

One Transmission Rate

Desert Southwest Region

August 7, 2023



Participant Instructions

- All virtual participants will be muted during the presentation
- 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

- History
- Proposal Summary & Benefits
- New Formula Rates & Schedules
- Revisions to Existing Formula Rates & Schedules
- Prepayments
- Timeline & Resources



History of Combining Rate Efforts

- WAPA and its customers have a history of combining rates
- Most notable is the Integrated System rate of Upper Great Plains Region, Basin Electric, and Heartland Consumers Public Power District
- DSW previously attempted to combine rates in 2003 with the Multi-System Transmission Rate (MSTR) effort



MSTR Effort

- Combination of Central Arizona Project (CAP), Pacific Northwest-Pacific Southwest Intertie Project (Intertie), and Parker-Davis Project (PDP)
- Considered a range of approaches from phasing-in the combined rate to a nonfirm rate
- Exhaustive but educational:
 - Impact of pancaking
 - Knowledge of transmission systems
 - Closer working relationships
 - Technical/ratemaking abilities
- Despite its merits, ultimately not successful due to transmission system usage differences as compared to today

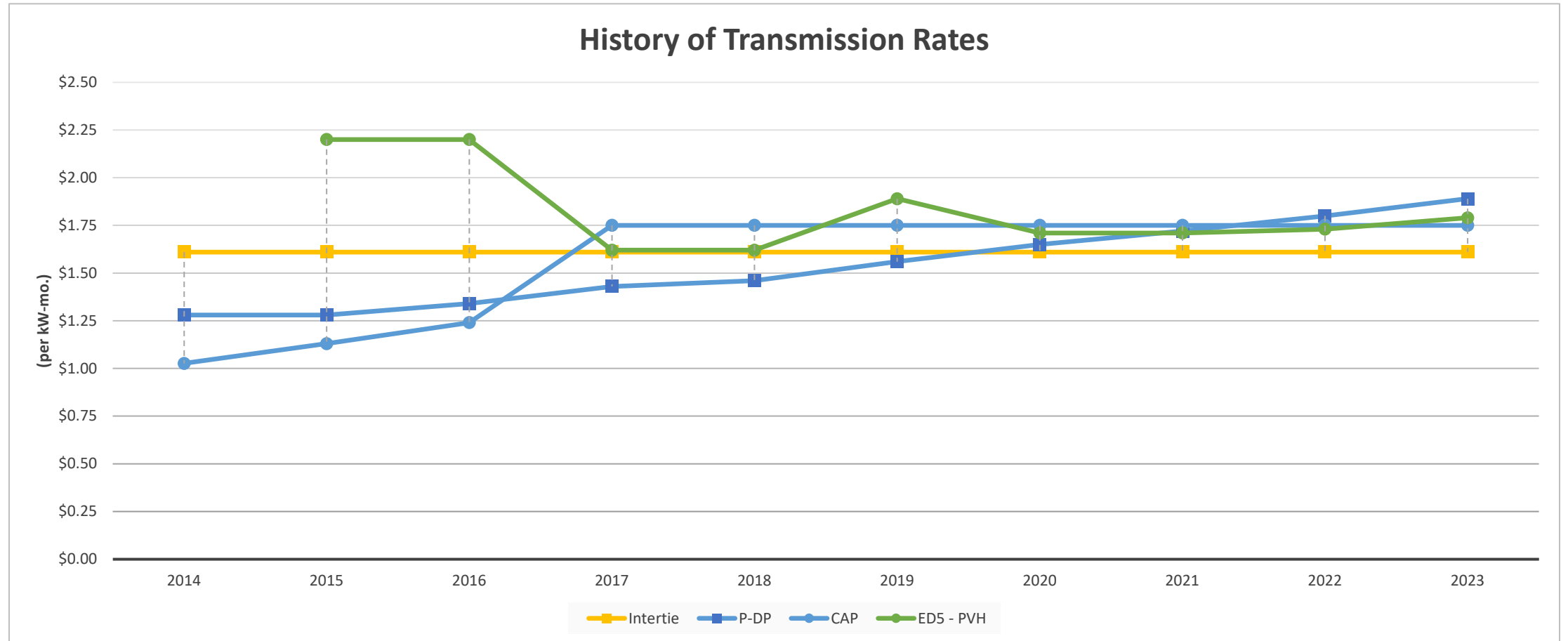


Renewed Interest

- Much had changed at DSW by 2018: rates had converged, rise of markets, transmission usage changed
- Customer Technical Committee requested DSW investigate a combined rate – sidelined due to working on the Joint Planning Agreement
- In 2019, as a result of jointly prioritizing various initiatives with DSW customers, a combined rate was one of the top three initiatives and internal analysis began
- In 2020, effort expanded to include the Colorado River Storage Project (CRSP) transmission system



Rate Convergence



DSW/CRSP Combined Rate

- Combination of CAP, Electrical District No. 5 to Palo Verde Hub Project (ED5-PVH), Intertie, PDP and CRSP
- Customer collaboration
 - Held four work group meetings in 2020
 - Educate, explore, and formulate
- Briefing documents, fact sheets, and FAQs prepared
- Cost impact analysis workbook developed
- CRSP moved towards investigating market participation
- Effort ended Fall 2021



DSW One Transmission Rate (OTR)

- DSW customers were still interested in a single rate for CAP, ED5-PVH, Intertie, and PDP
- Kicked off DSW OTR effort in early 2022
- Held two work group meetings
- Discussed losses, rate pancaking, tariff, network and prepayments
- Utilized the same tools developed for the Combined Rate effort
- Developed rate projections for 10 years
- Materials and meeting notes available at:

<https://www.wapa.gov/regions/DSW/Rates/Pages/OTR.aspx>



OTR Proposal Summary

- New formula rates and schedules for transmission service
 - Firm and nonfirm point-to-point (P2P) and network integration (Network)
 - Use of CAP, ED5-PVH, Intertie, and PDP transmission facilities
 - Single charge (no pancaking) for each class of service over a continuous path across multiple projects
 - Payment required one month in advance (long-term P2P and Network)
- Revise existing PDP formula rates and schedules
 - Firm electric service (FES)
 - Firm transmission of Salt Lake City Area/Integrated Projects (SLCA/IP) power



OTR Proposal Benefits

- Eliminate pancaking
- Equitable/fair pricing and treatment for all customers
- More efficient use of transmission systems
- Single charge will stimulate sales
- Long-term financial and rate stability
- Optimize project repayment
- Minimize administrative burden



Firm Point-to-Point Transmission Service

- Proposed new rate schedule, DSW-FT1
- Applies to long-term and short-term transmission on CAP, ED5-PVH, Intertie, and PDP
- Contains formulas to calculate the applicable rates
- Rates calculated annually with updated financial and capacity reservation information
- Supersedes Rate Schedules CAP-FT3, INT-FT5, and PD-FT7



Long-Term Rate

- For transmission service of one year or longer
- Annual rate for each kilowatt per year (kW-year) equals:
 - The combined annual transmission revenue requirement (ATRR) of each project divided by the combined anticipated long-term capacity reservations for each project, rounded to the nearest 12-cent increment.
- Payable monthly, the rate for each kilowatt per month equals the annual rate per kW-year divided by 12



Short-Term Rates

- For transmission service up to one year
- Maximum rate for each kilowatt equals:

Monthly	Annual long-term rate divided by 12 months and rounded two decimal places
Weekly	Annual long-term rate divided by 52 weeks and rounded two decimal places
Daily	Annual long-term rate divided by 365 days and rounded two decimal places
Hourly	Annual long-term rate divided by 8,760 hours and rounded five decimal places



Nonfirm Transmission Service

- Proposed new rate schedule, DSW-NFT1
- Applicable to CAP, ED5-PVH, Intertie, and PDP
- Contains a formula to calculate the rate
- Maximum hourly rate for each kilowatt equals annual long-term rate divided by 8,760 hours and rounded to five decimal places
- Hourly rate calculated annually using updated information
- Supersedes Rate Schedules CAP-NFT3, INT-NFT4, and PD-NFT7



Network Transmission Service

- Proposed new rate schedule, DSW-NTS1
- Applies to CAP, ED5-PVH, Intertie, and PDP
- Contains a formula to calculate the monthly charge
- Monthly charge equals the customer's load ratio share multiplied by one twelfth (1/12) of the combined ATRR of each project
- Combined ATRR will be determined annually with updated financial information
- Supersedes Rate Schedules CAP-NITS3, INT-NTS4, and PD-NTS4



PDP Firm Electric Service

- Proposed new rate schedule, PD-F8
- Revises transmission section under charges to align with proposed new rate schedule DSW-FT1
- No changes proposed to the energy and capacity sections
- Other proposed minor changes
 - Apply Rate Schedule DSW-UU1 to unreserved use of transmission
 - Delete section on transformer losses; which was inadvertently published as “section on transmission losses” in *Federal Register notice*
- Supersedes Rate Schedules PD-F7

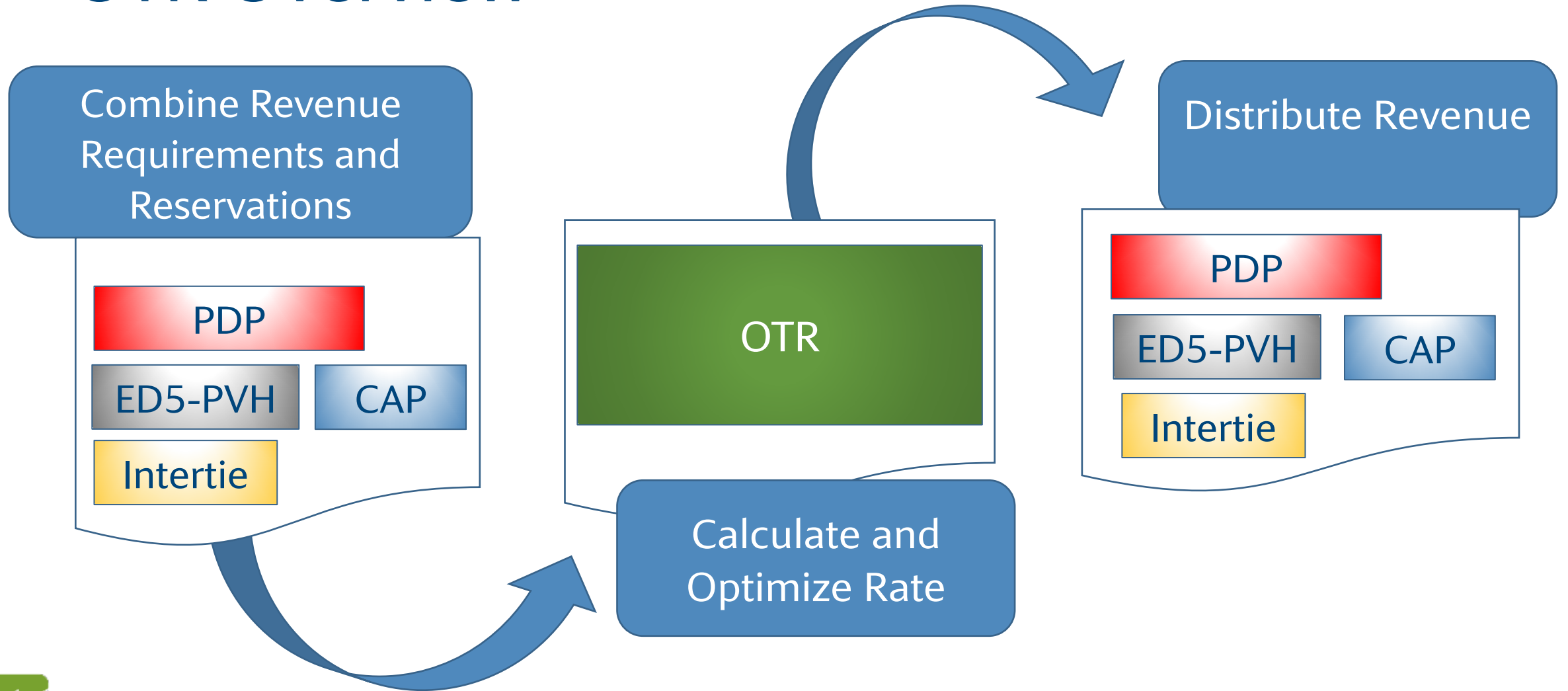


PDP Firm Transmission of SLCA/IP Power

- New proposed rate schedule, PD-FCT8
- Revises the rate section to align with the proposed new rate schedule DSW-FT1
- Other proposed minor changes
 - Apply Rate Schedule DSW-TL1 for transmission losses
 - Apply Rate Schedule UU1 to unreserved use of transmission
- Supersedes Rate Schedules PD-FCT7



OTR Overview



Annual OTR Calculation Example

- Step 1 – Combine Transmission System Revenue Requirements
 - Revenue needed from sales of long-term firm service – numerator
 - Also used to calculate monthly charges for Network service
- Step 2 – Combine Transmission System Reservations
 - Estimated quantity of long-term firm sales – denominator
- Step 3 – Calculate Rate
 - Applied to point-to-point sales to determine monthly charges and produce revenue for project repayment



Step 1: Combine Revenue Requirements (\$)

	Costs		PY True-up/ Carryover		Offsetting Revenue		Additional Revenues From Combining		Revenue Requirements
FY 2023	135,515,922	-	(373,353)	-	29,453,997	-	1,680,000	=	104,755,278
FY 2024	134,787,866	-	0	-	28,764,892	-	840,000	=	105,182,974
FY 2025	136,671,287	-	0	-	28,850,694	-	840,000	=	106,980,593
FY 2026	137,246,959	-	0	-	28,936,767	-	840,000	=	107,470,192
FY 2027	142,164,892	-	0	-	28,667,115	-	840,000	=	112,657,777
FY 2028	147,205,225	-	0	-	28,761,811	-	840,000	=	117,603,414
FY 2029	149,438,267	-	0	-	28,666,470	-	840,000	=	119,931,797
FY 2030	157,480,420	-	0	-	28,665,025	-	840,000	=	127,975,395
FY 2031	164,410,086	-	0	-	28,710,223	-	840,000	=	134,859,863
FY 2032	164,077,506	-	0	-	28,872,846	-	840,000	=	134,364,660



Step 2: Combine Reservations (kW)

	Reservations		Adjustment for Pancakes		Additional Reservations From Combining		Total Reservations
FY 2023	5,068,326	+	(379,959)	+	300,000	=	4,988,367
FY 2024	5,136,660	+	(379,959)	+	300,000	=	5,056,701
FY 2025	5,136,660	+	(379,959)	+	300,000	=	5,056,701
FY 2026	5,002,660	+	(379,959)	+	600,000	=	5,222,701
FY 2027	5,002,660	+	(379,959)	+	600,000	=	5,222,701
FY 2028	5,002,660	+	(379,959)	+	600,000	=	5,222,701
FY 2029	5,002,660	+	(379,959)	+	900,000	=	5,522,701
FY 2030	5,002,660	+	(379,959)	+	900,000	=	5,522,701
FY 2031	5,002,660	+	(379,959)	+	900,000	=	5,522,701
FY 2032	5,002,660	+	(379,959)	+	1,200,000	=	5,822,701



Step 3: Calculate Rate

	Revenue Requirements (\$)	/	Total Reservations (kW)	=	\$/kW-Year	or	\$/kW-Month
FY 2023	104,755,278	/	4,988,367	=	21.00	or	1.75
FY 2024	105,182,974	/	5,056,701	=	20.80	or	1.73
FY 2025	106,980,593	/	5,056,701	=	21.16	or	1.76
FY 2026	107,470,192	/	5,222,701	=	20.58	or	1.71
FY 2027	112,657,777	/	5,222,701	=	21.57	or	1.80
FY 2028	117,603,414	/	5,222,701	=	22.52	or	1.88
FY 2029	119,931,797	/	5,522,701	=	21.72	or	1.81
FY 2030	127,975,395	/	5,522,701	=	23.17	or	1.93
FY 2031	134,859,863	/	5,522,701	=	24.42	or	2.03
FY 2032	134,364,660	/	5,822,701	=	23.08	or	1.92

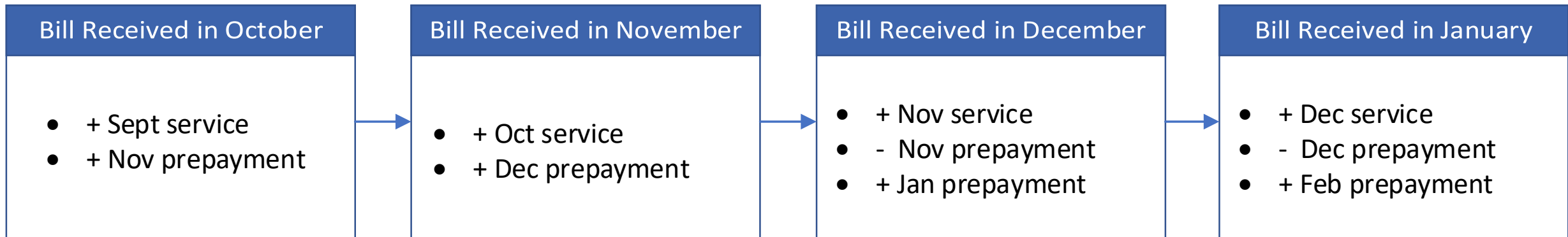


Prepayments

- Prepay for service one month in advance, credited in subsequent month
- Long-term point-to-point and network
 - Intertie and PDP point-to-point currently prepaying
 - New for CAP, ED5-PVH, and PDP network
- Prepayment for point-to-point based on capacity reserved
- Prepayment for network based on most recent service bill
- Optional transitional period to phase-in initial prepayments across four months
- Short-term and nonfirm will not prepay since quantity of service is not known in time for advance payment



Simplified Prepayments Diagram

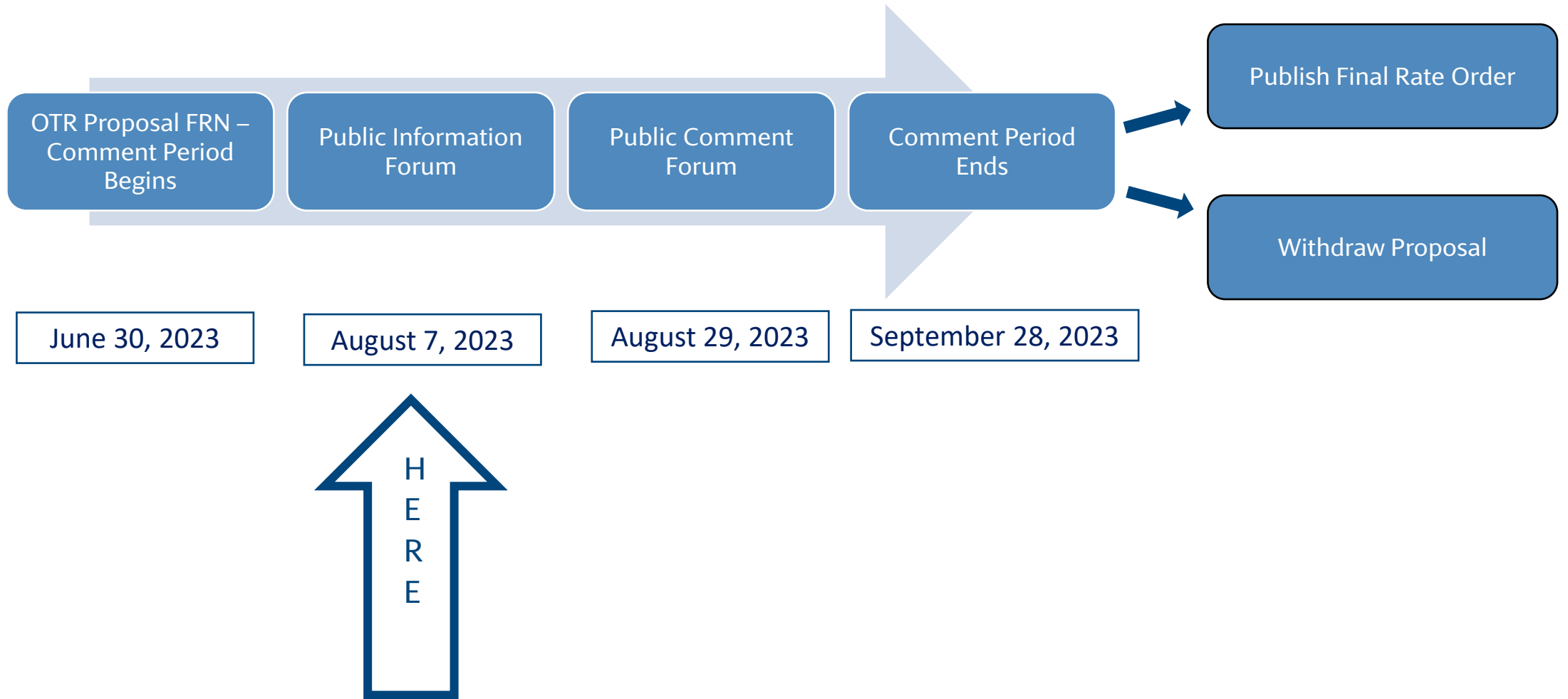


2x payment in
initial months

Single payment until
final month of service
when no bill will be due



Tentative Timeline



Resources

Tina Ramsey
Rates Manager
ramsey@wapa.gov

Kevin Schaefer
Rates Specialist
kschaefer@wapa.gov

Shannon Joya
Rates Specialist
joya@wapa.gov

Todd Statler
Rates Specialist
statler@wapa.gov

Marina Montano
Rates Specialist
mmontano@wapa.gov



For Questions and Comments Today

- Please choose one of the following options:
 - Send questions to the host via chat
 - Use the “Raise” icon. The host will unmute and call on you. Click the same icon to lower your hand.
 - Unmute yourself or press *6 if you are only participating by phone
- Make sure you are not “double-muted” when attempting to talk (i.e., muted on your device in addition to the application)



Written Comments

Please send written comments for the official record to:

Jack D. Murray

Senior VP and Desert Southwest Regional Manager

Mail: P.O. Box 6457, Phoenix, AZ 85005

Email: dswpwrmrk@wapa.gov



For further information as well as copies of this presentation,
visit WAPA's website at
<https://www.wapa.gov/regions/DSW/Rates/Pages/OTR.aspx>



www.wapa.gov



@westernareapowr



western-area-power-administration



WesternAreaPower1



westernareapower



wapa.gov

