



Western
Area Power
Administration

Parker-Davis Project

Fiscal Year 2019 Charges

June 7, 2018

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DSW Rates & Alternative
Finance Manager

Agenda

- Rate Extension
- FY 2018 Rate Calculation Summary
- Standard Calculation Parameters
- FY 2019 Charge Determinates
- Preliminary FY 2019 Charges
- Optional Restructuring (Mitigation Techniques)
- Next Steps and Contact Information



Rate Extension

- The existing formula rates expire September 30, 2018
- Will publish a *Federal Register* notice to extend our existing formula rates through FY 2023
- No immediate changes to the methodology needed; therefore, proposing an extension. Existing refinements are accommodated by the current rate methodology.
- The proposed rate extension has a comment period which will close 30 days after publication of the notice
- This meeting is not a part of the rate extension process. Comments on the extension must be submitted in writing to the contact information in the notice.



FY 2018 Rate Calculation Summary

Generation Charges

A reduction in the amount of carryover (unapplied revenues) available to offset costs resulted in an 5% increase to the composite generation charge

Transmission Charges

Transmission costs increased 4%, while reservations decreased 7%

We reduced a 12% transmission charge increase to 2% by deferring principal payment to future years



Standard Calculation Parameters

- Actual work plans are used for O&M expenses when available. Work plans are escalated for inflation in remaining years of cost evaluation period (rate window).
- Ten-Year Plan information from WAPA and Reclamation is used to project capital costs
- Costs not readily identified as generation or transmission are allocated via the Cost Apportionment Study
- Transmission and generation sales projections are based on contractual values, adjusted for known and measurables



FY 2019 Generation Charge Determinates

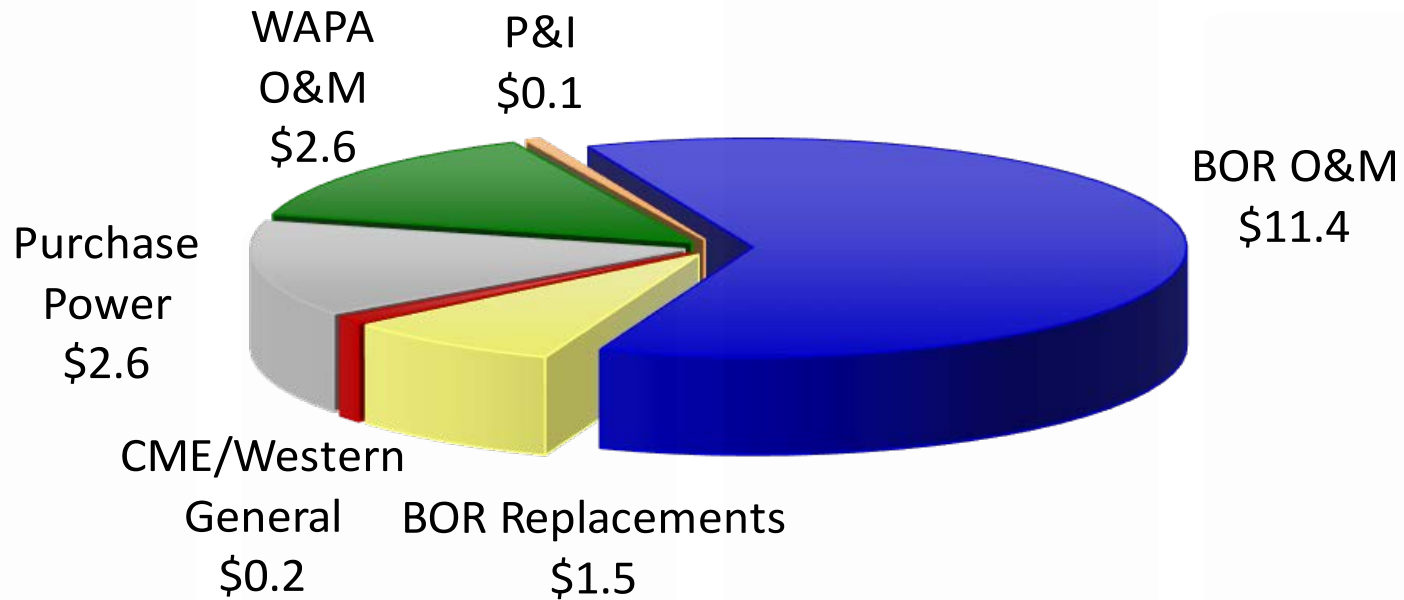
Average Annual Expenses (\$ in millions)

	FY 2018 - 2022	FY 2019 - 2023	Change
WAPA O&M	\$2.3	\$2.6	\$0.3
CME & Western General	\$0.2	\$0.2	-
BOR O&M	\$10.8	\$11.4	\$0.6
Purchase Power	\$2.3	\$2.6	\$0.3
BOR Replacements	\$1.5	\$1.5	-
P&I	\$0.1	\$0.1	-
Total	\$17.2	\$18.4	\$1.2



FY 2019 Generation Charge Determinates

Average Annual Expenses (in millions)



FY 2019 Generation Charge Determinates

Average Annual Other Revenue, Carryover, Revenue Requirement and Reservations (\$ in millions)

	FY 2018 - 2022	FY 2019 - 2023	Change
Other Revenue	\$0.3	\$0.3	-
Carryover	\$0.5	\$0.3	\$(0.2)
Total	\$0.8	\$0.6	\$(0.2)
Revenue Requirement	\$16.4	\$17.8	\$1.4
Reservations (GWh)	1,425	1,425	-



FY 2019 Transmission Charge Determinates (Other Revenue)

- Other Revenues are composed of all transmission related sales except for network integrated transmission service and long-term firm point-to-point
- Recent decreases are associated with changes in short-term sales
- Need to adjust projections for a balanced approach similar to purchase power
- Other Revenue projections are higher than recent actuals and will be reassessed each year



FY 2019 Transmission Charge Determinates (Other Revenue)

Year	Other Rev
FY 2013	\$9.0m
FY 2014	\$8.0m
FY 2015	\$7.4m
FY 2016	\$5.7m
FY 2017	\$4.6m
FY 2018 (Rate)	\$7.5m
FY 2019 (Prelim)	\$5.5m



FY 2019 Transmission Charge Determinates (Carryover)

Average Annual (\$ in millions)

	FY 2018 - 2022	FY 2019 - 2023	Change
Carryover	\$2.3	\$0.9	\$(1.4)

There is a reduction in the amount of carryover available to offset the revenue requirement, due to actual expenses exceeding estimates in previous years.



FY 2019 Transmission Charge Determinates

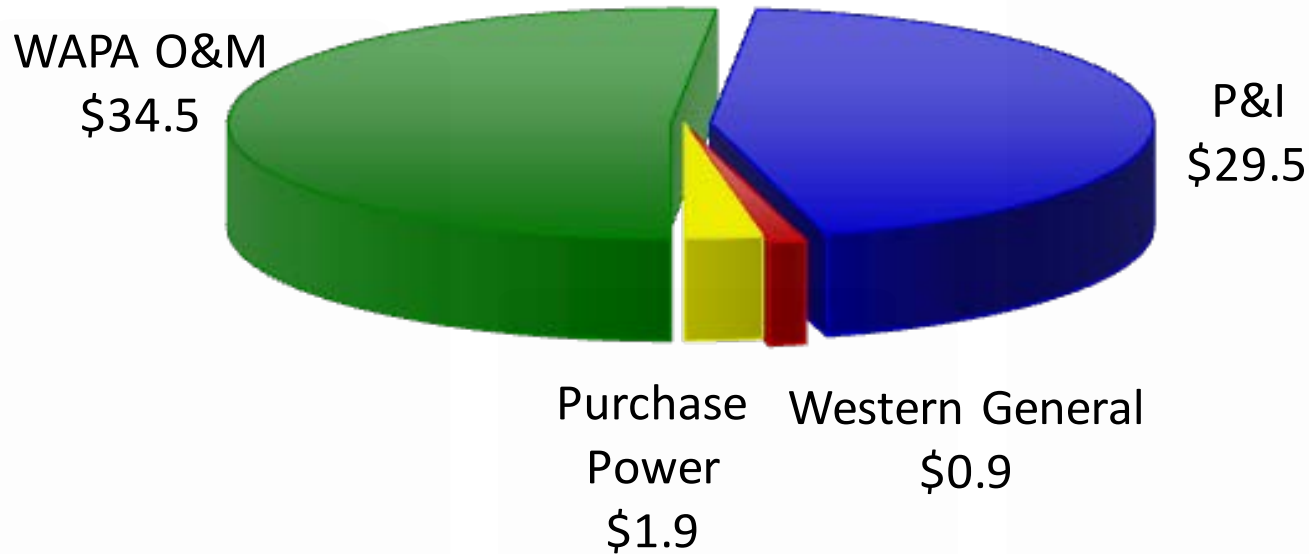
Average Annual Expenses (\$ in millions)

	FY 2018 - 2022	FY 2019 - 2023	Change
WAPA O&M	\$33.1	\$34.5	\$1.4
Western General	\$1.5	\$0.9	\$(0.6)
CME & Multi-Project	\$(1.2)	\$(0.9)	\$0.3
Purchase Power/Wheeling	\$1.9	\$1.9	-
P&I	\$23.7	\$29.5	\$5.8
Total	\$59.0	\$65.9	\$6.9



FY 2019 Transmission Charge Determinates

Average Annual Expenses (in millions)



FY 2019 Transmission Charge Determinates

Average Annual Other Revenue, Carryover, and Reservations (\$ in millions)

	FY 2018 - 2022	FY 2019 - 2023	Change
Other Revenue	\$10.9	\$9.0	\$(1.9)
Carryover	\$2.3	\$0.9	\$(1.4)
Total	\$13.2	\$9.9	\$(3.3)

Revenue Requirement	\$45.8	\$56.0	\$10.2
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Reservations (MW)	2,612	2,758	146
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Preliminary FY 2019 Charges

	FY 2018 (current)	FY 2019 (proposed)	Change	
Energy (mills/kWh)	5.78	6.25	0.47	8%
Capacity (kW-Month)	\$2.53	\$2.74	\$0.21	8%
Composite w/o Transmission (mills/kWh)	11.55	12.49	0.94	8%

Firm Transmission (kW-Month)	\$1.46	\$1.69	\$0.23	16%
NITS Revenue Requirement	\$41.3m	\$52.3m	\$11.0m	27%



Optional Restructuring of Reclamation Replacements

- To facilitate the AOF contract, Reclamation replacements have historically been recorded in the PRS with a 1-year repayment period
- Customers are required under the AOF to be fully credited for advances within two years
- Although we choose to repay the replacements immediately, they are actually due at the end of their 40-year service life (50 years for irrigation assets)
- Amortizing replacements over their service life would eliminate the FY 2019 generation charge increase of 8%



Optional Restructuring of Reclamation Replacements

	FY 2019 Charge Full Cost (1-yr)	Change from FY 2018		FY 2019 Charge Amortized	Change from FY 2018	
Energy (mills/kWh)	6.25	0.47	8%	5.78	0.00	0%
Capacity (kW-Month)	\$2.74	\$0.21	8%	\$2.53	\$0.00	0%
Composite w/o Transmission (mills/kWh)	12.49	0.94	8%	11.55	0.00	0%



Optional Restructuring of Reclamation Replacements

Why now?

Since WAPA stopped receiving advances under the AOF in 2009, credits for advances are small enough to be fully applied within two years.

Is crediting still a limitation?

Yes, each year this technique is used we will need to ensure that AOF participants can still be fully credited within two years.



Optional Restructuring of Reclamation Replacements

Benefits

- Lower Charges:

Increasing the period over which replacements are recovered reduces the annual charge.

- More Flexibility:

Making the change does not lock in this repayment technique. We may choose to make minimal principal payments annually or accelerate repayment.

Adopting this technique enhances our ability to moderate future charge increases.



Optional Restructuring of Reclamation Replacements

Cost

- Interest Expense:

Amortizing creates a difference between the amount of revenue collected per year and the amount of credits provided.

Interest is due on this difference until the additional revenue is collected.

The interest cost of amortizing replacements currently in the rate window over a 40-year service life would be approximately \$6m.



Optional Restructuring of Reclamation Replacements

Comparison of Full Cost (1-year) and Amortized Repayment
(\$ in millions)

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Full Cost (1-yr)	\$3.03	\$2.64	\$0.66	\$2.12	\$1.71	-	\$10.17
Amortized	-	\$0.11	\$0.21	\$0.24	\$0.32	\$0.38	\$1.26
Savings	\$3.03	\$2.53	\$0.45	\$1.88	\$1.39	\$(0.38)	\$8.91



Optional Restructuring of Transmission Principal

- Last year, deferred all of the planned FY 2018 principal payment to mitigate a transmission charge increase from 12% to 2%
- Can again defer the upcoming principal payment and effectively spread that principal across future periods to mitigate the increase to the FY 2019 charge:

	FY 2019 Charge (kW-month)	Change from FY 2018	
Full Principal Payment	\$1.69	\$0.23	16%
No Principal Payment	\$1.56	\$0.10	7%



Questions/Thoughts



Next Steps

- Information regarding the FY 2019 charges to be posted on WAPA's website:

<https://www.wapa.gov/regions/DSW/Rates/Pages/Parker-Davis.aspx>

- Generation costs finalized at Advancement of Funds Annual Funding Board – July 2018
- Proposed charges will be finalized in July/August and become effective for the October 2018 service month



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