



— BUREAU OF —
RECLAMATION



Western
Area Power
Administration

Boulder Canyon Project

Fiscal Year 2021 Informal Base Charge Meeting

February 10, 2020

Phoenix, AZ

Housekeeping

- Fire Exits
- Restrooms / Break Area
- Handouts
- Questions / Comments
- WebEx Instructions
- Introductions

Agenda

- Regulations, Orders, and Procedures
- Formulas
- Proposed Base Charge and Rates Summary
- FY 2019 Actuals
- FY 2020 Revised
- FY 2021 Proposed
- Timeline
- Additional Resources

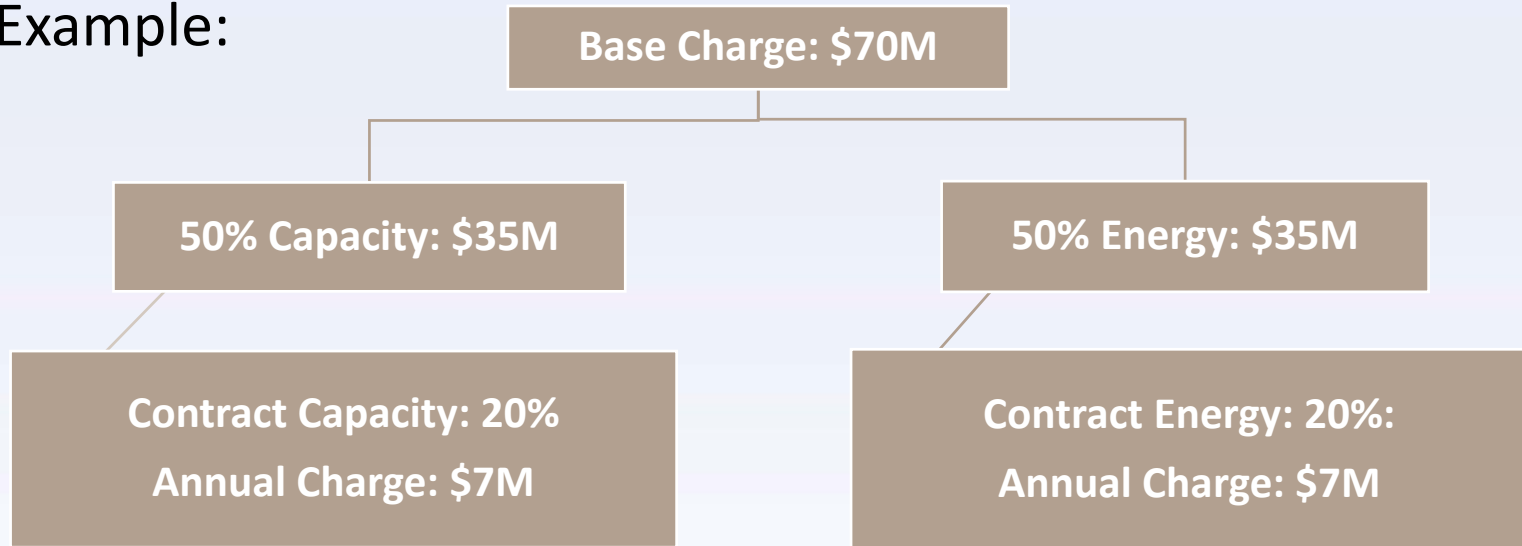
Regulations, Orders and Procedures

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**
- Boulder Canyon Project Electric Service Contract and Amended and Restated Implementation Agreement

Formulas

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



Formulas

Base Charge = Expenses – Carryover – Non-power Revenue

Composite Rate = Base Charge / Energy Projections

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

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

- Rates are for informational purposes only

Proposed Base Charge and Rates Summary

	FY 2020 Base Charge	FY 2021 Proposed	Difference	%
Base Charge	\$66,419,402	\$65,606,080	-\$813,322	- 1.2%
Energy Projection (MWh)	3,673,800	3,483,448	- 190,352	- 5.2%
Composite Rate (Mills/kWh)	18.08	18.83	0.75	4.1%
Energy Rate (Mills/kWh)	9.04	9.42	0.38	4.2%
Capacity Projection (kW)	1,584,583	1,584,583	-	0.0%
Capacity Rate (\$/kW-Mo)	\$1.75	\$1.73	-\$0.02	- 1.1%

- Derived from Final Ten Year Operating Plan published January 31, 2020
- Composite, energy, and capacity projections are finalized annually on June 1st
- Rates are for informational purposes only

FY 2019 Actuals

	FY 2019 Base Charge	FY 2019 Actuals	Change	%
Bureau of Reclamation				
O&M	56,822,000	56,232,316	(589,684)	
Replacements	2,984,000	11,811,795	8,827,795	
Visitor Services	9,063,000	12,482,671	3,419,671	
Payments to States	600,000	600,000	-	
Principal and Interest	977,548	966,139	(11,409)	
Post-Retirement Benefits	1,581,283	2,431,028	849,745	
	72,027,831	84,523,949	12,496,118	17%
Western Area Power Administration				
O&M	8,757,993	7,048,693	(1,709,300)	
Replacements	400,000	332,573	(67,427)	
Post Retirement Benefits	200,455	346,577	146,122	
Interest	20,703	31,684	10,981	
	9,379,151	7,759,527	(1,619,624)	-17%
Total Expense	81,406,982	92,283,476	10,876,494	13%
Prior Year Carryover	-	9,361,400	9,361,400	
Non-power Revenue	11,665,325	15,570,037	3,904,712	33%
Total	\$ 69,741,657	\$ 67,352,039	\$ (2,389,618)	-3%
Cash Available		2,389,618		
Less Change in UDO & AR		(13,990,401)		
Carryover into FY 2020	\$ -	\$ 16,380,019		

FY 2019 Actuals

- Reclamation's execution increased in replacements and visitor services categories
 - Funded through FY 2018 carryover for PRV Modernization, Wicket Gates, 16.5kV Generator Breakers, Elevator Motor and Controller, and Visitor Center Renovation projects
- WAPA's O&M execution decreased in both facility expense and systemwide expense categories
 - Decreases caused by a variety of factors including vacancies, changes in work priorities, and project funds being carried over into FY 2020

FY 2019 Actuals

- Non-power revenues were \$3.9M higher than budget projections in visitor services, ancillary services and water sales

FY 2020 Revised

	FY 2020 Base Charge	FY 2020 Revised	Change	%
Bureau of Reclamation				
O&M	58,463,000	66,496,712	8,033,712	
Replacements	4,384,000	6,536,409	2,152,409	
Visitor Services	9,529,000	9,787,000	258,000	
Payments to States	600,000	600,000	-	
Principal and Interest	977,548	965,108	(12,440)	
Post-Retirement Benefits	1,751,851	1,751,851	-	
	75,705,399	86,137,080	10,431,681	14%
Western Area Power Administration				
O&M	8,307,206	8,616,487	309,281	
Replacements	208,000	408,000	200,000	
Post Retirement Benefits	230,308	230,308	-	
Interest	24,922	24,922	-	
	8,770,436	9,279,717	509,281	6%
Total Expense	84,475,835	95,416,797	10,940,962	13%
Prior Year Carryover	1,295,141	16,380,019	15,084,878	1165%
Non-power Revenue	16,761,292	16,761,292	-	0%
Total	\$ 66,419,402	\$ 62,275,486	\$ (4,143,916)	-6%
Carryover into FY 2021		\$ 4,143,916		

FY 2020 Revised

- Reclamation's budget update includes \$10.4M in unobligated funds from FY 2019 projects
 - O&M includes approx. \$7.6M in extraordinary maintenance for Crain Inspection and Repair, Turbine Piping Area Machining, Erosion Repair, N3 Rotor Repair, and the Nevada Checkpoint Structure
 - Replacements includes approximately \$2.3M for Cylinder Gate Stems, Fiber Optic Cable Paths, 480 Volt Switchgear, and Public Safety Antenna projects
 - Visitor Services includes \$258K to continue work on Visitor Center and Monument Plaza projects

FY 2020 Revised

- WAPA's update includes \$509K in unobligated funds from FY 2019
 - O&M includes \$309K for:
 - Power Marketing - \$129K for Hoover Tools and Markets Gap Analysis
 - Multi-project Costs - \$100K to account for FY 2019 actuals
 - Depreciation - \$80K to account for FY 2019 actuals
 - Replacements include \$200K for the 69kV Bus Differential Relay project

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Change	%
Bureau of Reclamation				
O&M	58,463,000	61,044,500	2,581,500	
Replacements	4,384,000	6,036,000	1,652,000	
Visitor Services	9,529,000	9,570,000	41,000	
Payments to States	600,000	600,000	-	
Principal and Interest	977,548	977,548	-	
Post-Retirement Benefits	1,751,851	1,947,257	195,406	
	75,705,399	80,175,305	4,469,906	6%
Western Area Power Administration				
O&M	8,307,206	7,915,289	(391,917)	
Replacements	208,000	202,584	(5,416)	
Post Retirement Benefits	230,308	254,455	24,147	
Interest	24,922	28,441	3,519	
	8,770,436	8,400,769	(369,667)	-4%
Total Expense	84,475,835	88,576,074	4,100,239	5%
Prior Year Carryover	1,295,141	4,143,916	2,848,775	220%
Non-power Revenue	16,761,292	18,826,078	2,064,786	12%
Base Charge	\$ 66,419,402	\$ 65,606,080	\$ (813,322)	-1%

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Change	%
Bureau of Reclamation				
Operations	8,425,000	7,877,000	-548,000	-7%
Maintenance	17,278,000	18,520,000	1,242,000	7%
A&GE	22,643,000	24,143,000	1,500,000	7%
Extraordinary Maintenance	10,117,000	10,504,500	387,500	4%
O&M	\$ 58,463,000	\$ 61,044,500	\$ 2,581,500	4%

- Reclamation's operations is decreasing by \$548K for FY 2021
 - Determined Hoover Operation Controllers will support Parker/Davis Dams; budget was reduced by \$700K
 - Increases in salaries cost, water scheduling, and regional support partially offset budget decreases

FY 2021 Proposed

- Reclamation's maintenance budget is increasing \$1.2M
 - Salaries increase account for approximately \$750K
 - Maintenance staff charging towards maintenance accounts for \$530K increase
 - Reduced support towards extraordinary maintenance and replacement projects
- Reclamation's A&GE budget is increasing \$1.5M
 - A&GE includes area manager, compliance and regulatory, engineering, management services, and security budgets
 - Salaries increase account for approximately \$900K
 - Services costs are increasing by \$380K primarily due to the K-9 explosive services contract

FY 2021 Proposed

Line #		FY 2020 Base Charge	FY 2021 Proposed	Difference	%
Bureau of Reclamation					
17	Hoover Facilities Fire Code Compliance Upgrades	\$ 100,000	\$ -		
10	N1 Turbine Pit Area Machining	325,000	-		
12	Erosion Repair	480,000	-		
9	Paradox Valve Repair	925,000	-		
20	Generator Life Extension	3,357,000	-		
18	Visitor Center - Exhibit Level Refurbishment*	150,000	20,000		
19	Monument Plaza Restoration*	150,000	20,000		
21	N3 Rotor Repair	250,000	857,000		
4	Tail Bays Stop Loss Coating	270,000	320,000		
3	Crane Inspection and Repair	650,000	650,000		
2	Fire Piping Plan	760,000	500,000		
1	Power Plant Piping Management Plan	950,000	800,000		
26	Generator Step-Up Transformers Maintenance	1,750,000	500,000		
6	Butterfly Valve Recoating	-	187,500		
25	Partial Discharge Monitors	-	500,000		
22	N3 Stator Re-wedge	-	800,000		
11	Rock Fall Mitigation	-	500,000		
8	Penstock Lateral Tunnels - Safety Doors Refurbishment		750,000		
5	Penstocks and Lateral Spot Coating	-	4,100,000		
Extraordinary Maintenance		\$ 10,117,000	\$ 10,504,500	\$ 387,500	4%

*SNPLMA Projects

FY 2021 Proposed

- Reclamation's extraordinary maintenance budget decreased \$4.9M since the preliminary FY 2021 Ten-Year Operating Plan (TYOP) published in July 2019
 - Revisited projects in a continued effort to stabilize budgets
 - Budget is increasing \$388K from FY 2020

FY 2021 Proposed

Line #		FY 2020 Base Charge	FY 2021 Proposed	Difference	%
Bureau of Reclamation					
16	Elevator Motor and Controller Replacement	100,000	-		
17	Governor Oil Pump Replacement	120,000	-		
9	Replacement Wastewater Treatment Facility	170,000	-		
18	Segmented Firdle Bridge Joint Replacement	350,000	-		
1	Rebuild and Replace Generator Coolers	528,000	554,000		
2	A9 Wicket Gates and Facing Plates	750,000	1,550,000		
4	Cylinder Gate Stem Evaluation and Replacement	1,750,000	500,000		
5	480-Volt Switchgear Replacement	250,000	2,320,000		
6	Flow Meter Replacement	172,000	172,000		
7	UCM Life Cycle Replacement	30,000	60,000		
14	Hazardous Noise Abatement Plan	164,000	50,000		
15	Central Section HVAC Replacement	-	80,000		
8	Water Plant and Waste Water Plant Controls	-	250,000		
20	Control Center Renovation	-	500,000		
Replacements		\$ 4,384,000	\$ 6,036,000	\$ 1,652,000	38%

FY 2021 Proposed

- Reclamation's replacements budget has decreased \$216K since the preliminary FY 2021 TYOP was published in July 2019
 - Reclamation reviewed projects in a continued effort to stabilize budgets
 - Reclamation's replacements budget is increasing \$1.7M from FY 2020

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Change	%
Bureau of Reclamation				
Visitor Services	9,529,000	9,570,000	41,000	0.4%
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 is remaining relatively steady
- Payment to States is static from year-to-year
- Flood Control P&I is remaining unchanged as well – payoff in 2037

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Difference	%
Bureau of Reclamation				
Actual - 2014	1,453,998	-		
Actual - 2015	1,750,556	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		
Post-Retirement Benefits (PRB)	\$ 1,751,851	\$ 1,947,257	\$ 195,406	11%

- PRBs are imputed retirement, health insurance, and life insurance costs
- Forecasted PRBs are based on a 5-year average of recent actuals
- FY 2021 PRB increased by \$195K due to higher FY 2018 and FY 2019 actuals

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Change	%
Western Area Power Administration				
Transmission Line Maintenance	305,287	179,536		
Communication Systems Support	308,873	396,653		
Safety Costs	141,527	226,848		
Phoenix Service Center Costs	548,479	481,120		
Substation Maintenance	1,087,038	984,812		
Facility Expense	2,391,204	2,268,969	(122,235)	-5%
Power Billing/Collecting	217,564	258,495		
System Operations and Load Dispatching	2,892,526	2,832,401		
Transmission/Engineering Studies	91,824	146,363		
Conservation and Renewable Energy	52,085	22,619		
Financial Management Costs	136,235	75,529		
Power Marketing Costs	1,769,989	1,577,224		
Multiproject Costs	560,931	638,841		
Depreciation	94,848	94,848		
Systemwide Expense	5,816,002	5,646,320	(169,682)	-3%
O&M	\$ 8,207,206	\$ 7,915,289	\$ (291,917)	-4%

FY 2021 Proposed

- WAPA's O&M budget is decreasing by \$292K
 - Facility expenses decreased \$125K in transmission line maintenance and \$102K in substation maintenance due to cyclical work requirements on other power systems
 - Systemwide expenses decreased primarily in the power marketing budget activity. Power marketing decreased by \$193K resulting from work required on other power systems.

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Difference	%
Western Area Power Administration				
Hoover Channel Bank Equipment Replacement	208,000	-		
DACS Replacement	-	202,584		
Replacements	\$ 208,000	\$ 202,584	\$ (5,416)	-3%

- WAPA's replacement budget varies based on the cost of each project
 - The budget has historically been \$400K
 - FY 2021 budget is decreasing by \$5K

FY 2021 Proposed

	FY 2020	FY 2021		
	Base Charge	Proposed	Difference	%
Western Area Power Administration				
Actual - 2014	\$ 225,846	\$ -		
Actual - 2015	180,918	180,918		
Actual - 2016	237,811	237,811		
Actual - 2017	196,001	196,001		
Actual - 2018	310,966	310,966		
Actual - 2019	-	346,577		
Post-Retirement Benefits (PRB)	\$ 230,308	\$ 254,455	\$ 24,146	10%

- PRBs are imputed retirement, health insurance, and life insurance costs
- Forecasted PRBs are based on a 5-year average of recent actuals
- FY 2021 PRB are increasing \$24K due to higher FY 2018 and FY 2019 actuals

FY 2021 Proposed

		FY 2020		FY 2021		
		Base Charge		Proposed	Difference	%
Western Area Power Administration						
	Actual - 2014	\$ 14,090	\$	-		
	Actual - 2015	23,270		23,270		
	Actual - 2016	27,421		27,421		
	Actual - 2017	28,549		28,549		
	Actual - 2018	31,281		31,281		
	Actual - 2019	-		31,684		
	Interest - CME & Warehouse	\$ 24,922	\$	28,441	\$ 3,519	14%

- Forecasted CME and Warehouse Interest is based on a 5-year average of recent actuals
- FY 2021 interest is increasing \$4K due to higher FY 2018 and FY 2019 actuals

FY 2021 Proposed

	FY 2020 Base Charge	FY 2021 Proposed	Change	%
Prior Year Carryover	1,295,141	4,143,916	2,848,775	220%
Visitor Services	15,000,000	17,000,000	2,000,000	
Ancillary Services	1,211,292	1,276,078	64,786	
Water Sales Revenue	550,000	550,000	-	
Non-power Revenue \$	16,761,292	\$ 18,826,078	\$ 2,064,786	12%

- Prior year carryover increased in FY 2021 and will offset expenses by \$4.1M
- Non-power revenue increased by \$2.1M
 - Visitor Services projections increased \$2M due to the implementation of commercial use authorizations for road-based tours
 - WAPA ancillary services projections increased by \$64K due to higher historical averages

FY 2021 Proposed

	FY 2020	FY 2021		
	Base Charge	Proposed	Change	%
Bureau of Reclamation				
O&M	58,463,000	61,044,500	2,581,500	
Replacements	4,384,000	6,036,000	1,652,000	
Visitor Services	9,529,000	9,570,000	41,000	
Payments to States	600,000	600,000	-	
Principal and Interest	977,548	977,548	-	
Post-Retirement Benefits	1,751,851	1,947,257	195,406	
	75,705,399	80,175,305	4,469,906	6%
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Replacements	208,000	202,584	(5,416)	
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Total Expense	84,475,835	88,576,074	4,100,239	5%
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Non-power Revenue	16,761,292	18,826,078	2,064,786	12%
Base Charge	\$ 66,419,402	\$ 65,606,080	\$ (813,322)	-1%

Timeline (Tentative)

February 2020

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

March 2020

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

April 2020

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 (Tentative)

May 2020

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

June 2020

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

October 1, 2020

Effective date of base charge and rates

Timeline (Tentative)

- **Public Information Forum**

- 30 days after *Federal Register* notice publication
- March 2020, from 10:30 am – 12:30 pm

- **Public Comment Forum**

- 60 days after *Federal Register* notice publication
- April 2020, from 10:30 am – 12:30 pm

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>