



— BUREAU OF —
RECLAMATION



Western
Area Power
Administration

Boulder Canyon Project

Fiscal Year 2022 Base Charge and Rates Public Information Forum

May 17, 2021

Webex

Participant Instructions

- 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
- **Phones will be muted during the presentation**

Agenda

- Regulations, Orders, and Procedures
- Formulas
- Base Charge and Rates Summary
- FY 2022 Proposed Base Charge
- Timeline
- Additional Resources

Regulations, Orders, and Procedures

Regulations, orders, and procedures for rate development:

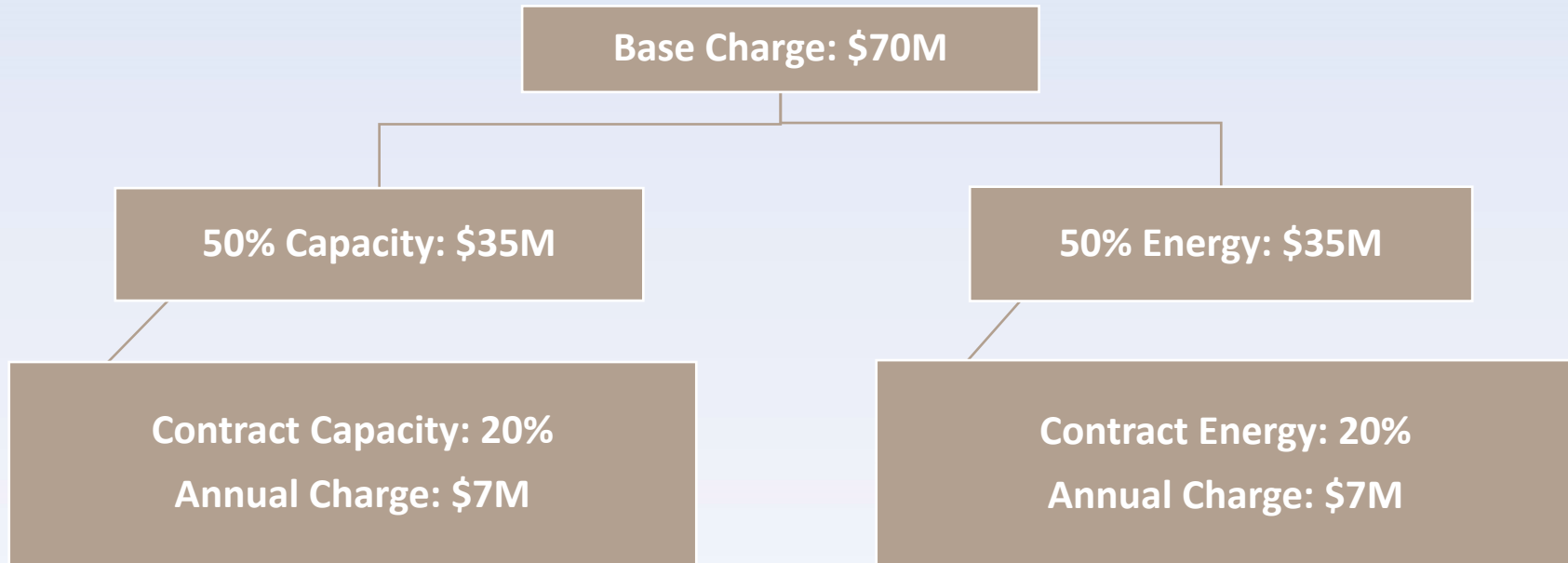
- 10 CFR 903 - describes public participation in power and transmission rate adjustments and extensions
- DOE Order RA 6120.2 - establishes financial reporting policies, procedures, and methodology for all Power Marketing Administrations ---- **Outlines Power Repayment Study Requirements**
- 10 CFR 904 - applies specifically to the Boulder Canyon Project's (BCP) charges for sales of power ---- **Outlines the Base Charge and Rates**
- BCP Electric Service Contract and Amended and Restated Implementation Agreement

Formulas

$$\text{Expenses} - \text{Carryover} - \text{Non-power} = \text{Base} \\ \text{Revenue} \qquad \qquad \text{Charge}$$

- Contractors are charged a proportionate share of the annual base charge divided between capacity and energy – not a rate

Formulas



Rates

Composite Rate = Base Charge / Energy Projections

Energy Rate = (50% of Base Charge) / Energy Projections

Capacity Rate = (50% of Base Charge) / Capacity Projections

Rates calculated for informational purposes

Base Charge and Rates Summary

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Base Charge	\$ 65,443,462	\$ 68,577,778	\$ (2,738,144)	\$ 3,134,316	4.8%
Energy Projection (MWh)	3,615,770	3,297,102	(318,668)	(318,668)	-8.8%
Composite Rate (Mills/kWh)	18.10	\$ 20.80	1.08	2.70	14.9%
Energy Rate (Mills/kWh)	9.05	10.40	0.54	1.35	14.9%
Capacity Projection (kW)	1,611,083	1,442,500	(168,583)	-168,583	-10.5%
Capacity Rate (\$/kW-Mo)	\$ 1.69	\$ 1.98	\$ 0.14	\$ 0.29	17.2%

- Fiscal Year (FY) 2022 Proposed includes the Final Ten-Year Operating Plan (TYOP) and mid-year review updates
- Mid-year update includes changes since the TYOP
- Composite, energy, and capacity projections are from the second draft of the Master Schedule. Projections will be updated again on June 1st.
- Rates are for informational purposes only

FY 2022 Updated Base Charge

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Updates	Change	%
Bureau of Reclamation					
O&M	\$ 61,044,500	\$ 56,557,500	\$ (1,170,000)	\$ (4,487,000)	
Replacements	6,036,000	11,086,500	(272,000)	5,050,500	
Visitor Services	9,570,000	11,082,000	-	1,512,000	
Payments to States	600,000	600,000	-	-	
Principal and Interest	977,548	977,548	-	-	
Post-Retirement Benefits	1,947,257	1,991,582	-	44,325	
	80,175,305	82,295,130	(1,442,000)	2,119,825	3%
Western Area Power Administration					
O&M	7,915,289	8,435,714	-	520,425	
Replacements	202,584	450,000	-	247,416	
Post Retirement Benefits	254,455	248,201	-	(6,254)	
Interest	28,441	29,089	-	648	
	8,400,769	9,163,004	-	762,235	9%
Total Expense	88,576,074	91,458,134	(1,442,000)	2,882,060	3%
Prior Year Carryover	4,306,534	1,979,667	1,296,144	(2,326,867)	-54%
Non-power Revenue	18,826,078	20,900,689	-	2,074,611	11%
Base Charge	\$ 65,443,462	\$ 68,577,778	\$ (2,738,144)	\$ 3,134,316	4.8%

Reclamation O&M

O&M	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Updates	Change	%
Bureau of Reclamation					
Operations	\$ 7,877,000	\$ 8,023,000	\$ -	\$ 146,000	2%
Maintenance	18,520,000	17,594,500	-	\$(925,500)	-5%
A&GE	24,143,000	22,913,000	(200,000)	\$(1,230,000)	-5%
Extraordinary Maintenance	10,504,500	8,027,000	(970,000)	\$(2,477,500)	-24%
O&M	\$ 61,044,500	\$ 56,557,500	\$ (1,170,000)	\$ (4,487,000)	-7%

- Reclamation's operations increased (\$146K)
 - Increases in salaries, regional support, services, training and materials partially offset by a decrease in equipment

Reclamation O&M

- Reclamation's maintenance decreased (\$926K)
 - Maintenance staff charging to RAX projects
 - Decrease in services and regional support
- Reclamation's A&GE budget decreased (\$1.2M)
 - A&GE includes area manager, compliance and regulatory, engineering, management services, and security budgets
 - Decrease due to the allocation of costs from Compliance to Visitor Services
 - A&GE budget was reduced (\$200K) during the mid-year review

Reclamation O&M

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Bureau of Reclamation					
Visitor Center - Exhibit Level Refurbishment*	\$ 20,000	\$ -	\$ -		
N3 Stator Re-wedge	800,000	-	-		
Monument Plaza Restoration*	20,000	-	-		
Power Plant Piping Management Plan	800,000	950,000	-		
Fire Piping Plan	500,000	600,000	-		
Crane Inspection and Repair	650,000	500,000	(250,000)		
Tail Bay Stop Logs Coating	320,000	320,000	-		
Penstocks and Lateral Spot Coating	4,100,000	2,000,000	-		
Penstock Lateral Tunnels - Safety Doors Refurbishment	750,000	300,000	-		
Butterfly Valve Recoating	187,500	-	(220,000)		
Rock Fall Mitigation	500,000	600,000	-		
N3 Rotor Repair	857,000	857,000	-		
Partial Discharge Monitors	500,000	-	(500,000)		
Generator Step-Up Transformers Maintenance	500,000	500,000	-		
Erosion Repair		800,000	-		
A2 Stator Epoxy Steel Laminate	-	600,000	-		
Extraordinary Maintenance	\$ 10,504,500	\$ 8,027,000	\$ (970,000)	\$ (2,477,500)	-24%

Reclamation O&M

- Reclamation's extraordinary maintenance decreased (\$2.5M)
 - Continued effort to stabilize budgets
- In response to the pandemic, Reclamation reduced their RAX budget (\$970K)

Reclamation Replacements

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Bureau of Reclamation					
Hazardous Noise Abatement Plan	\$ 50,000	\$ -	\$ -		
Central Section HVAC Replacement	80,000	330,000	-		
Control Center Renovation	500,000	500,000	-		
Rebuild and Replace Generator Coolers	554,000	581,000	-		
A9 Wicket Gates and Facing Plates	1,550,000	2,000,000	-		
Cylinder Gate Stem Evaluation and Replacement	500,000	2,750,000	-		
480-Volt Switchgear Replacement	2,320,000	2,835,500	-		
Flow Meter Replacement	172,000	100,000	(72,000)		
UCM Life Cycle Replacement	60,000	60,000	-		
Water Plant and Waste Water Plant Controls	250,000	100,000	(300,000)		
Replacement Wastewater Treatment Facility	-	200,000	100,000		
Escalator Replacement	-	1,150,000	-		
Additional Tail Bay Stop Log	-	110,000	-		
Upgrade CISCO ONS 15454	-	310,000	-		
N7 Unit Oil System Replacement	-	60,000	-		
Replacements	\$ 6,036,000	\$ 11,086,500	\$ (272,000)	\$ 5,050,500	84%

Reclamation Replacements

- Reclamation's replacements increased (\$5.1M)
 - Includes projects deferred in FY 2020 and FY 2021 due to COVID-19 pandemic
- In response to the pandemic, Reclamation reduced its replacements budget (\$272K)

Reclamation Other Expenses

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Bureau of Reclamation					
Visitor Services	\$ 9,570,000	\$ 11,082,000	\$ -	\$ 1,512,000	15.8%
Payments to States	\$ 600,000	\$ 600,000	\$ -	\$ -	0.0%
Principal and Interest - Flood Control	\$ 977,548	\$ 977,548	\$ -	\$ -	0.0%

- Hoover Dam Visitor Services budget increased (\$1.5M)
 - Higher labor projections in salaries, overtime, overhead and benefits, due to allocation of costs between departments
- Payment to States is static from year-to-year
- Flood Control P&I is remaining unchanged as well – payoff in 2037

Reclamation Post-Retirement Benefits

Post-Retirement Benefits (PRB)		FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Bureau of Reclamation						
	Actual - 2015	1,750,556	-	\$ -		
	Actual - 2016	1,790,540	1,790,540	-		
	Actual - 2017	1,533,544	1,533,544	-		
	Actual - 2018	2,230,616	2,230,616	-		
	Actual - 2019	2,431,028	2,431,028	-		
	Actual - 2020	-	1,972,181	-		
	PRBs	\$ 1,947,257	\$ 1,991,582	\$ -	\$ 44,325	2%

- Imputed retirement, health insurance, and life insurance costs
- Based on 5-year average of most recent actuals

WAPA O&M

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Western Area Power Administration					
Transmission Line Maintenance	179,536	210,717	\$ -		
Communication Systems Support	396,653	424,899	-		
Safety Costs	226,848	291,961	-		
Phoenix Service Center Costs	481,120	250,558	-		
Substation Maintenance	984,812	796,413	-		
Facility Expense	2,268,969	1,974,548	-	(294,421)	-13%
Power Billing/Collecting	258,495	157,000	-		
System Operations and Load Dispatching	2,832,401	3,295,923	-		
Transmission/Engineering Studies	146,363	154,669	-		
Conservation and Renewable Energy	22,619	14,125	-		
Financial Management Costs	75,529	81,651	-		
Power Marketing Costs	1,577,224	1,991,039	-		
Multiproject Costs	638,841	671,758	-		
Depreciation	94,848	95,002	-		
Systemwide Expense	5,646,320	6,461,167	-	814,847	14%
O&M	\$ 7,915,289	\$ 8,435,715	-	\$ 520,426	7%

WAPA O&M

- WAPA's O&M budget is increasing (\$520K)
 - Redistribution of costs due to the closure of Navajo Generating Station
 - Hoover-Mead line lease costs
 - Not budgeted in FY 2021
 - Financial treatment resulted in \$210K in annual cost instead of \$5.8M
 - Higher labor projections for salaries, overtime, overheads and benefits in power operations

WAPA Replacements

Replacements	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Western Area Power Administration					
DACs/Channel Bank HVR/MED Equipment Replacement	51,000	200,000	\$ -		
69 kV Bus Differential Relay Replacement	149,000		-		
Coupling Capacitor Voltage Transformer (CCVT) Replacement		250,000	-		
Replacements	\$ 200,000	\$ 450,000	\$ -	\$ 250,000	125%

- Budget varies based on projects
- FY 2022 replacement budget increased (\$250K)

WAPA Post-Retirement Benefits

Post Retirement Benefits (PRB)	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change	%
Western Area Power Administration					
Actual - 2015	\$ 180,918	\$ -	\$ -		
Actual - 2016	237,811	237,811	-		
Actual - 2017	196,001	196,001	-		
Actual - 2018	310,966	310,966	-		
Actual - 2019	346,577	346,577	-		
Actual - 2020	-	149,649	-		
PRBs	\$ 254,455	\$ 248,201	\$ -	\$ (6,254)	-2%

- Imputed retirement, health insurance, and life insurance costs
- Based on 5-year average of most recent actuals

WAPA Other Expenses

	FY 2021	FY 2022	Mid-Year	Change	%
Interest - CME & Warehouse	Base Charge	Proposed	Update		
Western Area Power Administration					
Actual - 2015	\$ 23,270		\$ -		
Actual - 2016	27,421	27,421	-		
Actual - 2017	28,549	28,549	-		
Actual - 2018	31,281	31,281	-		
Actual - 2019	31,684	31,684	-		
Actual - 2020	-	26,511	-		
Interest - CME & Warehouse	\$ 28,441	\$ 29,089	\$ -	\$ 648	2%

- Based on 5-year average of most recent actuals

Carryover and Revenue

Non-Power Revenue	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Update	Change
Prior Year Carryover	4,306,534	1,979,667	1,296,144	\$ (2,326,867)
Visitor Services	17,000,000	19,000,000		2,000,000
Ancillary Services	1,276,078	1,350,689	-	74,611
Water Sales Revenue	550,000	550,000	-	-
Non-power Revenue \$	18,826,078	\$ 20,900,689	\$ -	\$ 2,074,611

- Prior year carryover decreased (\$2.3M)
 - Originally projected for FY 2022 at \$680K but increased \$1.3M by Reclamation and WAPA during the mid-year update

- Non-power revenue increased (\$2.1M)
 - Implementation of commercial use authorizations for road-based tours
 - Ancillary Services based on 5-year average of most recent actuals

FY 2022 Proposed Base Charge

	FY 2021 Base Charge	FY 2022 Proposed	Mid-Year Updates	Change	%
Bureau of Reclamation					
O&M	\$ 61,044,500	\$ 56,557,500	\$ (1,170,000)	\$ (4,487,000)	
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Payments to States	600,000	600,000	-	-	
Principal and Interest	977,548	977,548	0	-	
Post-Retirement Benefits	1,947,257	1,991,582	-	44,325	
	80,175,305	82,295,130	(1,442,000)	2,119,825	3%
Western Area Power Administration					
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Replacements	202,584	450,000	-	247,416	
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Base Charge	\$ 65,443,462	\$ 68,577,778	\$ (2,738,144)	\$ 3,134,316	4.8%

Timeline

April 15, 2021

Notice was published in the *Federal Register* and emailed to contractors; 90-day public comment and consultation period began

May 17, 2021

Public Information Forum: The public is briefed on the base charge and rates; a recorder transcribes the forum and comments are part of the official record

June 14, 2021

Public Comment Forum: The public is provided the opportunity to make comments about the base charge and rates; a recorder transcribes the forum, comments are part of the official record, and responses are provided in the final *Federal Register* notice

Timeline

July 14, 2021

Public Process: The 90-day public comment and consultation period concludes

August 2021

Final Rate Order: The final *Federal Register* notice is published

October 1, 2021

Effective date of base charge and rates

Additional Resources

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

Additional Resources

Please send written comments for the official record to:

Jack D. Murray

Acting Senior VP and Desert Southwest Regional Manager

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Email: dswpwrmrk@wapa.gov

For Questions/Comments Today

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