	(53,043)		3,107,059	3,499,892	(392,833)

***CRSP / CREDA Report
September 2023***

Colorado River Storage Project



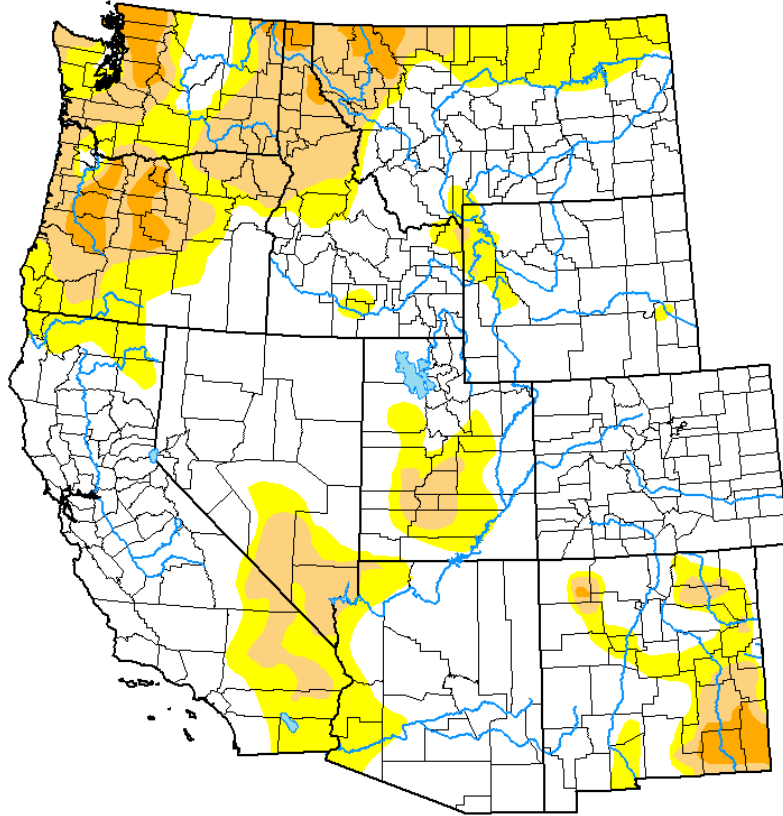
Kelton Andersen

Topic Discussions

- CRSP Hydrology
- CREDA Items
 - WAPA
 - Bureau of Reclamation

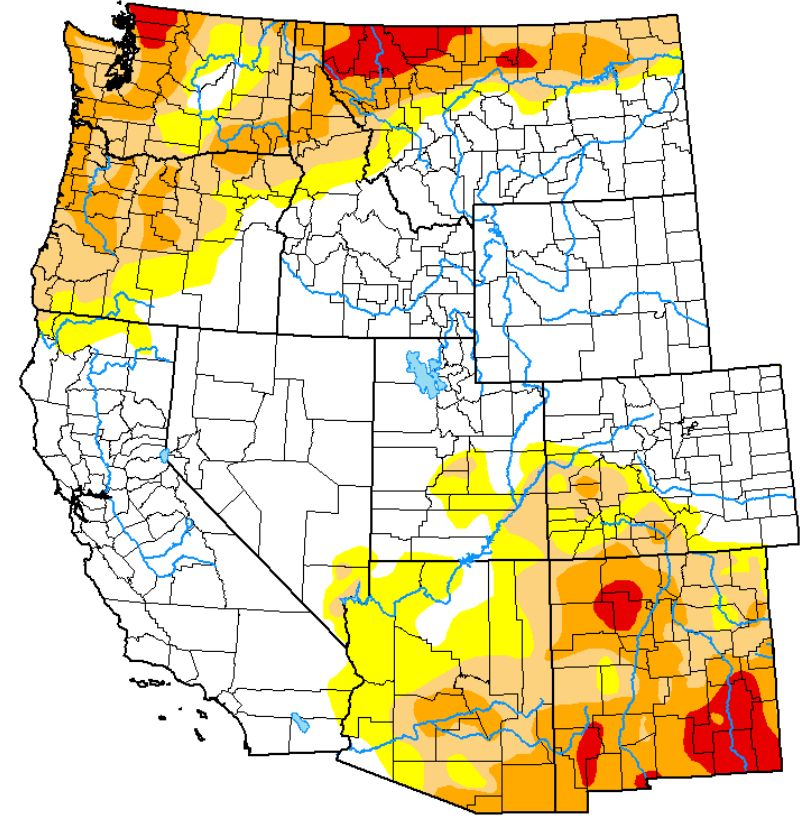
Drought Monitor

July 2023



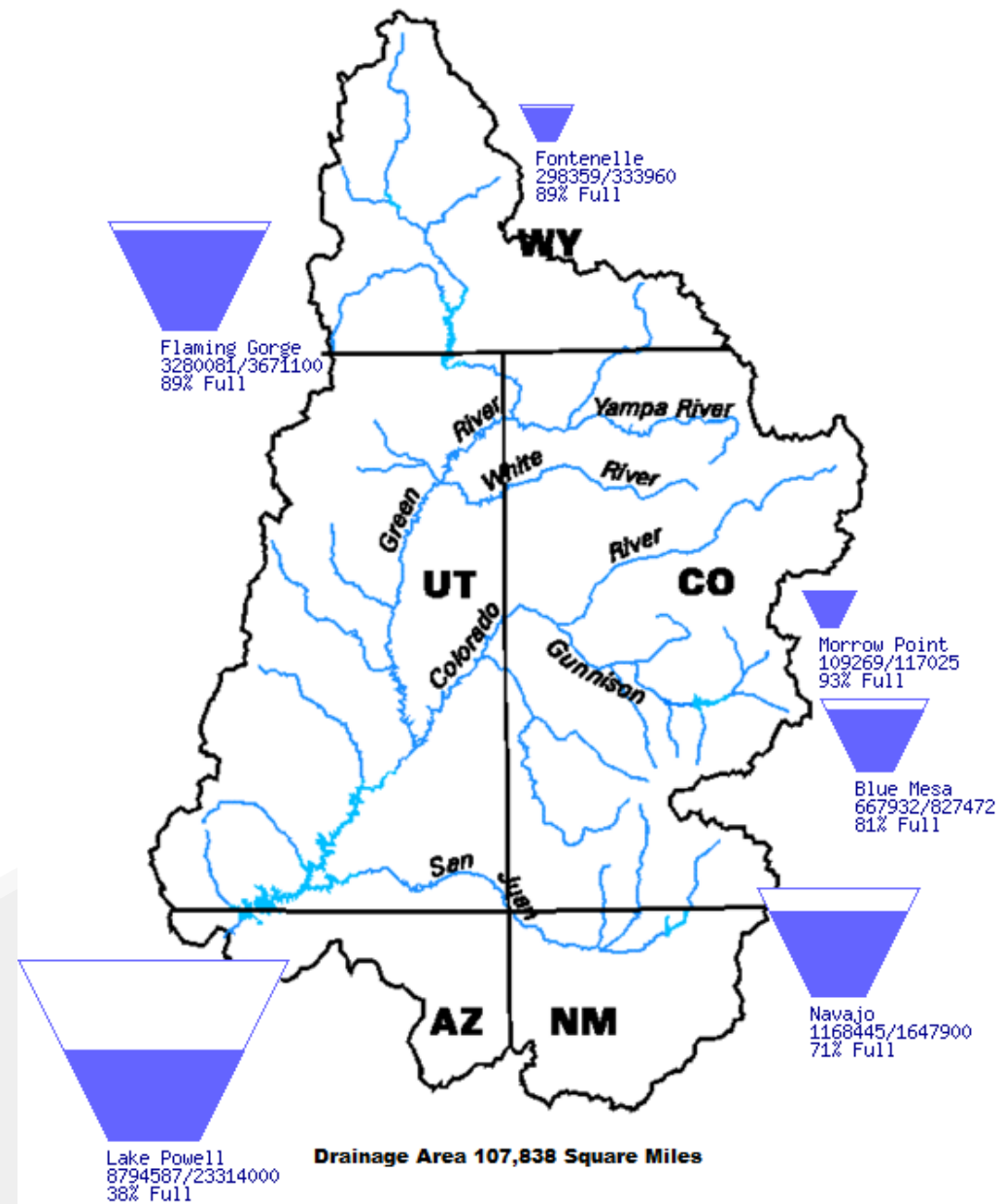
7/13/2023

September 2023

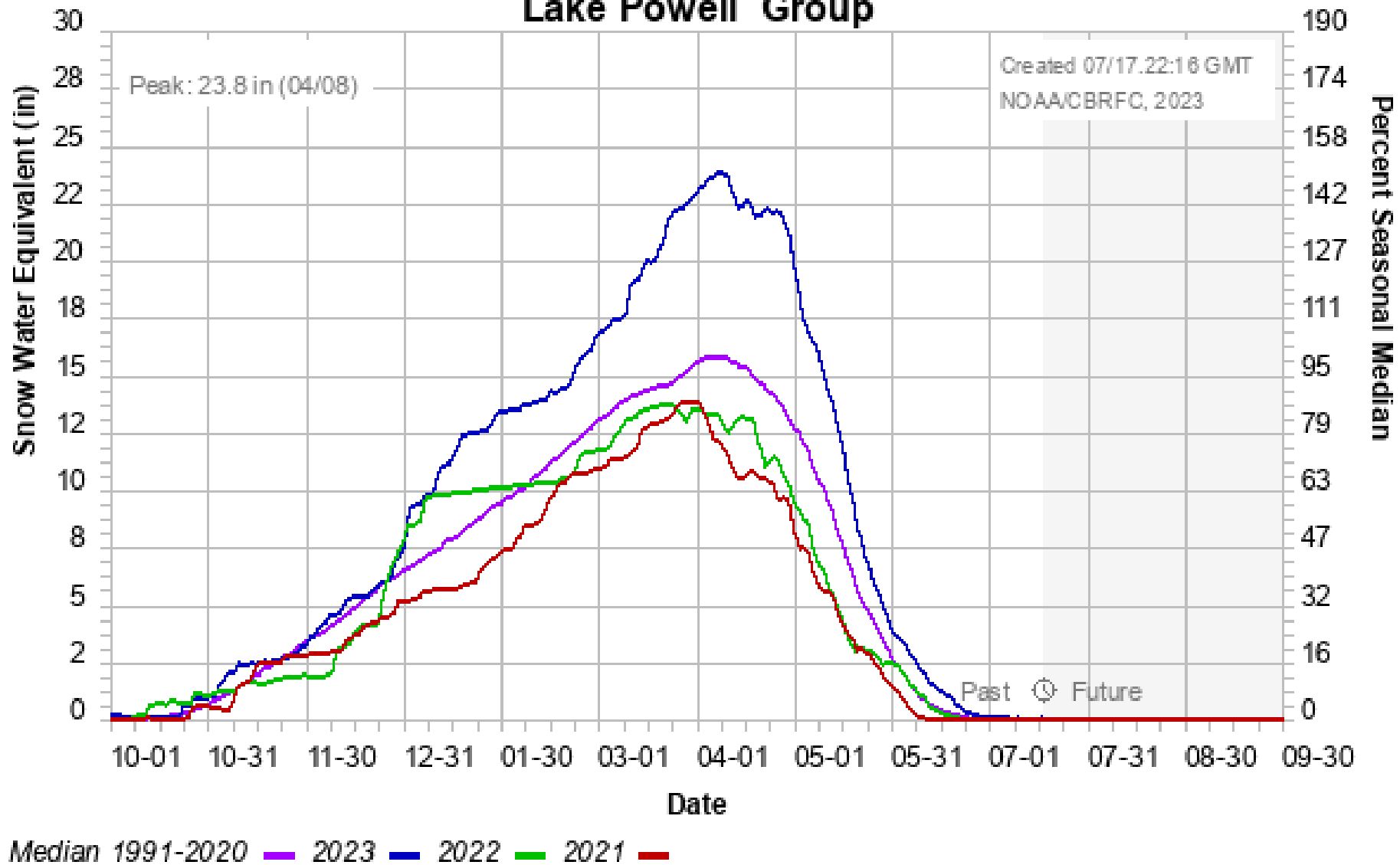


9/14/2023

Upper Colorado River Drainage Basin



Colorado Basin River Forecast Center Lake Powell Group



Lake Powell Conditions

- Status of Lake Powell
 - Current lake elevation = 3,574 feet
 - = 126 feet below the spillway
 - = 84 feet above penstock intake level
 - Current storage is 8.8 million acre-feet
 - = 38% of reservoir capacity



Lake Powell Inflow



- Unregulated inflow by water-year

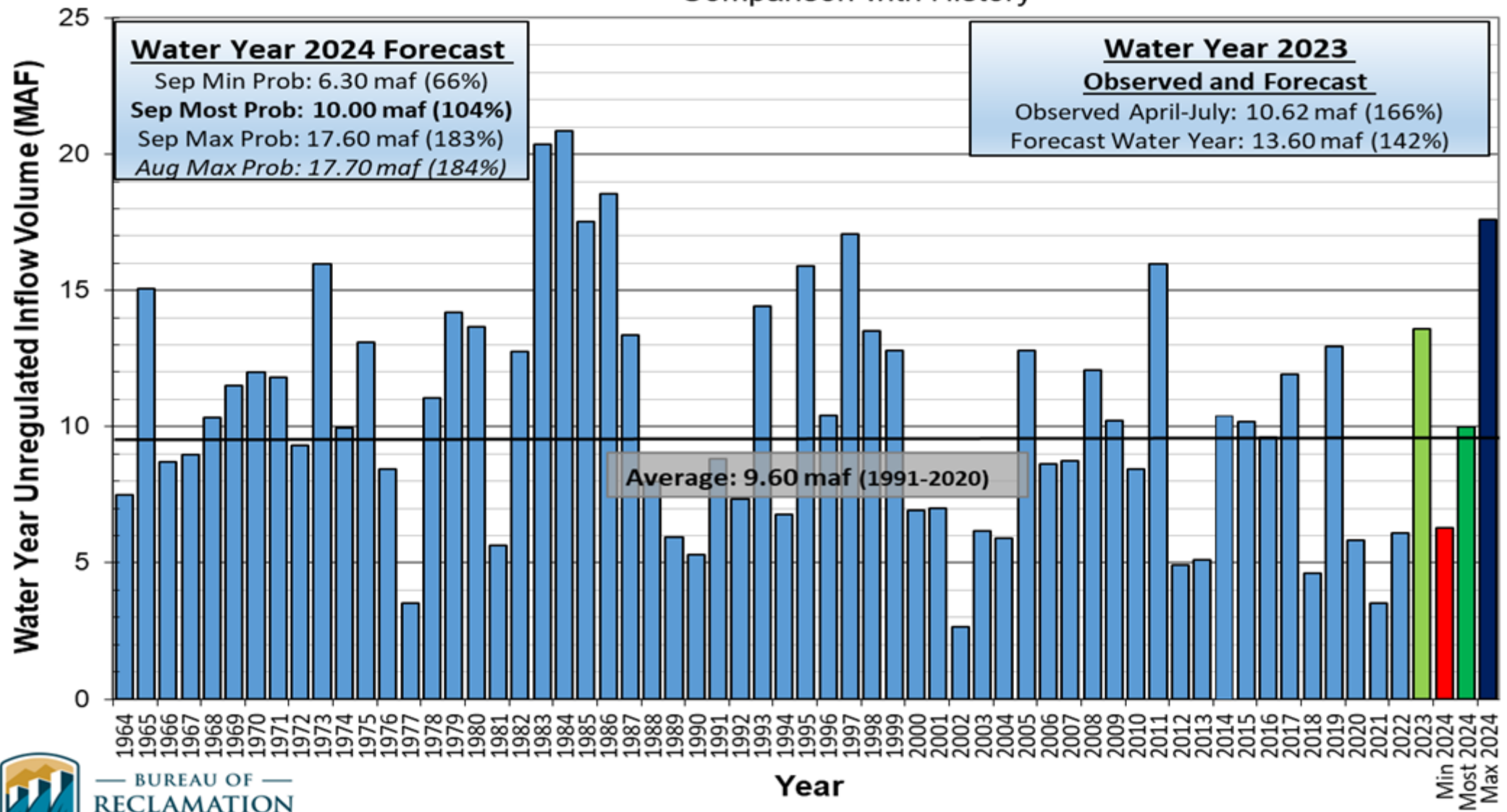
- 2015 = 94% of average
- 2016 = 89%
- 2017 = 110%
- 2018 = 43%
- 2019 = 120%
- 2020 = 54%
- 2021 = 32%
- 2022 = 63% of avg.
- 2023 = 142% of avg. forecasted
- 2024 = 104% of avg. forecasted (probable range of 64% to 184%)

- 2023 inflow:
 - Actual
 - Jun = 149%
 - Jul = 109%
 - Aug = 81%
 - Forecast
 - Sep = 116%
 - Oct = 116%
 - Nov = 123%

Lake Powell Unregulated Inflow

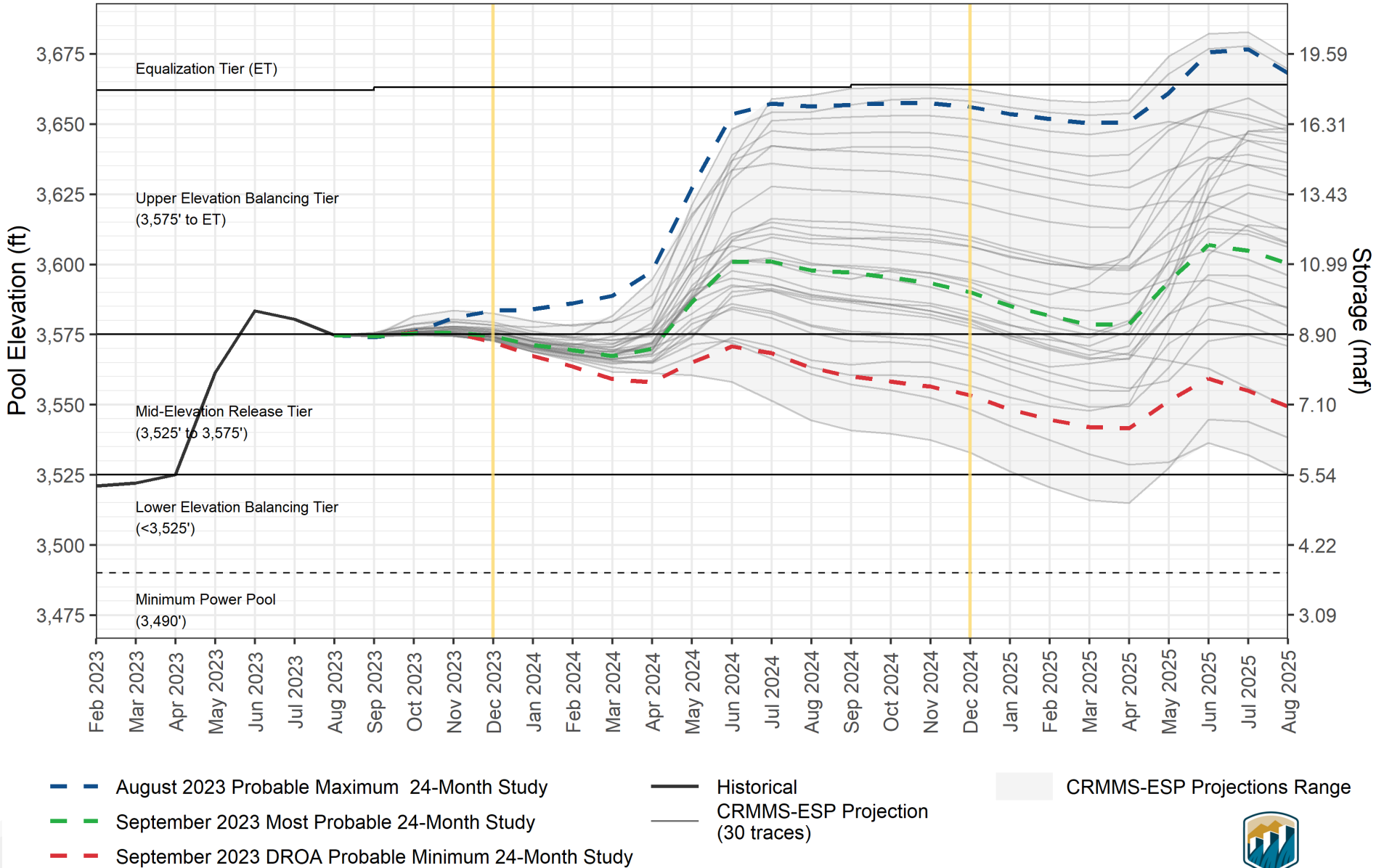
Water Year 2023 and 2024 Forecast *(issued September 1)*

Comparison with History

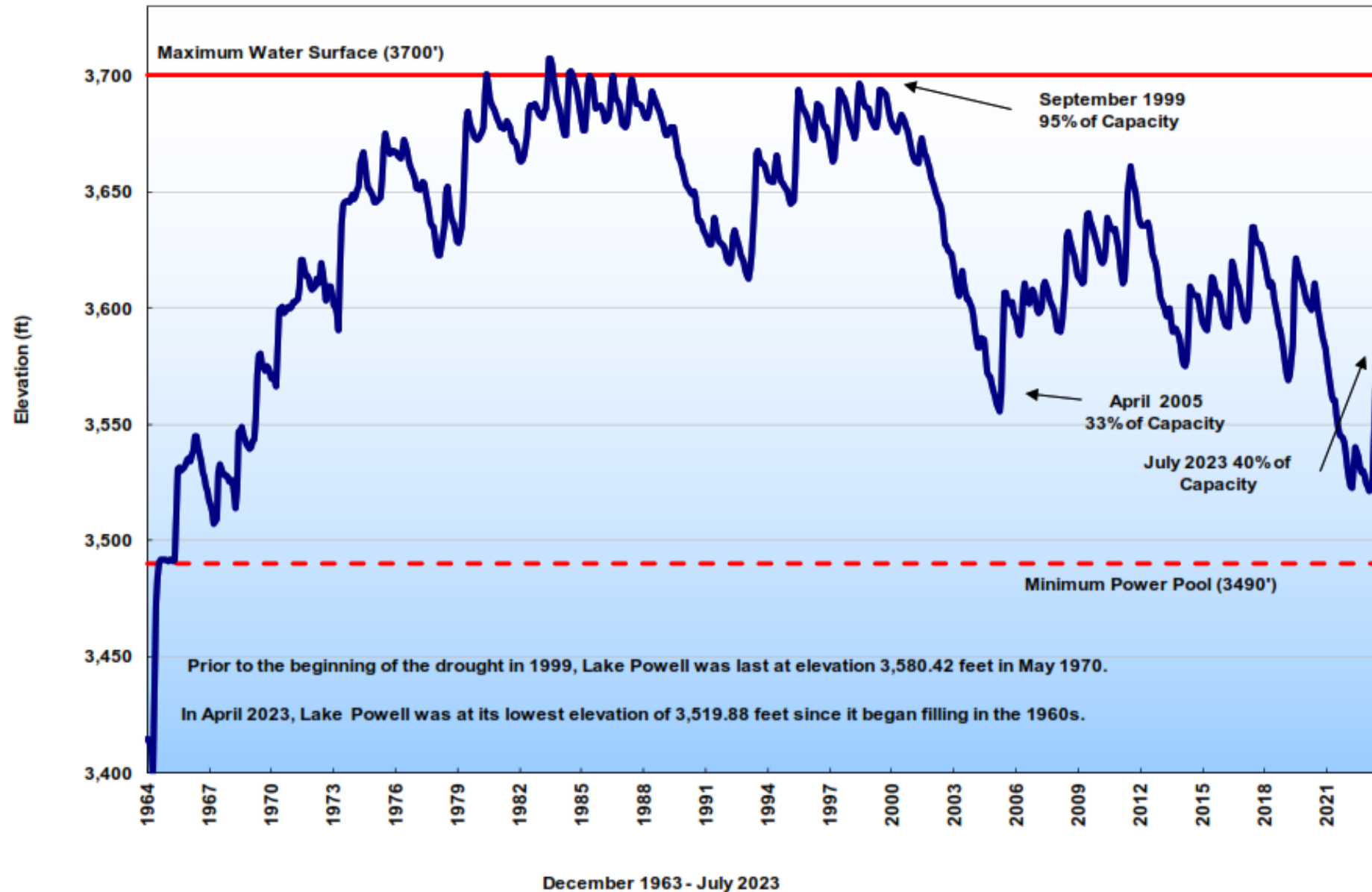


BUREAU OF
RECLAMATION

Lake Powell End-of-Month Elevations
CRMMS Projections from August and September 2023



Lake Powell End of Month Elevation



CRSP Rate

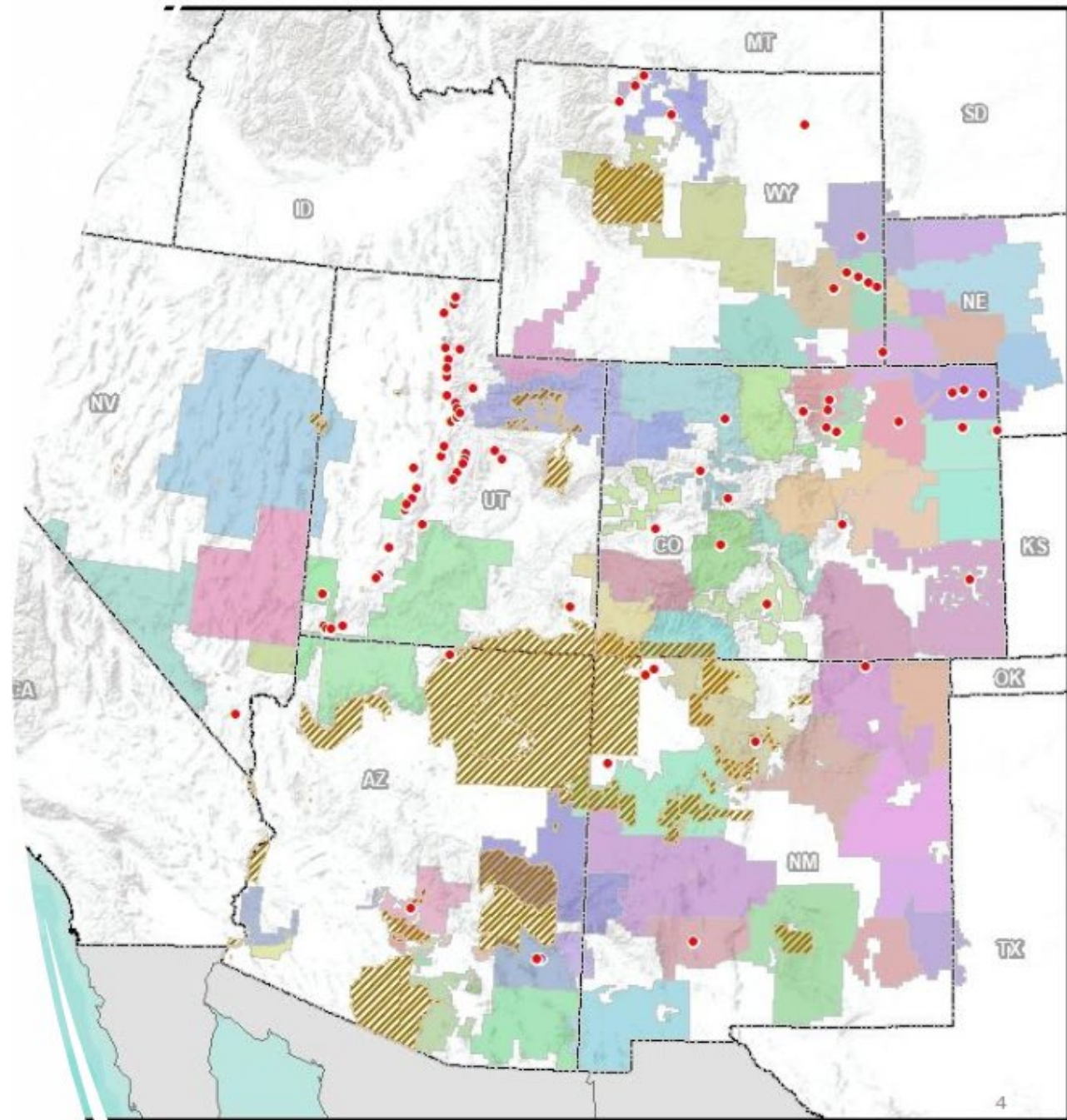


- Current CRSP rate effective through year 2023
 - Set to be in place for 2 years
- WAPA going through FRN process (Federal Register Notice)
 - WAPA-206
 - Proposal has No rate change
 - \$5.25/kW-month
 - \$12.36/MWh

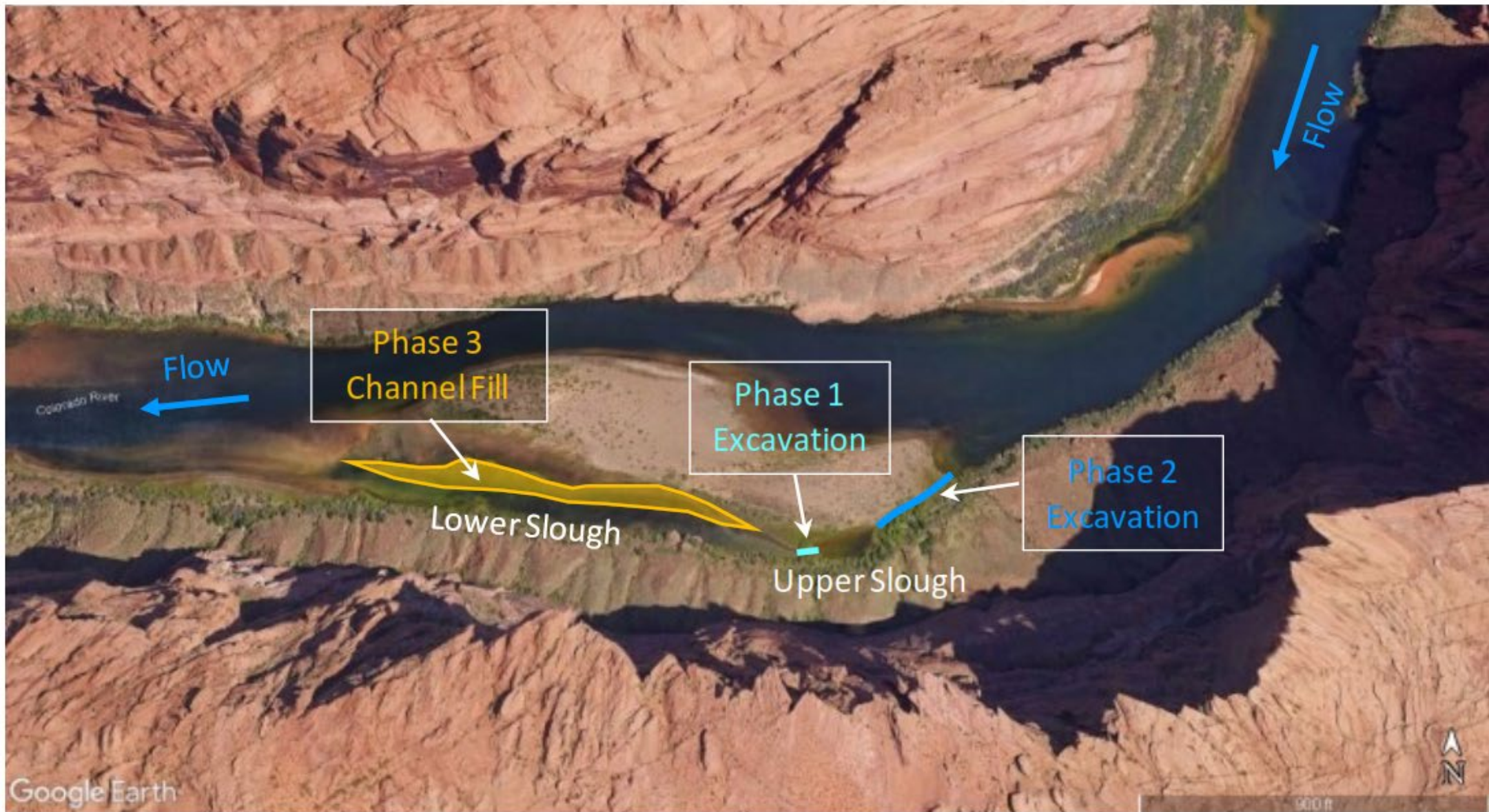
CRSP Firm Electric Service Deliveries

- 130 Long-Term Firm Electric Service Customers
- Long-Term Customers located across 6 states
- 54 Native American Tribes
- 76 municipalities, rural cooperatives, irrigation districts
- About 5 million end-use consumers, mostly in rural areas.

Note: Red dots are municipalities; solid-colored blocks are rural electric cooperatives; cross-hatched areas are Tribes.



Proposed Slough Modifications

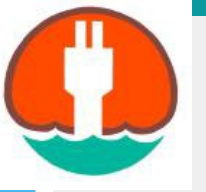




— BUREAU OF —
RECLAMATION

Glen Canyon Dam Air Injection Test

CREDA's Mission

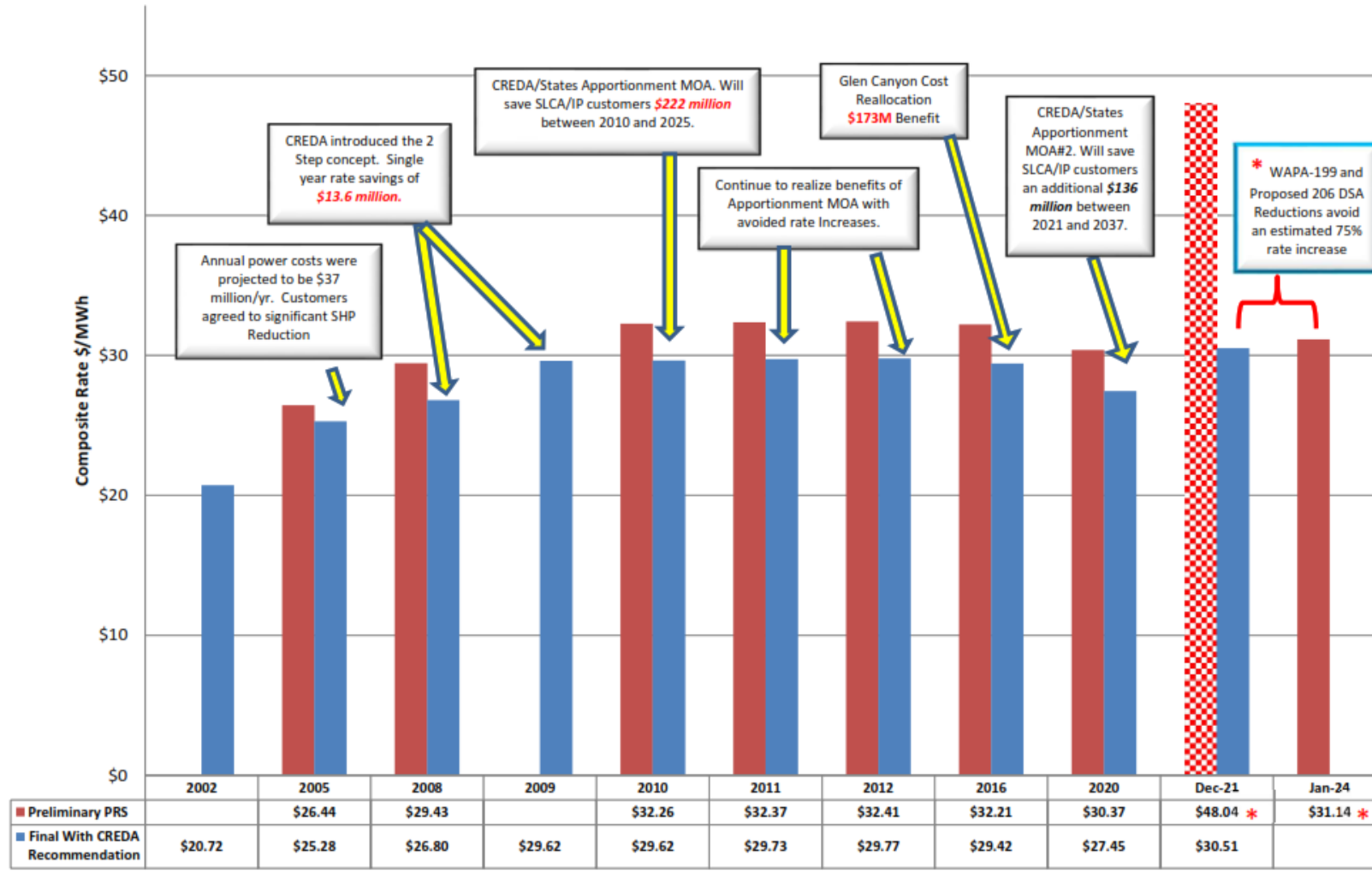


“To preserve and enhance the **availability, affordability, and value** of Colorado River Storage Project (CRSP) facilities while promoting **responsible stewardship** of the Colorado River System.”

CREDA Influence of CRSP Rates

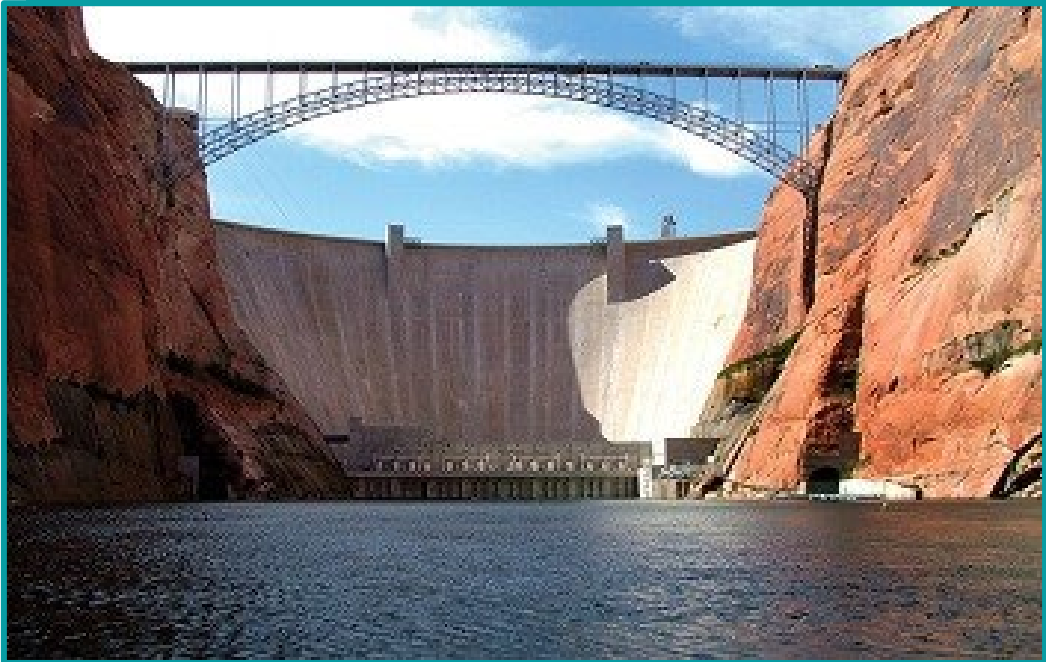


SLCA/IP Composite Rate History
As Proposed by WAPA and Final With CREDA Recommendation



*Pg 20 of 10/2021 Brochure "If WAPA was purchasing power to SHP levels in WAPA-199, the \$130M cost for purchased power in the September 24-month Study would result in a 75 percent rate increase compared to WAPA-190."

9/6/2023





Transformer Capacity Solutions

Central-St. George Project



Rachel Stanford

Summary

- ICPE to perform study – Mike Velarde, Chris Christensen
- Evaluate proposed transformer upgrades and/or additions
- Draft summary report
- Estimated 28 weeks to complete
- Cost estimate \$55,350
 - Not-to-exceed
 - Time and materials

Staff is seeking approval to instruct ICPE to begin work to study Washington County transformer deficiencies and evaluate & document potential solutions at a not-to-exceed cost of \$55,350.