Western Area Power Administration

Proposed 2028 Parker-Davis Project Power Marketing Plan

Public Information Forum

June 20, 2024

Participant Instructions

- Exit and restroom locations
- For the courtesy of other participants and to facilitate transcription of the meeting, please save all questions and comments until the end of the presentation

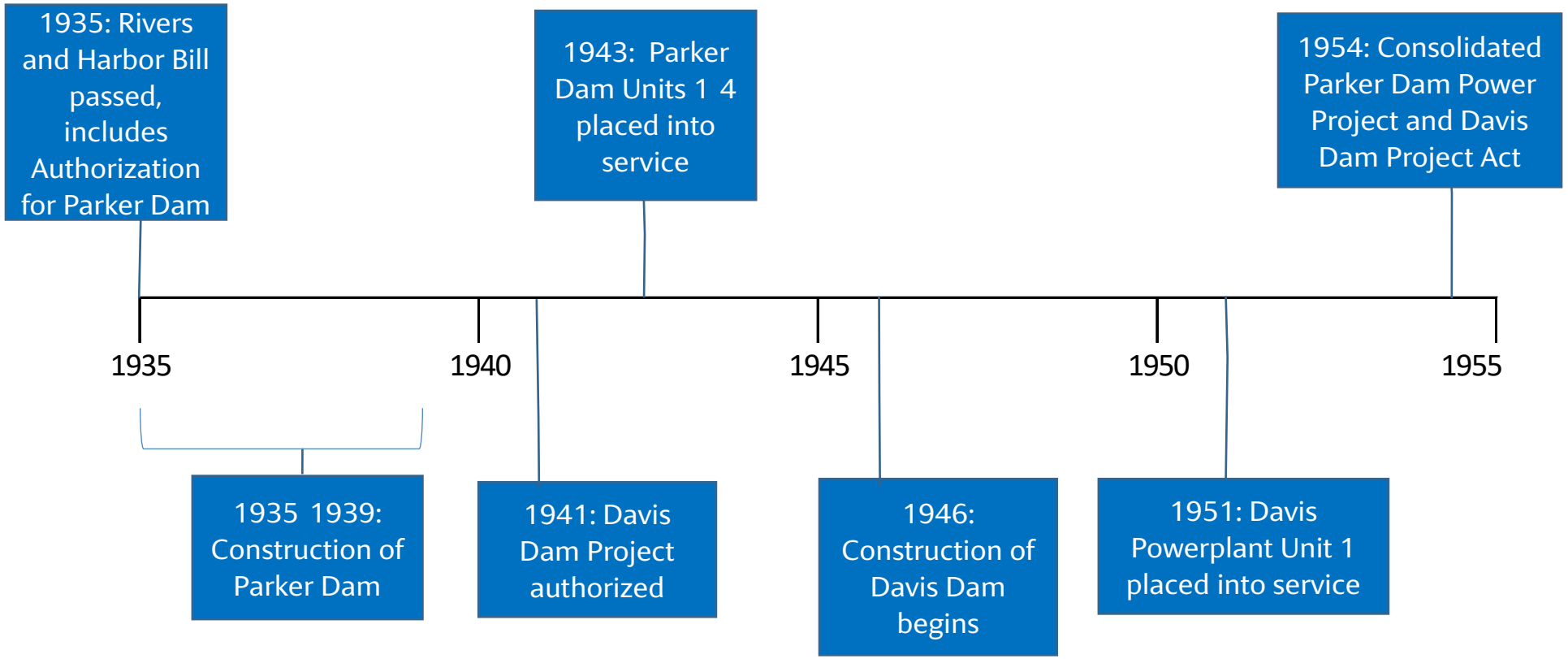
Agenda

- Parker-Davis Project (P-DP) history
- Power Marketing Initiative (PMI) milestones and effort to date
- Federal Register Notice (FRN) dated May 20, 2024
  - Proposal
- Points of contact

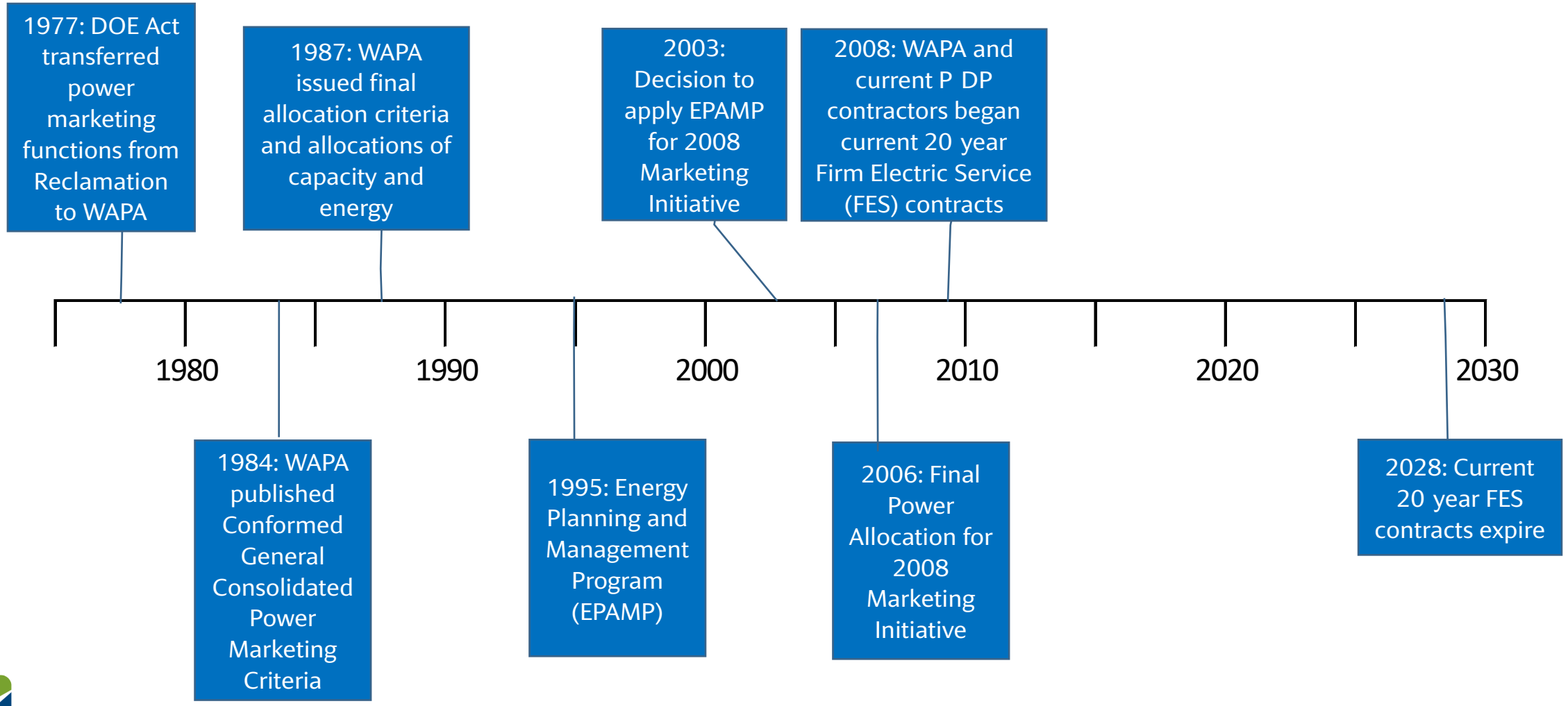
History

- Western Area Power Administration (WAPA) was established as part of the U.S. Department of Energy in 1977
- Desert Southwest Region (DSW) is one of WAPA's regional offices
- DSW owns and operates approximately 1,500 miles of high voltage transmission lines and 45 substations throughout Arizona, California, and Nevada to facilitate delivery of P-DP power in those three states
- WAPA markets power in a manner that encourages the most widespread use at the lowest possible rates consistent with sound business principles

Parker-Davis Project History



Parker-Davis Project History, continued



History, continued

- P-DP is a large power and water system of the Lower Colorado River Basin located in Arizona, California, and Nevada
- DSW allocates P-DP power that is not reserved for project purposes to preference power contractors
- Current contracts expire September 30, 2028

Current FES Allocations – 35 Contractors

Agua Caliente Band Of Cahuilla Indians

Arizona Electric Power Cooperative, Inc.

City of Corona

City of Mesa

City of Needles

City of Williams

City of Yuma AZ

Colorado River Commission of Nevada

Eastern Arizona Power Pool Association

Electrical District No. 3, Pinal County

Fort Mojave Indian Tribe

Hohokam Irrigation and Drainage District

Imperial Irrigation District

Pechanga Band Of Luiseño Mission Indians of the Pechanga Reservation, California

Salt River Project

San Luis Rey River Indian Water Authority

Tohono O'odham Utility Authority

Town of Fredonia

Town of Gilbert

Town of Marana Utilities Department

Town of Thatcher

Town of Wickenburg

U.S. Department of Defense, Yuma Proving Ground

U.S. Department of Energy, Nevada Operations Office

U.S. Department of the Air Force - Edwards Air Force Base

U.S. Department of the Air Force - Luke Air Force Base

U.S. Department of the Air Force - March Air Reserve Base

U.S. Department of the Air Force - Nellis Air Force Base

U.S. Department of the Interior - Bureau of Indian Affairs (Colorado River Agency)

U.S. Department of the Interior - Bureau of Indian Affairs (San Carlos Irrigation Project)

U.S. Department of the Navy - Naval Facilities Engineering Command SW

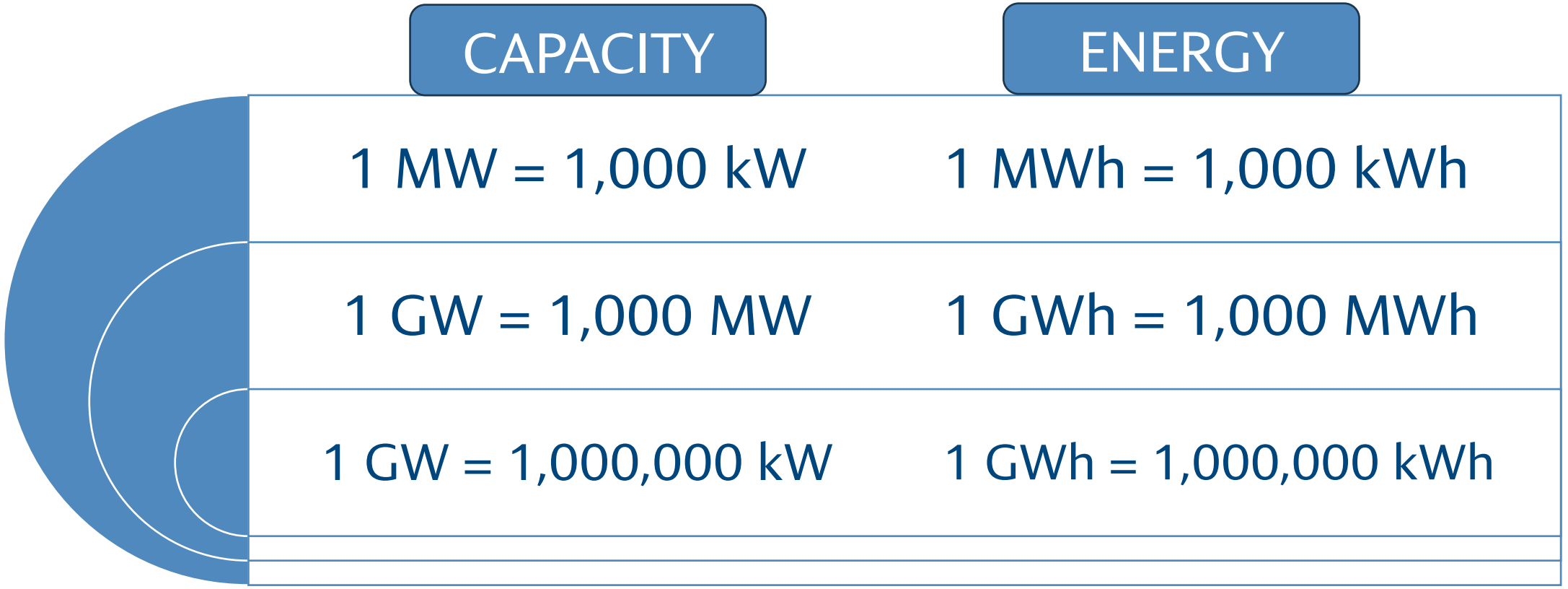
U.S. Marine Corps, Marine Corps Air Station Yuma

Viejas Band Of Kumeyaay Indians

Wellton-Mohawk Irrigation and Drainage District

Yuma Irrigation District

Unit Conversion



CAPACITY	ENERGY
1 MW = 1,000 kW	1 MWh = 1,000 kWh
1 GW = 1,000 MW	1 GWh = 1,000 MWh
1 GW = 1,000,000 kW	1 GWh = 1,000,000 kWh

Current FES Allocations of Capacity and Associated Energy

Summer	Winter
259,206 kW*	198,337 kW*
March – September	October - February

*Does not include Priority Use Power (PUP)

Rated Capacity

Parker Dam Power Project:

- 4 Units
- Each unit rated at 30 megawatt (MW)
- Total of 120 MW rated capacity – 60 MW allotted to P-DP and 60 MW allotted to MWD

Davis Dam Power Project:

- 5 Units
- 4 rated at 51.75 MW and 1 rated at 48 MW
- Total rated capacity: 255 MW

Parker-Davis Project:

- Rated capacity = 60 MW + 255 MW = 315 MW

Water Delivery

- The primary purpose of P-DP is water control and delivery.

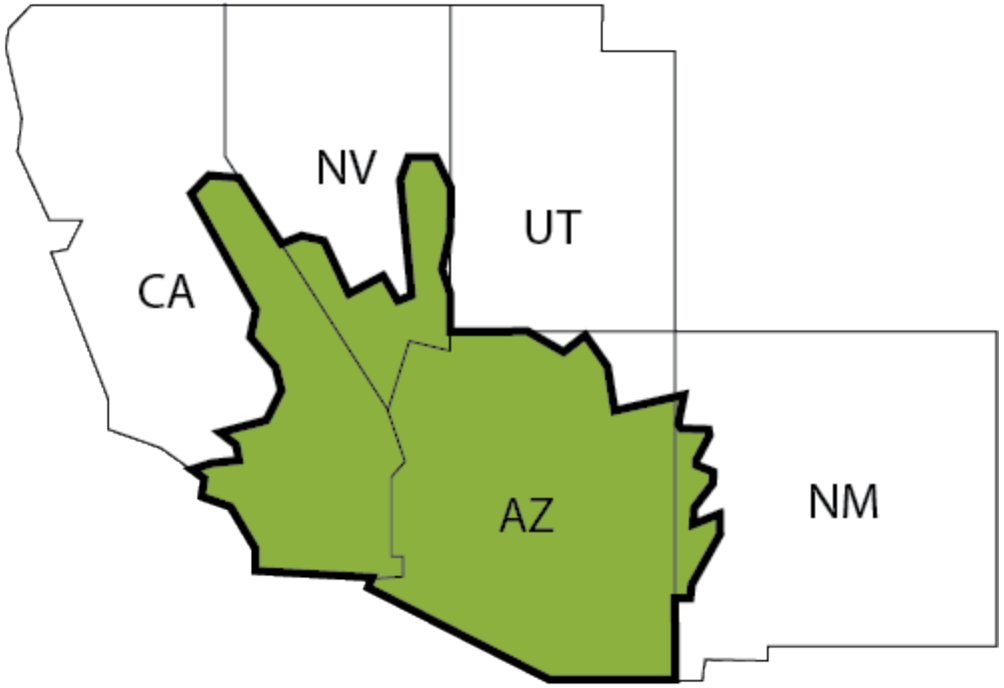
- The water control system consists of storage reservoirs that provide daily, seasonal, and annual flow regulation.
- Power generated from these resources depends on hydrology and water operation requirements.

Marketable Power

Priority Use Power	Marketable Power	Withdrawable Power
• PUP is capacity and energy reserved by the United States. • Required for Reclamation projects in the Lower Colorado River Basin. • Required for Native American irrigation projects adjacent to the Lower Colorado River south of Davis Dam and north of the border between the United States and Mexico.	• Power that is surplus to PUP is marketed to preference entities as Firm Electric Service (FES).	• Power that is reserved as PUP, but not presently needed, also may be marketed to contractors as withdrawable power. • Two-year advance notice required to withdraw.

P-DP Marketing Area

The marketing area consists generally of most of Arizona, southern California, southern Nevada, and a small part of New Mexico



P-DP Post-2028 Marketing Initiative

- P-DP Firm Electric Service contracts expire September 30, 2028
- Last marketed in 2008
- Currently conducting Post-2028 P-DP Power Marketing Initiative

A power marketing initiative is the review and possible development or revision of a power marketing plan when there are product changes, additions to capacity, or when existing power sales contracts expire.

PMI Effort to Date

Informal meetings with existing contractors

October 2020, December 2020, July 2021, September 2023, January 2024

Potential new contractor meeting

October 2023

Initiated public process via *Federal Register* notice

May 20, 2024

2024 PMI Timeline

May 20, 2024

Published Notice of Proposal FRN, begins public process

June 20, 2024

Public Information Forum (hybrid)

July 19, 2024

Public Comment Forum (hybrid)

August 19, 2024

Consultation and Comment Period ends

90 days

2025-2028 PMI Estimated Timeline

January 2025

Publish Notice of Decision FRN of Final 2028 Plan and possible call for applications

November 2025

Publish Notice of Proposal FRN for proposed allocations

August 2026

Publish Notice of Decision FRN of final allocations

August 2026 – May 2028

Contract development and finalization

October 1, 2028

Service under new contracts begins

Proposed 2028 Marketing Plan

- The Proposed 2028 Plan addresses:
  - The power to be marketed after September 30, 2028, which is the termination date for current P-DP electric service contracts
  - The general terms and conditions under which the power will be marketed starting on October 1, 2028, and going through September 30, 2048
  - The criteria to determine eligibility for new allocations for the proposed resource pool

Notice of Proposal Includes

1. EPAMP/PMI
2. Resource pool
3. Capacity allocations
4. Quarterly Energy
5. Optional Energy
6. Excess Energy
7. Minimum scheduling requirements
8. Contractor use of transmission
9. General Criteria and Contract Principles
10. Eligibility Criteria

1. Apply EPAMP/PMI Proposal

The Energy Planning and Management Program has two major sections:

Describes the terms and requirements for both WAPA and the contractors regarding Integrated Resource Planning including who must comply, what the IRP should include, how and when the IRP should be submitted, etc.

Integrated Resource Planning (IRP)

Describes the framework for marketing WAPA's long-term firm hydroelectric resources while promoting the widespread use of Federal resources.

Power Marketing Initiative (PMI)

EPAMP PMI Resource Extensions

The EPAMP PMI lays out an extension formula to determine the Contract Rate of Delivery (CROD) to be extended to existing contractors:

= **CROD extended to existing contractors**

2. Resource Pool Proposal

- Include 3,750 kW from 2025 upgrade of a generating unit at Davis
- Extend 98% of available marketable capacity to existing contractors
- Create a resource pool of up to 2% of seasonal capacity allocations
  - Supports widespread use
  - 5,259 kW summer resource pool capacity
  - 4,041 kW winter resource pool capacity
  - Net impact is less than a 1% reduction to existing FES contractors

Resource Pool Proposal

PROPOSED P-DP FES CROD	SUMMER (kW)	WINTER (kW)
Total P-DP FES current CROD	259,206	198,337
Additional marketable capacity*	3,750	3,750
Revised marketable capacity	262,956	202,087
FES CROD extended (98%)	257,697	198,045
Resource pool capacity (2%)	5,259	4,041
FES CROD percent reduction	0.58%	0.15%

* Expected Davis unit upgraded capacity.

3. Capacity Allocations Proposal

- Market a fixed amount of CROD for the summer and winter seasons
  - At least 259,206 kW summer, 198,337 kW winter
- New allocations could be less than 1 MW
  - If fractional MWs are allocated, use a rounding methodology for all contractors:
    - To ensure CROD is not exceeded in any hour
    - Efficient use of capacity
    - Help ensure capacity is available in valuable times of the day

4. Quarterly Energy Proposal

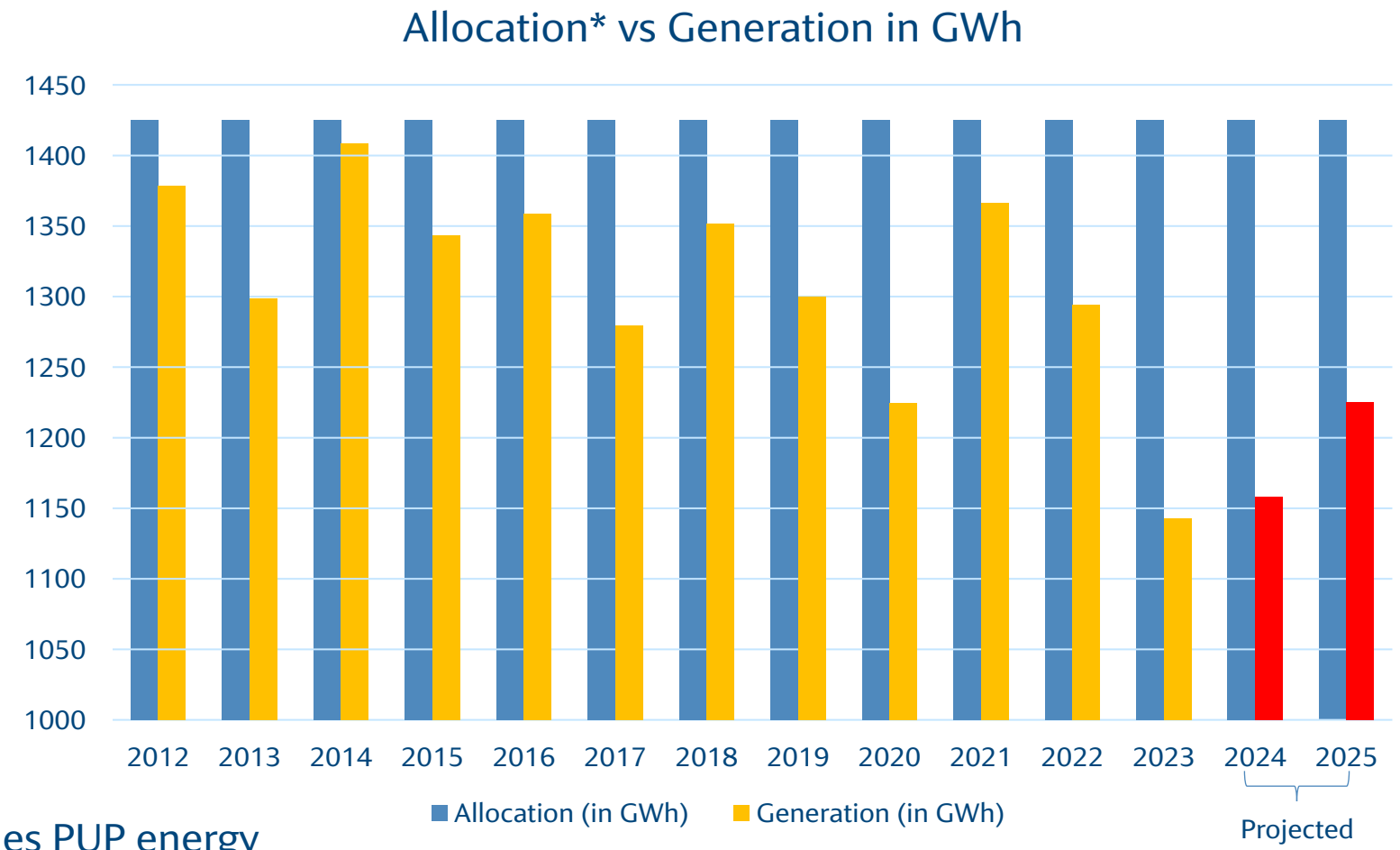
- Revise energy allocation methodology
- Offer Quarterly Energy based on the Bureau of Reclamation's 24-month study generation projections to align energy deliveries with changing hydrology

Current Energy Allocations

Summer season March - September	Contractors receive 67% of the capacity factor	Equals 3,441 kWh of energy per kW of capacity • 214 days in the summer season x 24 hours x 0.67	A contractor who is allocated 1,000 kW of capacity receives 3,441,000 kWh of energy for the summer season
Winter season October - February	Contractors receive 47% of the capacity factor	Equals 1,703 kWh of energy per kW of capacity • 151 days in the winter season x 24 hours x 0.47	A contractor who is allocated 1,000 kW of capacity receives 1,703,000 kWh of energy for the winter season

Current Energy Allocations, continued

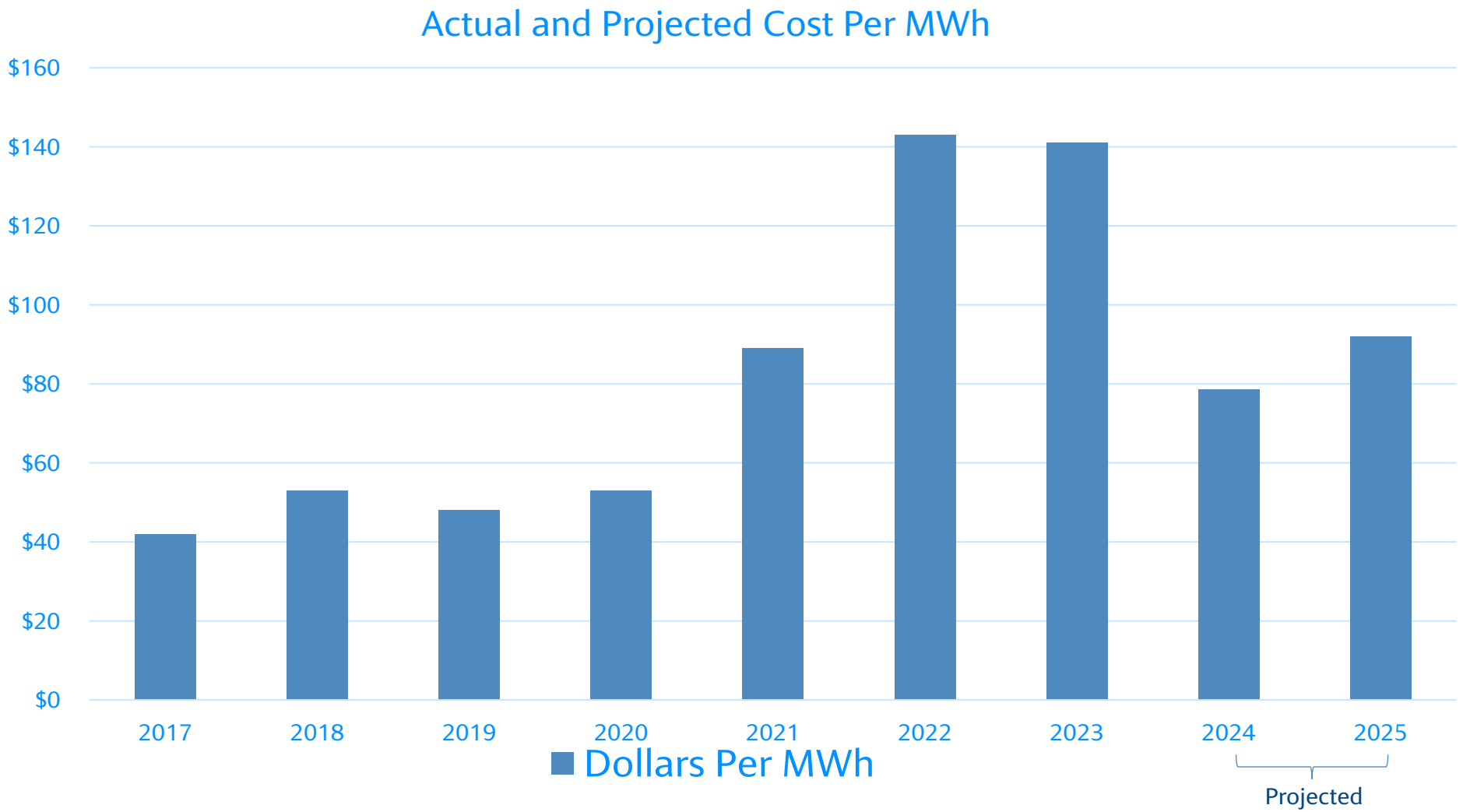
- The amount of energy allocated based on the current criteria
  - Has not changed
  - And is greater than the amount of energy generated



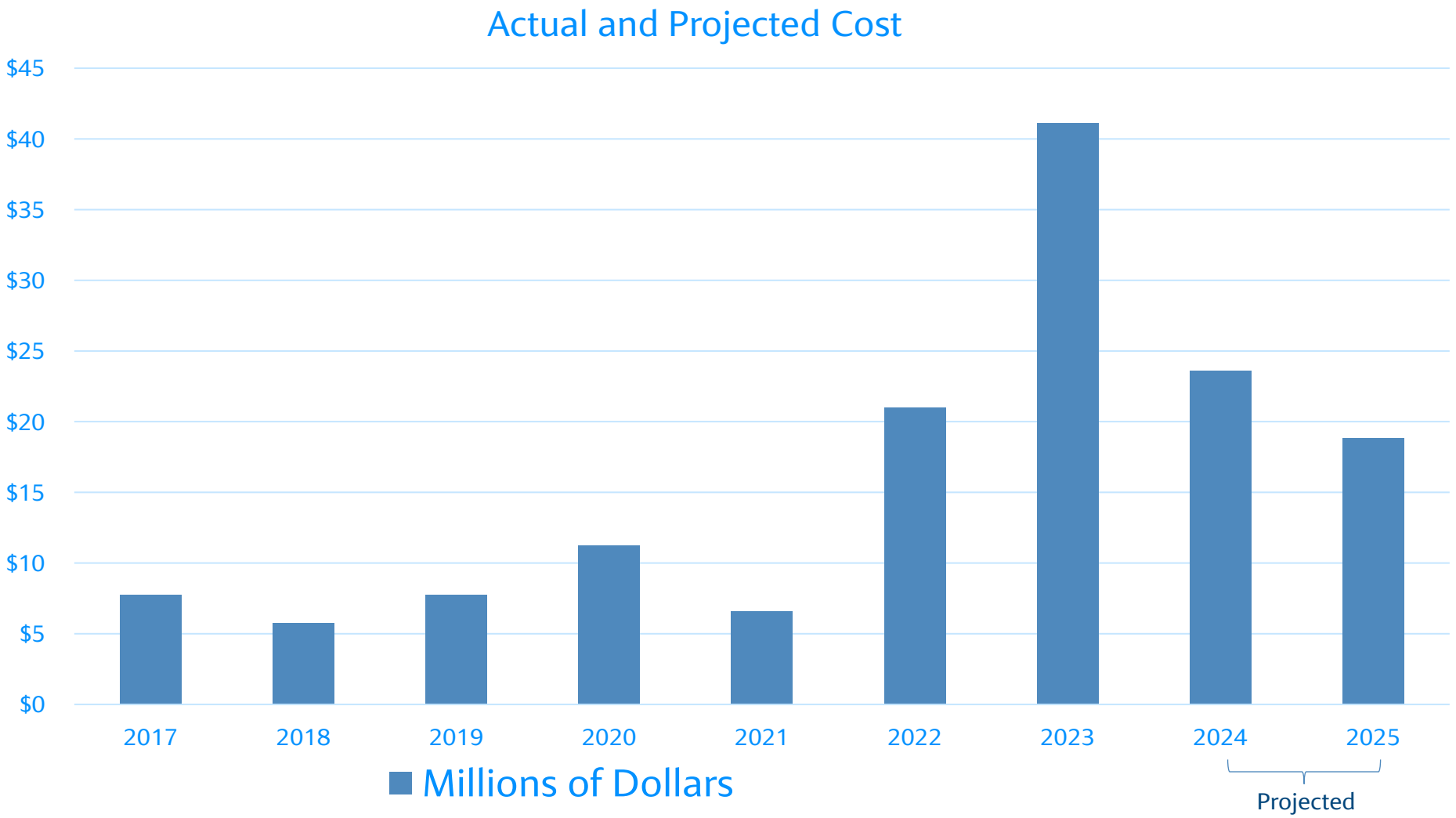
*Allocation includes PUP energy

FY 2017-2025 Purchase Power Volume

FY 2017-2025 Purchase Power Cost Per MWh



FY 2017-2025 Purchase Power Cost



Purchase Power Rate Methodology

- Purchase power is difficult to project given the volatility of hydrology and energy pricing
- Purchase power cost projections are reviewed for cost recovery and may be level to prevent adverse rate impacts
- Under-collections of purchase power costs may result in financial deficits which are recovered in subsequent rates, with interest

Ongoing Purchase Power Challenges

	Generation Revenue Requirement	PPW Included in Rate	Actual Generation PPW	Generation Deficit	Typical P&I
	In millions of dollars				
FY 2018	$16.5	$2.0	$6.5	$3.2	$0.6
FY 2019	$17.8	$2.0	$7.0	$1.6	$0.3
FY 2020	$18.5	$5.3	$11.3	$6.7	$1.1
FY 2021	$19.5	$5.3	$6.6	$1.1	$0.2
FY 2022	$21.6	$6.0	$21.0	$12.1	$1.6
FY 2023	$25.3	$8.5	$41.4	$21.7	$2.7
FY 2024 (est.)	$35.1	$18.0	TBD	TBD	TBD
FY 2025 (est.)	TBD	$18.0	TBD	TBD	TBD
				$46.4	$6.5

Quarterly Energy Proposal Details

- Propose using projected generation from Reclamation as new basis for energy deliveries (Quarterly Energy).
  - Use the most recent 24-month study
  - Allows for energy deliveries to be more in line with actual generation, thereby decreasing the amount of power to purchase
  - Available generation, less PUP energy, would be allocated to contractors based on a pro-rata share of their seasonal CROD

Quarterly Energy Publication Schedule

Determined by August 31	Determined by November 30	Determined by February 28, 29	Determined by May 31
October	January	April	July
November	February	May	August
December	March	June	September

5. Optional Energy Proposal

- Purchase supplemental energy on a separate pass-through cost basis on contractor's behalf
  - Contractor is responsible for the full cost of Optional Energy in addition to their FES costs and will fund in advance
- To be scheduled with the contractor's Quarterly Energy
- Must not exceed the contractor's CROD scheduled at a 100% capacity factor
  - 100% capacity factor = CROD x 24 hours x # of days in month
- Must elect no later than the day before prescheduling takes place

Generation Projection Changes

- If there is a significant reduction to generation projection following the Quarterly Energy publication
  - WAPA will assess impact to projected purchase power requirements
  - Could result in revised contractor energy deliveries based on pro-rata share of CROD
  - Effective no later than one day prior to prescheduling

6. Excess Energy Proposal

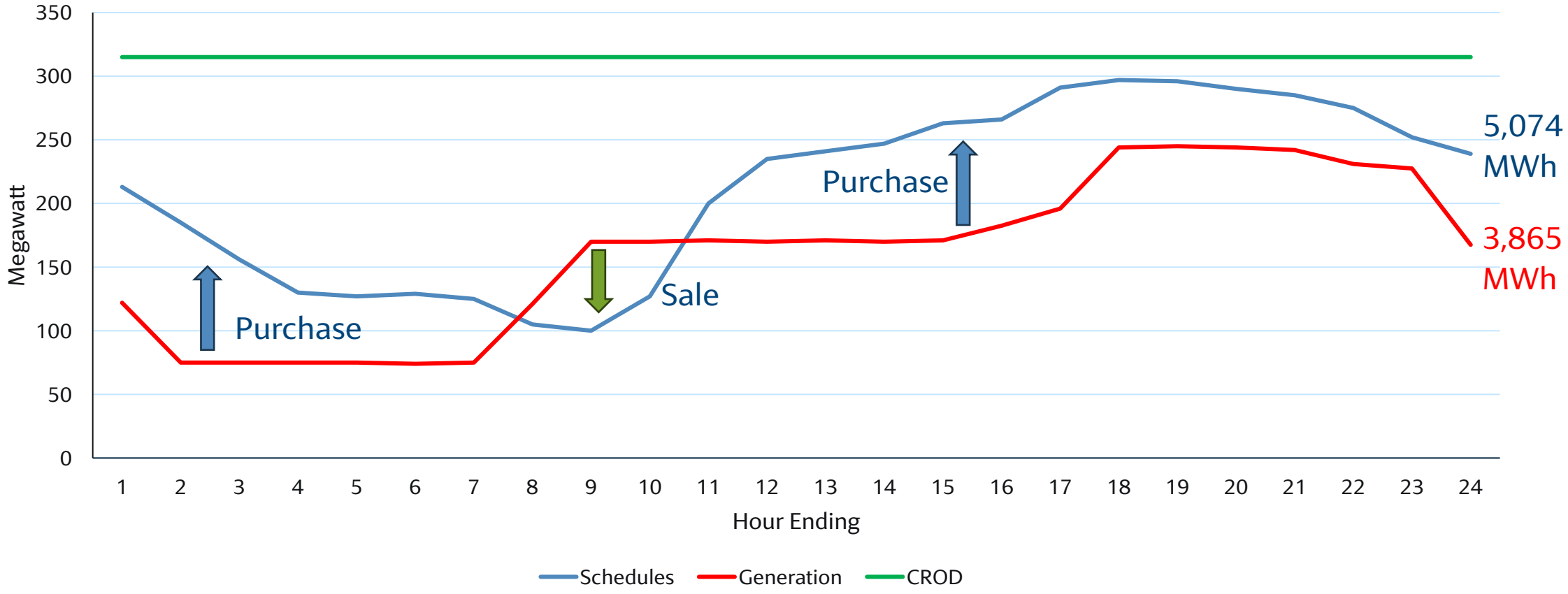
- Excess Energy would be the portion of projected annual generation exceeding a kWh calculation of all projected marketable capacity (including PUP) multiplied by the 67 percent capacity factor in the summer season and the 47 percent capacity factor in the winter season
- Excess Energy would be distributed to all contractors and PUP recipients

7. Minimum Scheduling Proposal

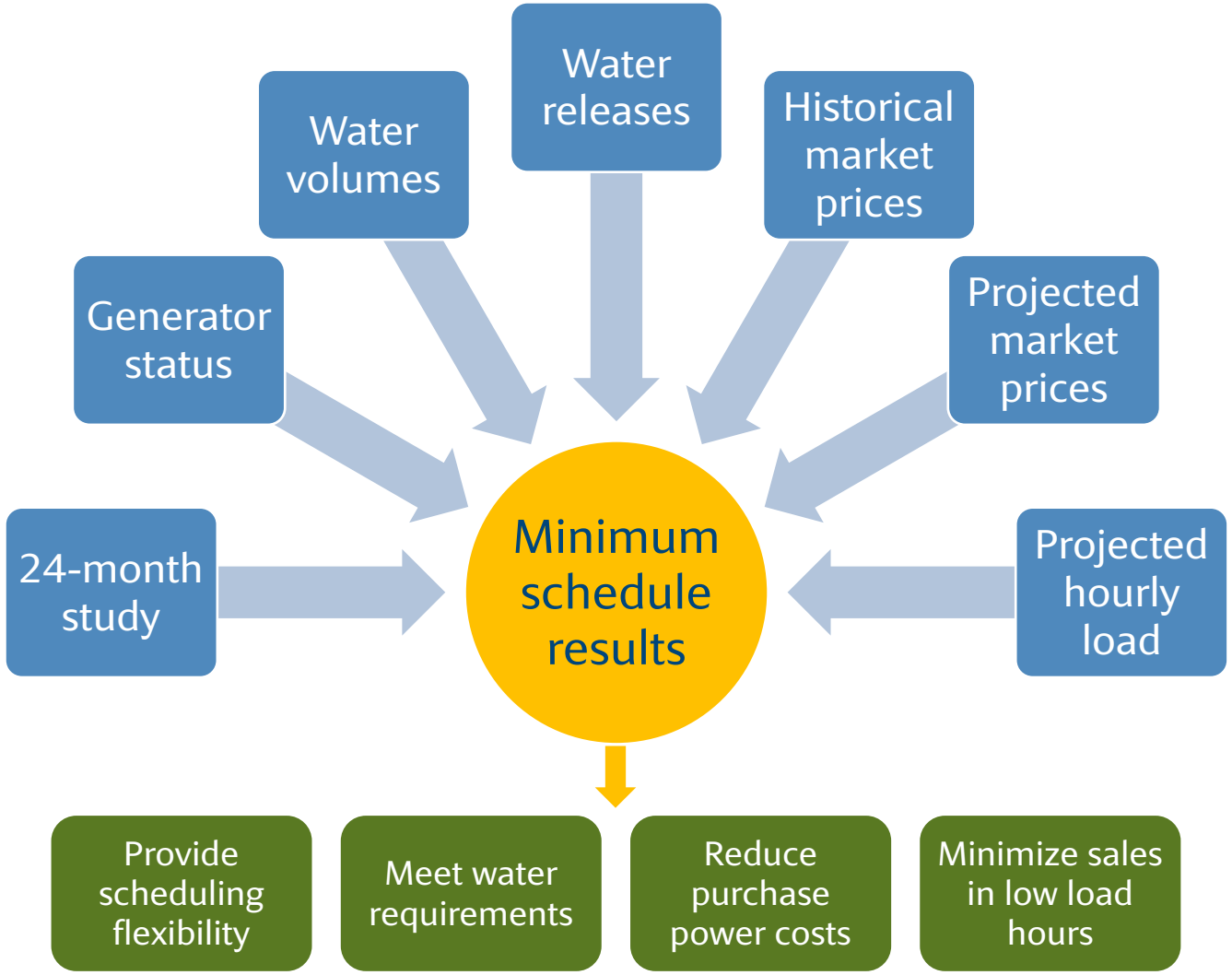
- Change current minimum requirement of 25% minimum in off peak hours, due to changes in load demand
- New minimum requirement that aligns with 24-month study and how energy is scheduled within the Western Interconnection
  - Intends for contractors to receive the maximum benefit of their resource allocation while accommodating the following goals: meeting Reclamation's water requirements, reducing purchase power and wheeling costs, and minimizing sales of energy in low hours

P-DP Generation vs Schedule

FY 2023 peak day



Minimum Scheduling Tool & Goals



8. Contractor Use of Transmission Proposal

- Option that would allow contractors to utilize the P-DP transmission reserved for delivery of their firm electric service allocations for contractor-owned or -purchased resources
- Transmission capacity used for such energy could not exceed a contractor's CROD
- Usage of transmission capacity will be comparable to service under WAPA's Open Access Transmission Tariff (OATT)

9. General Criteria & Contract Principles

- FES contracts shall be executed no later than May 31, 2028, unless otherwise agreed to in writing by WAPA
- 20 Year Contract Term
  - October 1, 2028, through September 30, 2048
- Power will be delivered pursuant to Metering and Scheduling Instructions, which will be part of contractors' electric service contracts
- Will include WAPA's standard FES provisions, integrated resource plans, and General Power Contract Provisions
- Renewable energy certificate provision

General Criteria & Contract Principles, continued

- New contractors will be required to prepay for service according to the applicable rate schedule and may participate in advance funding of WAPA's and Reclamation's operation and maintenance expenses
- New contractors will be required to reimburse existing contractors for undepreciated replacement advances, to the extent existing contractors' allocations are reduced due to creation of a resource pool
- Purchase power deficits incurred during previous marketing period will not be passed through to new contractors

Transmission Service

- P-DP power will be delivered to designated points of delivery on the P-DP transmission system.
- Contractors must secure all necessary transmission service to deliver Federal power beyond WAPA's P-DP transmission system.
- A list of designated delivery points will be provided with the call for resource pool applications.
- WAPA will market surplus transmission capacity on P-DP under WAPA's Open Access Transmission Tariff and other applicable arrangements.

Resource Pool – When to Apply

- If WAPA creates a resource pool, new contractors will have the opportunity to apply for a Federal hydropower allocation
- Start when WAPA issues a call for applications
  - Mid-January 2025, based on estimated timeline

10. Proposed Eligibility Criteria - Who Can Apply

- Qualified applicants:
  - Must meet the preference requirements under Section 9(c) of the Reclamation Project Act of 1939
  - Should be located within DSW's primary marketing area
  - Must not have an existing allocation of Federal power or be a member of a parent entity that has an allocation of Federal power.
  - Must be ready, willing, and able to receive and distribute or use power (not applicable to Native American tribes)

Proposed Eligibility Criteria - Who Can Apply, continued

- Qualified applicants:
  - That desire to purchase power from WAPA for resale to consumers, including cooperatives, public utility districts, public power districts, and municipalities, must achieve electric utility status and have necessary arrangements for transmission and/or distribution service by January 31, 2028 (not applicable to Native American tribes)
  - Must be a Native American tribe as defined in the Indian Self Determination Act of 1975 to qualify as Native American tribe applicants
  - Must respond to call for applications, which would be published in the same FRN as the Final 2028 Power Marketing Plan

Benefit Crediting Arrangement

- Benefit crediting arrangements are available only to tribes
- A tribe partners with another entity, typically a utility that agrees to:
  - Take the power from WAPA
  - Pay the WAPA invoice
  - Provide the tribe with a monetary benefit
- WAPA drafts the contract between the tribe, benefit crediting partner, and WAPA
- Tribes negotiate the terms/benefit directly with the benefit crediting partner
- WAPA ensures the contract terms are reasonable and in compliance with the firm electric service contracts

Next Steps

- Public Comment Forum
  - July 19, 2024, 1:00 PM MST
  - In-Person at WAPA's Desert Southwest Office, 615 S. 43rd Ave, Phoenix, AZ
  - Virtually through Teams link
- Submit written comments to WAPA by August 19, 2024
- WAPA evaluates comments
- WAPA publishes Final Decision in a *Federal Register* notice
  - Estimated mid-January 2025

Written Comments

Please provide any written comments for the official record regarding the marketing plan by August 19, 2024. Submit comments to:

Mr. Jack D. Murray
Senior VP and Desert Southwest Regional Manager
Mail: P.O. Box 6457, Phoenix, AZ 85005-6457
Fax: (602) 605-4663
Email: pdp-remarketing@wapa.gov

Website

https://www.wapa.gov/about-wapa/regions/dsw/pdpremarketing/

- Contains:
  - *Federal Register* notices
  - Upcoming meeting information
  - Presentations
  - Additional materials

Contact Information

Mr. John Paulsen
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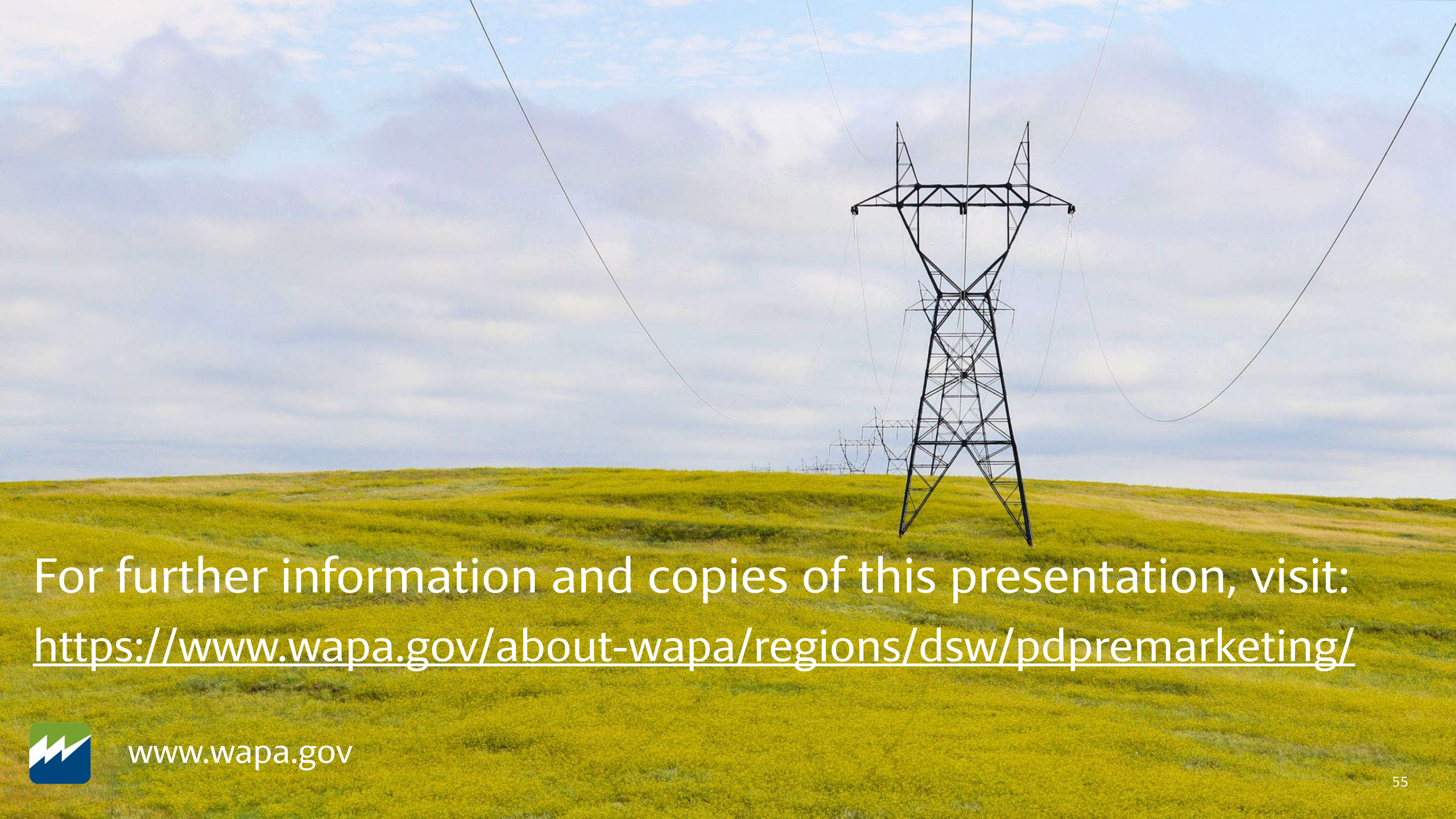
Power Marketing Advisor
Phone: (602) 605-2572
Email: Jhenn@wapa.gov

For Questions/Comments Today

- For questions, please choose one of the following options:
  - Raise your hand
    - Use the “Raise Hand” icon next to your name in participant list on Teams
  - Unmute yourself if you are only participating by phone (*6)
  - Please do not add your questions/comments in the chat box
- Teams participants, ensure you are not “double-muted” (i.e., muted on your device and in the Teams application)



For further information and copies of this presentation, visit:
https://www.wapa.gov/about-wapa/regions/dsw/pdpremarketing/

SUMMER SEASON						
Current P-DP Customers	Current Contractual Capacity Allocations (KW)			Potential New Allocations with a 2% Resource Pool (KW)		
	Total	Non-Withdrawable	Withdrawable	CAPACITY EXTENDED (98%)	CAPACITY Extended "Non-Withdrawable"	CAPACITY Extended "Withdrawable"
Agua Caliente	1,000	1,000		994	994	
Total AEPCO	23,637	23,637		23,499	23,499	
Corona	2,000	2,000		1,988	1,988	
CRA	8,839	8,839		8,788	8,788	
Total CRC	56,560	53,000	3,560	56,231	53,000	3,231
EAPPA	1,000	1,000		994	994	
ED 3	5,164	3,021	2,143	5,134	3,021	2,113
Edwards AFB	18,160	17,318	842	18,054	17,318	736
Fredonia	2,000	1,514	486	1,988	1,514	474
Total Ft Mohave	4,000	4,000		3,977	3,977	
Gilbert	1,000	1,000		994	994	
HOHOKAMIDD	1,000	1,000		994	994	
IID	32,327	32,327		32,139	32,139	
Luke AFB	2,603	1,795	808	2,588	1,795	793
MARANA	1,000	1,000		994	994	
March AFB	4,539	3,129	1,410	4,513	3,129	1,384
MCAS Yuma	2,142	1,477	665	2,130	1,477	653
MESA	10,379	10,379		10,319	10,319	
NAVYFECSW	2,000	1,131	869	1,988	1,131	857
Needles	5,065	5,065		5,036	5,036	
NV Test Site	2,229	1,537	692	2,216	1,537	679
Nellis AFB	2,867	1,977	890	2,850	1,977	873
PECHANGA	1,000	1,000		994	994	
SANLUISREY	2,000	2,000		1,988	1,988	
Total SCIP	17,067	16,218	849	16,968	16,218	750
SRP	31,483	31,483		31,300	31,300	
Thatcher	1,000	1,000		994	994	
Total Tohono O'Odham	2,867	1,977	890	2,850	1,977	873
VIEJAS	1,000	1,000		994	994	
Wickenburg	2,000	1,434	566	1,988	1,434	554
WILLIAMS	1,000	1,000		994	994	
WMK IDD	3,079	2,650	429	3,061	2,650	411
YID	1,000	1,000		994	994	
YPG	5,199	4,268	931	5,169	4,268	901
YUMAPW	1,000	1,000		994	994	

PUP Customers

WMK IDD APM	35,900	35,900
YCWUA	4,600	4,600

Notes:
1/ The potential new capacity allocations based on a 2% resource pool (approximately 5.259 MWs) are for illustrative purposes only.
2/ Additional capacity of 3.75 MWs from the Davis rewind, effective July 2025, was allocated to all customers before calculating the 2% resource pool.
3/ Consequently, each customer's capacity is reduced by approximate 0.58% only.
4/ The 0.58% reduction was made to customer's withdrawable capacity, if applicable.
5/ Creation of the resource pool does not affect PUP capacity.
6/ These allocation are for illustrative purposes only.

WINTER SEASON						
Current P-DP Customers	Current Contractual Capacity Allocations (KW)			Potential New Allocations with a 2% Resource Pool (KW)		
	Total	Non-Withdrawable	Withdrawable	CAPACITY EXTENDED (98%)	CAPACITY Extended "Non-Withdrawable"	CAPACITY Extended "Withdrawable"
Agua Caliente	1,000	1,000		999	999	
Total AEPCO	18,284	18,284		18,257	18,257	
Corona	1,000	1,000		999	999	
CRA	5,903	5,903		5,894	5,894	
Total CRC	40,752	38,655	2,097	40,692	38,655	2,037
EAPPA	1,000	1,000	0	999	999	
ED 3	4,203	2,765	1,438	4,197	2,765	1,432
Edwards AFB	14,538	14,040	498	14,517	14,040	477
Fredonia	1,334	1,084	250	1,332	1,084	248
Total Ft Mohave	1,192	1,192		1,190	1,190	
Gilbert	1,000	1,000		999	999	
HOHOKAMIDD	1,000	1,000		999	999	
IID	26,135	26,135		26,097	26,097	
Luke AFB	2,613	2,124	489	2,609	2,124	485
MARANA	1,000	1,000		999	999	
March AFB	4,087	3,321	766	4,081	3,321	760
MCAS Yuma	1,784	1,450	334	1,781	1,450	331
MESA	7,950	7,950		7,938	7,938	
NAVYFECSW	2,000	1,381	619	1,997	1,381	616
Needles	4,038	4,038		4,032	4,032	
NV Test Site	2,164	1,759	405	2,161	1,759	402
Nellis AFB	2,613	2,124	489	2,609	2,124	485
PECHANGA	1,000	1,000		999	999	
SANLUISREY	1,000	1,000		999	999	
Total SCIP	13,047	12,540	507	13,028	12,540	488
SRP	22,358	22,358		22,325	22,325	
Thatcher	1,000	1,000		999	999	
Total Tohono O'Odham	2,338	1,900	438	2,335	1,900	435
VIEJAS	1,000	1,000		999	999	
Wickenburg	1,520	1,236	284	1,518	1,236	282
WILLIAMS	1,000	1,000		999	999	
WMK IDD	2,430	2,148	282	2,426	2,148	278
YID	1,000	1,000		999	999	
YPG	4,054	3,490	564	4,048	3,490	558
YUMAPW	1,000	1,000		999	999	

PUP Customers

WMK IDD APM	29,099	29,099
YCWUA	3,729	3,729

Notes:
1/ The potential new capacity allocations based on a 2% resource pool (approximately 4.041 MWs) are for illustrative purposes only.
2/ Additional capacity of 3.75 MWs from the Davis rewind, effective July 2025, was allocated to all customers before calculating the 2% resource pool.
3/ Consequently, each customer's capacity is reduced by approximate 0.15% only.
4/ The 0.15% reduction was made to customer's withdrawable capacity, if applicable.
5/ Creation of the resource pool does not affect PUP capacity.
6/ These allocation are for illustrative purposes only.