



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

6/7/2023

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 May 2023

STAFF REPORTS

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

BUDGET

OLD BUSINESS

1. Capacity Update

NEW BUSINESS

1. Possible recommendation of approval for updates to Underground Standards & Specifications
2. EV Charging Rates Discussion
3. Impact Fee Study Discussion
4. 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





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

- 1 The Hurricane City Power Board met on May 3, 2023, at 3:00 p.m. at the Clifton Wilson Substation on 526 W
2 600 N.
3
- 4 In attendance were Mac Hall, Charles Reeve, Jerry Brisk, Joseph Prete, Dave Imlay, Scott Hughes, Michael
5 Ramirez, Brian Anderson, Jared Ross, Doug Heideman, Fred Resch, and Crystal Wright.
6
- 7 Mac Hall welcomed everyone to the meeting; Doug Heideman led the Pledge of Allegiance and Mac Hall
8 offered the prayer. Charles Reeve motioned to approve minutes from the April 2023 meeting. Jerry Brisk
9 seconded the motion. Motion passed unanimously.
10
- 11 **Scott Hughes:** Scott Hughes reported an update on employees. We received a journeyman application and
12 after the hiring process we have extended Brayden Rice an offer. He will be starting next week. He wanted to
13 remind the board to save the date for the upcoming UAMPS Annual Member Conference that will be held in
14 August.
15
- 16 **Brian Anderson:** Brian Anderson reported that 600 N Phase 3A has been our main objective. They should have
17 the 69kv line connected, so if there was an emergency, we would have the ability to switch back off the Rocky
18 Mountain Power feed. The plan is to start pulling the 1272 wire next week. That would complete this project.
19 The line crew has been working tirelessly trying to get this project done on time. He provided a report on the
20 Cordero line. The only way that project was able to be completed with our packed workload was to allow
21 Cordero to hire a contractor to complete the job. The project is complete, minus one property owner's
22 easement. There is a meeting with that property owner to help answer some questions they have. We will not
23 energize the line until all easements have been obtained.
24
- 25 **Mike Ramirez:** Mike Ramirez said there isn't anything notable to report other than they're still busy keeping up
26 with projects.
27
- 28 **Jared Ross:** Jared Ross reported on the Three Falls Substation construction. The cement is almost all done.
29 They are working on digging for the ground grid. The building has walls, and the roof has been started. He then
30 reported an update on the five-year emissions testing that was just completed. Everything passed so we
31 should be good for another five years. There were a couple of generators that gave them a few problems
32 during testing, but they were able to resolve them. Generator #6 is still having low power issues and the
33 problem is deeper than they thought. We will probably be looking at a top end overhaul next winter after the
34 run season.
35
- 36 **Budget:** Scott Hughes presented the regular monthly graphs and numbers. Dave Imlay commented that the kw
37 is going down, but the kwh is going up. That's a good trend to have for the load factor. Discussion about the
38 trends in the market over the last ten years.



39 **1150 West Easements Update:** Scott Hughes stated we are still working hard to get easements along 1150
40 West. The existing local businessperson that had been handling the easements resigned after encountering
41 numerous difficulties and an outside person was hired. The new person has had some successes and is still
42 working to procure easements along our preferred route. We are in the property acquisition phase of this
43 project.
44

45 **Southwest Utah Technical Task Force (SWUTTF) Update:** Scott Hughes provided an update from the last
46 meeting. The main important point is that we came very close to exceeding the capacity on the St George
47 Substation to Purgatory line. This line feeds Brentwood and Clifton Wilson substations for us. If entities had
48 not been running generators last summer, we would have exceeded the capacity on that line. The solution that
49 Rocky Mountain Power (RMP) came back with was to shift load. It is an immediate solution, but not a long-
50 term fix. RMP has also started the process to reconductor that line to increase load. They will be pulling a new
51 high-temp wire that gives close to 1272 capacity on a wire the same diameter as the 795 that's in there so they
52 can use existing structures and hardware. This line goes through turtle habitat, so they don't want to have to
53 do anything to change structures. Dave Imlay asked if they specified where the loads were increasing in the
54 meeting. Scott Hughes answered they didn't specify. Dave said St George didn't want to have any other
55 transmission on a line they'd paid for, but if Dixie Power, who wasn't a participant of that transmission line
56 project is using up the capacity and causing problems, that we shouldn't have to pay any money for that. Scott
57 and Dave will get together to discuss details of the history and intricacies of that line.
58

59 **UAMPS Updates:** Scott Hughes stated all the information he will present was included in the packet. He will go
60 through slides quickly and answer any questions. Discussion regarding EV chargers and stated that we need to
61 be on top of changes, how they affect our power system, and issues with having to provide resources for
62 unknown load amounts and times of usage. Discussion about federal government efforts to solve the problem
63 of long transformer lead times. Scott presented some participation numbers in various solar projects that we
64 are participants in. UAMPS had members do a survey to find out their priorities as they search for new projects
65 to participate in and will use that information going forward to help achieve member goals. Presented some
66 forecasted Palo Verde summer pricing.
67

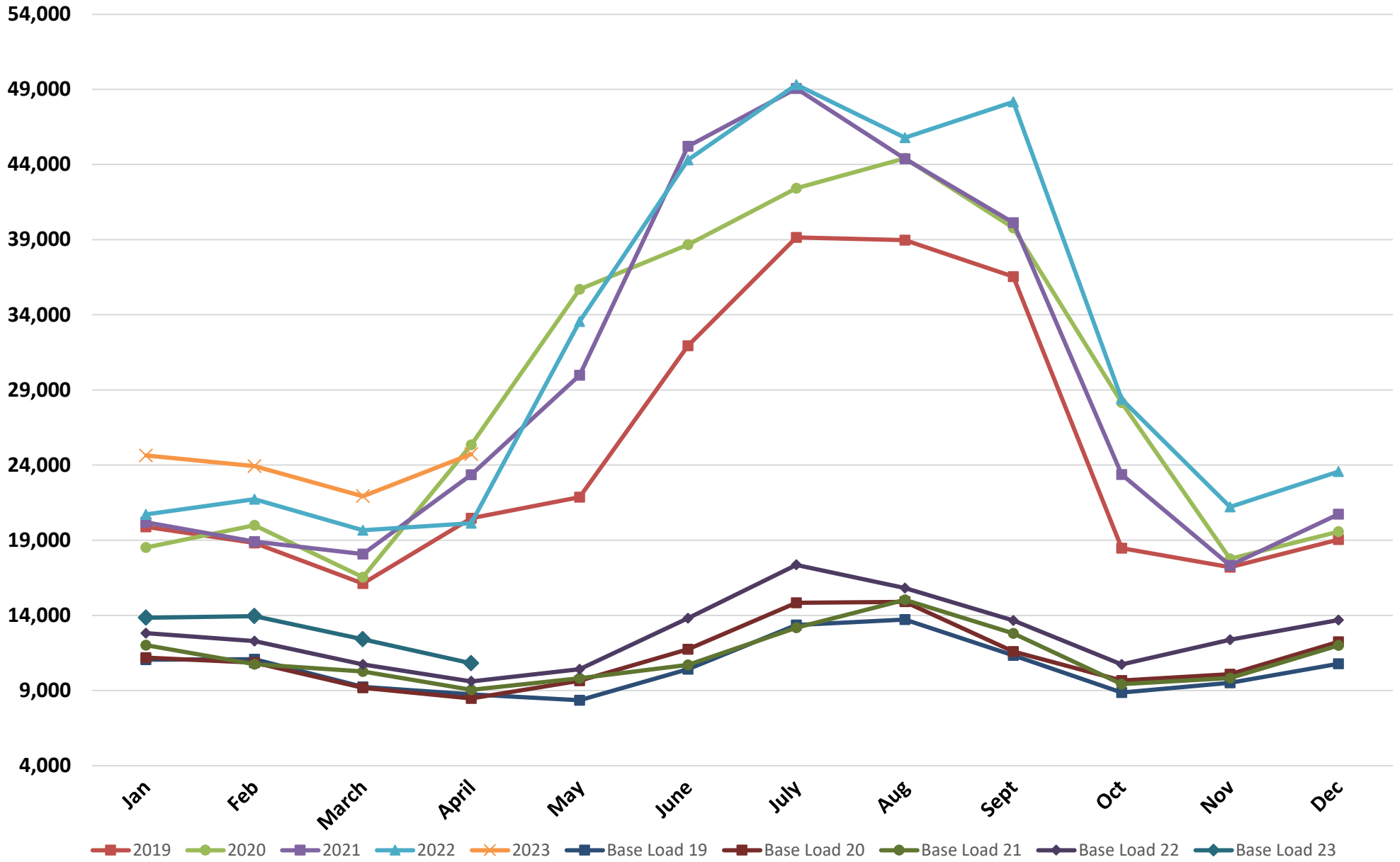
68 Dave Imlay made a motion to move into closed session. Joseph Prete seconded the motion. Motion passed
69 unanimously at 4:10 p.m. Came out of closed session at 4:45 p.m.
70

71 Dave Imlay wanted to recognize the work that Kyle Fenn has been doing as the lone journeyman on the line
72 crew. We would have been unable to complete the 600 North Phase 3A project without his hard work,
73 knowledge, and leadership with his crew. Scott Hughes supported that recognition as well as giving credit to
74 Brian Anderson as well for his efforts.
75

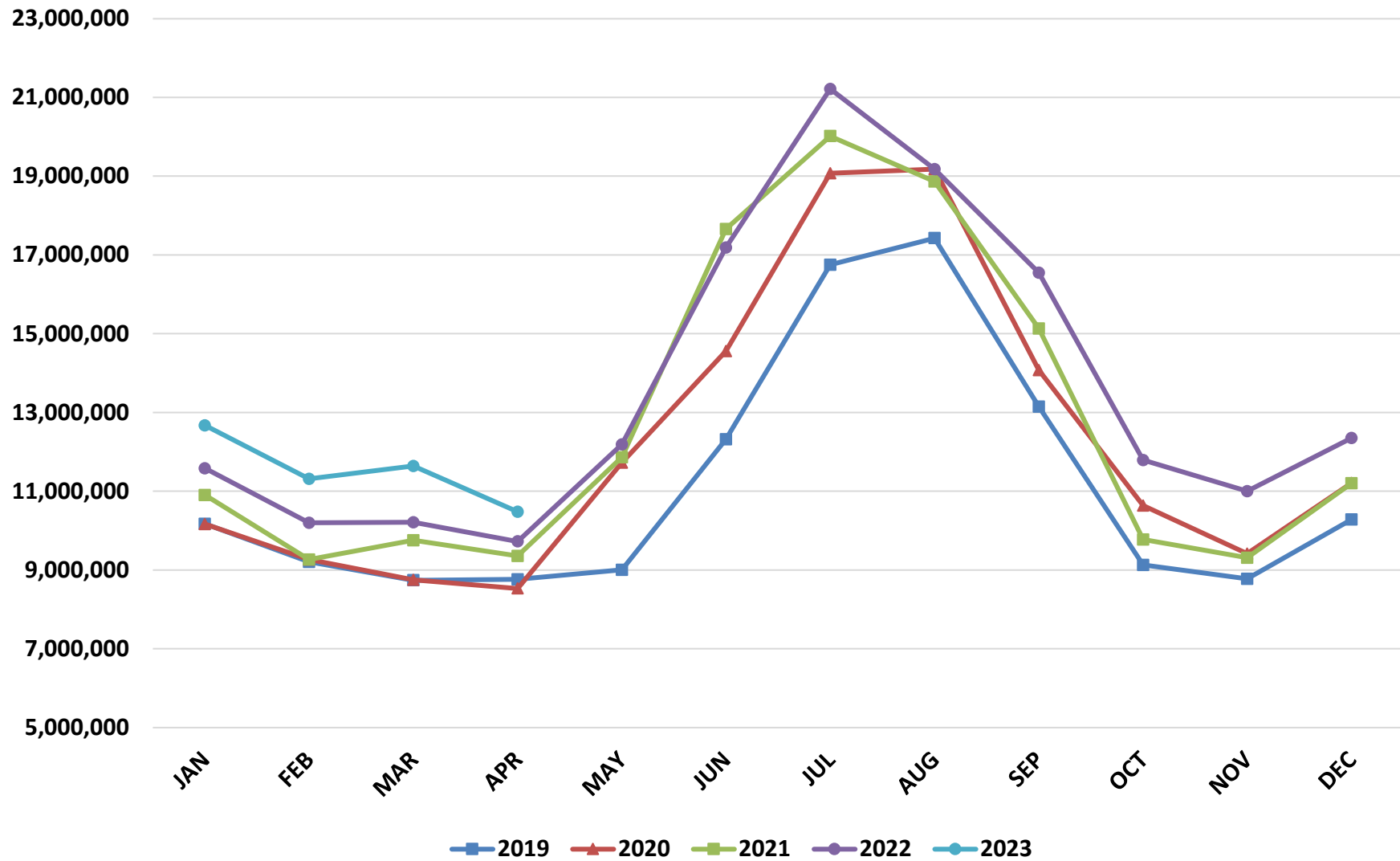
76 Power Board adjourned at 4:50 p.m. The next Power Board Meeting is scheduled for June 7, 2023, at 3:00 p.m.

BUDGET

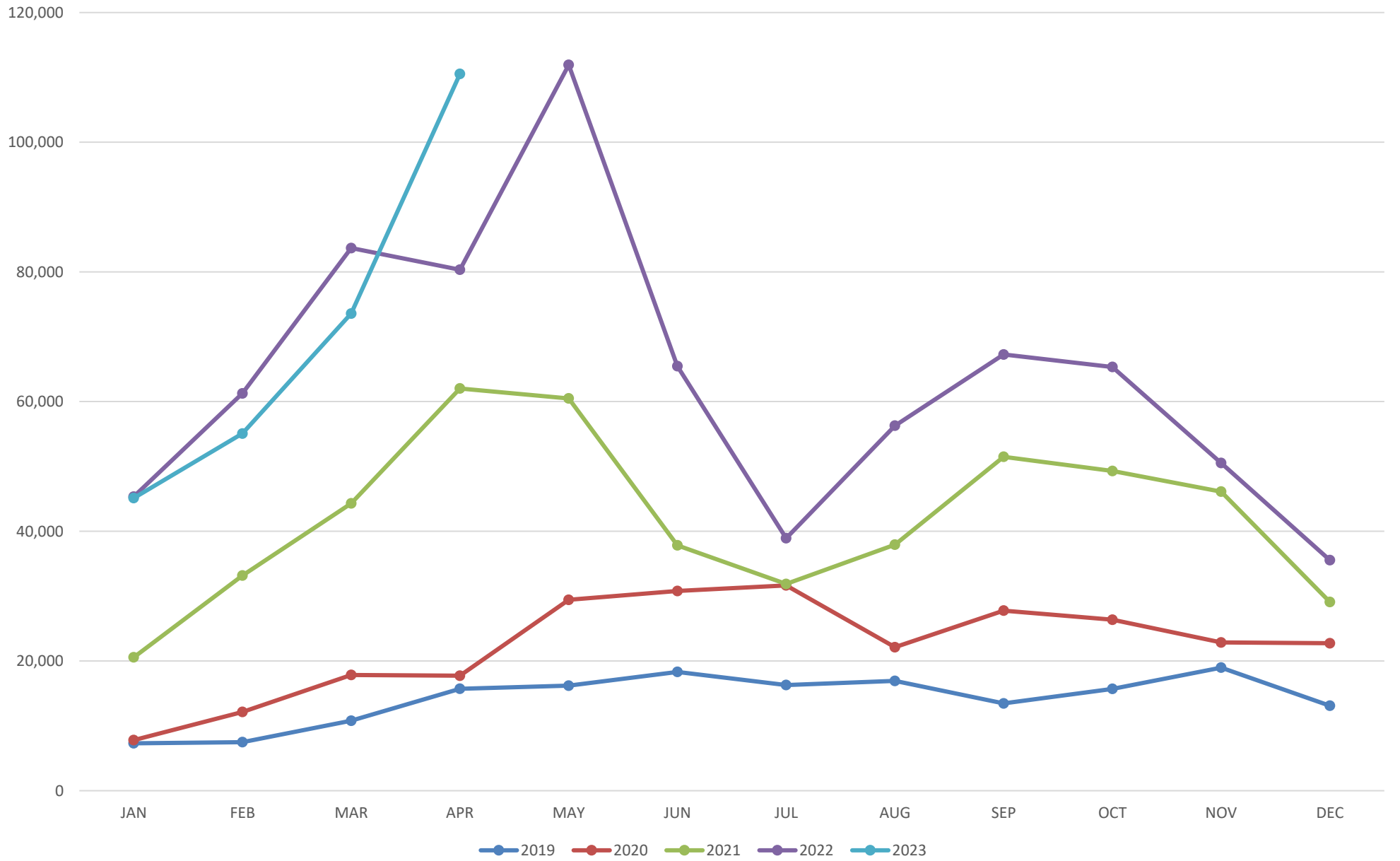
2019 - 2023 KW LOAD



2019 - 2023 KWH LOAD



Solar Kwh



AVERAGE YEARLY POWER PRICES

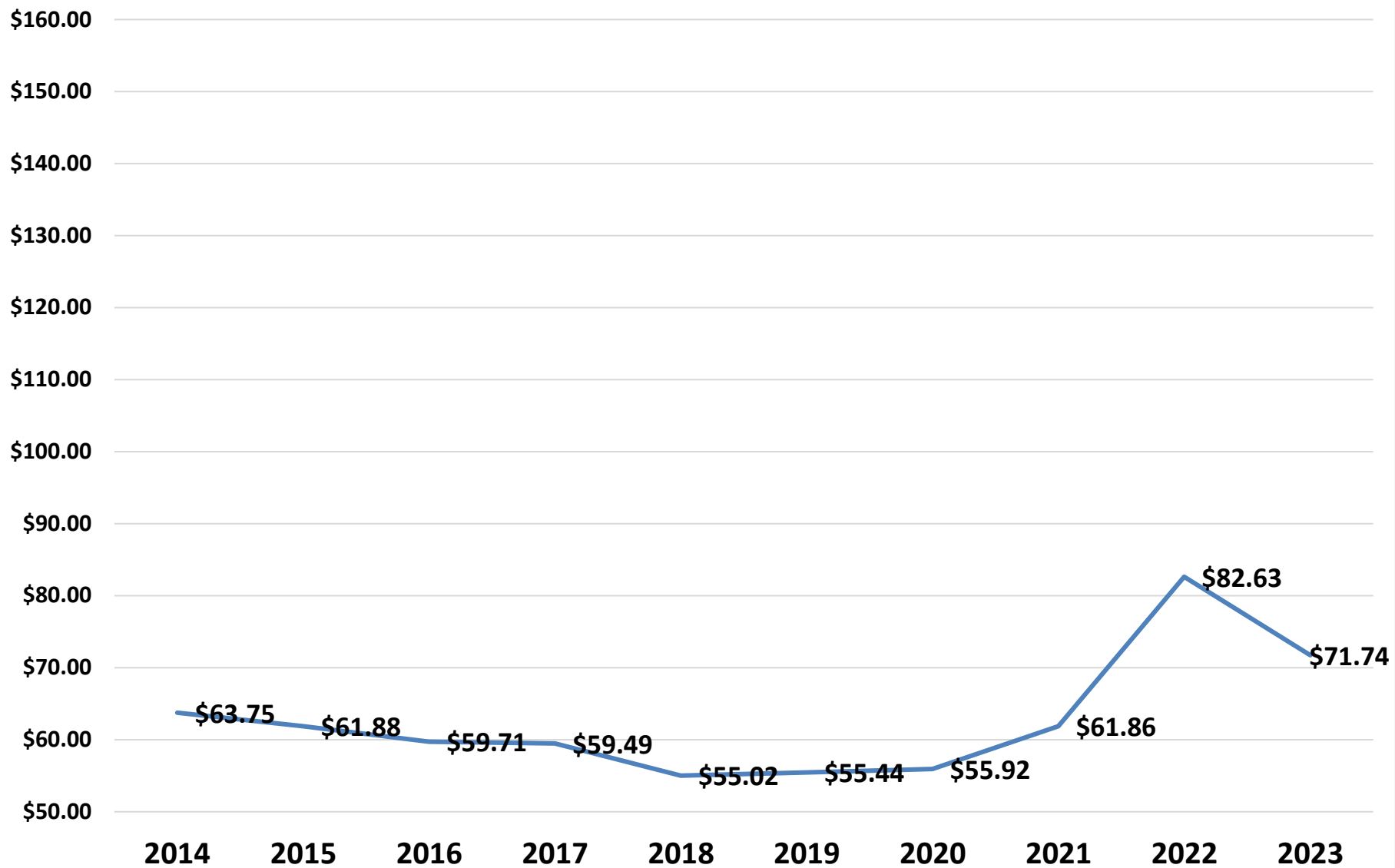
22-23 bdgt amount (as of April) **\$105.98**
 BDGT Year to Date **\$102.33**

	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	
<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	
<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	
<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	
<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	\$92.67
<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	\$94.06

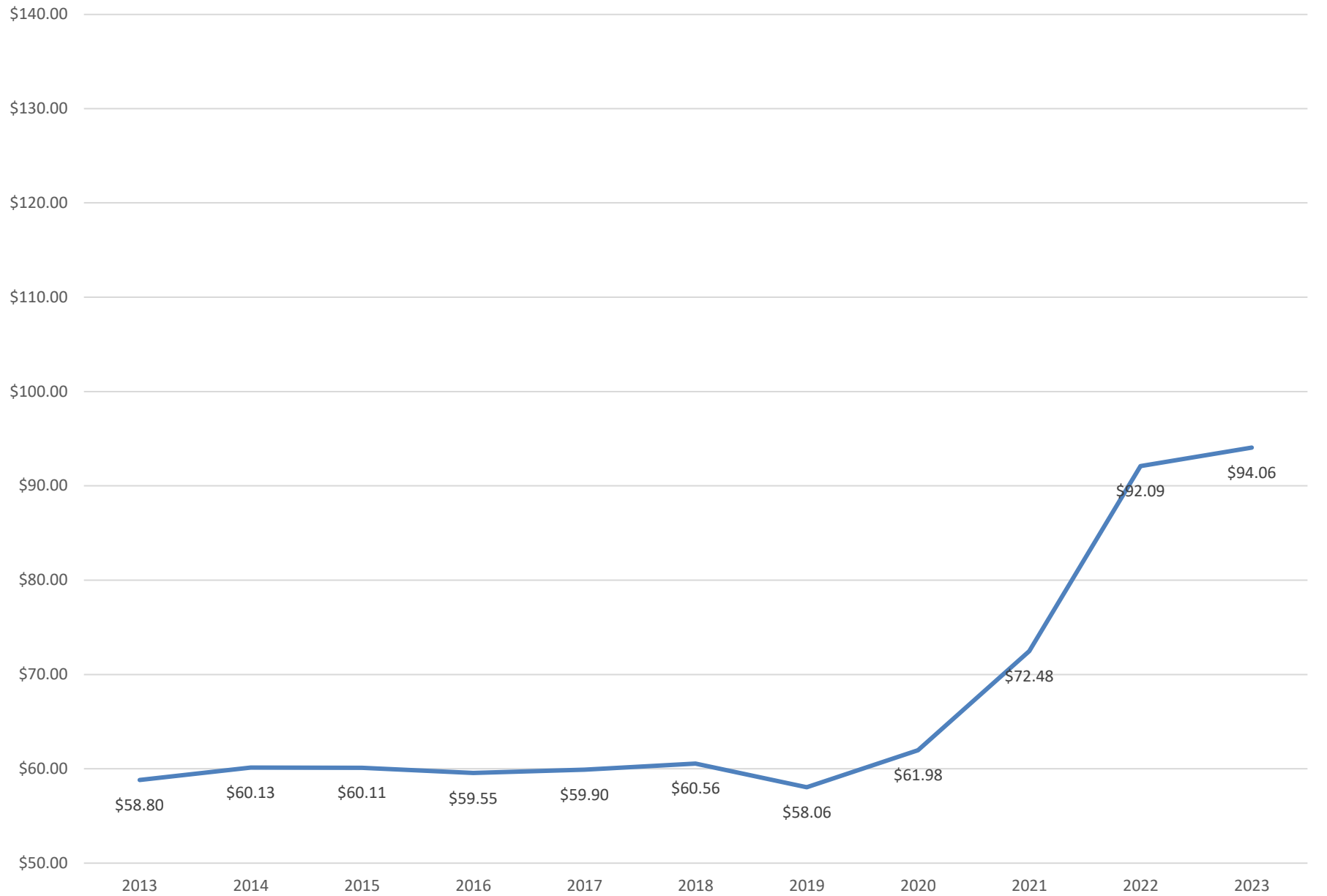
**Cy to
Date**

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.

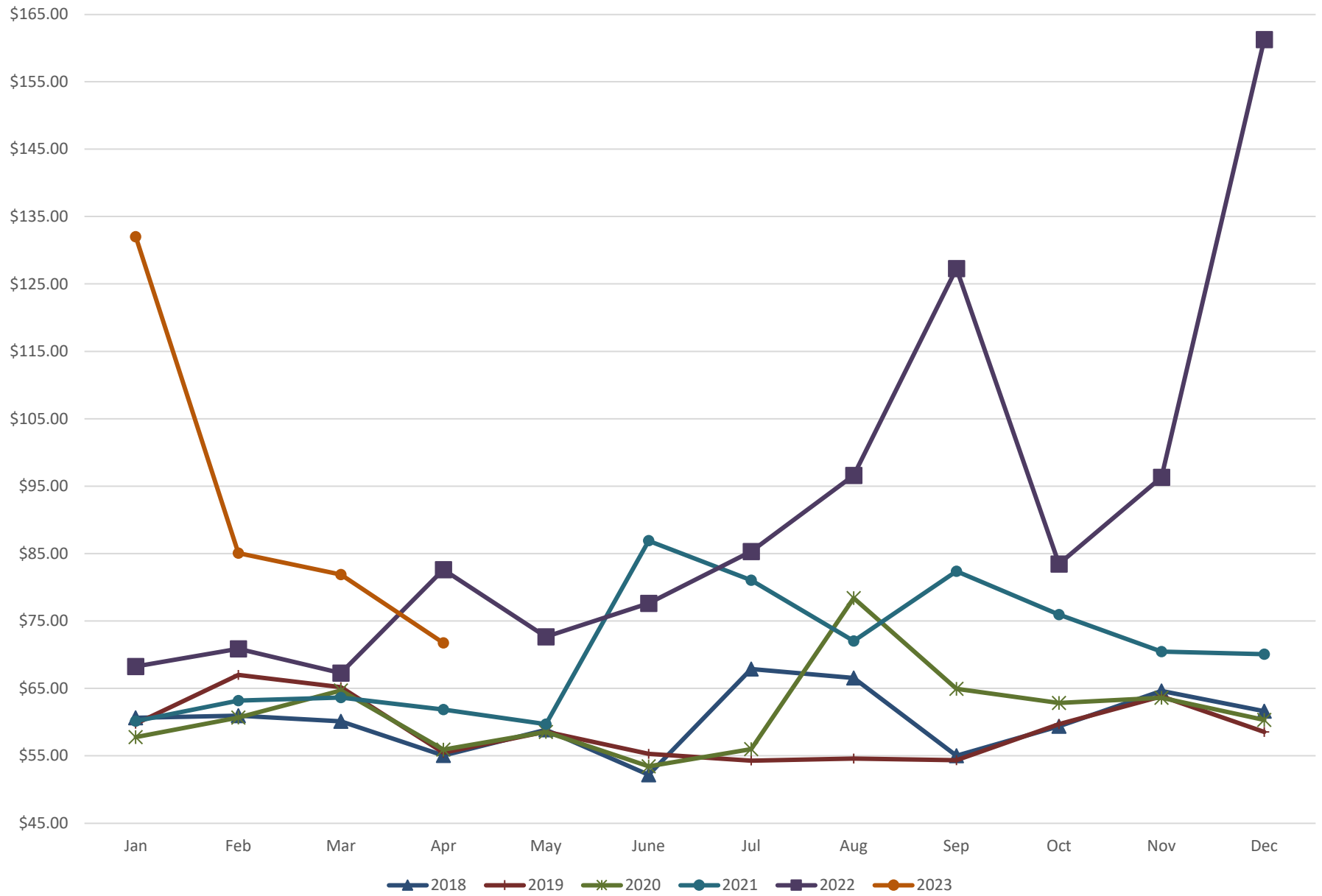
Apr



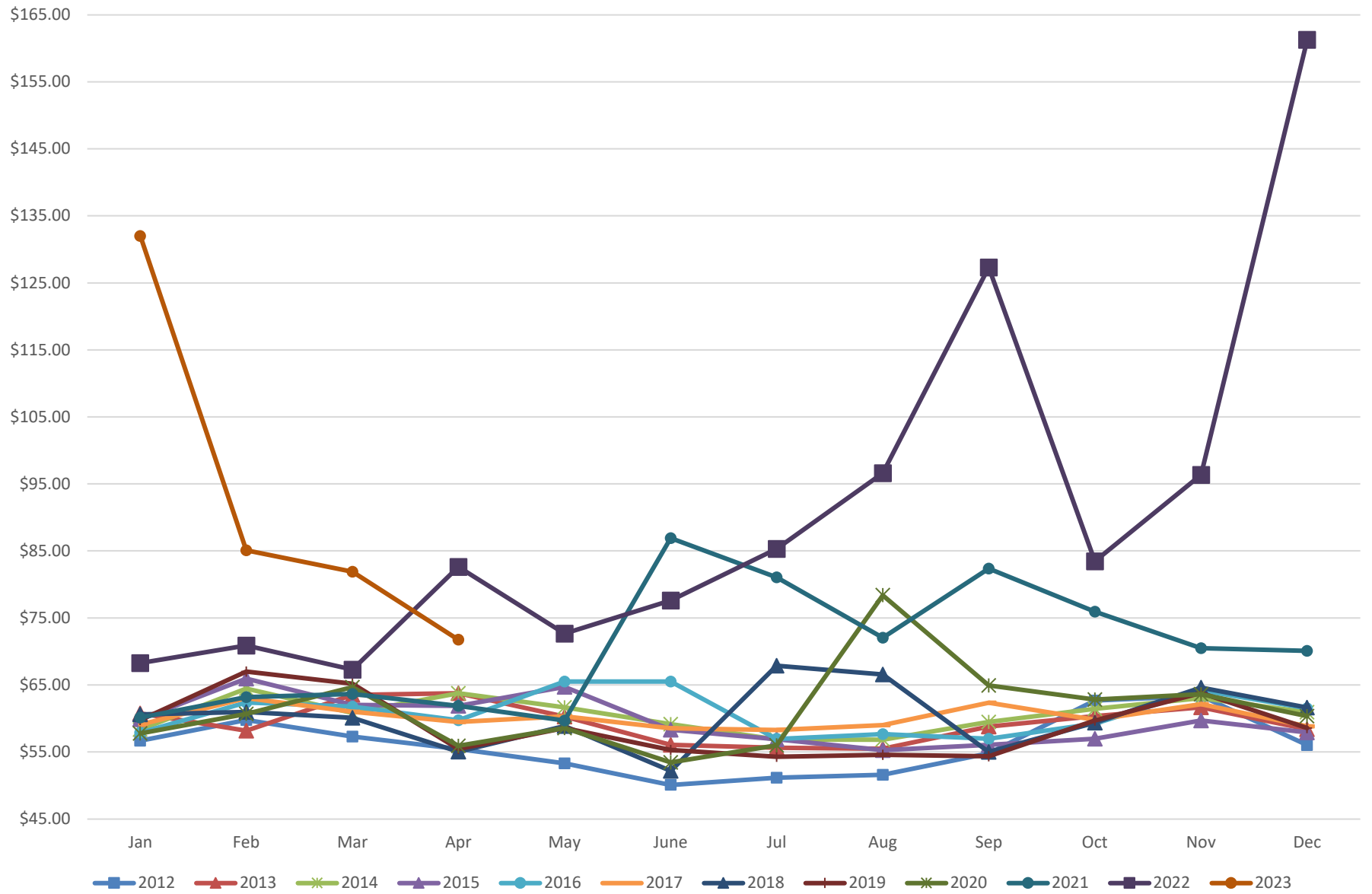
Weighted Average



Avg Monthly Price (5 Yrs)



Avg Monthly Price



POOL PROJECT

PX & Scheduling Report

April 2023

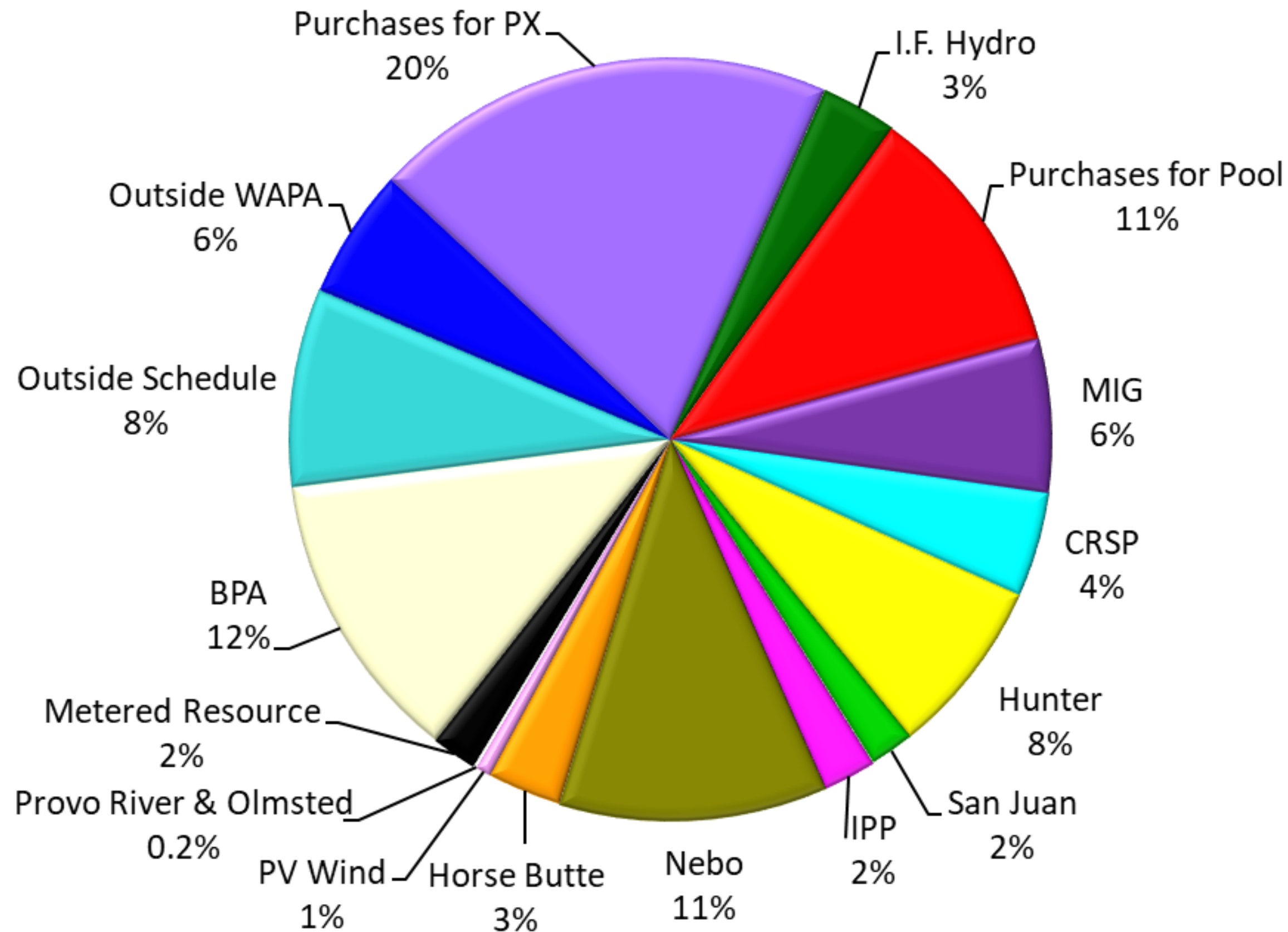
UAMPS



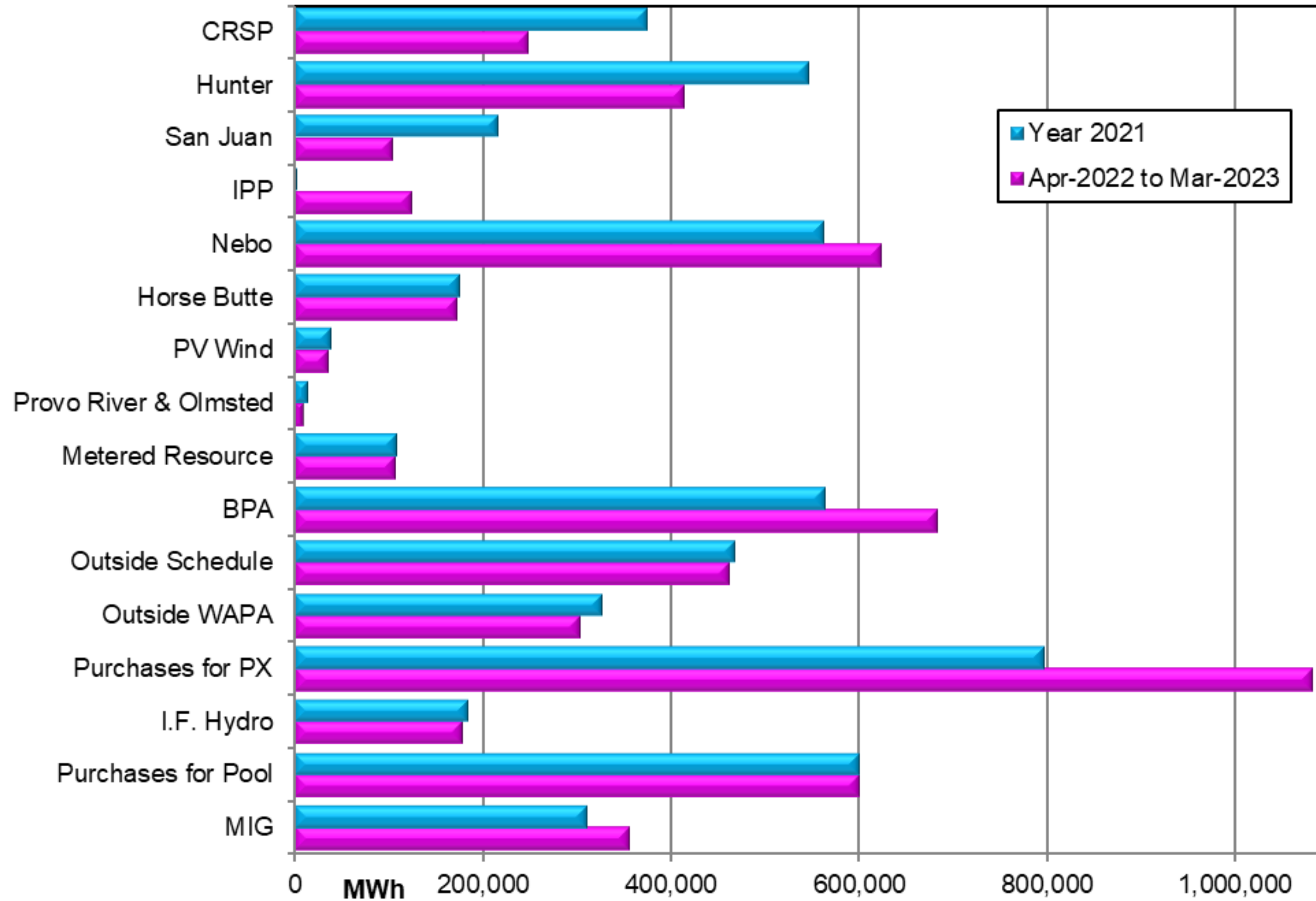
Topic Discussions

- Information Graphs
 - Resource Breakdown
 - Red Mesa Solar Generation
- PacifiCorp System Loss Rate Change

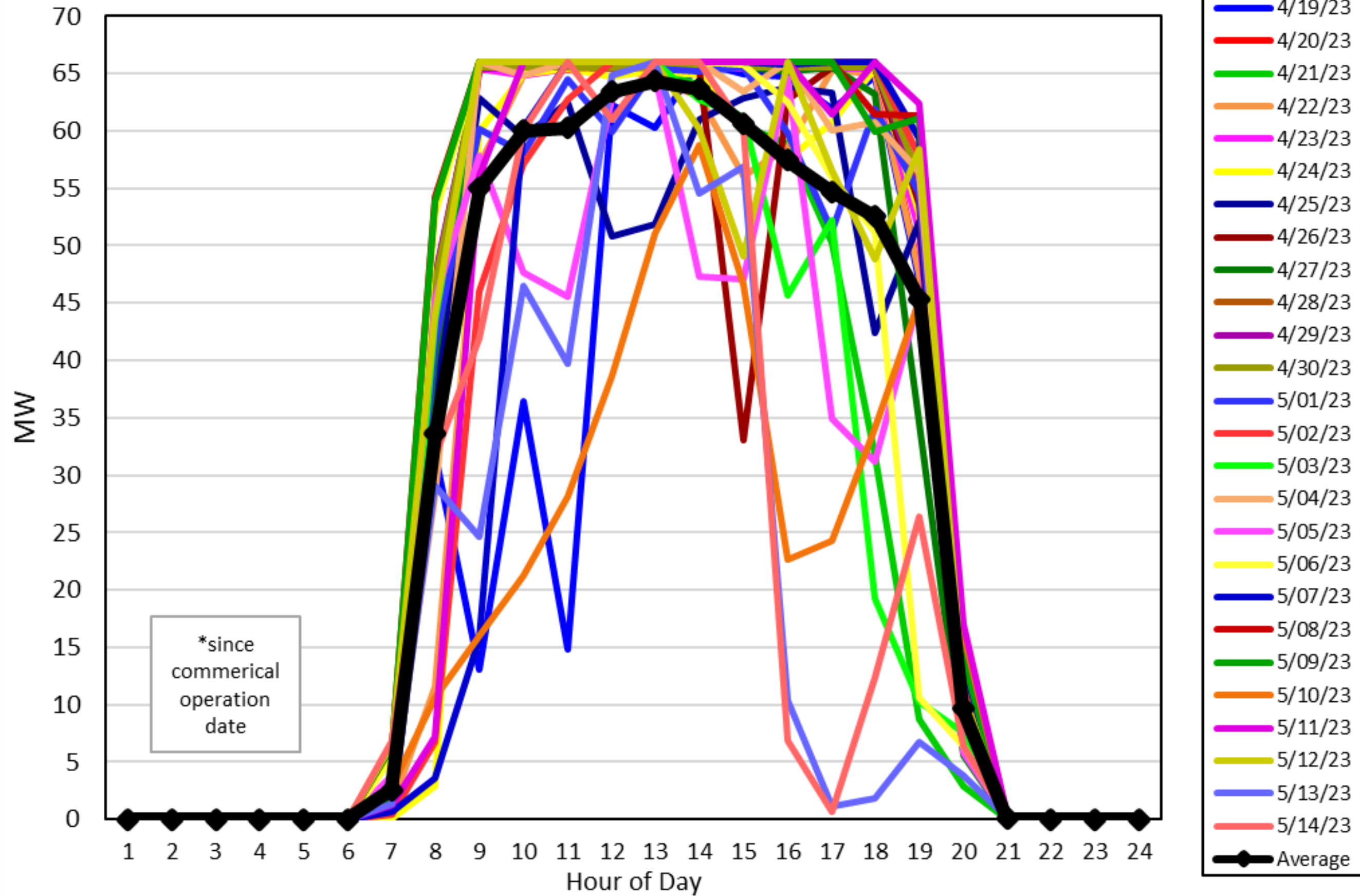
Resource Breakdown: Apr-2022 to Mar-2023



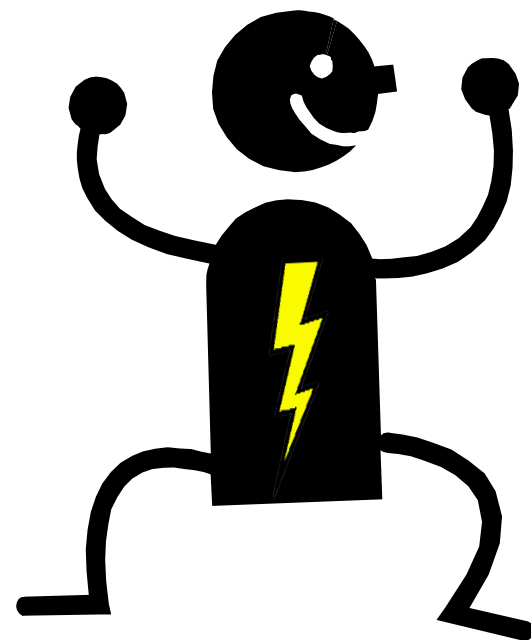
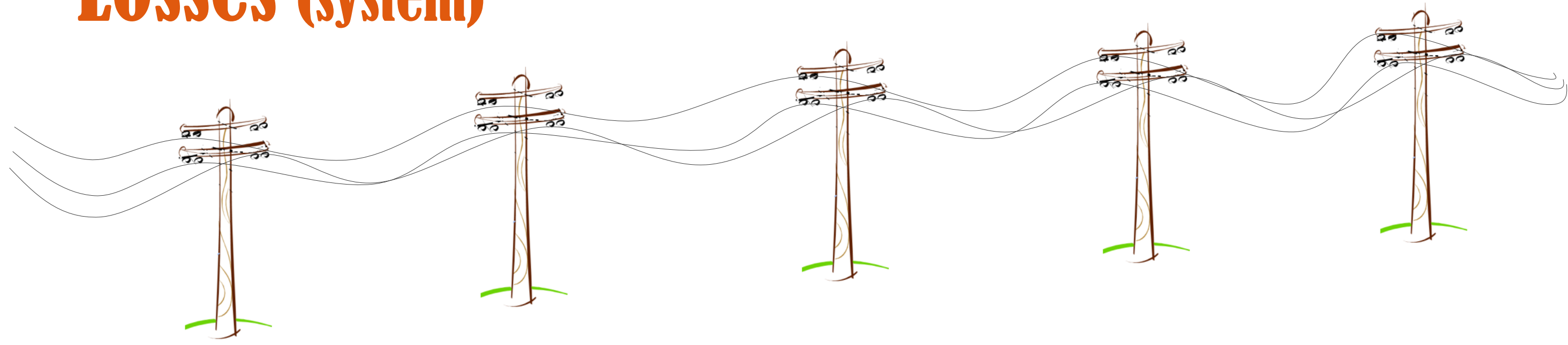
Energy by Resource



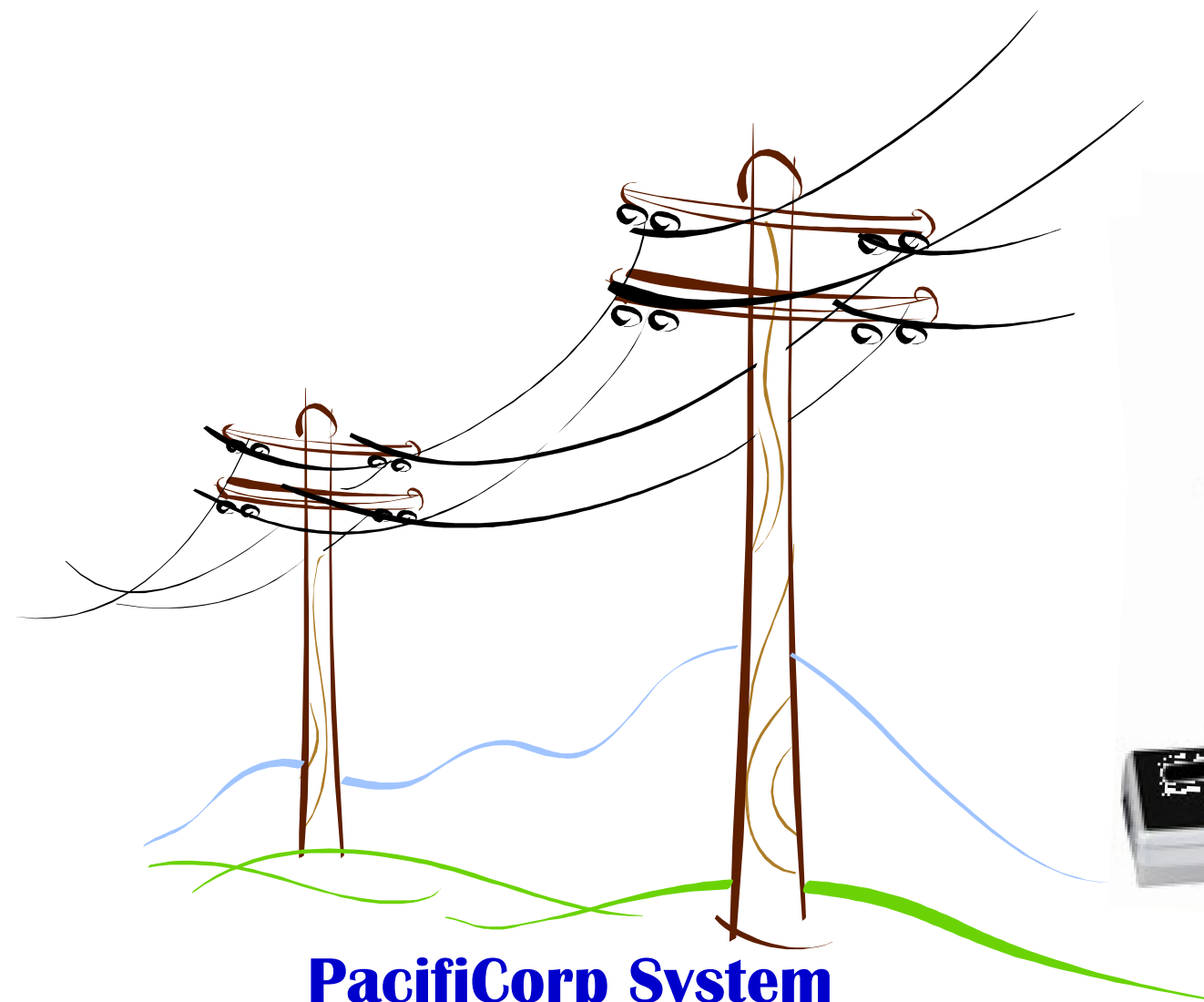
Red Mesa Solar Generation



Losses (system)



Before



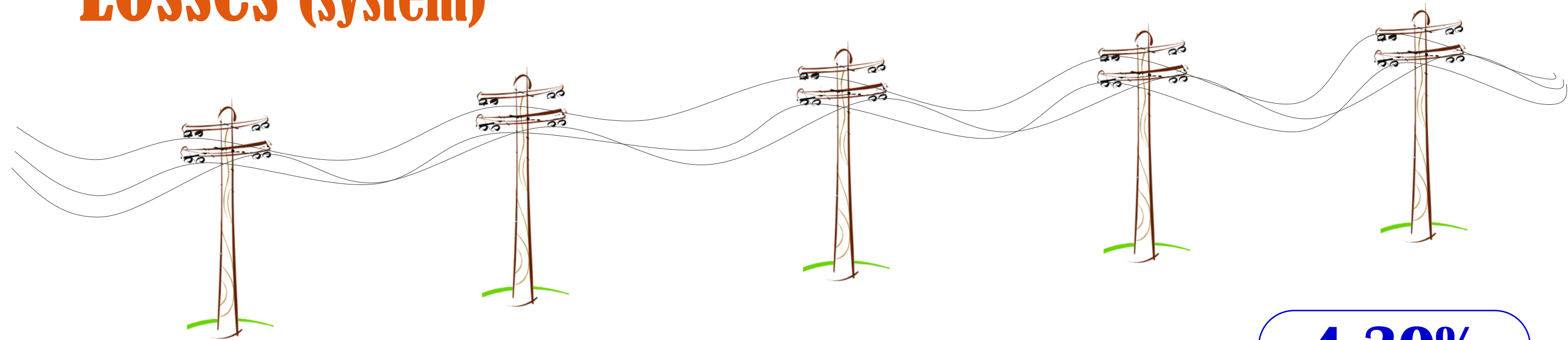
PacifiCorp System



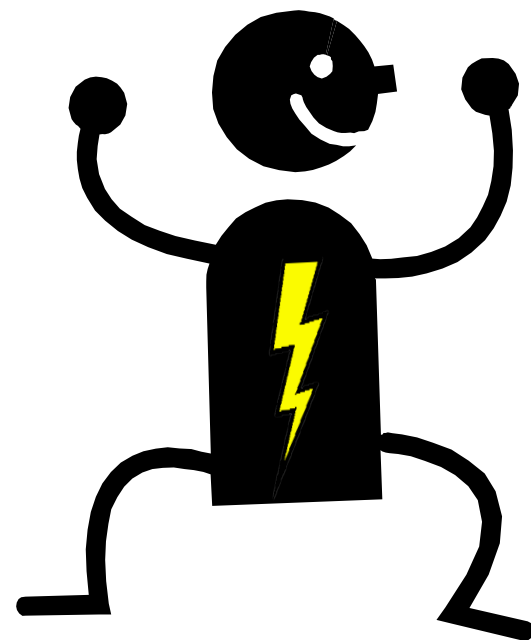
After

**3.75%
loss**

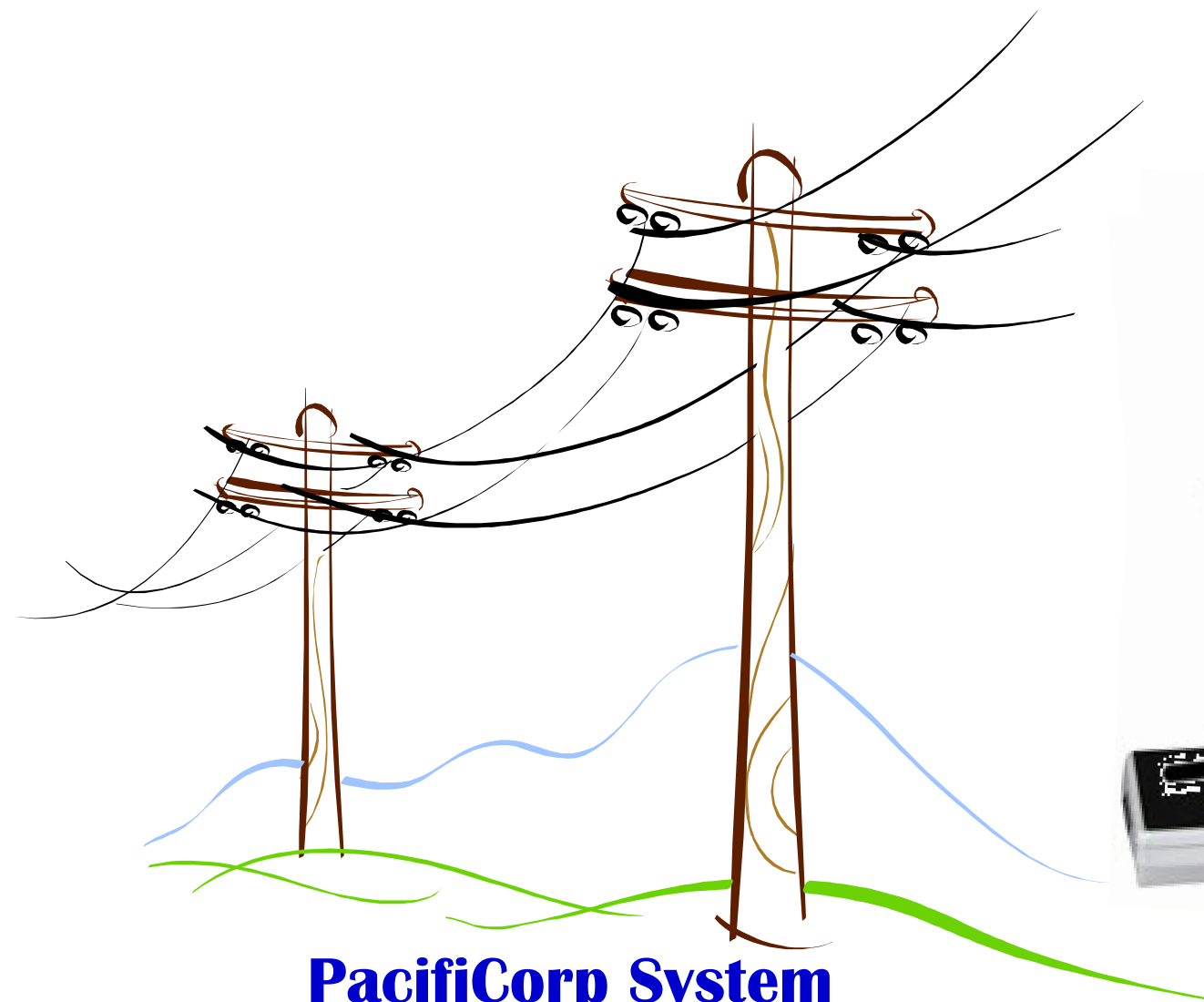
Losses (system)



**1 MW
Schedule**



Before



PacifiCorp System

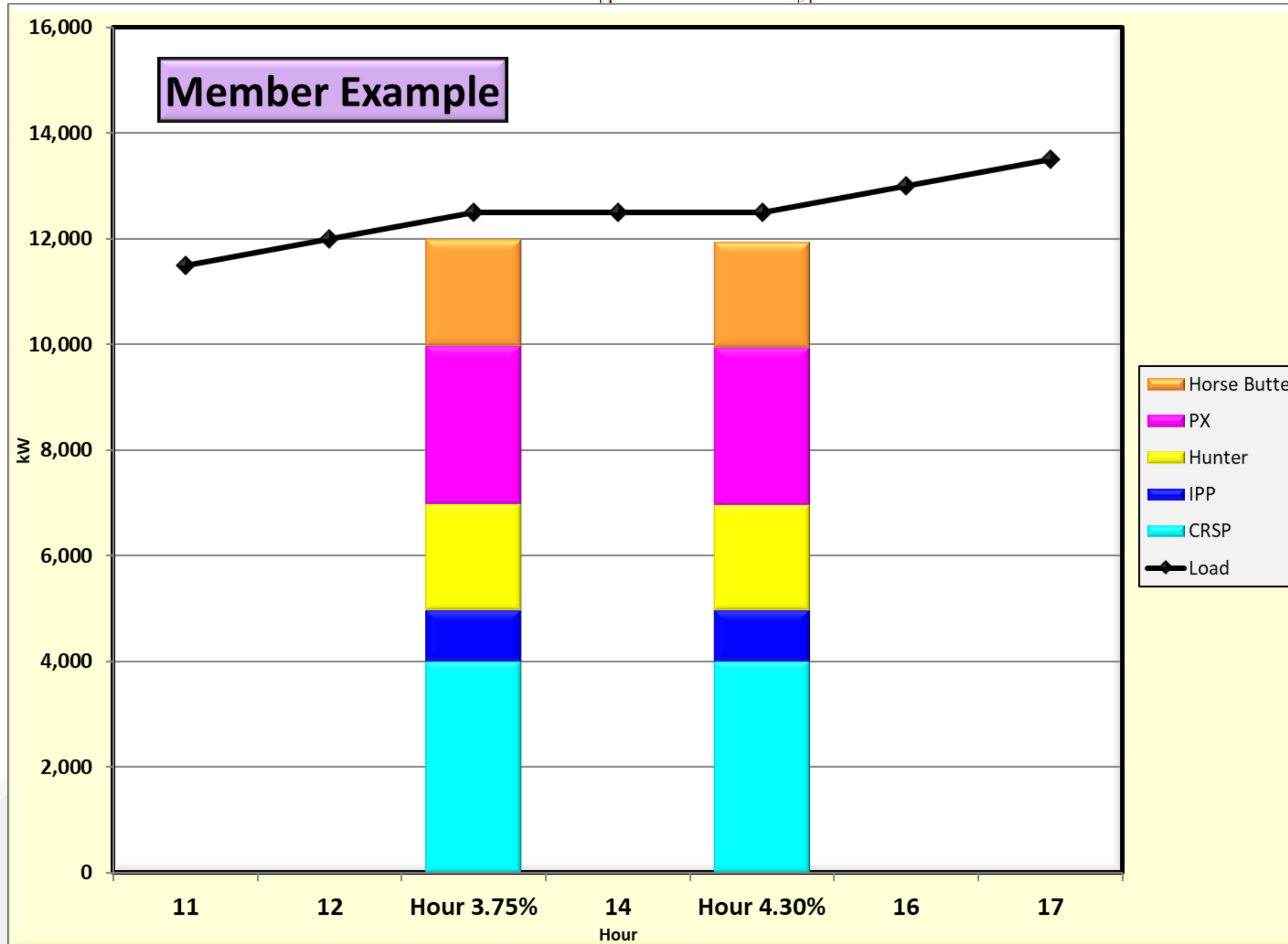
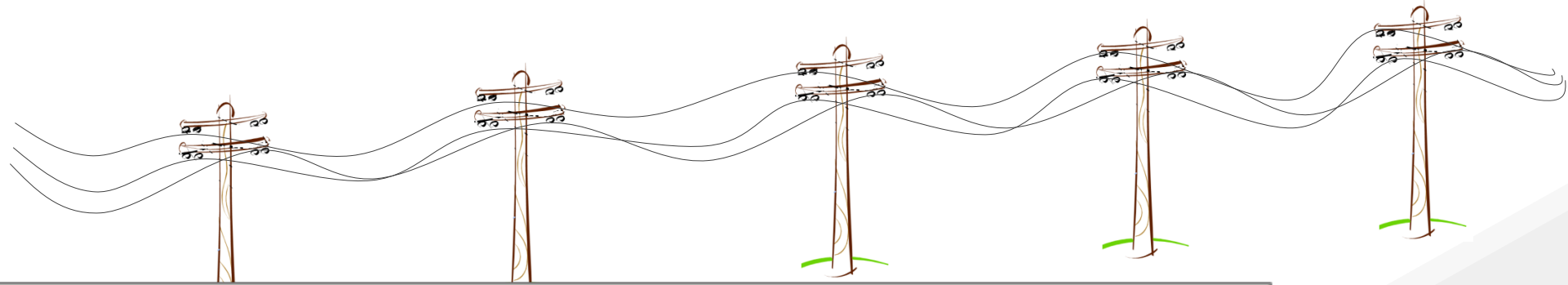


After

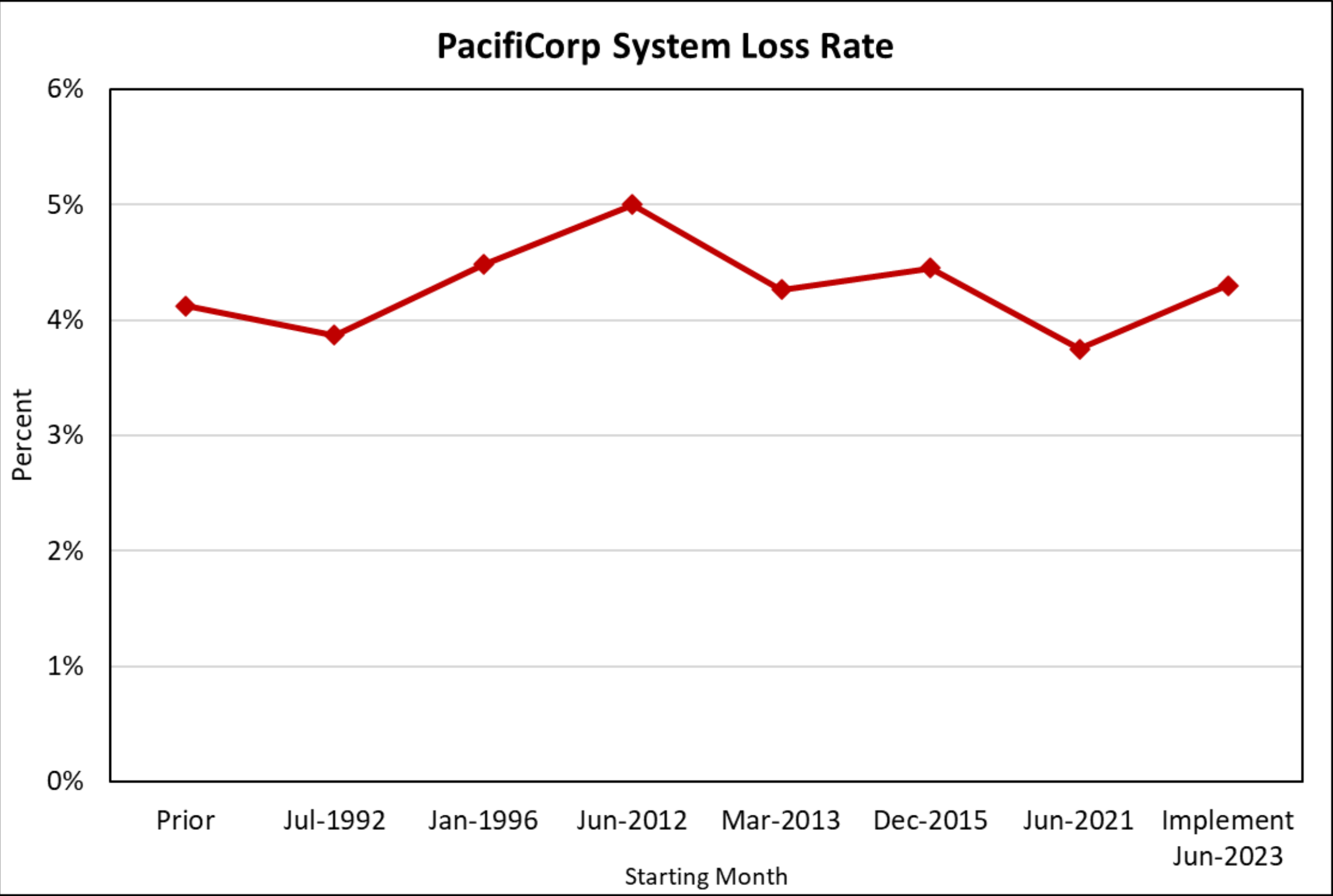
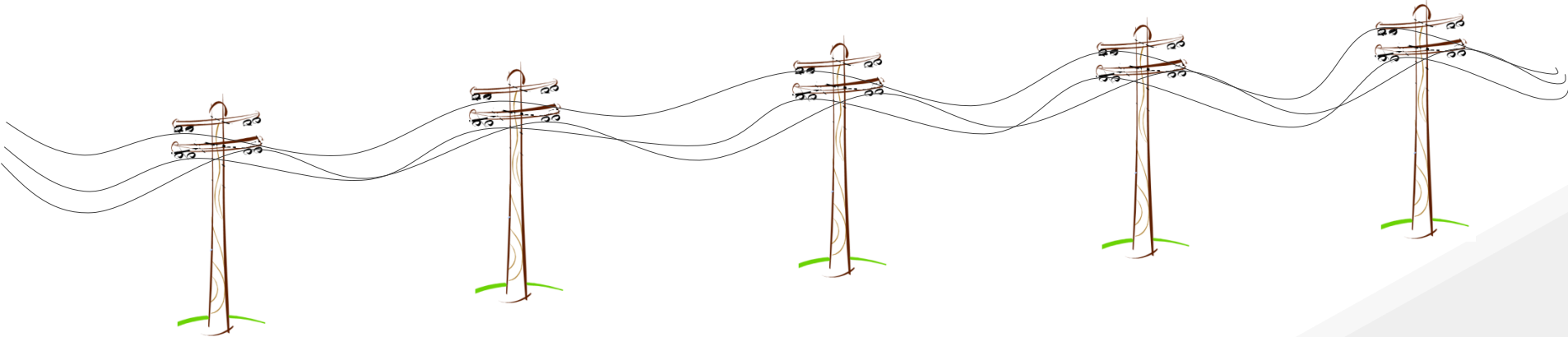
4.30%
~~3.75%~~
loss

959 kW
~~964 kW~~
at meter

Losses (system)



Losses (system)



UTAH..	UTAH....
Loss..	Eff.Date
1.0375	06-01-21
1.0445	12-01-15
1.0426	03-01-13
1.05	06-01-12
1.0448	01-01-96
1.0387	07-01-92
1.0412	



BES Exemption

Central-St. George Project



Rachel Stanford

WC Ad Hoc Committee - BES EXEMPTION

OPTIONS for BES Exemption Approach:

- Deseret/Dixie & UAMPS/members prepare a joint WECC submission
 - Deseret/Dixie does not want to be slowed down in this process due to UAMPS/members last minute desire to engage
- Deseret/Dixie submits request for BES Exemption to WECC with no UAMPS/member participation
 - Deseret/Dixie believes they have a better chance of getting the approval without UAMPS/members due to the Millcreek Generators
 - UAMPS/members would need to prepare our own submission
- Deseret/Dixie & UAMPS/members prepare a joint FERC submission
 - Deseret counsel identified a precedent setting So. Cal Edison filing where a large looped 115 kV system with internal generation was granted exemption
 - UAMPS counsel reviewed and noted FERC relies on the 7-Factor test established in Order No. 888 to determine whether an element is distribution or transmission.
 - The Commission has also used the “Mansfield Test” to determine whether facilities are “integrated” with the transmission system.
 - Deseret is leaning toward submitting the WECC Exemption and only going to FERC if rejected

7-Factor Test

1. Local distribution facilities are normally in close proximity to retail customers
2. Local distribution facilities are primarily radial in character
3. Power flows into local distribution systems and rarely, if ever, flows out
4. When power enters a local distribution system, it is not reconsigned or transported into some other market
5. Power entering a local distribution system is consumed in a comparatively restricted geographic area
6. Meters are based at the transmission/local distribution interface to measure flow into the local distribution system
7. Local distribution systems will be of reduced voltage

Mansfield Test

1. Whether the facilities are radial, or whether they loop back into the transmission system
2. Whether energy flows only in one direction, or both
3. Whether the transmission provider is able to provide transmission service to itself or other transmission customers over the facilities in question
4. Whether the facilities provide benefits to the transmission grid in terms of capability or reliability, and whether the facilities can be relied on for coordinated operation of the grid
5. Whether an outage on the facilities would affect the transmission system

Third Party Consulting Services

Staff has identified two available consulting services to review the facilities involved in the 138 kV loop to determine likelihood of the closed loop meeting the criteria to qualify for a BES exemption and assist in the preparation of the submittal.

- Proven Compliance Solutions (PCS)
 - \$6,875 to provide analysis of likely acceptance/rejection and to prepare the submittal (25 hours)
 - \$275/hr rate
 - Total estimated cost \$6,875
- HSI
 - \$4,800 to provide analysis of likely acceptance/rejection (24 hours)
 - \$8,000 to prepare the submittal (40 hours)
 - \$200/hr rate
 - Total estimated cost \$12,800

Staff Recommendation

- Staff recommends proceeding with PCS for the BES exemption analysis and submission.
 - More efficient proposal and less expensive despite the higher hourly rate
 - Good experience with NERC transmission compliance and with previous exemption requests
 - Feel they can give an accurate estimate of how successful our proposal will be with just a short review/analysis of the situation.
- Staff is asking for PMC to authorize staff to proceed with PCS on the BES exemption analysis and submission

Greenhouse Gas Rule

- **Clean Air Act Section 111 Regulation of Greenhouse Gas Emissions from Fossil Fuel-Fired Electric Generating Units**
- **Standards for new and existing generating units**
 - **Rules for all new generating units and existing units over 300 MW are the same**
 - **No rules for existing generating units under 300 MW, but comments solicited for future rulemaking**
- **60-day comment period from official publication (likely this week)**
- **Final rule not expected for 12-18 months**
 - **Cannot be legally challenged until final rule issues**

Greenhouse Gas Rule

- **All new combustion turbines and existing turbines over 300 MW will be subject to new emissions standards depending on amount of load**
 - **Low load (<20% capacity factor) must use low emitting fuels, like natural gas**
 - **Intermediate load (20%-source-specific capacity factor) must co-fire with 30% hydrogen by 2032**
 - **High load (above intermediate standard) must co-fire with 30% hydrogen by 2032 and 96% by 2038 OR implement carbon capture technology for 90% of emissions by 2035**
- **Coal fired generation dictated by closing date**
 - **2032: no change**
 - **2035: <20% capacity factor**
 - **2040: 40% natural gas co-firing, with 16% emission reduction**
 - **After 2040: 90% carbon capture**