# 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

4/5/2023

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 March 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. Sky Ranch Update
2. DER Subcommittee Update

**NEW BUSINESS**

1. UAMPS Updates

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

In attendance were Mac Hall, Pam Humphries, Dave Imlay, Charles Reeve, Scott Hughes, Michael Ramirez, Brian Anderson, and Crystal Wright.

Mac Hall welcomed everyone to the meeting; Pam Humphries led the Pledge of Allegiance and Dave Imlay offered the prayer. Dave Imlay motioned to approve minutes from the January 2023 and February 2023 meetings. Pam Humphries seconded the motion. Motion passed unanimously.

**Scott Hughes:** Scott Hughes gave an update on employees. We lost our new First Step Apprentice to Dixie Power. We are still looking for employees, but the current employees are doing a great job keeping things moving along. He reminded the board about the UAMPS Toolkit that is coming up for them to attend.

**Brian Anderson:** Mike Ramirez reported for Brian Anderson and provided an update on the 600 North Phase 3A project. The line crew just completed putting together one of the 69kv switches. It's been rainy, so they've been sorting parts to begin staging poles in locations when they can. He informed them about a right-hand turn lane from State Street onto 700 W southbound that was requested by UDOT. We have power equipment where they will be needing space for that turn lane. We have reached an agreement with Interstate Rock to move some of that power equipment back. Charles Reeve asked how the easement purchases are coming along for the routes out south. Brian Anderson and Scott Hughes answered they have begun approaching landowners. If landowners agree to provide easements, then we can use COG money to pay for them. If landowners do not agree, then COG money cannot be used.

**Mike Ramirez:** Mike Ramirez has been taking care of managing the new applications for employees to set up interviews. We have had three first-round interviews that will be back this week for a second-round interview. We widened the existing listing we had for a Journeyman to also accept applications for Groundsman and Apprentices. We are now getting flooded with applications. It's taking a long time to go through and make sure they're qualified for the positions. Dave Imlay suggested to give preference to applications from locals to help with the retention issues we've been having with employees moving away after getting trained.

**Jared Ross:** Jared Ross provided an update on Three Falls Substation. They have the cement transformer pad completed. They are now forming foundations in the building area and another transformer pad. Three Peaks Drilling was going to begin drilling depending on weather. We're continuing to move forward with this project. Generator #8 has been reinstalled. The sub crew has inspected all the generators and completed their spring maintenance already knowing they would be busy building the substation. Emissions testing is scheduled for the first part of April. We will be scheduling a test run, which has been delayed due to natural gas restrictions.

DRAFT

**Budget:** Scott Hughes showed the regular budget graphs from the packet and explained the information from the most recent month. Then he showed graphs showing profit & loss from the purchase and sale of power as well as the full department margin & deficit. December and January were rough months because of the prolonged increase in market power rates. This combined with the large infrastructure projects have hit the financial health of the department hard. He is meeting with the City Manager and Accountant tomorrow to take a deep dive into finances.

**Rates:** Scott Hughes stated that due to the financial health of the department, we are looking at another rate increase. This isn't ideal and difficult to have to look at but is the reality. Dave Imlay stated we have an obligation to protect the health of the department. We must do what is necessary to recover the financial stability of the department. Charles Reeve commented he also likes to avoid rate increases but agrees costs of power have increased so substantially we really have no choice. Pam Humphries stated even though many people are on a fixed income it is necessary to continue to operate. Our rates have not kept pace with the increases in market power and our exposure to the market is significant. Mac Hall asked the group how they feel about a 10% increase across the board implemented as soon as possible. The feedback was unanimous that it needs to be done as quickly as possible. Dave Imlay made a motion to approve a 10% increase for base rate and consumption rates across the board as soon as possible to have approved by City Council. Charles seconded the motion. Motion passed unanimously.

**Generation Update:** Scott Hughes updated that the City Council approved the purchase of Generator #9. After January's financial statements came in, we have determined that we may have to hold off on the purchase while we take a deeper look at the financials. The air quality permit is good for 18 months, and there's a possibility of requesting an extension.

**Solar Update:** Scott Hughes stated that the updated solar policy that was previously approved by the board was approved by City Council. We realized we also needed a resolution because there were changes to base rates within that policy. We are waiting to draft a resolution for those rate changes to finalize that approval.

**UAMPS Updates:** Scott Hughes stated most updates were included in the packet. Dave Imlay said he is interested in the information regarding the five-year purchase of natural gas. Scott Hughes stated they're just soliciting interest in a purchase at this point. One update on Carbon Free Power Project (CFPP), the Nuclear Regulatory Committee (NRC) has set aside every Thursday as CFPP pre-application day. We believe it is a good sign of support for the project. Presented a graph showing Hurricane's firm resources by amounts and years of production. This was put together based on a previous request from the board.

**Discussion and possible recommendation regarding Sky Ranch:** Scott Hughes reported that we have been in discussions with Rocky Mountain Power (RMP) regarding purchasing the Sky Ranch power system. We conducted a calculation based on the age and amount of equipment that was listed as assets by RMP. They provided an asset list and price. We went through the list to see how much depreciation of the assets would possibly change things to come up with a price of our own. Dave Imlay said in his opinion the biggest pro is the acquisition of easements. He feels the biggest con will be the integration of their solar customers to our current solar policies and structure. That is notoriously difficult historically. He feels like the price is very competitive although it is important to negotiate pricing to account for depreciation of assets. There was a discussion about how depreciation is calculated and whether there is an actual fund that can be utilized.

DRAFT

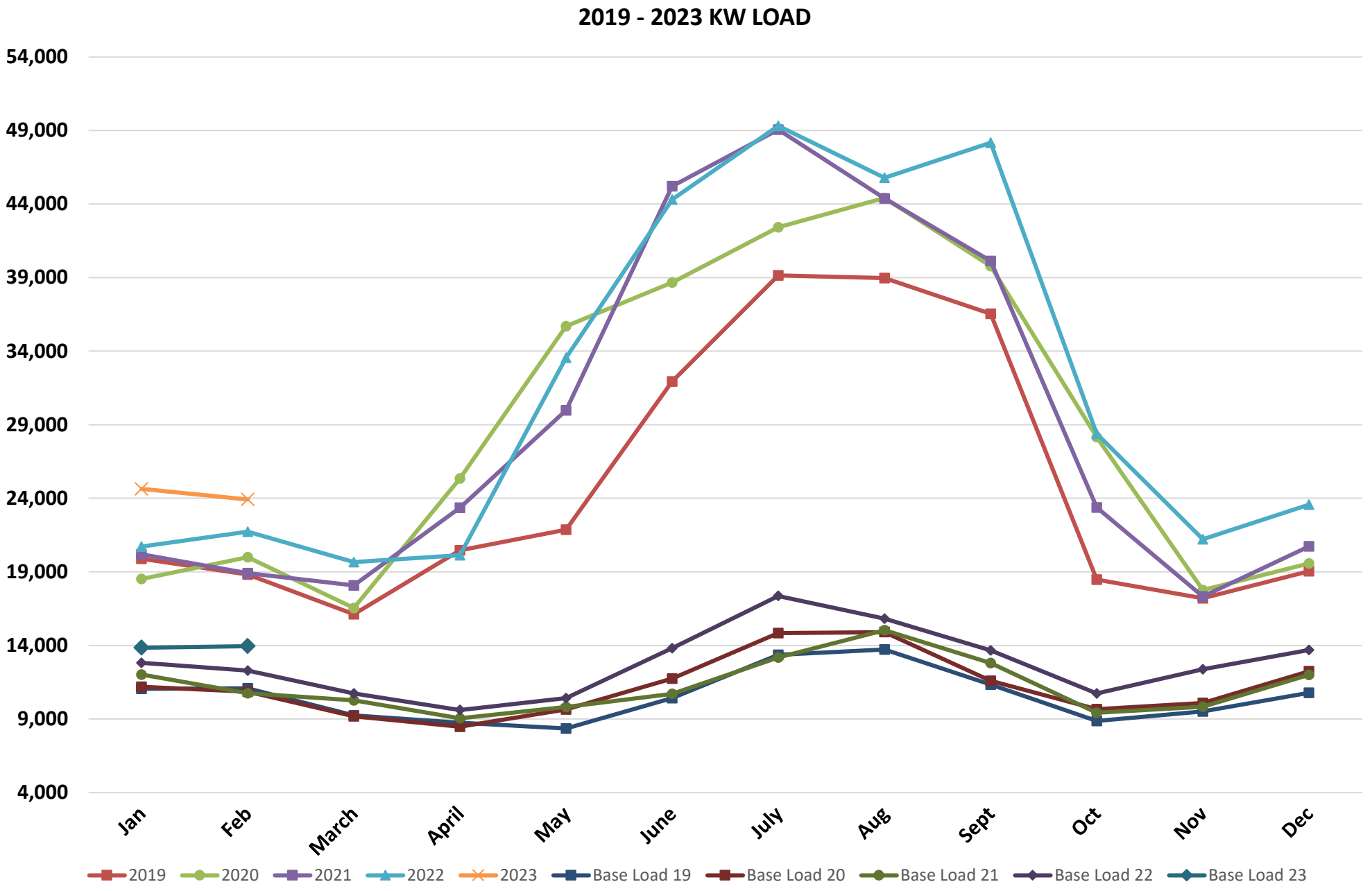
**Discussion of reacquiring Washington County Fairgrounds infrastructure:** Scott Hughes showed a map of the area we are discussing. Dave Imlay provided a history of how they chose to go from individual base rates to one primary meter. They took on the maintenance of the infrastructure. They have approached us about finding out what would need to be done for us to take that infrastructure system back. They don't have the expertise or qualifications to maintain that system. We provided them with initial information about what we would require, and they are going to approach the County Commissioners about that possibility. We stated up front that it would need to be individually metered with base rates, which is the reason they chose initially to go the other direction. Dave Imlay said he has no problem with taking that system back. The consensus of the board is that they are fine with this direction.

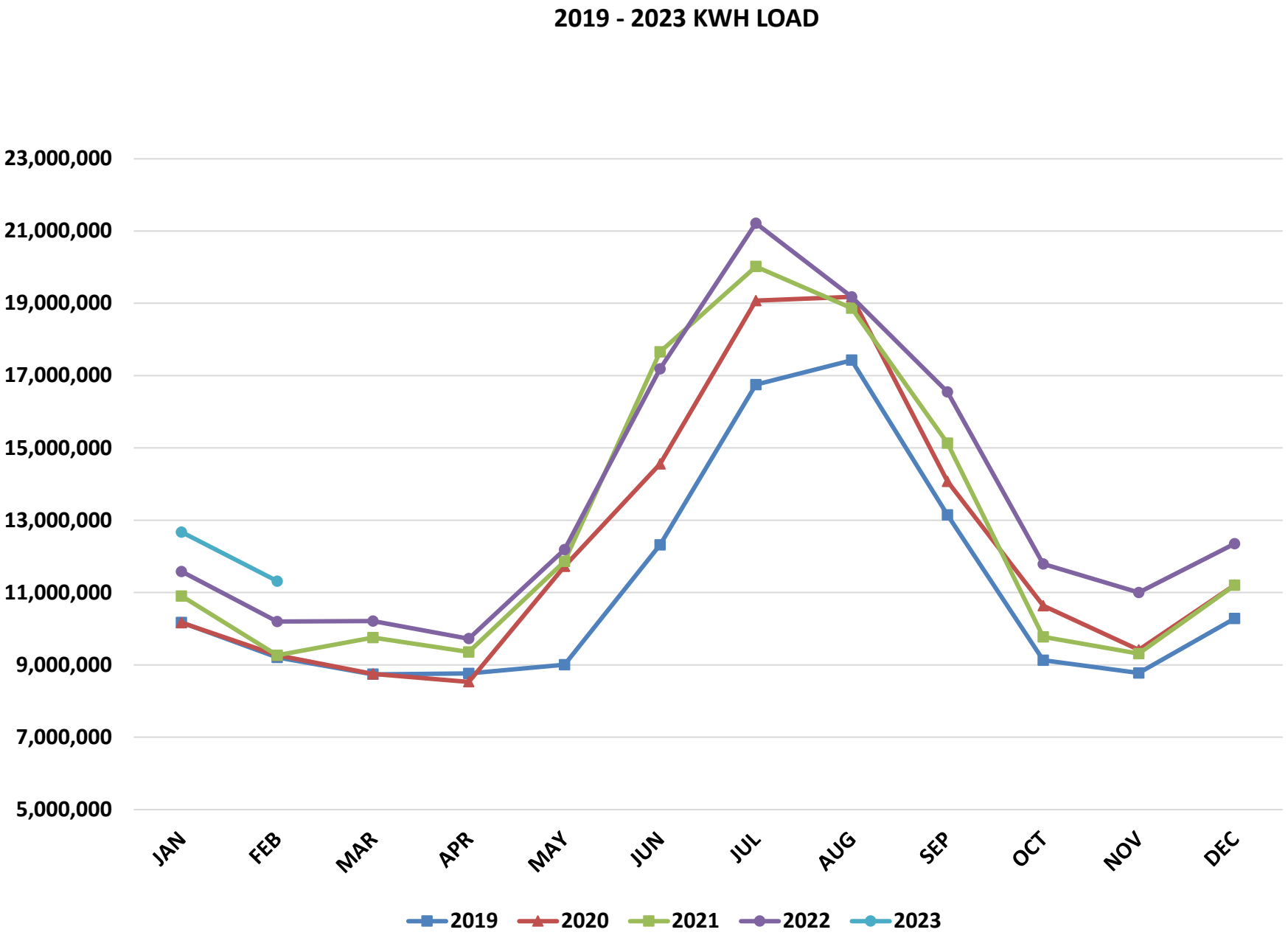
**Discussion and possible decision regarding forward market purchase:** Scott Hughes provided a chart showing a possible forward market purchase that UAMPS would like to go out to bid for. We need to look through this information and determine if we want to participate and at what level. Dave Imlay suggested that we participate for sure and is leaving it up to us to determine what level to participate. The consensus of the board is that we do participate.

The Power Board adjourned at 4:30 p.m. The next Power Board Meeting is scheduled for April 5, 2023, at 3:00 p.m.

DRAFT

# BUDGET


2019 - 2023 KW LOAD
54,000
49,000
44,000
39,000
34,000
29,000
24,000
19,000
14,000
9,000
4,000
Jan
Feb
March
April
May
June
July
Aug
Sept
Oct
Nov
Dec
2019
2020
2021
2022
2023
Base Load 19
Base Load 20
Base Load 21
Base Load 22
Base Load 23


2019 - 2023 KWH LOAD
23,000,000
21,000,000
19,000,000
17,000,000
15,000,000
13,000,000
11,000,000
9,000,000
7,000,000
5,000,000
JAN
FEB
MAR
APR
MAY
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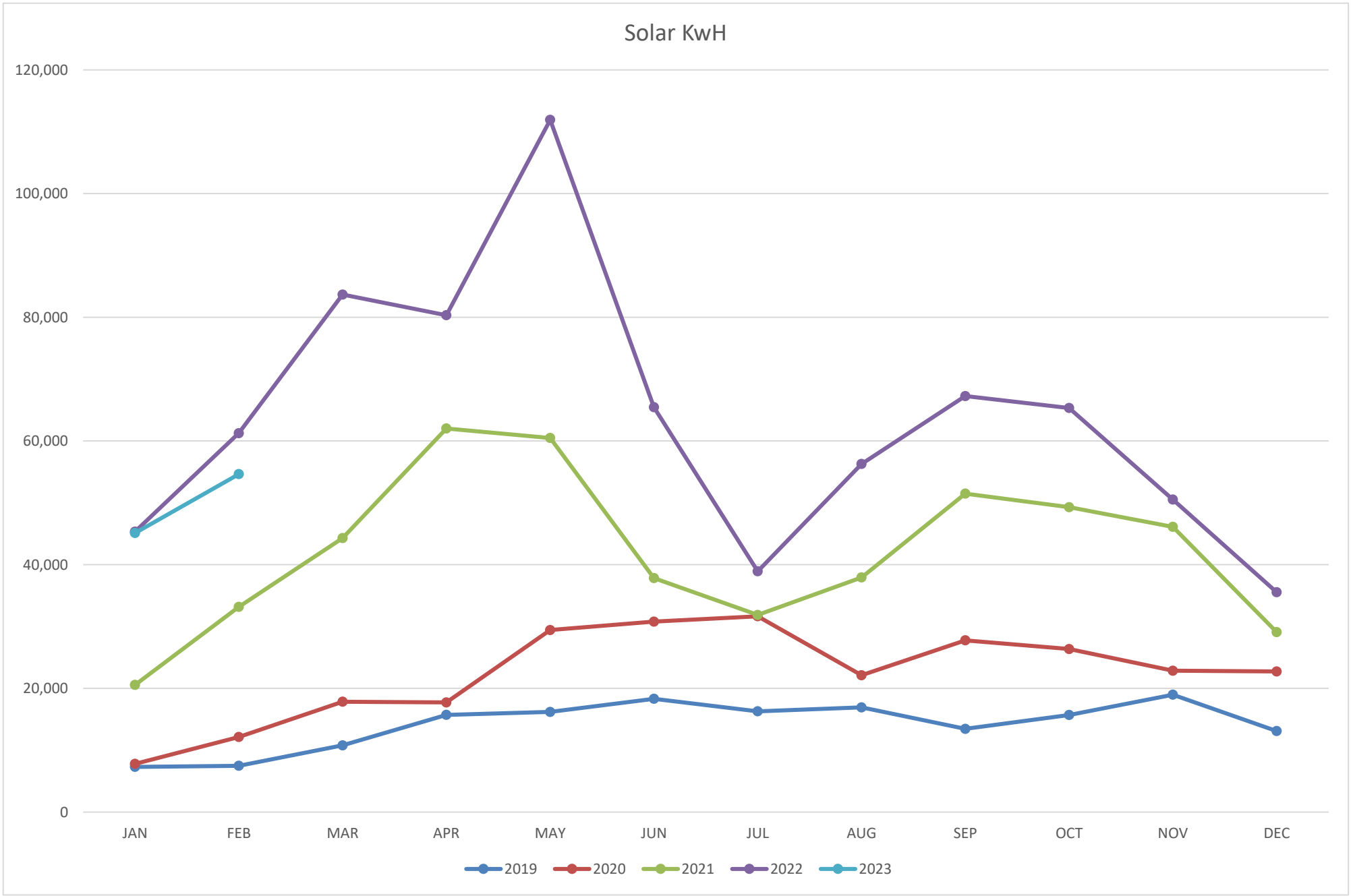
AUG
SEP
OCT
NOV
DEC
2019
2020
2021
2022
2023


Solar KwH
120,000
100,000
80,000
60,000
40,000
20,000
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
2019
2020
2021
2022
2023

# AVERAGE YEARLY POWER PRICES

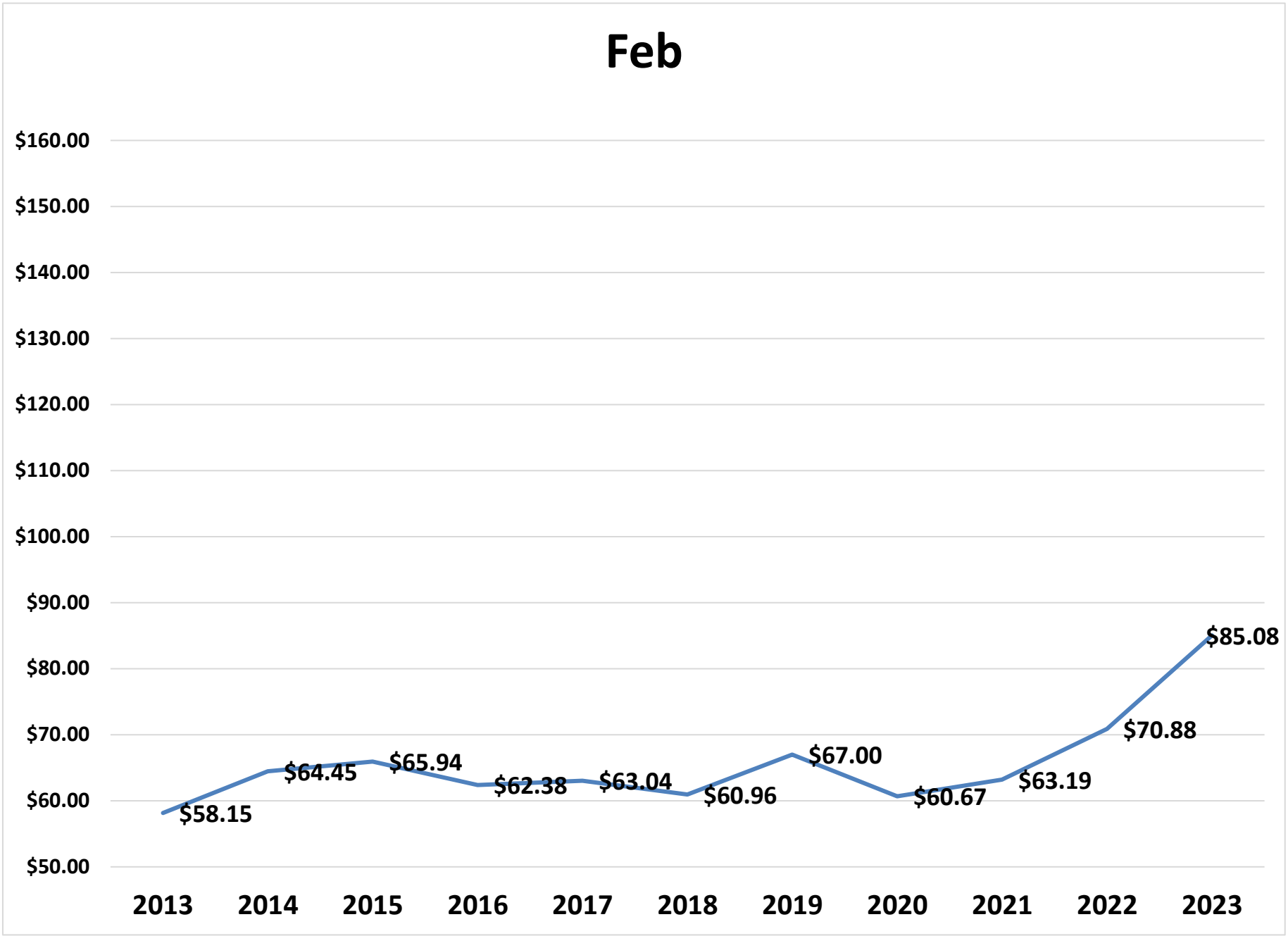
22-23 bdgt amount (as of January) **$111.82**

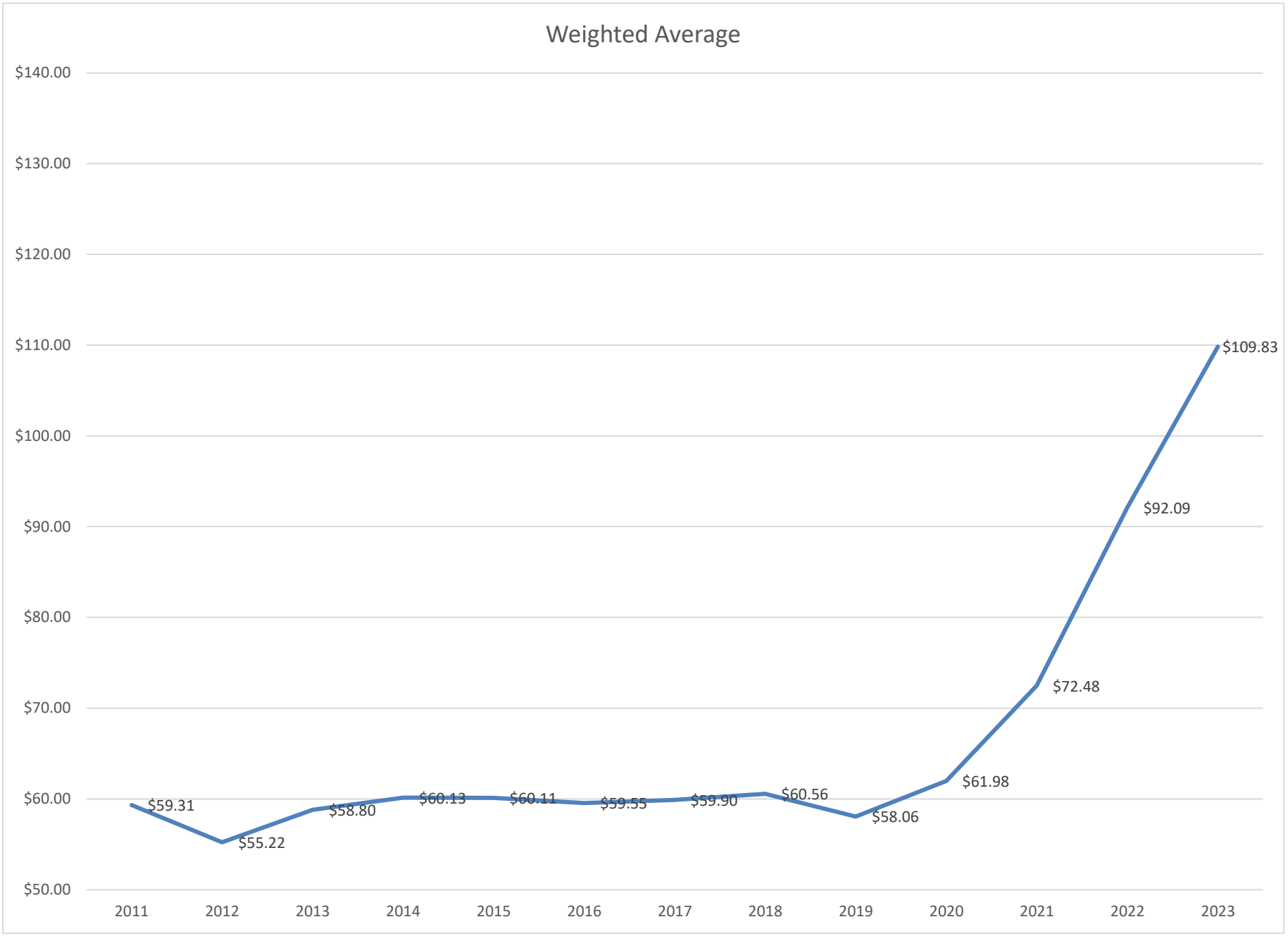
BDGT Year to Date **$107.17**

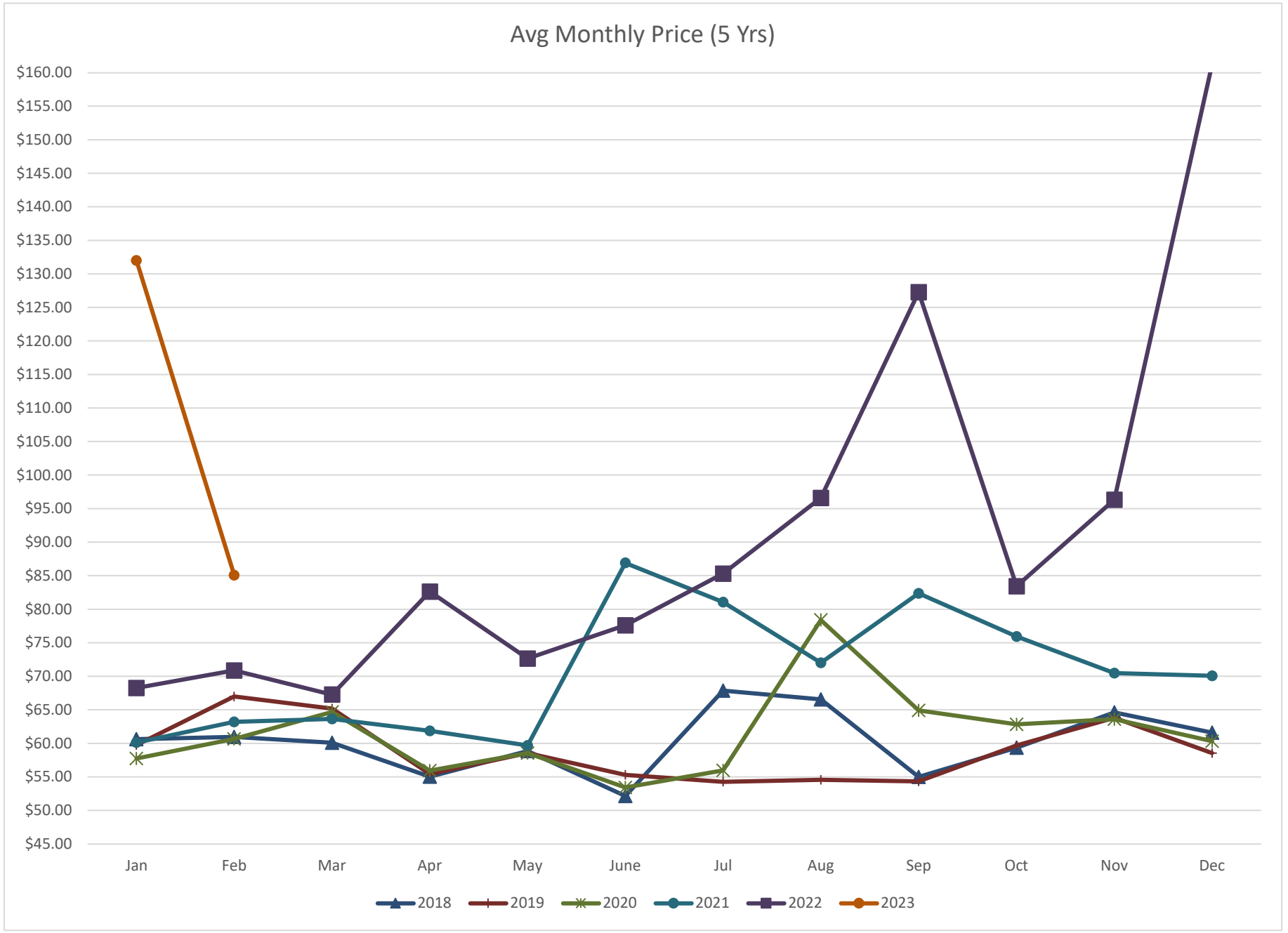
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Jan* | $56.66 | $60.76 | $58.36 | $59.86 | $57.87 | $59.07 | $60.62 | $59.75 | $57.76 | $60.14 | $68.25 | $132.00 |
| *Feb* | $59.78 | $58.15 | $64.45 | $65.94 | $62.38 | $63.04 | $60.96 | $67.00 | $60.67 | $63.19 | $70.88 | $85.08 |
| *Mar* | $57.28 | $63.50 | $60.83 | $62.03 | $61.77 | $60.99 | $60.09 | $65.17 | $64.67 | $63.64 | $67.28 | |
| *Apr* | $55.43 | $63.77 | $63.75 | $61.88 | $59.71 | $59.49 | $55.02 | $55.44 | $55.92 | $61.86 | $82.63 | |
| *May* | $53.31 | $60.28 | $61.64 | $64.71 | $65.51 | $60.32 | $58.86 | $58.55 | $58.55 | $59.69 | $72.66 | |
| *June* | $50.09 | $56.05 | $59.15 | $58.30 | $65.51 | $58.54 | $52.17 | $55.30 | $53.44 | $86.91 | $77.60 | |
| *Jul* | $51.16 | $55.62 | $56.85 | $56.91 | $56.95 | $58.29 | $67.87 | $54.29 | $55.98 | $81.04 | $85.31 | |
| *Aug* | $51.57 | $55.49 | $56.84 | $55.27 | $57.67 | $59.00 | $66.55 | $54.58 | $78.40 | $72.03 | $96.60 | |
| *Sep* | $54.79 | $58.80 | $59.46 | $56.06 | $56.97 | $62.36 | $55.00 | $54.34 | $64.93 | $82.38 | $127.29 | |
| *Oct* | $62.68 | $60.35 | $61.42 | $56.97 | $59.23 | $59.79 | $59.36 | $59.70 | $62.82 | $75.92 | $83.45 | |
| *Nov* | $63.37 | $61.65 | $63.03 | $59.68 | $64.18 | $62.14 | $64.60 | $63.80 | $63.60 | $70.47 | $96.34 | |
| *Dec* | $56.02 | $58.37 | $60.91 | $57.90 | $61.51 | $58.80 | $61.61 | $58.55 | $60.33 | $70.07 | $161.27 | |
| *Yr Avg* | $56.01 | $59.40 | $60.56 | $59.63 | $60.64 | $60.15 | $60.23 | $58.87 | $61.42 | $70.61 | $90.80 | $108.54 |
| *Weighted Avg* | $55.22 | $58.80 | $60.34 | $58.99 | $59.55 | $59.90 | $60.56 | $58.11 | $61.98 | $72.46 | $92.09 | $109.83 |

*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.*


Feb
$160.00
$150.00
$140.00
$130.00
$120.00
$110.00
$100.00
$90.00
$80.00
$70.00
$60.00
$50.00
$58.15
$64.45
$65.94
$62.38
$63.04
$60.96
$67.00
$60.67
$63.19
$70.88
$85.08
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


Weighted Average
$140.00
$130.00
$120.00
$110.00
$100.00
$90.00
$80.00
$70.00
$60.00
$50.00
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
$59.31
$55.22
$58.80
$60.13
$60.11
$59.55
$59.90
$60.56
$58.06
$61.98
$72.48
$92.09
$109.83


Avg Monthly Price (5 Yrs)
$160.00
$155.00
$150.00
$145.00
$140.00
$135.00
$130.00
$125.00
$120.00
$115.00
$110.00
$105.00
$100.00
$95.00
$90.00
$85.00
$80.00
$75.00
$70.00
$65.00
$60.00
$55.00
$50.00
$45.00
Jan
Feb
Mar
Apr
May
June
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2018
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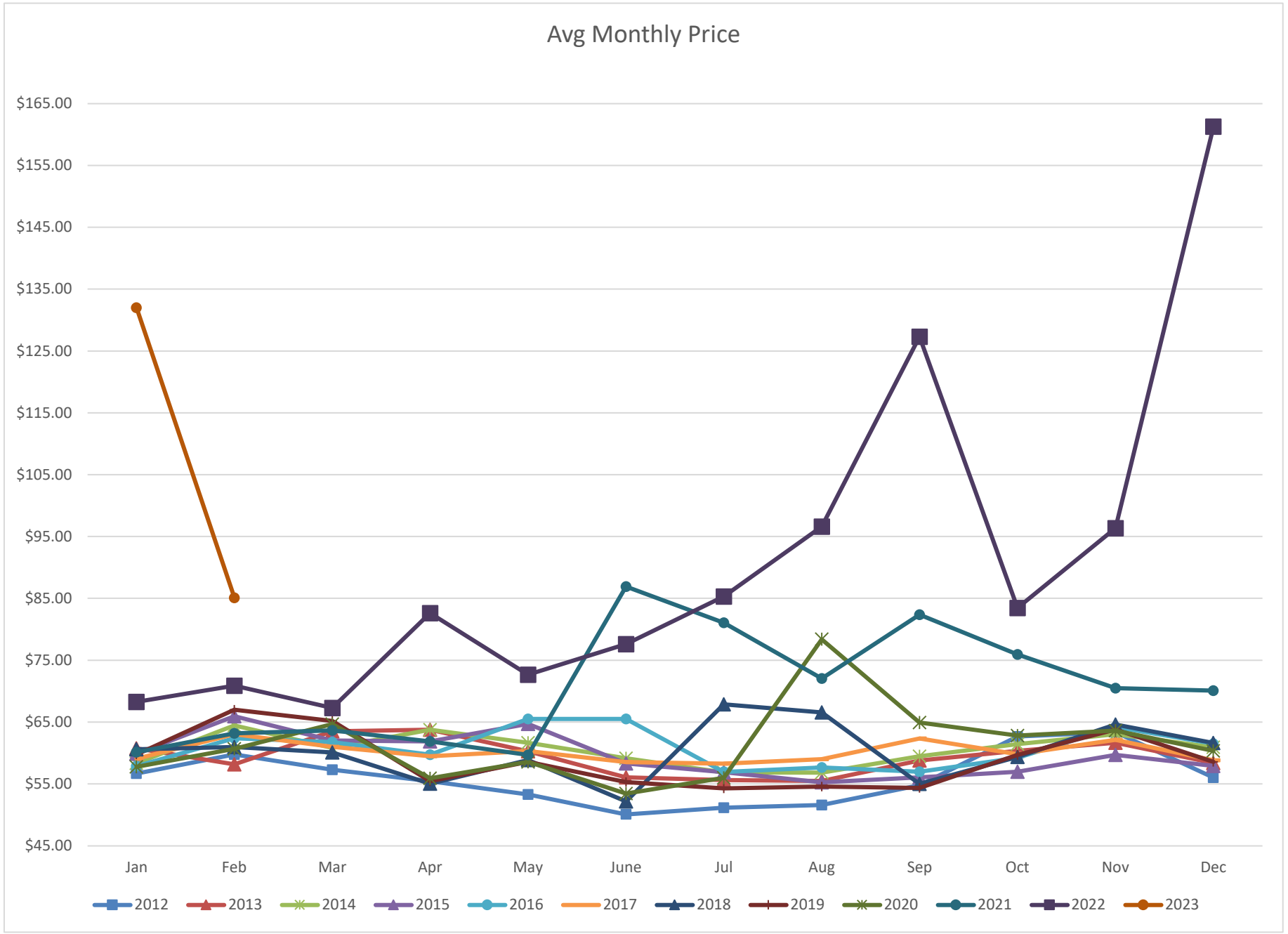
2022
2023


Avg Monthly Price
$165.00
$155.00
$145.00
$135.00
$125.00
$115.00
$105.00
$95.00
$85.00
$75.00
$65.00
$55.00
$45.00
Jan
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2012
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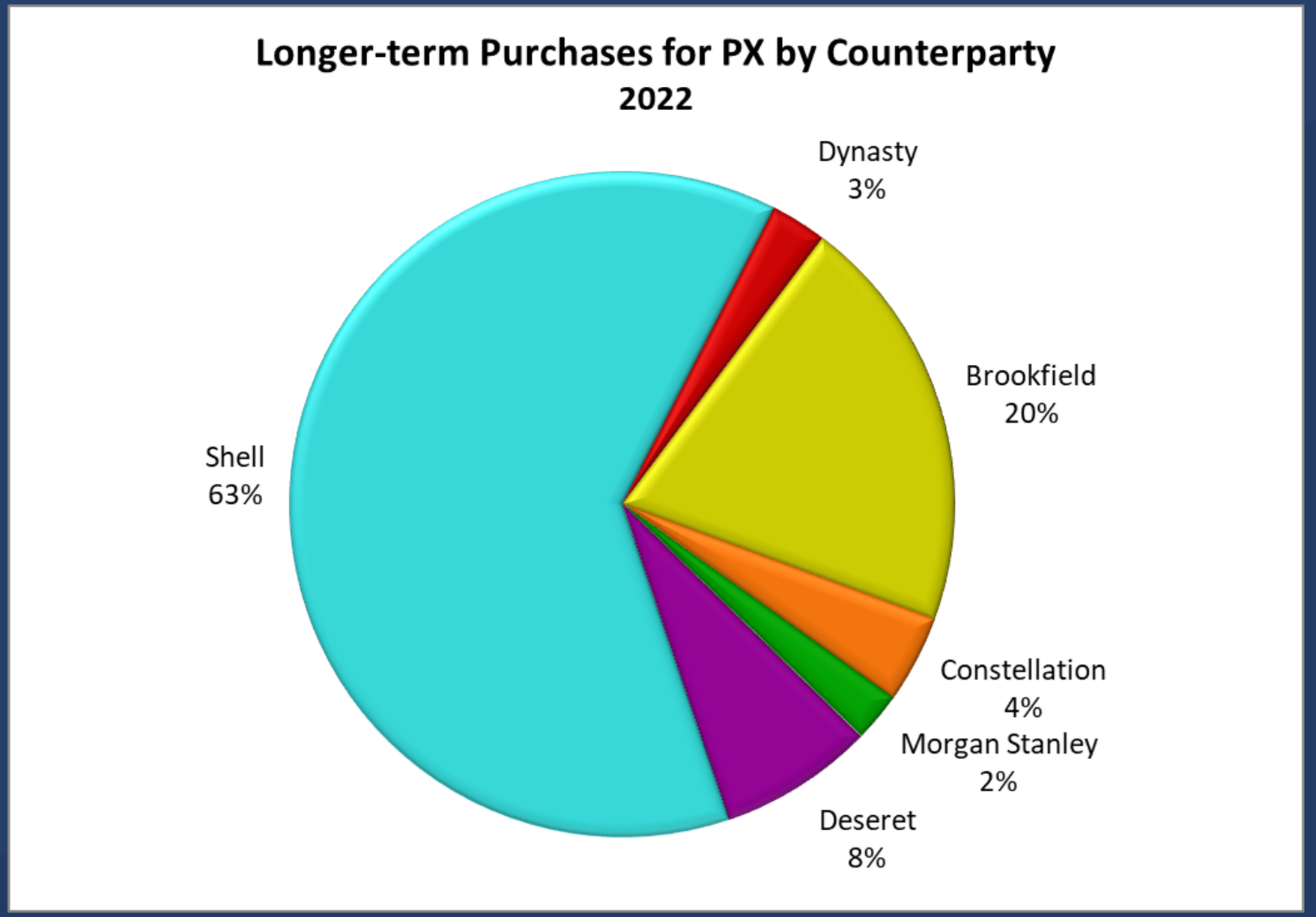
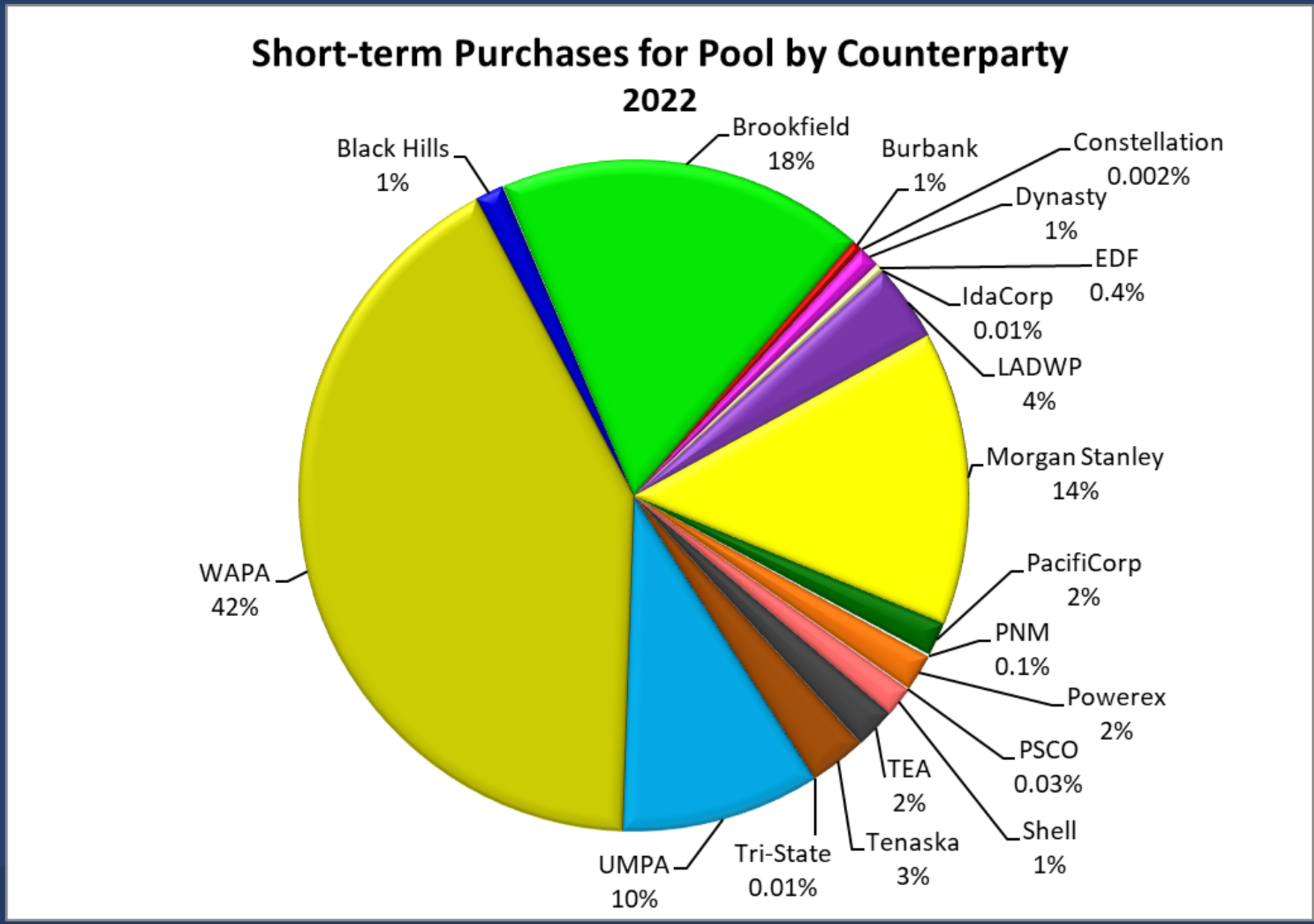
2023

# POOL PROJECT

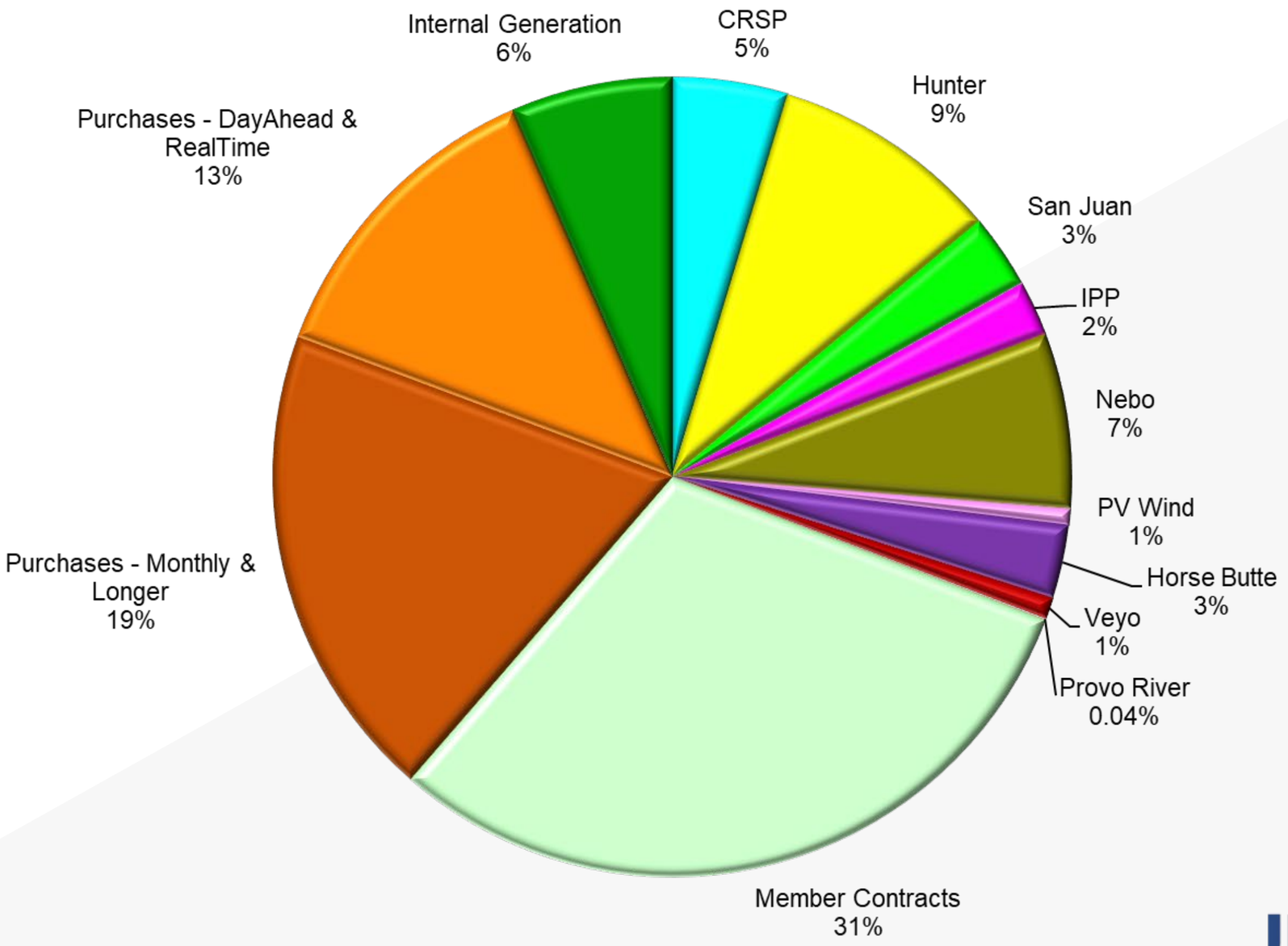
# PX & Scheduling Report
# February 2023

UAMPS SMARTENERGY


Longer-term Purchases for PX by Counterparty
2022
Dynasty
3%
Brookfield
20%
Constellation
4%
Morgan Stanley
2%
Deseret
8%
Shell
63%


Short-term Purchases for Pool by Counterparty
2022
Black Hills 1%
Brookfield 18%
Burbank 1%
Constellation 0.002%
Dynasty 1%
EDF 0.4%
IdaCorp 0.01%
LADWP 4%
Morgan Stanley 14%
PacifiCorp 2%
PNM 0.1%
Powerex 2%
PSCO 0.03%
Shell 1%
TEA 2%
Tenaska 3%
Tri-State 0.01%
UMPA 10%
WAPA 42%

# UAMPS Resources: 2022



PRESENTED BY GDS ASSOCIATES, INC.

# 2023 UAMPS IRP

## *Pool Project Management Committee Meeting*

**March 15, 2023**

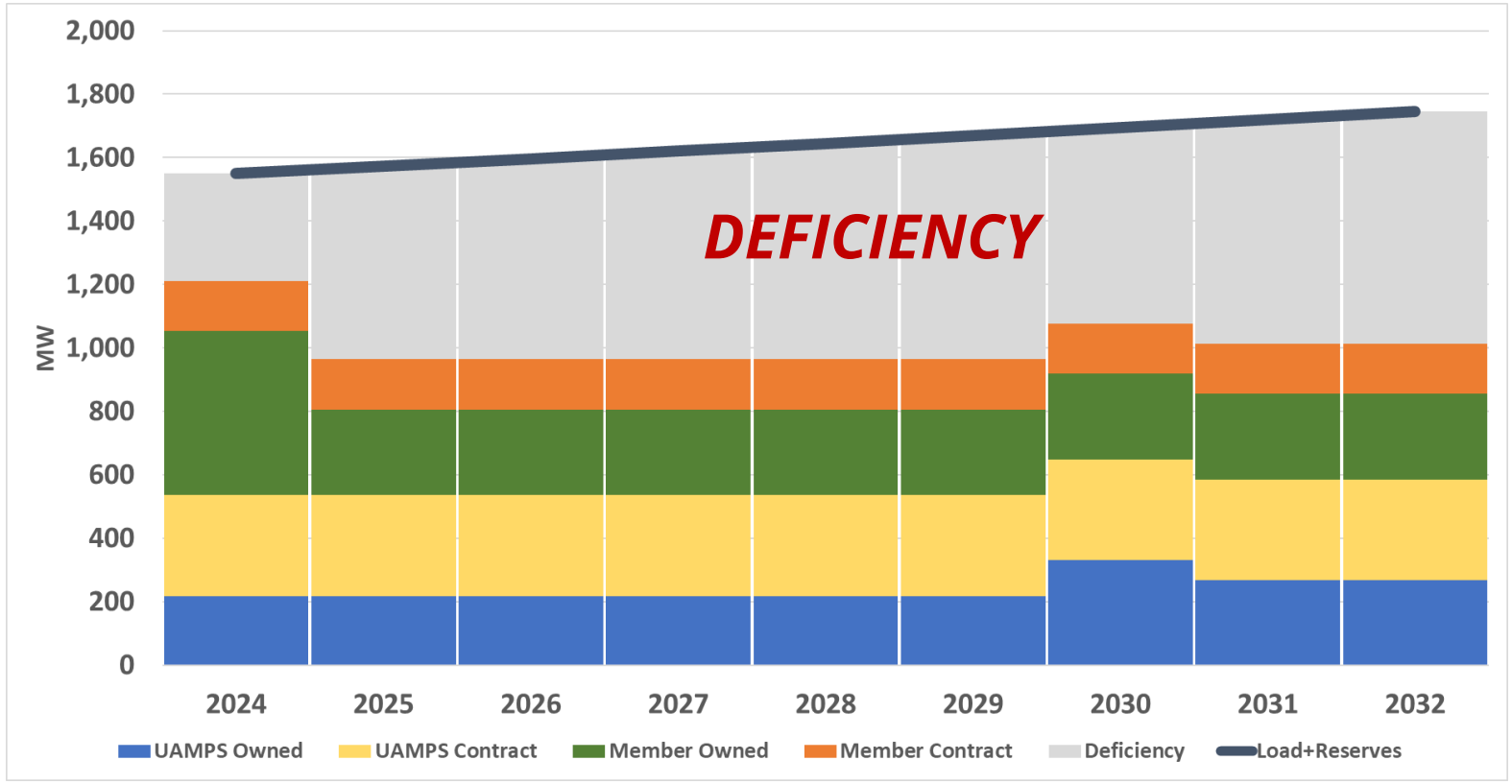
# WHAT IS AN INTEGRATED RESOURCE PLAN?

- An IRP **IS**….
  - Holistic planning tool used by electric utilities
  - **Road Map** for future decisions
    - Provide guidance on criteria for future decisions
    - Incorporate feedback from various stakeholders
    - Evaluate resources under different scenarios
- An IRP **IS NOT**….
  - Conclusion for a specific resource portfolio
  - A “one-off” study
  - Prediction of the future

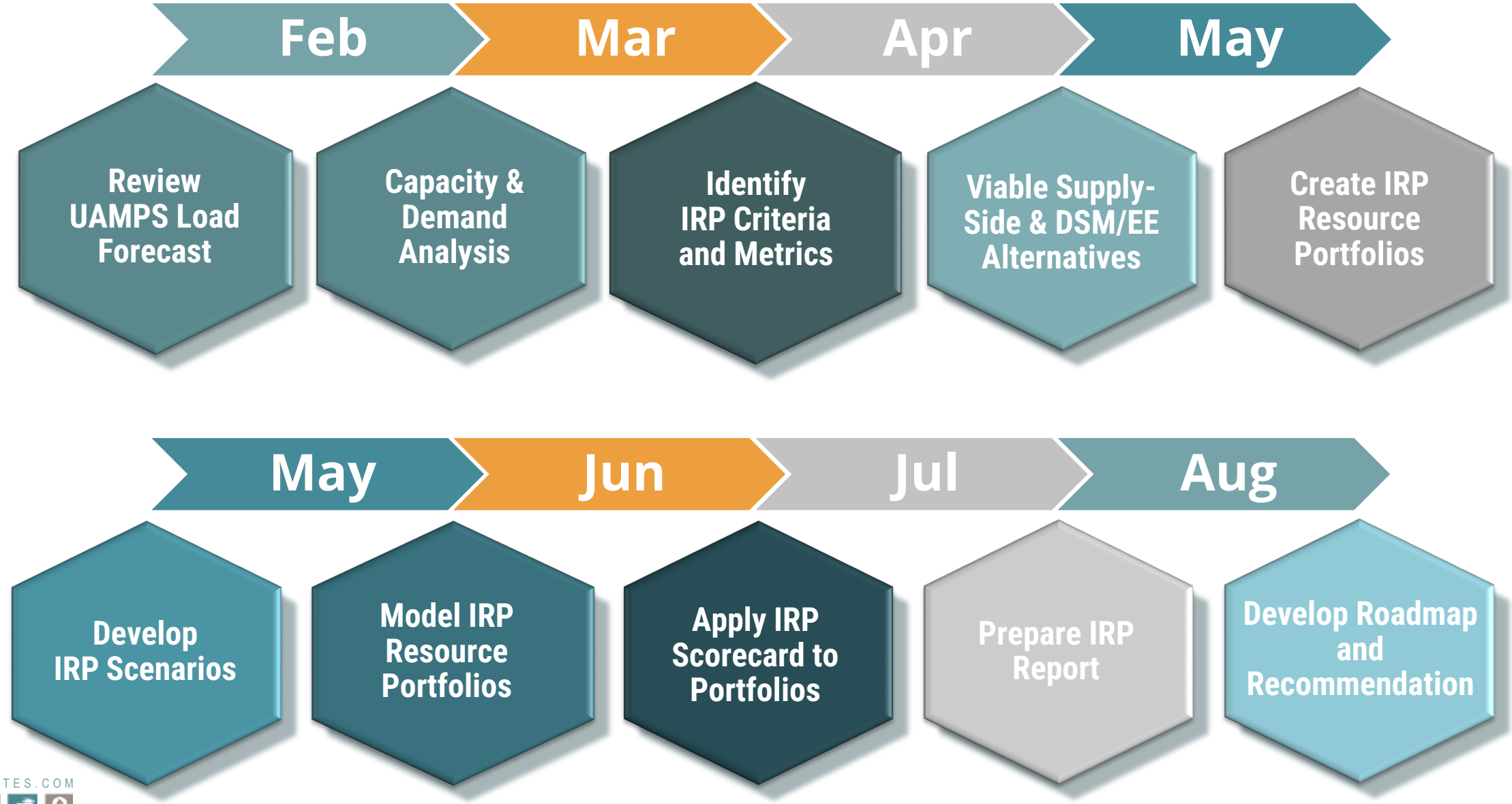
# WHY IS UAMPS CONDUCTING AN IRP?

- Determine capacity and energy deficiencies
- Identify best resource additions to complement UAMPS' goals
- Evaluate benefits and impact of carbon free transition

***UAMPS CDR Table (Preliminary Data)***

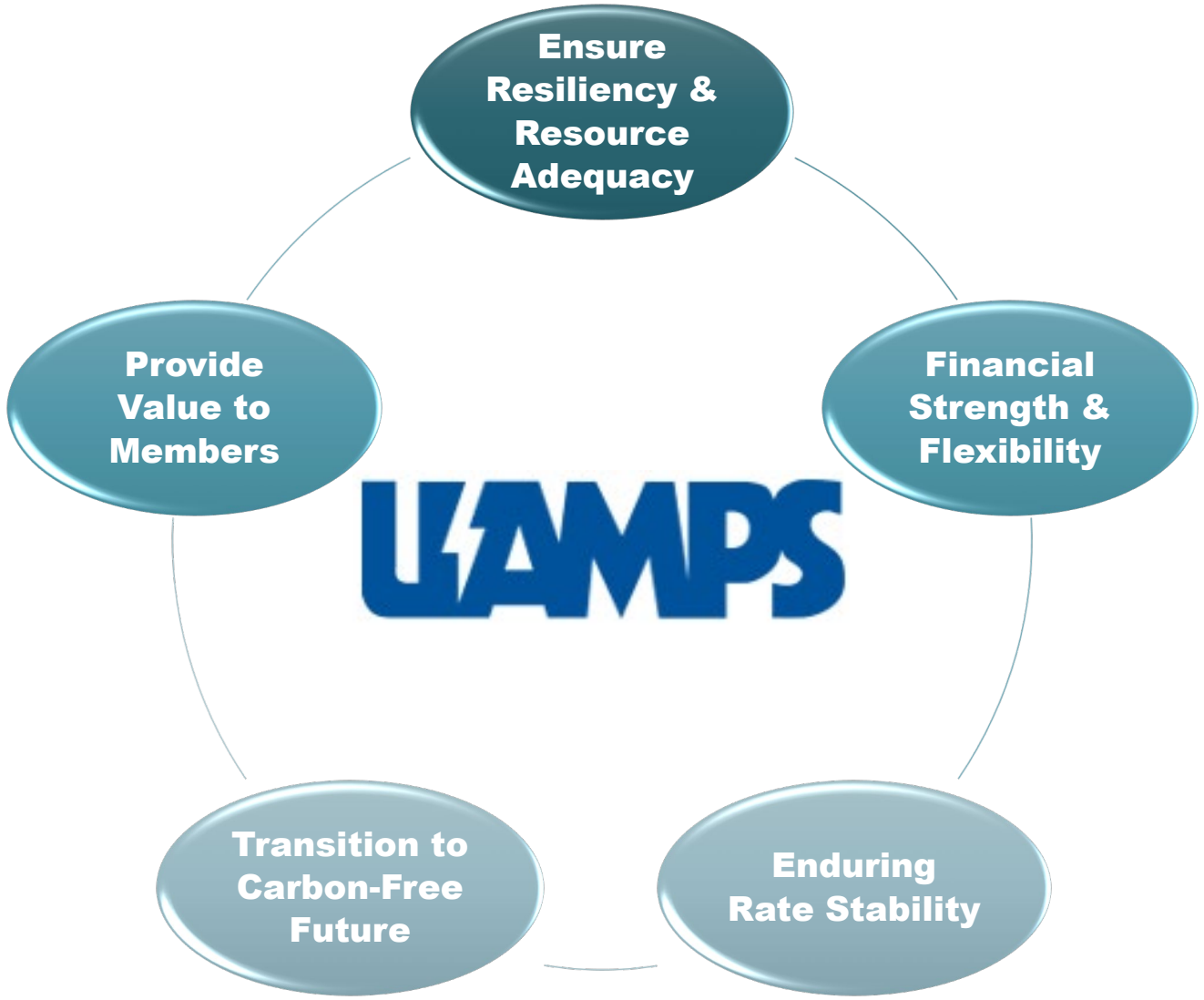


# SCOPE OF WORK / IRP TASKS



# UAMPS GOALS AND PRIORITIES

# UAMPS GOALS AND PRIORITIES




- IRP effort should be in alignment with UAMP's corporate strategy and strategic goals
- UAMPS' Strategic Priorities
  - Rate Stability
  - Resource Resiliency
  - Financial Health
  - Carbon Free Future
  - Adding Member Value
- UAMPS' Strategic Stakeholders
  - UAMPS' Board and Members
  - Members' Retail Customers
  - Lenders / Bondholders

# POTENTIAL IRP CRITERIA & METRICS

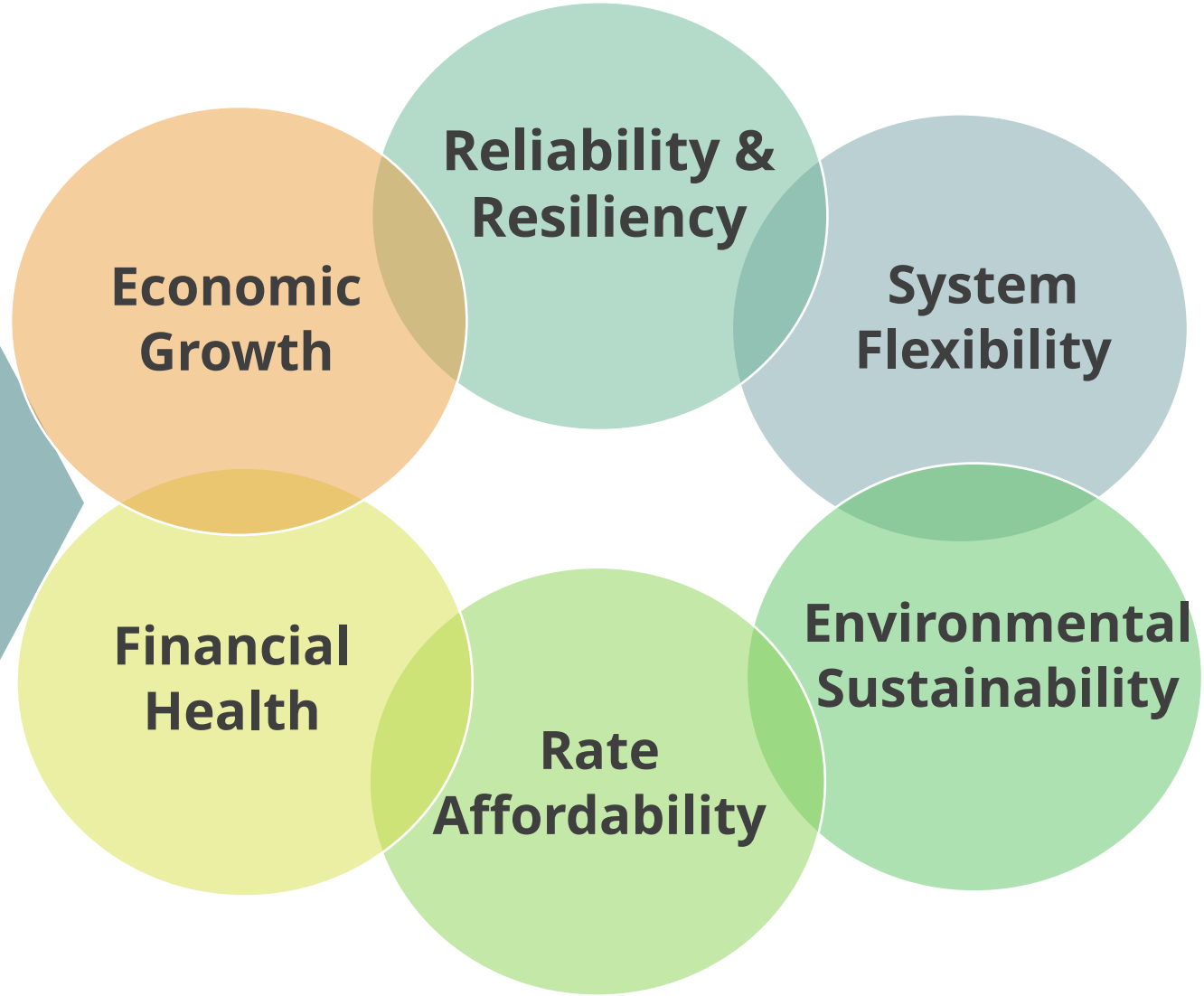
**Develop quantitative / qualitative criteria to evaluate resource portfolios**

- *What are essential criteria for your stakeholders?*

**Assign objective metrics to criteria, along with appropriate weightings**

- *Weightings should emphasize strategic priorities & objectives*

**Recommend 3 – 5 criteria**



# POTENTIAL IRP CRITERIA & METRICS

## Economic Growth

1. Job creation
2. Property taxes

## Reliability & Resiliency

1. Reserve margin
2. Market exposure

## System Flexibility

1. Dispatchability
2. Resource/fuel diversity

## Financial Health

1. Incremental debt
2. Financial ratios

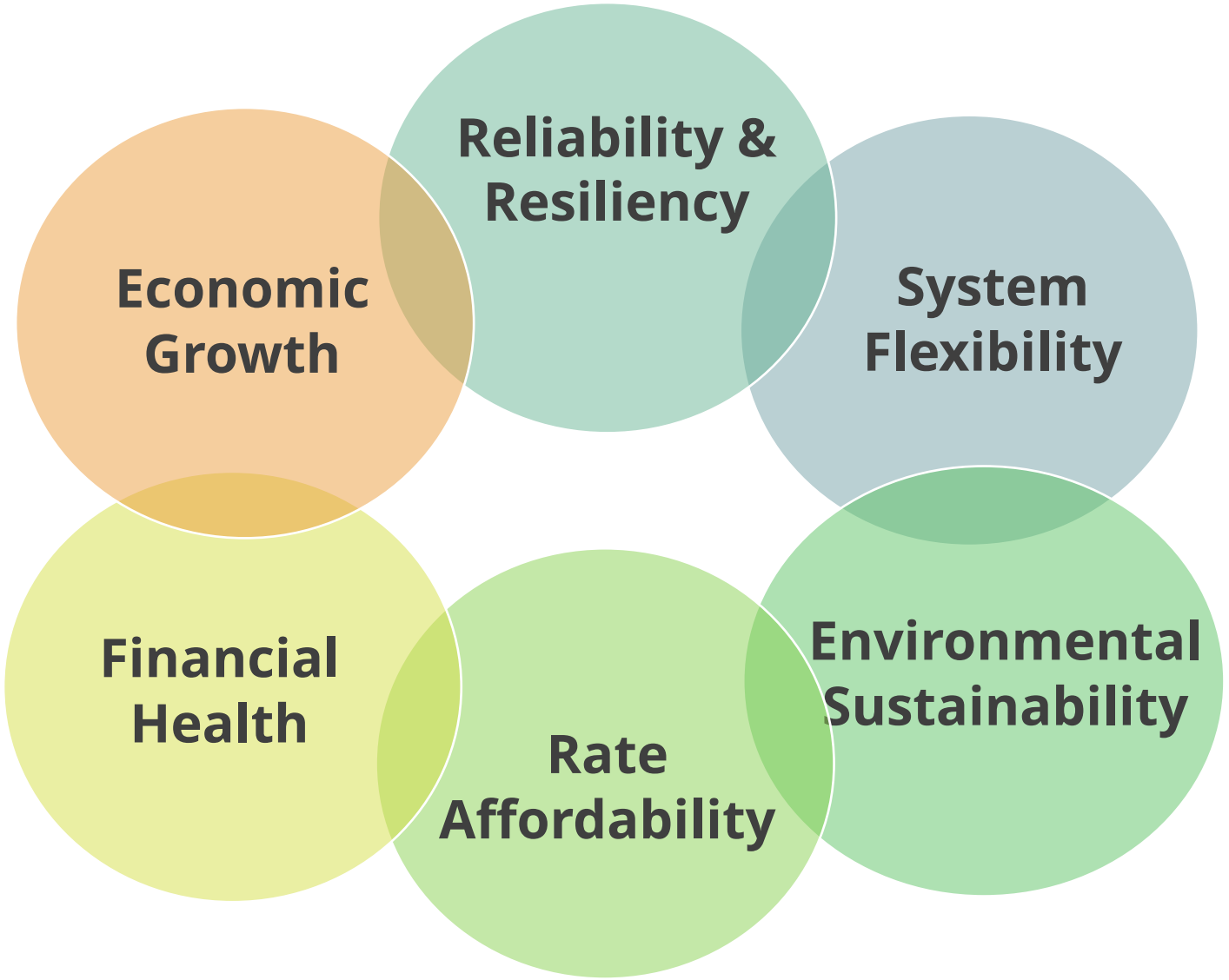
## Rate Affordability

1. Expected power cost
2. Rate volatility

## Environmental Sustainability

1. GHG Reductions
2. Renewable generation

# POTENTIAL IRP CRITERIA & METRICS

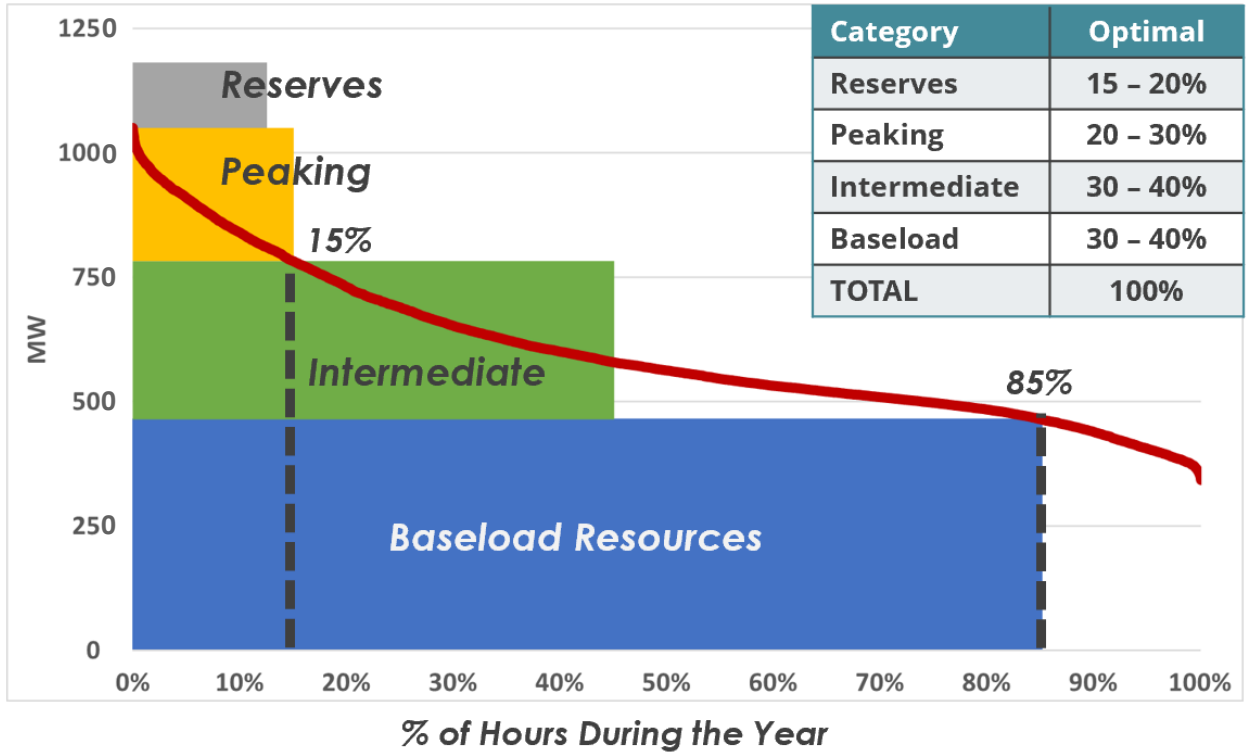



- Members can determine priorities by "voting" on the criteria
  - Grading scale of 1 – 5 for each category
  - Summing up votes / points determines most important criteria
  - Also will assist UAMPS with appropriate "weighting" for IRP scorecard

# APPLICATION OF IRP CRITERIA / METRICS

# DEVELOP IRP RESOURCE PORTFOLIOS

- Determine types of available resources and create alternative resource portfolios




| Category | Optimal |
|---|---|
| Reserves | 15 – 20% |
| Peaking | 20 – 30% |
| Intermediate | 30 – 40% |
| Baseload | 30 – 40% |
| TOTAL | 100% |

***Viable and Available***

**Battery Energy Storage**

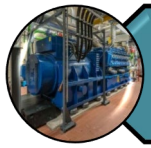
**Wind**

**Geothermal**

**CCGT and CTs**

**Purchase Power**

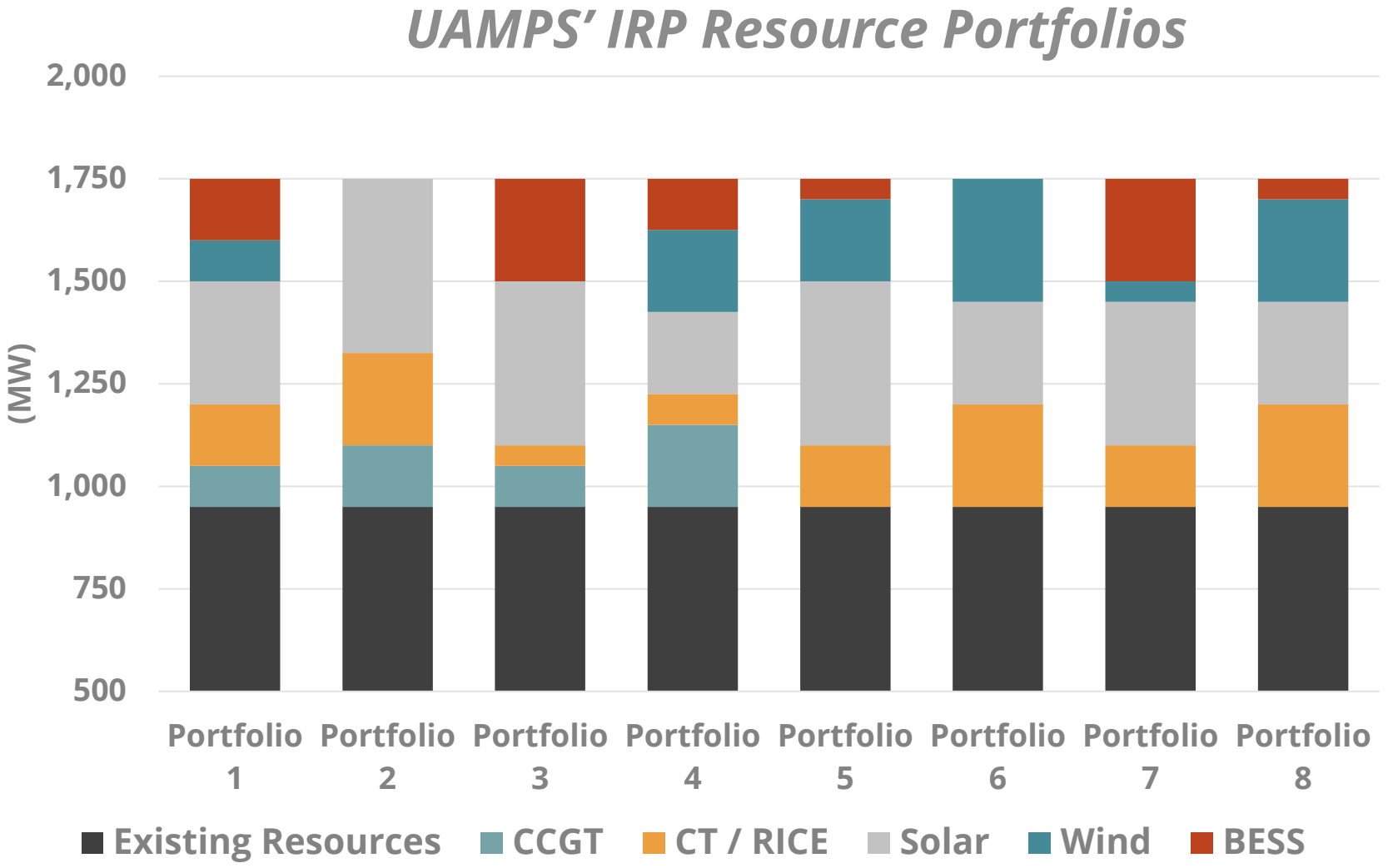
**SMR Nuclear**


**Reciprocating Engine**

**Solar PV**

# CREATE ALTERNATIVE PORTFOLIOS

- Create alternative resource portfolios that represent different and diverse set of resources
  - *Ensure planning capacity needs are met*
  - *Can include alternatives to existing resources that MAY be retired*
  - *Include "what-if" resource options to understand potential value*
- Next, model each portfolio across different IRP scenarios to determine cost, emissions, etc.



# IRP PORTFOLIO SCORECARD

- Score IRP resource portfolios on each IRP criteria / metric
- Score card objectively determines most effective resource portfolio by combining criteria scores and weightings

| | Criteria (Weighting) | | | | | |
|---|---|---|---|---|---|---|
| Portfolio | Power Cost (30%) | Volatility (10%) | Capital Funding (20%) | Carbon Emission (20%) | Market Exposure (20%) | Wghtd Portfolio Score |
| Portfolio 1 | 5.0 | 4.8 | 4.8 | 3.2 | 5.0 | 4.58 |
| Portfolio 2 | 4.8 | 5.0 | 5.0 | 4.2 | 4.8 | 4.74 |
| Portfolio 3 | 3.0 | 4.8 | 4.6 | 4.8 | 4.6 | 4.18 |
| Portfolio 4 | 4.0 | 4.6 | 4.8 | 4.6 | 5.0 | 4.54 |
| Portfolio 5 | 5.0 | 3.5 | 3.2 | 3.0 | 3.4 | 3.77 |
| Portfolio 6 | 3.2 | 3.0 | 3.0 | 5.0 | 3.0 | 3.46 |
| Portfolio 7 | 4.2 | 3.4 | 3.2 | 3.8 | 3.2 | 3.64 |
| Portfolio 8 | 4.4 | 3.8 | 5.0 | 4.0 | 3.4 | 4.18 |

# QUESTIONS

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