Washington Power Board Presentation

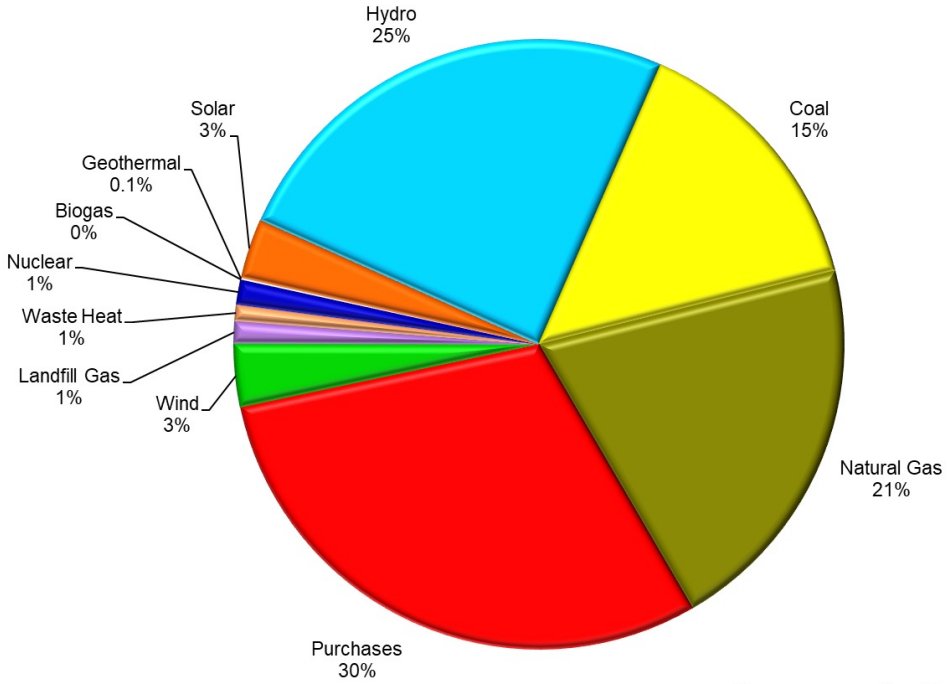
March 5, 2024

Mason Baker, CEO & General Manager

UAMPS Overview

- A political subdivision formed under the Utah Interlocal Cooperation Act in 1980
- Provides electric services on a non-profit basis to 50 public power utilities in seven western states
- Project-based with 16 Projects
  - Not an all-requirements provider
  - Member autonomy
- Each Project operates independent from one another under the UAMPS umbrella

UAMPS Projects



Resources by Type: 2023

Generation Projects

Hunter Project – *coal-fired*

San Juan Project – *coal-fired (retired)*

IPP Project – *coal fired (converting to natural gas)*

Payson Project – *natural gas*

Natural Gas Project

CRSP Project – *hydro*

- **Provo River** - *hydro*
- **Olmsted** - *hydro*

Horse Butte Wind Project – *wind*

- **Repowering and/or HBW 2** – *investigating*

Veyo Project – *waste heat*

Firm Power Supply Project

- **Pleasant Valley** – *wind*
- **Patua** – *geothermal and solar*
- **Red Mesa Tapaha (2023)** – *solar*
- **Steel 1A and Steel 1B (2024)** – *solar*
- **Sunnyside** – *waste coal*

Carbon Free Power Project – *small modular reactors (terminated)*

Transmission Projects

Central-St. George Project

Craig-Mona Project

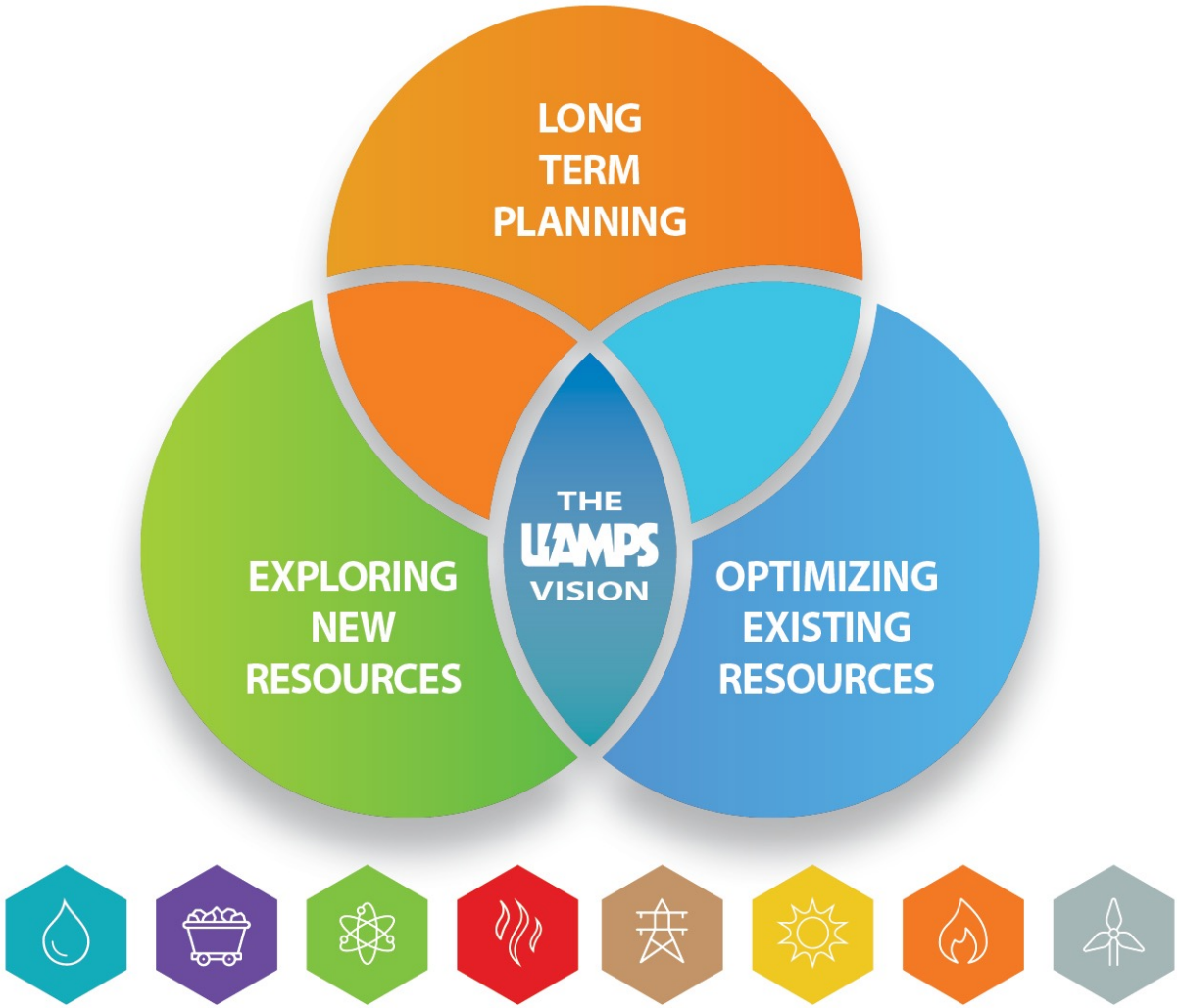
Service Projects

Pool Project – *dispatch and scheduling services*

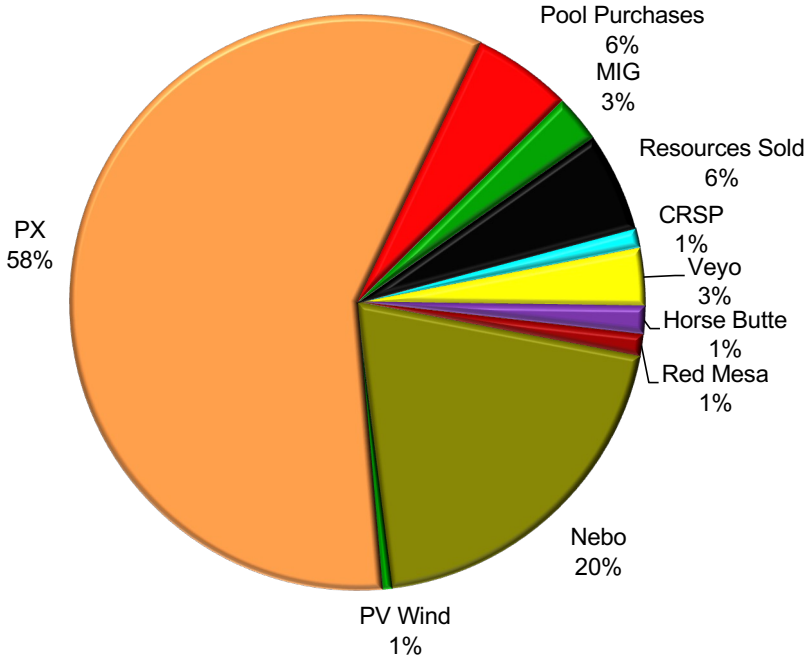
Resource Project – *investigation of new resources*

GPA Project

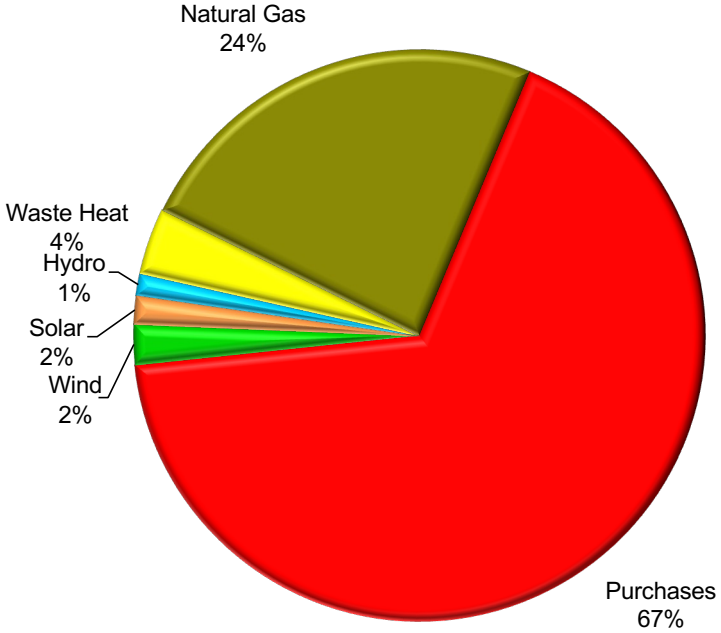
Member Services Project


LONG
TERM
PLANNING
EXPLORING
NEW
RESOURCES
THE
LAMPS
VISION
OPTIMIZING
EXISTING
RESOURCES

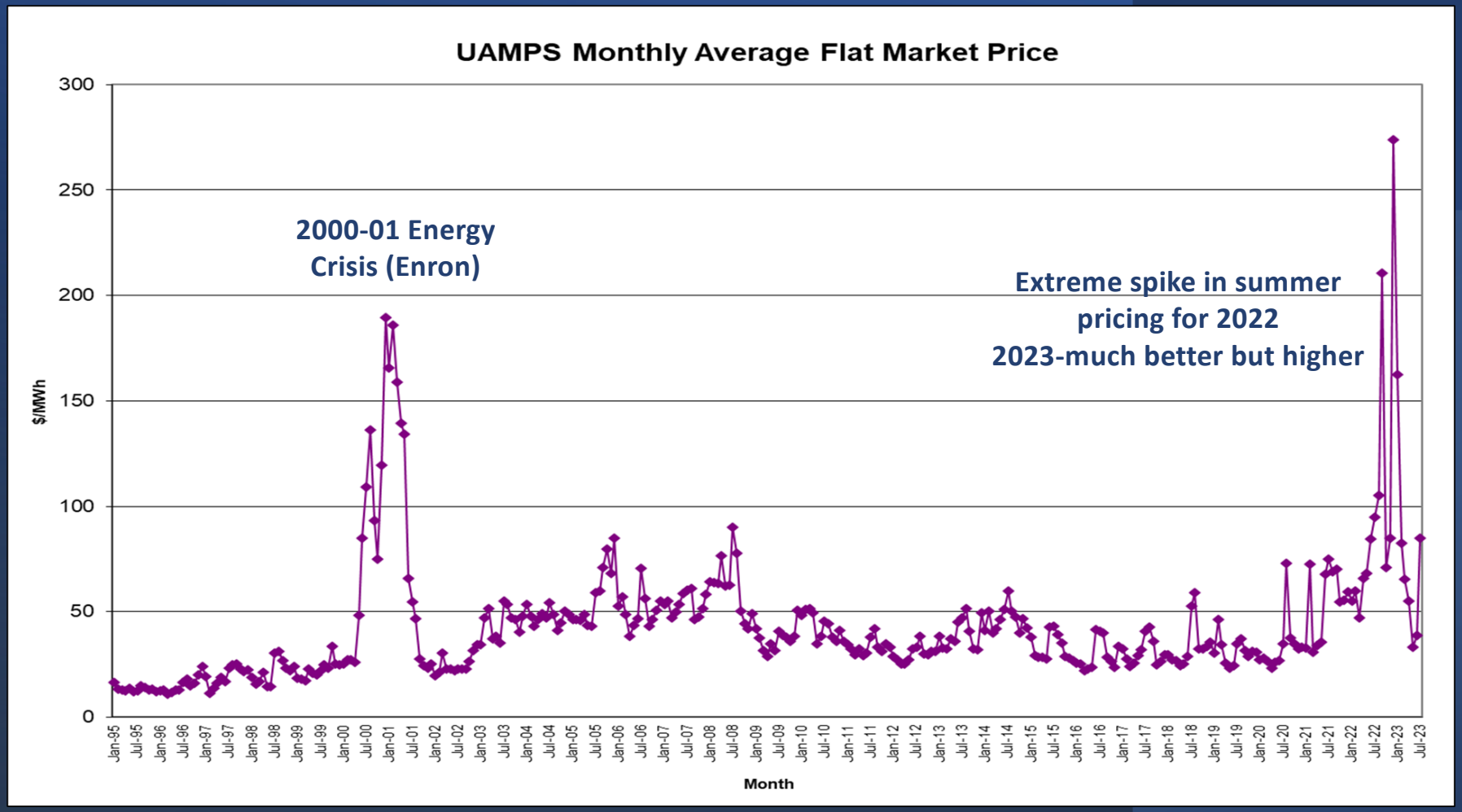
Washington: Resource Usage Breakdown - 2023

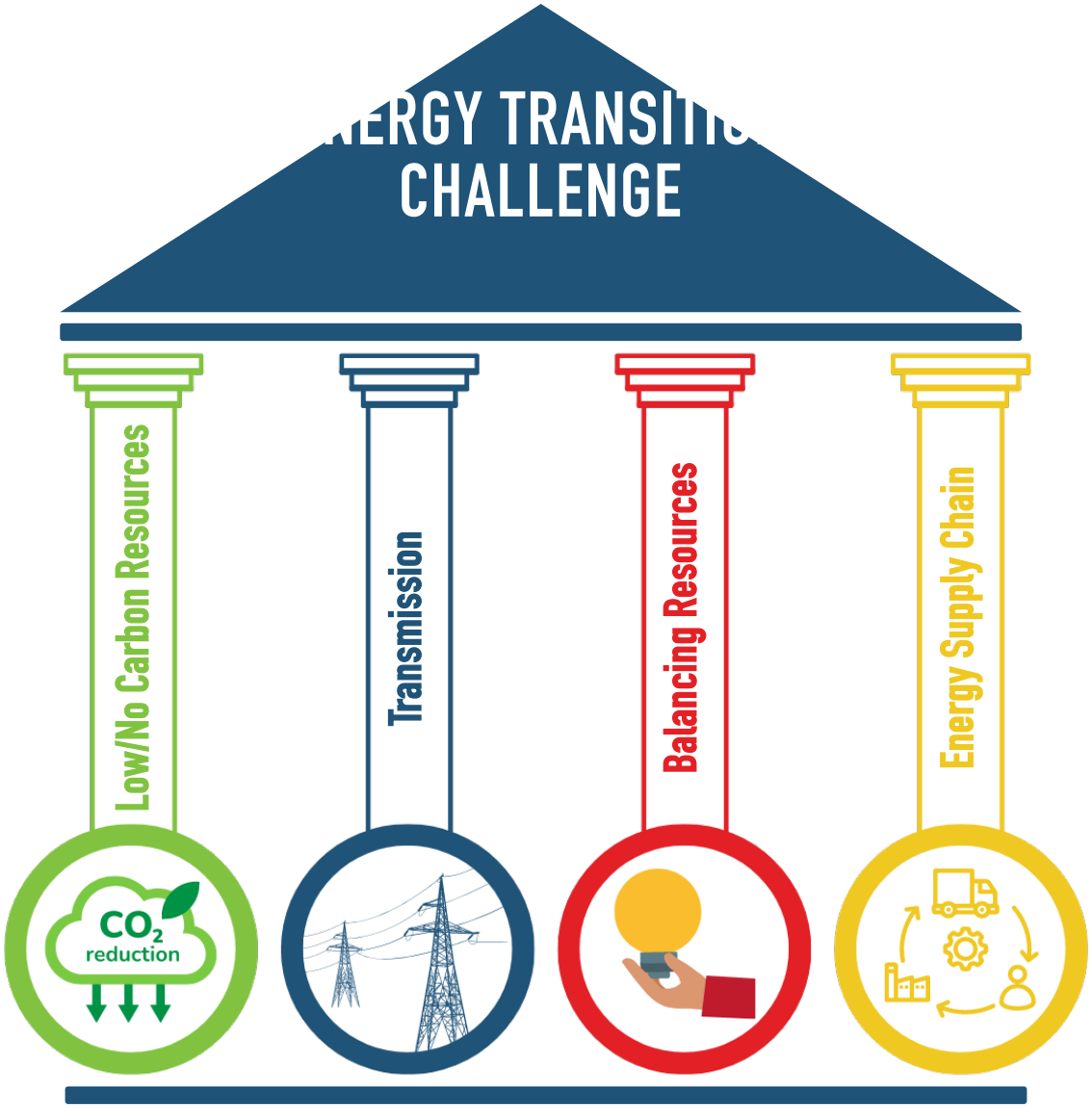


Washington Resources by Type: 2023



- Extreme increases in 2022 wholesale pricing
- Financial impact on member communities
- Learned from these experiences and developed planning tools to minimize risk moving forward

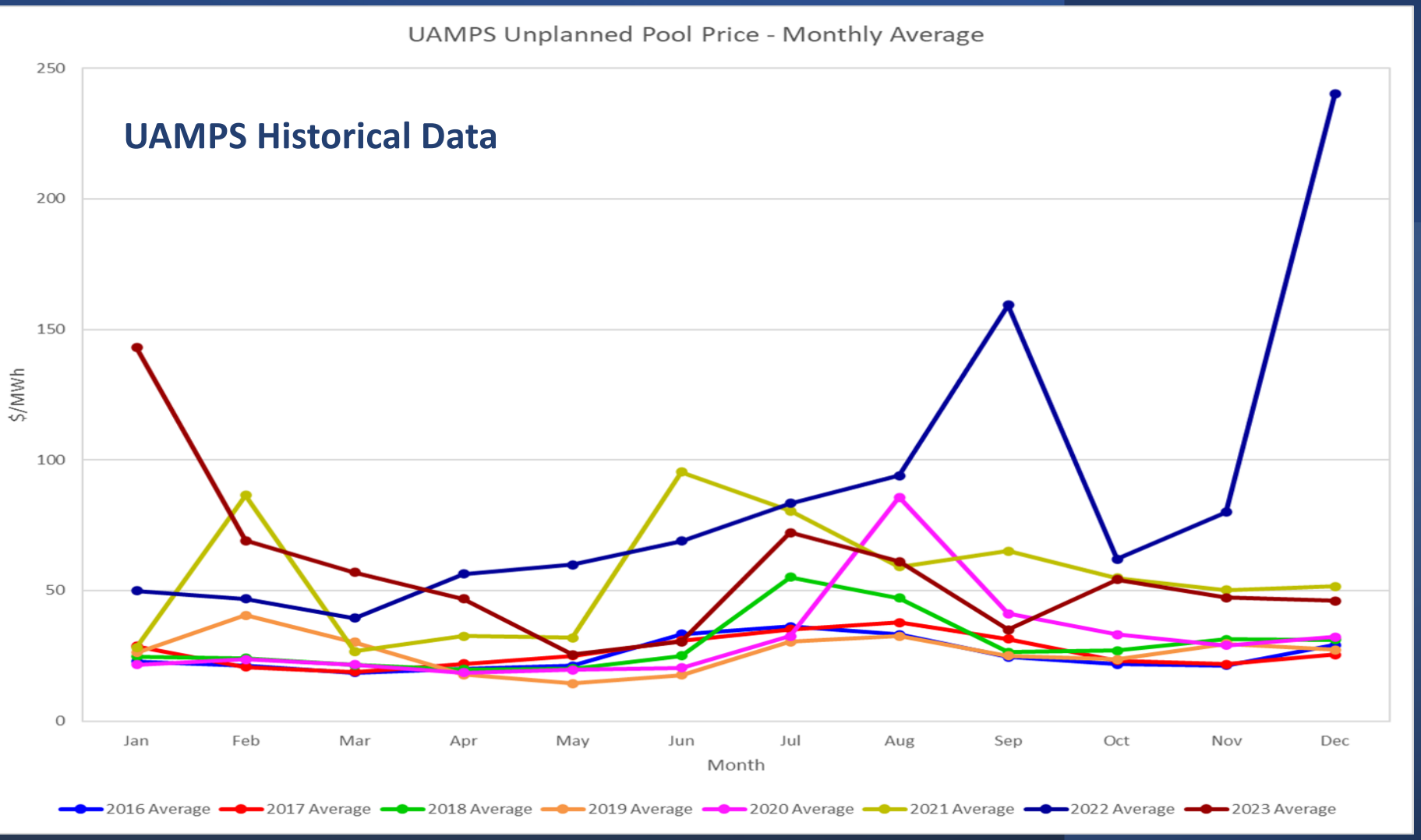

UAMPS Monthly Average Flat Market Price
2000-01 Energy Crisis (Enron)
Extreme spike in summer pricing for 2022
2023-much better but higher
$/MWh
300
250
200
150
100
50
0
Jan-95
Jul-95
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Jan-04
Jul-04
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
Jul-14
Jan-15
Jul-15
Jan-16
Jul-16
Jan-17
Jul-17
Jan-18
Jul-18
Jan-19
Jul-19
Jan-20
Jul-20
Jan-21
Jul-21
Jan-22
Jul-22
Jan-23
Jul-23
Month

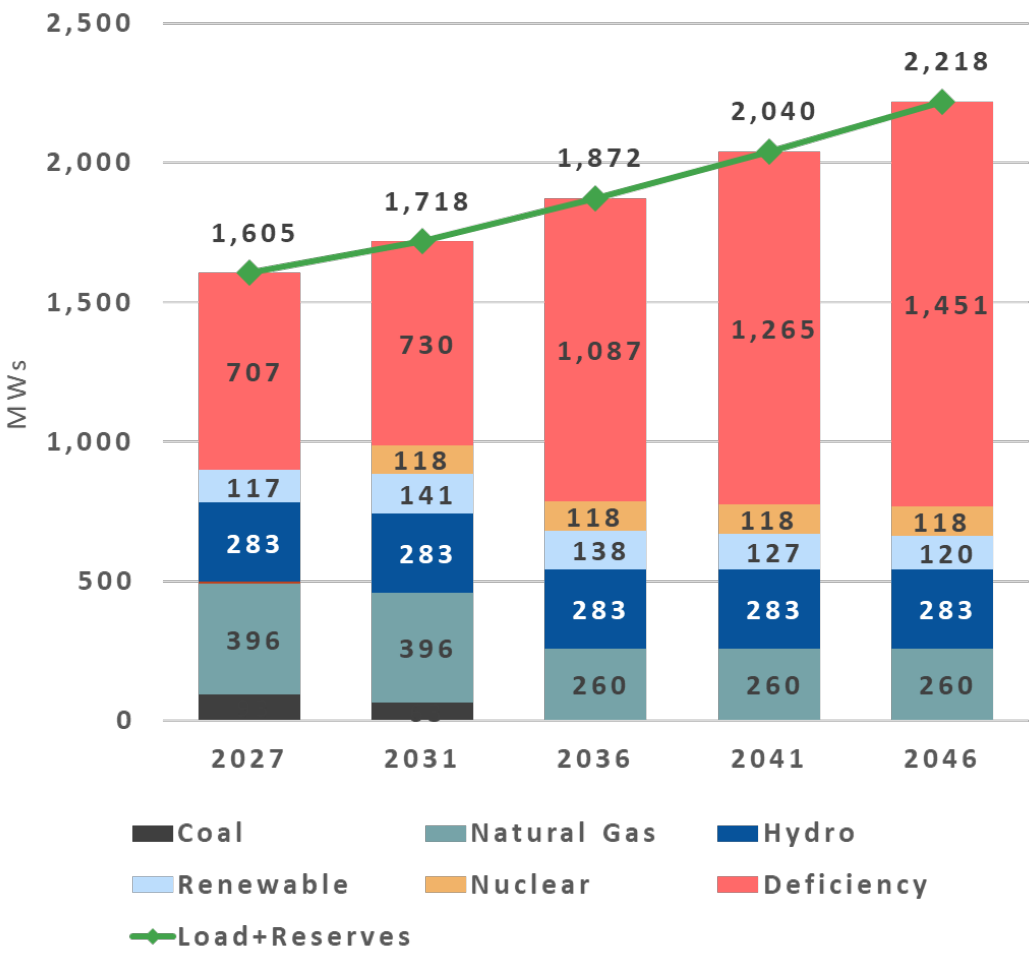

ERGY TRANSITIO
CHALLENGE
Low/No Carbon Resources
Transmission
Balancing Resources
Energy Supply Chain
CO_2
reduction

Affordability

- Transition to Low/No Carbon Generation will result in increased costs to the end use customer
- **Good news**: Renewable generation pricing has become more economic over the last decade
- **Bad news:** Renewables are intermittent and we need dispatchable generation to ensure a reliable electric system
- Natural Gas Generation is becoming the default resource to meet dispatchability need but its long-term role in the Energy Transition is uncertain

UAMPS Historical Data





IRP Results

- New resource need
- Reserves=115% of load
- Peaking need

Integrated Resource Plan Recommendations

Aggressive Thermal Plant Development / Acquisition	UAMPS should engage and pursue development and acquisition of approximately 300 MW of CCGT and 200 MW of peaking generation (either RICE or CT, or both).
Pursue Competitive Solar & BESS, as well as Wind	UAMPS should continue to pursue opportunities to identify and acquire PPAs or ownership in up to 300 MW of solar, coupled with 150 MW of BESS, and up to 300 MW of wind generation resources.
Preserve Nebo and Hunter 2 (i.e. extend retirement dates)	Given both Nebo and Hunter 2 will be reach the end of their commercial operating lives in 2035 and 2032, respectively, UAMPS should evaluate opportunities to extend the lives of both resources and undergo project life extension feasibility .
Identify and Procure Land Site Options	Since generation development activities can be long-lead time items, UAMPS should evaluate feasible generation sites and either procure land options for future development or acquire the land now.

Firm Power Project

- 40 MW Steel Solar 1A
  - COD last week of February 2024
  - Entitlement 1,292 MW
- 40 MW Steel Solar 1B
  - COD last week of March 24
  - Entitlement 5,747 MW
- Located in Box Elder County
- 25 year take-or-pay Power Purchase Agreement
- Battery Storage Option

Horse Butte Wind Project

- Currently investigating option to repower and/or expand the Project up to 100 MW (increase of 42.4 MW)
- Expansion commercial operation date dependent on interconnection timing
- **Expansion Entitlement 744 MW**

Fremont
Solar + Storage

- 99 MW Solar + 49.5 MW Storage
- Located in Iron County west of Paragonah
- 25 year take-or-pay Power Purchase Agreement
- LGIA signed (decreased schedule risk)
- Commercial operation date 2026
- **Study Entitlement 6,271 MW**

Geothermal

- Pursuing 65 MW of geothermal
- Two locations
  - Winnamucca, NV
  - Fallon, NV
- Commercial operation dates
  - Q4 2027
  - Q3 2029
- 25 year take-or-pay Power Purchase Agreement
- **Study Entitlement 3,270 MW**

Natural Gas Generation

- Multiprong investigation
  - Small "behind the meter" as well as large projects
- RFP includes:
  - Identification of two sites
    - Transmission LGIA deadline May 15th
  - Additional Enyo Solar + NG
    - Existing LGIA
- Ongoing evaluation to insure economical competitive
  - Technology (Wartisia, GE and CAT)
  - Air permit limitations
  - Water availability
  - Amortization period
- **Study Entitlement 2.8516%**

Implementation of New Tools

- FY23 "Budget" to "Actual" Dashboard
- All-requirements Pool Project Option
- Financial Health Checks

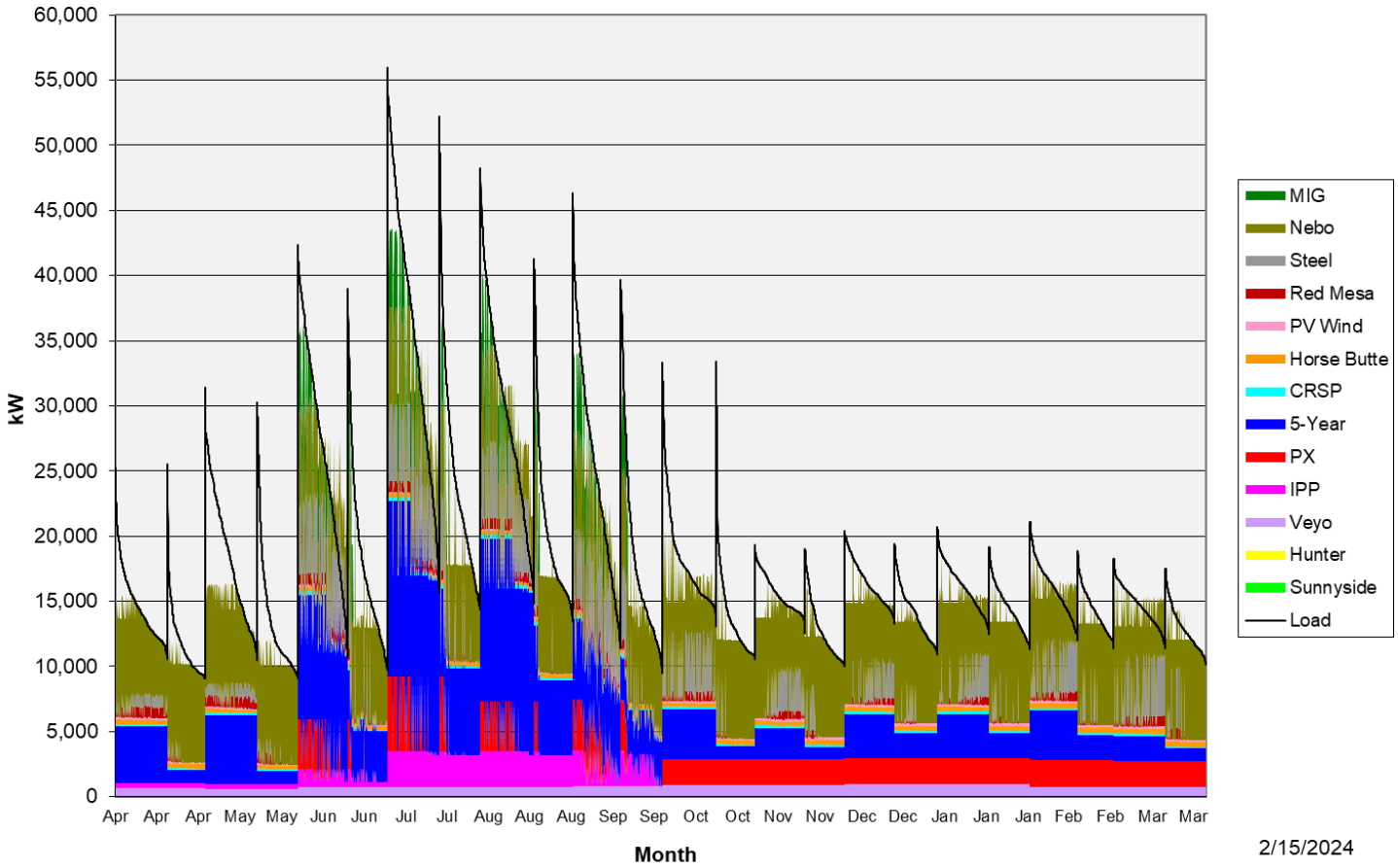
QUESTIONS

Washington

Forecasted Load to Resource Comparison and Shortage/Surplus Results

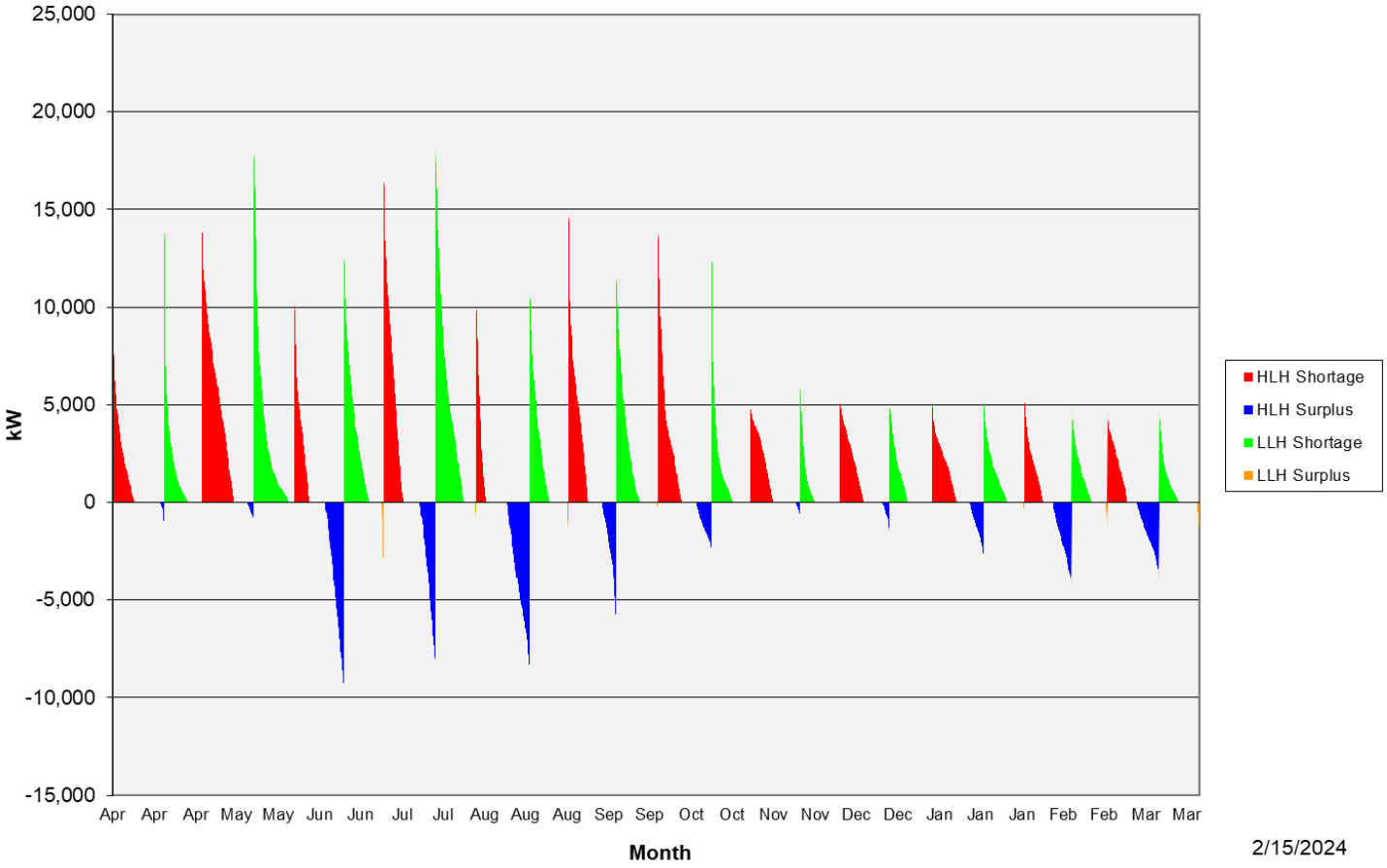
	Forecasted Load[3]		kW Average[1]				
			Forecasted	Forecasted	Shortage/(Surplus)[2]		
Month	kW Peak	kWh Energy	Load	Resources[4]	Flat	HLH	LLH
Apr-24	25,512	9,698,536	13,470	12,141	1,329	1,203	1,501
May-24	31,371	12,155,148	16,338	12,842	3,495	3,620	3,338
Jun-24	42,309	16,508,557	22,929	22,039	890	-504	2,632
Jul-24	55,942	23,058,142	30,992	28,227	2,765	1,475	4,400
Aug-24	48,207	19,193,752	25,798	25,546	252	-1,010	2,001
Sep-24	46,285	15,786,489	21,926	20,006	1,919	1,576	2,312
Oct-24	33,422	12,141,940	16,320	14,738	1,582	1,621	1,527
Nov-24	19,308	10,319,061	14,332	13,314	1,018	1,250	728
Dec-24	20,424	11,408,950	15,335	14,237	1,097	1,210	967
Jan-25	20,662	11,484,385	15,436	14,493	943	803	1,120
Feb-25	21,073	10,269,396	15,282	14,810	472	77	998
Mar-25	18,252	10,328,508	13,882	13,512	370	128	677
Year	55,942	162,352,864	18,533	17,181	1,352	954	1,860

Washington Forecasted Load and Resources, April 2024 - March 2025



2/15/2024

Washington Forecasted Load Compared to Resources, April 2024 - March 2025



2/15/2024