

Adapting in a world of change

Mid-West Electric Consumers Association Board meeting
Sept. 23, 2020 | Virtual meeting

Mark A. Gabriel
Administrator and CEO

Engaging in a world of change



Third quarter accomplishments

- Not Monitored Quarterly / New Metric
- On Track to Complete / Target Met
- Slightly Off Track / Target Not Met
- Severely Off Track / Target Not Met

	Performance	Contextual
Enterprise Indicators	Control Performance Standard 1	OSHA Recordable Incident Rate (RIR)
	Reliability Centered Maintenance	OSHA Days Away Restricted Trans. (DART)
	AM Tier I Data Usage	
	SCADA/EMS Systems Availability	
	Cyber Security Response	
	Annual O&M / KWh Generated	
	Repayment of Investment	
Tactical Action-Level Organizational Function-Level Program-Level	Customer Outreach	Accountable Outages (Retiring)
	AM New Asset Analysis	Employee Turnover Rate
	AM Data Quality Confidence Index	FEVS Inclusion Index
	GSS Network Systems Availability	FEVS Engagement Index
	Physical Security Remediation	FEVS Innovation Index
	Emergency Mgt. Readiness	
	Power Systems HP/JC	
	Acquisition Cost Savings	
	Safety HP/JC	
	Reserve Strategy Execution	

Coronavirus response

- Objective: Ensure continued mission success and protect employees
- Maximized telework; no visitors
- 138 people hired
- 3 employee well-being surveys
- Sequestration processes & testing
- Multiple all-employee and craft Town Halls
- Continuing Responsible Workplace Re-entry plans



Third employee well-being survey

- 745 respondents
- ~84% able to fulfill work responsibilities
- Return to work
 - 54% not ready
 - 27% uncertain
 - 19% ready
- Major concerns
 - Exposure to virus/other people's actions
 - Wearing masks for extended periods of time
 - Communication
 - Workload

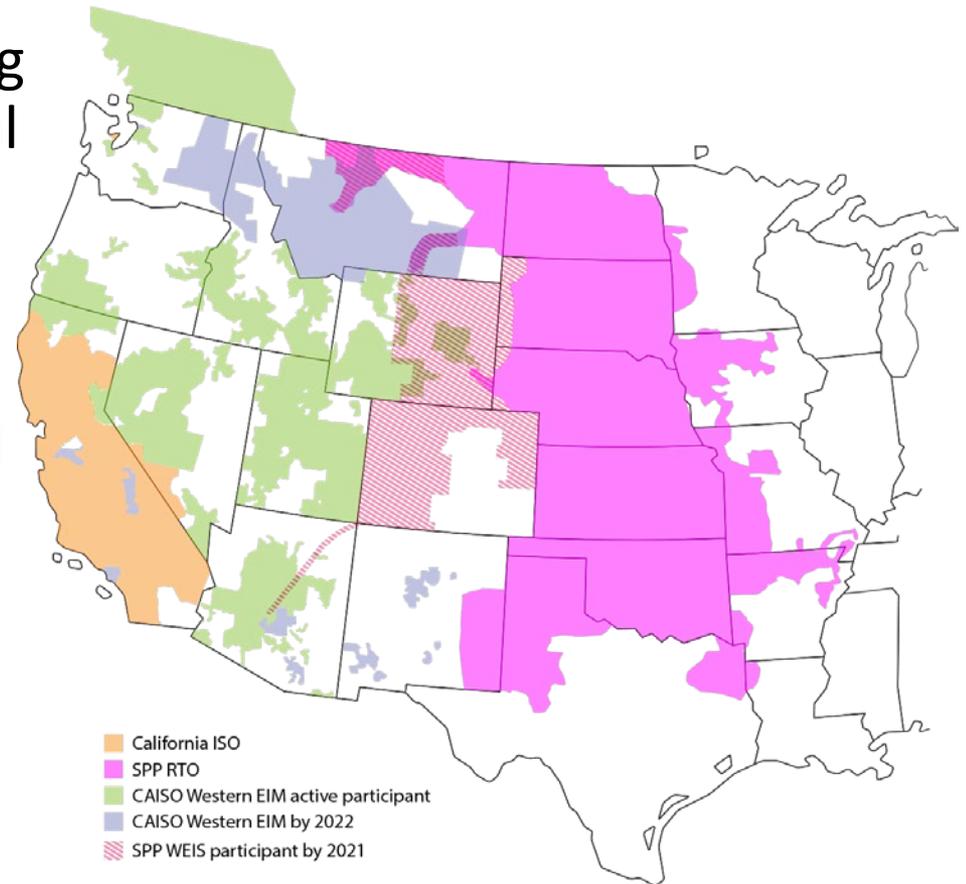
Hydropower MOU

- Main focus on R&D
- Contributing to:
 - Asset Management
 - Value of hydro
 - Workforce
 - Water supply reliability
 - Environmental outcomes
- Action plans expected in 90 days
- Role for customers



Markets update

- Working with SPP on revising WEIS tariff for FERC approval
- On track to meet deadlines
- Started market trials and training
- Expected OATT filing around Nov. 2
- DSW study results expected in next several weeks
- SN go-live timeline accelerated to March 25



Wildfire prevention & mitigation

- Continuing effort to reduce risk of wildfire impacts to and initiation from power lines
- Active role on ESCC wildfire committee
- Industry leader
- Gears of Government award for work in CO



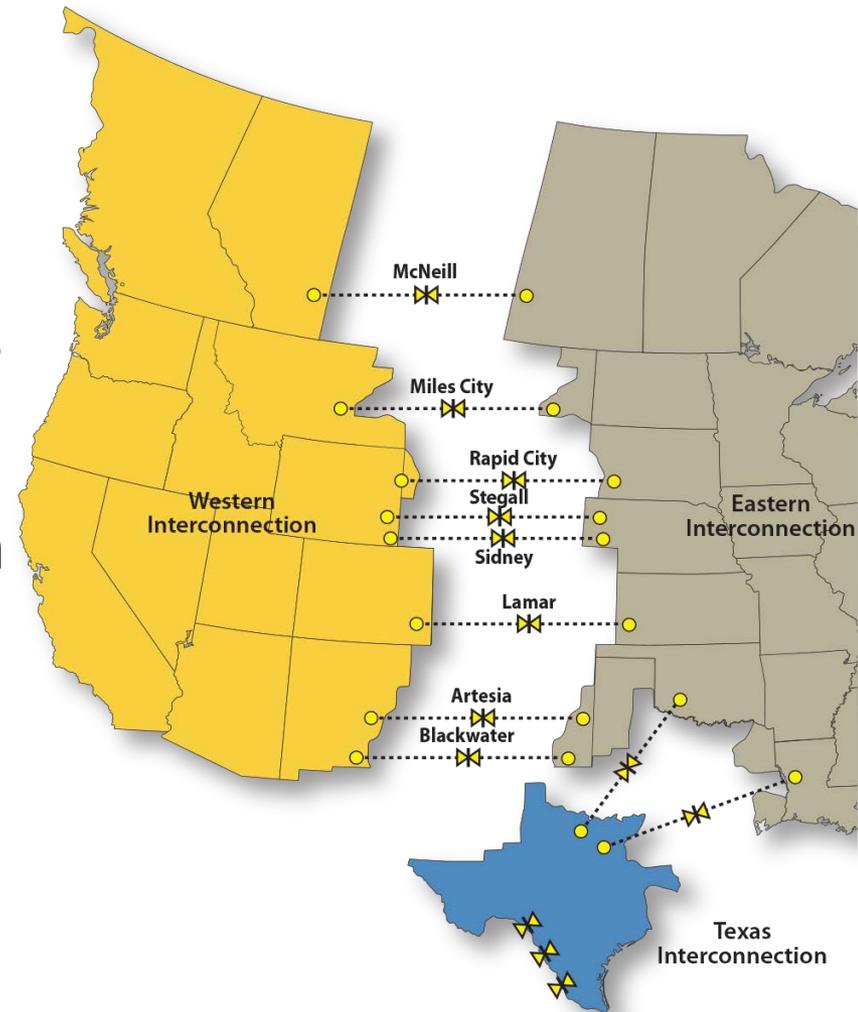
Support to CA energy emergency

- ~5,400 MWh transmitted Aug. 14-19
 - 1,900 MWh from CRSP (Glen Canyon)
 - 3,300 MWh from CVP
 - 200 MWh from DSW
- Affirms value of hydropower



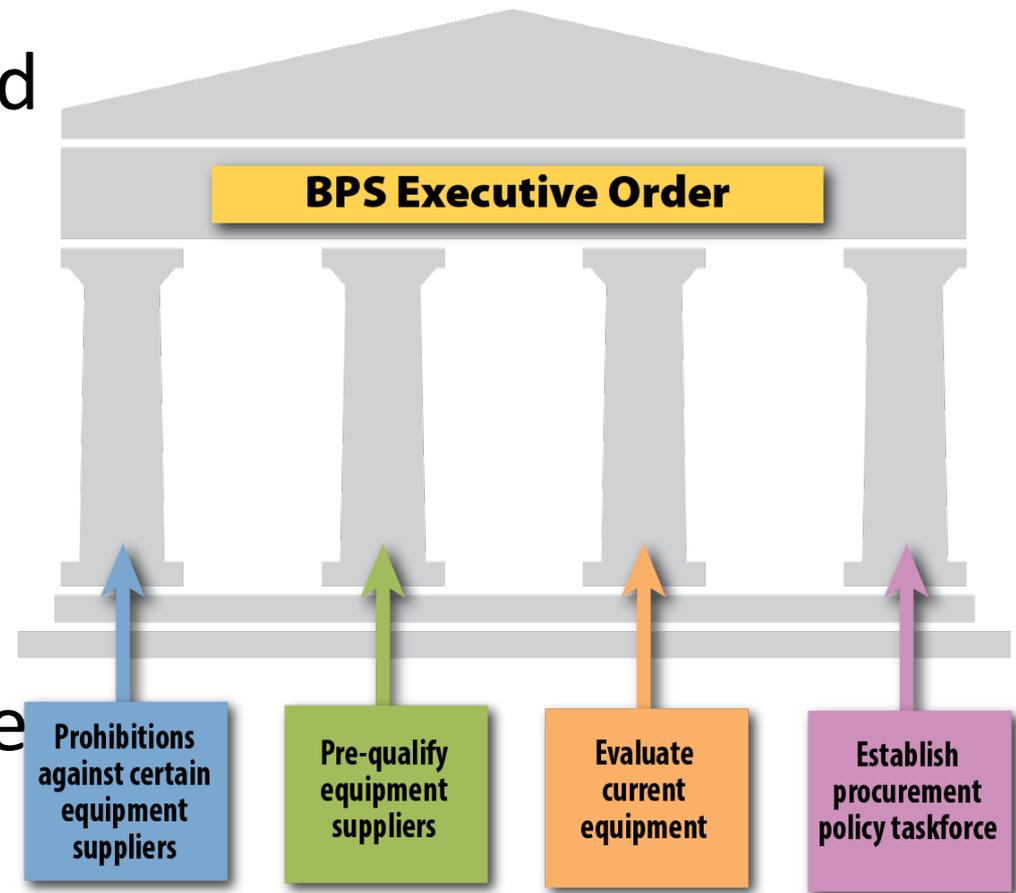
Transmission challenges

- Closure of traditional generation out of sync with transmission buildout
- Not a financial, permitting or process challenge
- No one willing or able to sign long-term contracts due to market uncertainty
- Upgrading and upgrading DC interties

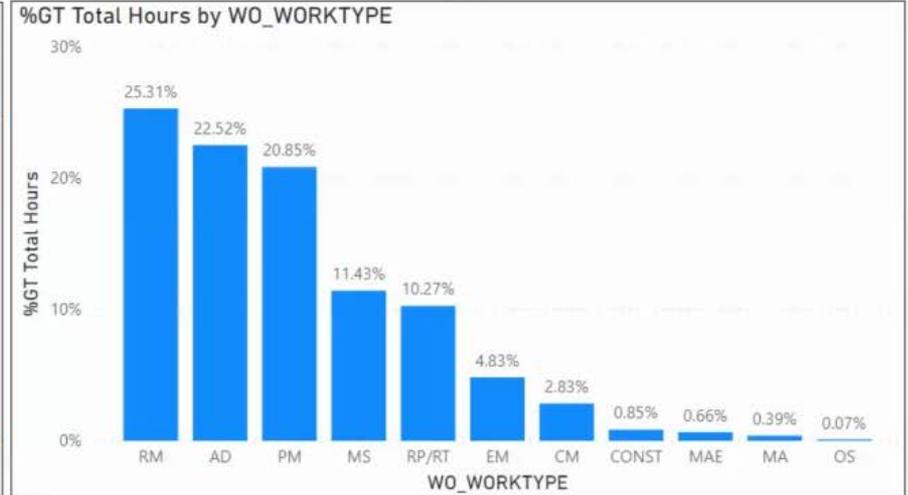
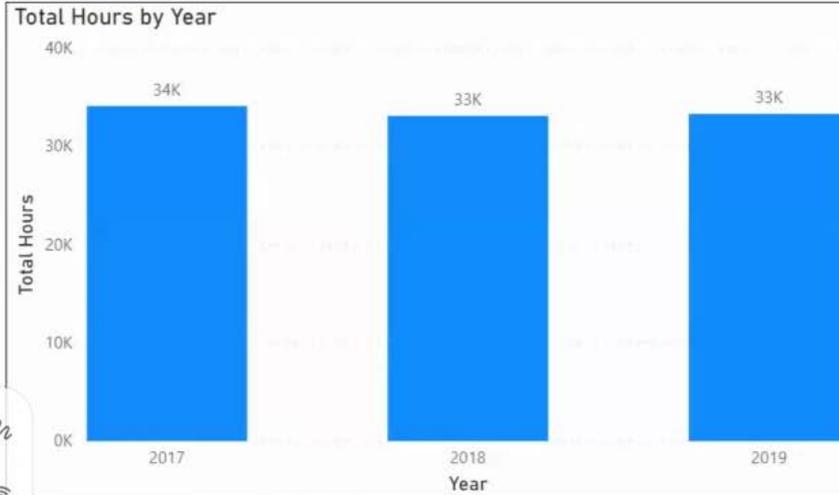


BPS EO update

- RFI comment period closed
- DOE reviewing comments for rule making
- Submitted responses directly to DOE

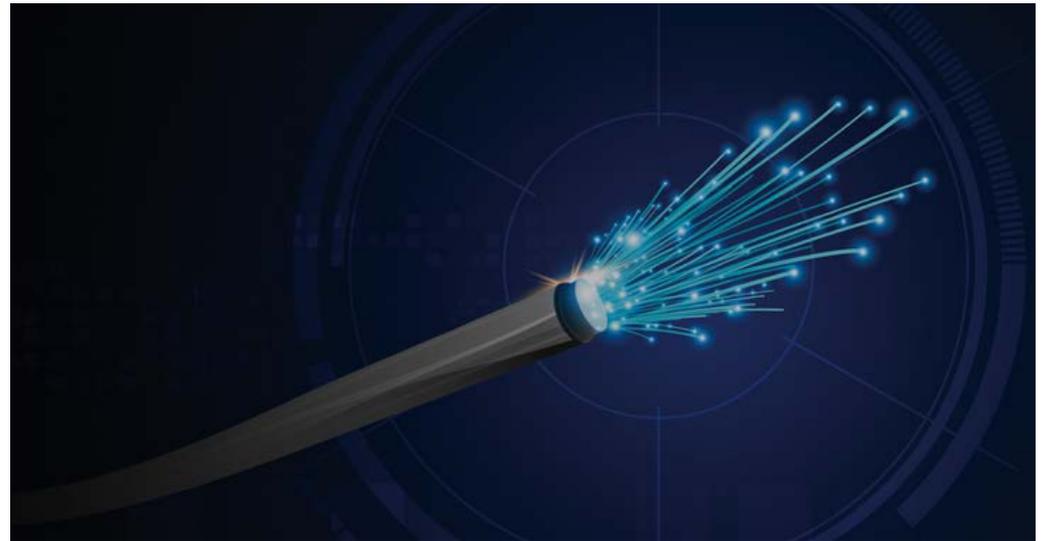


Workload management initiative



Fiber pilot project

- Pilot project plan completed
- Continuing to explore fiber partnerships with three customers
 - DMEA
 - PRPA
 - TPUD
- Awaiting DOE delegation of authority



Personnel updates

- Senior VP & UGP Regional Manager Jody Sundsted is retiring
 - VP of Power Operations Lloyd Linke is acting
- Senior VP & CFO is Mike Peterson
- New Senior VP & CRSP Manager Tim Vigil
- CAO selection expected soon

Key takeaways

We are committed to delivering on our mission. Industry is changing at a rapid pace, and we must keep up. Focus on optimizing existing technologies & assets.



Contact/follow me

Mark Gabriel

720.962.7705

gabriel@wapa.gov



wapa.gov



[@westernareapowr](https://twitter.com/westernareapowr)
[@MarkAGabriel](https://twitter.com/MarkAGabriel)



[Mark Gabriel](https://www.linkedin.com/in/MarkGabriel)



[WesternAreaPower1](https://www.youtube.com/channel/UC...)



[westernareapower](https://www.instagram.com/westernareapower)



[wapa.gov](https://www.facebook.com/wapa.gov)



WAPA Financial Update

Mid-West Electric Consumers Association Board meeting
Sept. 23, 2020 | Virtual meeting

Michael Peterson
Senior VP and CFO

Agenda

- CFO Introduction
- Budget Formulation & Guiding Principles
- Reserve Strategy, Tactics & Projections
- Projected FY20 Results
- Financial Transparency

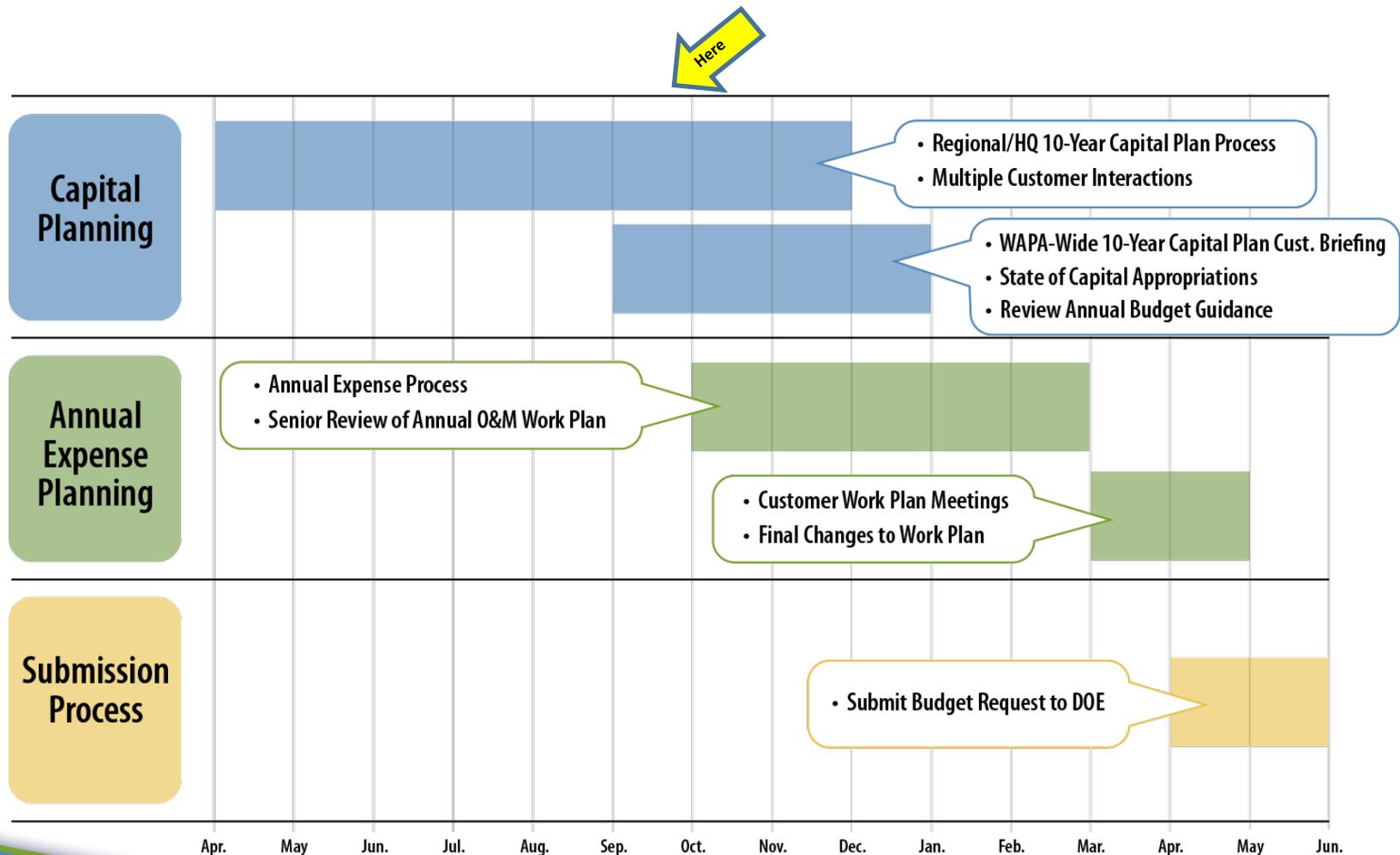
WAPA's New CFO

Michael Peterson – Experience & Education

- Chief Financial Officer 2014-present
- Commodities & Energy Equity Research Analyst 2006-2014
- Commodities Trader 1997-2006

- University of Chicago MBA, International Finance
- Illinois Institute of Technology MS, Financial Markets
- University of Denver BA, Political Science/Economics

Budget Formulation Timeline



Budget Guiding Principles



- Administrator's Budget Guidance
- Grid protection, reliability, resilience
- Capital plan alignment
- Stable funding mechanisms
- Cost efficiency
- Rate stability, predictability, affordability
- Checks & balances
- Transparency
- Preserve the value of the hydro resource

Budget in an Election Year

Possible outcomes for the FY 2021 Budget:

- A. Delayed: Continuing Resolution
- B. Approved: Budget Authorized / Appropriated
- C. Not Approved: Shut-down

➤ WAPA well positioned

Reserve strategy

Sustainable funding tool to support WAPA's mission

	Annual O&M	Capital funding	Purchase power & wheeling
Example	Salaries, supplies and equipment	Building new transmission lines and related structures	Buying power on behalf of customers when water conditions require it
Purpose	Allows WAPA to sustain operations during emergencies, continuing resolutions or lapses in appropriations	Provides funding in advance of starting capital construction projects and flexibility with schedule / priority changes in collaboration with customers	Improves both WAPA and customer cash management while minimizing energy rate spikes during a drought
Strategy	Retain 31% of annual funding need	Retain sufficient funding to cover up to 3 years of capital investments	Retain 3 years estimated funding during drought

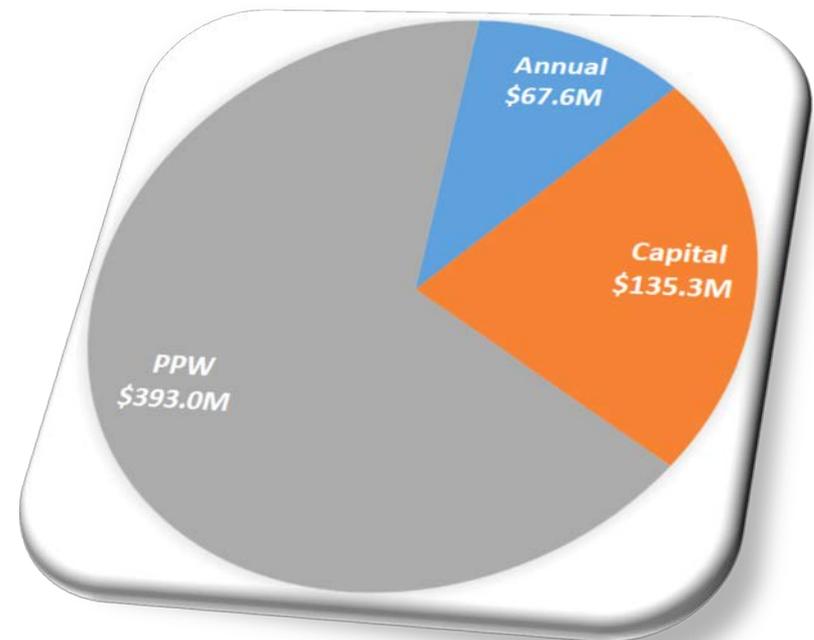
➤ *Carrying reserve balances do not impact power rates*

Reserves – Tactical Management

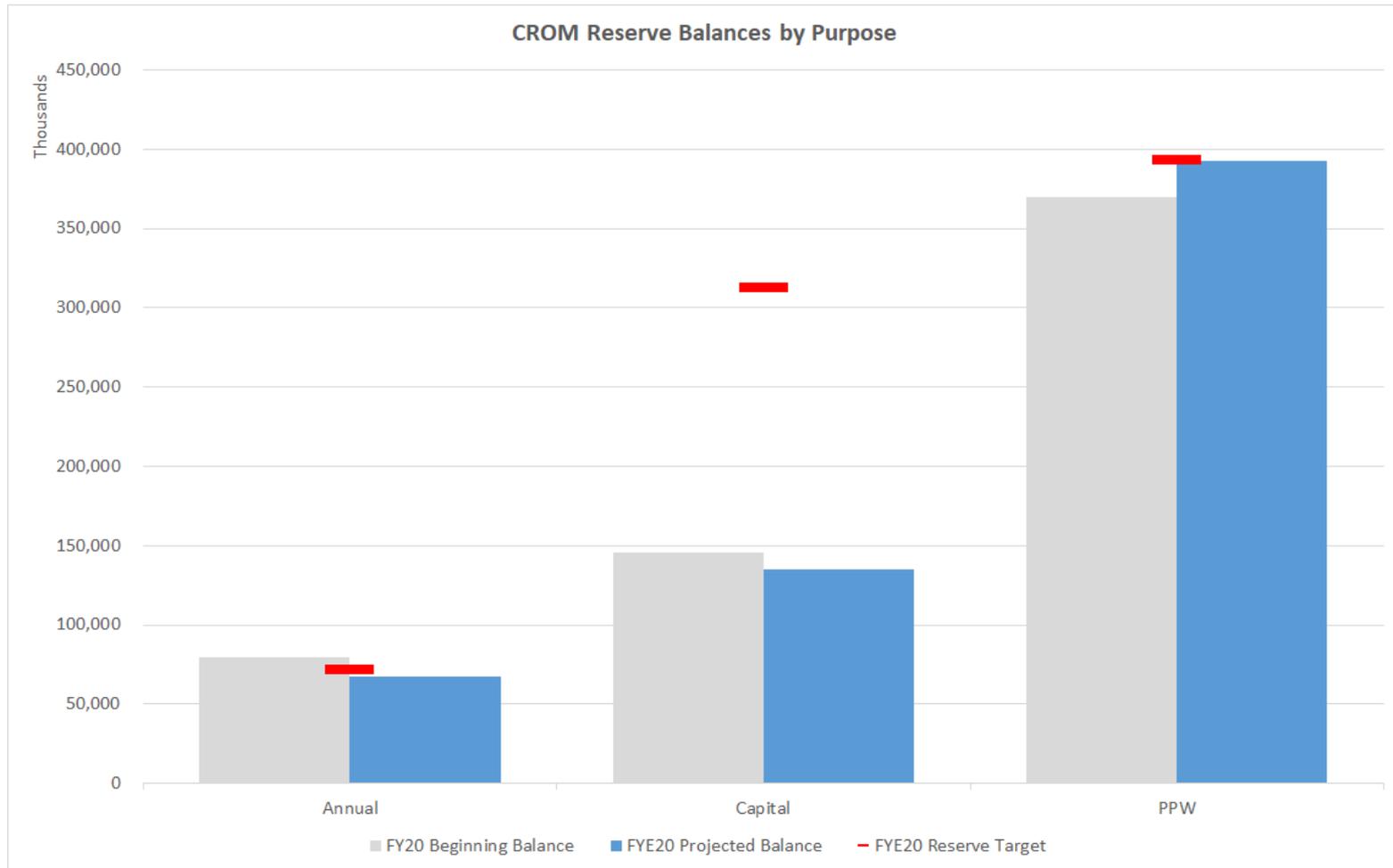
- Progress since 2016
 - ✓ **Annual O&M:**
Reduced to target level, maintaining
 - ✓ **Capital:** Reduced to target level, maintaining
 - ✓ **PPW:** Anticipate reaching full target this FY
- Re-evaluate after FY 2020

Projected CROM Reserves by Purpose

FYE 20: \$595.8 (in Millions)



Reserves Targets – Projected FYE 20



Projected FY 2020 WAPA-wide results

- **Annual O&M: \$296M plan**
 - On track, executing within 1% of plan
- **Capital Program: \$248M plan**
 - Executing \$132M or 53% of capital plan (SLTP deferred)
- **Purchase Power & Wheeling:**
 - Reserves On Track, reached full \$393M CROM target
- **Return to Treasury:**
 - \$260M (\$1.8B over 5 years)
- **Financial Statement Audit:**
 - Anticipate unqualified opinion



Financial Transparency: The Source

- **Annual O&M: \$296M plan**
 - On track, executing within 1% of plan
- **Capital Program: \$248M plan**
 - Executing \$132M or 53% of capital plan (SLTP deferred)
- **Purchase Power & Wheeling:**
 - Reserves On Track, reached full \$393M CROM target
- **Return to Treasury:**
 - \$260M (\$1.8B over 5 years)
- **Financial Statement Audit:**
 - Anticipate unqualified opinion

Benefits

- Historical data readily available to stakeholders
- Standardized presentation and uniform categorization aids comparability
- System enhancements improve reporting and analysis tools

Location

- www.wapa.gov
- Click on “Visit the Source”
- Click on “Financial Transparency”

Contact/follow WAPA

Mike Peterson

720-962-7500

mdpeterson@wapa.gov



wapa.gov



@westernareapowr



Western Area Power Administration



WesternAreaPower1



westernareapower



wapa.gov



RMR Sustainable Capital Investment Plan

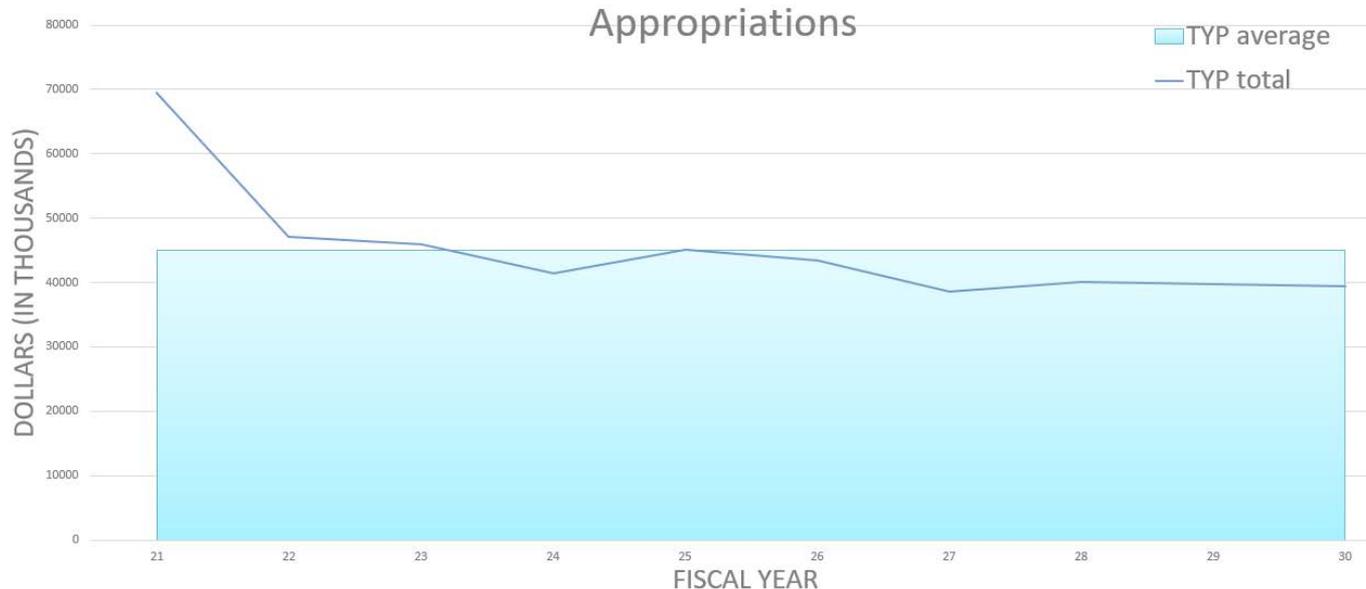
Mid-West Electric Consumers Association Board meeting
Sept. 23, 2020 | Virtual meeting

Dawn Roth Lindell
Senior VP and Rocky Mountain
Regional Manager

Development of a sustainable Ten-Year Plan

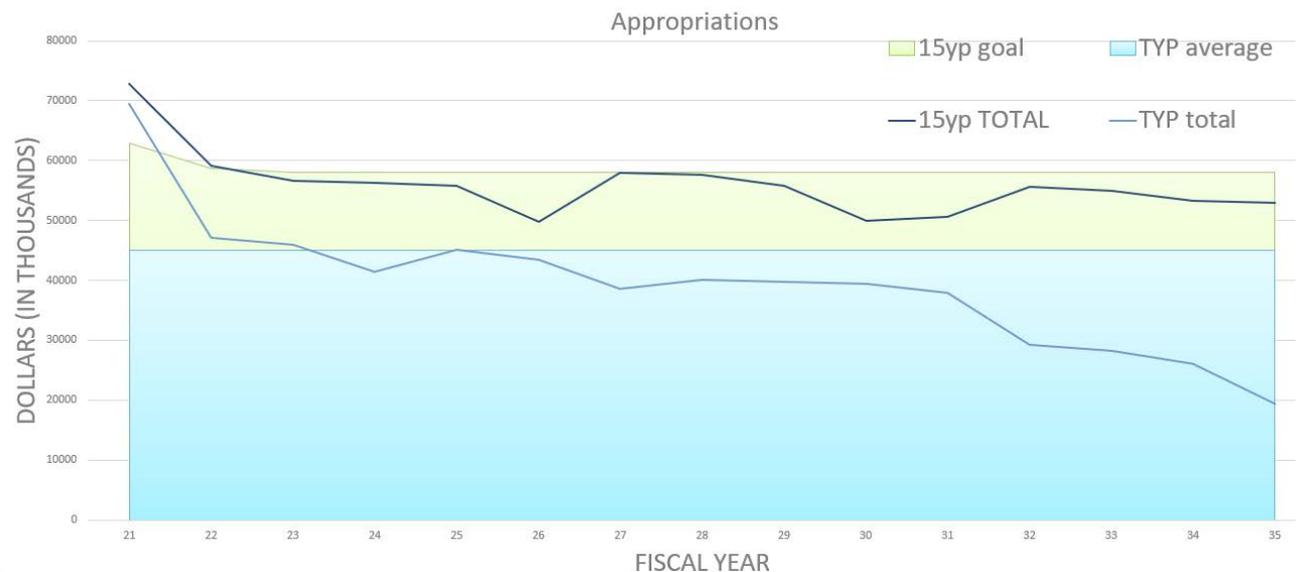
Historical Ten-Year Plan

- Captures project workload that can be done with available funding and resources
- Specific projects identified primarily in the first 3 years with placeholders for later years
- Plan is REACTIVE



Sustainable “Ten-Year” Plan

- Captures project workload that should be done to avoid potential issue resulting from deferred maintenance and repairs or replacements
- Specific projects identified, reduced placeholders
- Plan is PROACTIVE
- 30% increase in funding per year for 15 years



How do projects on this new plan compare to the old plan?

- Transmission Line Reconstruction
- Mobile and Heavy Equipment
- Buildings and Facilities

Transmission Line Reconstruction

- **Historical Ten-Year Plan**
Included only large-scale projects with complex or difficult scope
- Structure replacements were done individually and not captured in cohesive capitalized projects



Transmission Line Reconstruction

- **New 15-Year Plan** utilizes Asset Management data to prioritize repairs and replacements into larger consolidated segments that can be capitalized
- Projects are completed by either WAPA forces or construction contractors



Mobile & Heavy Equipment

- **Historical Ten-Year Plan**
Replace failed or severely deteriorated equipment, often beyond life-expectancy
- **New 15-Year Plan**
Evaluate fleet needs, replacing critical equipment first and scheduling replacements based on maintenance and lifecycle cost analysis

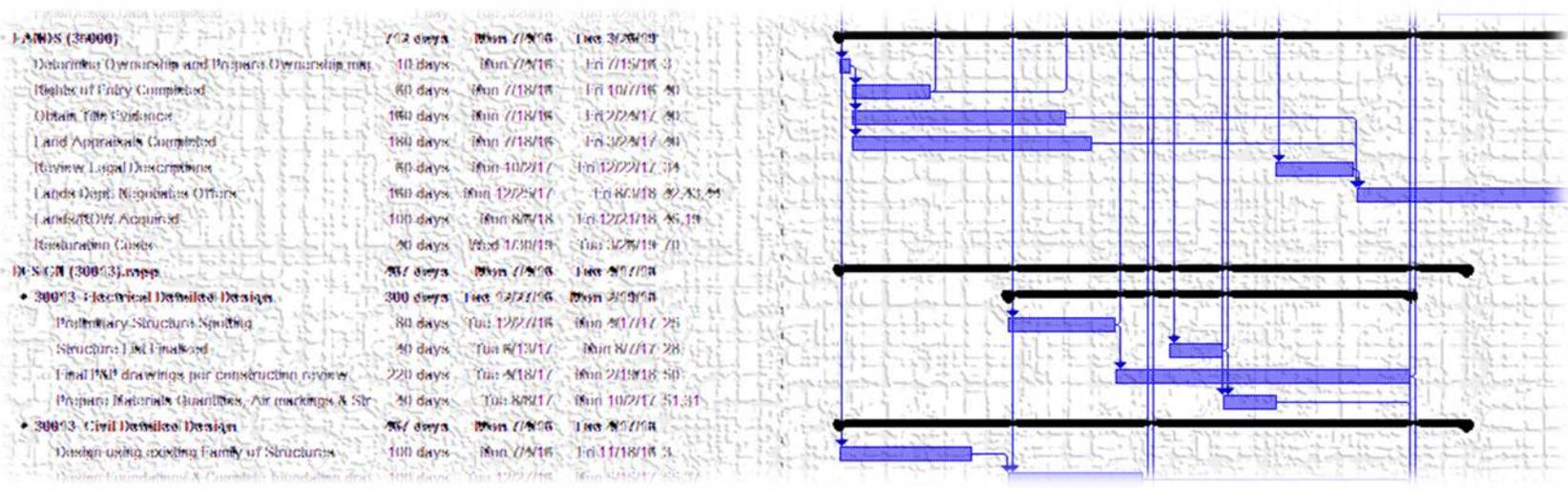


Buildings & Facilities

- **Historical Ten-Year Plan**
Repair existing buildings, often after failure has caused damage to equipment
- **New 15-Year Plan**
Repair roofs on an annual schedule, replace buildings when damage is substantial and construct garages to protect heavy equipment investments



How will WAPA execute this larger plan?



Workload & Project Management

- WAPA-wide resource management initiative
 - Balance demand and allocate resources when and where they are needed
- Project Planning & Management
 - Consolidation - group smaller projects into a single large project
 - Flexibility – ability to slide projects forward or back as delays occur
 - Preparation – preparatory work to mitigate risk and minimize delays
- Contract Labor
 - Increased contractor resources where demand is high and WAPA resources are low
 - Engineering & Design
 - Project Management
 - Environmental Surveys
 - Construction
 - Commissioning

Project Updates

Dave Johnston Tap – Sidney Emergency Reconductor

- Project will replace 213 miles of failing conductor
- Design complete with an Oct 1 solicitation anticipated
- Contract award expected early November 2020 with a project completion by June 1, 2021



Project Updates

- Estes – Flatiron Transmission Line Reconstruction
 - Design 95% complete
 - Supplemental Geotechnical investigation in progress
 - Additional data points will be used for precise foundation design cost savings over conservative designs
 - Procurement starting in November 2020
 - Construction contract award anticipated in March 2021



Project Updates

Lovell-Yellowtail Phase 3 Transmission Line Reconstruction

- Design in progress, expected to be complete by January 2021
- Procurement to start as early as January pending land acquisitions and right-of-way renewal discussions with the Crow Nation
- Anticipate construction contract award as early as April 2021



Contact/follow me

Dawn Roth Lindell

303-598-7494

lindell@wapa.gov

 Twitter: @roth_Lindell
The Source on WAPA.gov



WEIS Update

Dave Neumayer

VP of Power Marketing for RMR

SPP WEIS Filing with FERC

- WEIS Tariff, WJDA, and WMEC Scope filed February 2020 in Dockets ER20-1059, ER20-1060
- Multiple rounds of protests, comments filed
- FERC issued Deficiency Letter in April 2020
- Order issued on July 31 rejecting, without prejudice, SPP's original filing
- **New markets include revised filings**



FERC Issues Raised

Rejected Filing due to:

1. Non-Participant Transmission
2. Role of Reliability Coordinator



Provided Guidance to modify in subsequent filings:

3. Supply Adequacy Incentives/Penalties
4. Use of Average Losses
5. Lack of Justification for Automatic Increases to Market Mitigation Thresholds

WMEC Approved Revisions

Rejected Filing due to:

1. Non-Participant Transmission
Service Flow Constraints will constrain market
2. Role of Reliability Coordinator
Resolution primarily through clarifications

Provided Guidance to modify in subsequent filings:

3. Supply Adequacy Incentives/Penalties
Pricing structure to incent supply adequacy within BA
4. Use of Average Losses instead of marginal losses
LMP pricing will now include marginal loss component
5. Lack of Justification for Automatic Increases to Market Mitigation Thresholds
Removed automatic increases, will manually propose and justify



What's Next?

- ✓ WMEC approval of tariff edits
- ✓ SPP/FERC Pre-filing meetings
- SPP Board approval of tariff edits (September 22)
- SPP's FERC Filing (by October 1)
- WEIS Protocol edits to reflect tariff
- Parallel Operations – November
- FERC Approval?
- Go Live! – February 1, 2021



Upper Great Plains Region Update 2020

Mid-West Electric Consumers Association Board meeting
Sept. 23, 2020 | Virtual meeting

Lloyd Linke
Acting Senior VP and UGP
Regional Manager

Power Marketing Update

Lori Frisk

VP of Power Marketing for UGP

Customer Contracts Update

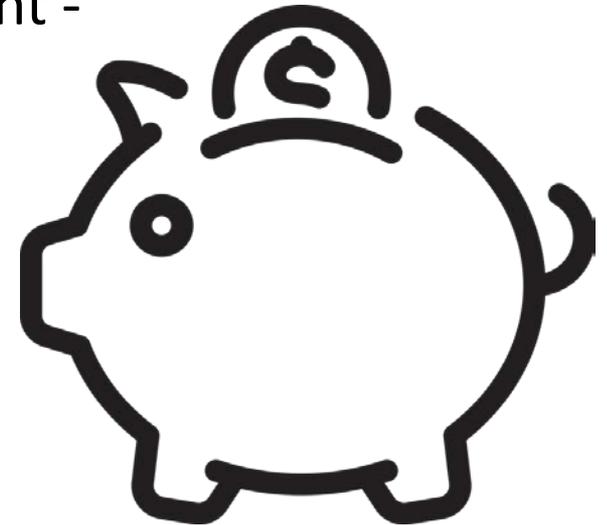
- 2020 to date
 - 206 contracts executed as of 9/11/2020
 - 86 contract have been offered
 - we are working with customers to get executed
 - 50 Contracts to be drafted to replace contracts that expire
 - PMI Tribal Contract update – Contact Darla at (406) 255-2938
 - 1/1/2021 removal of up to 7% losses and/or a 1 mill discount
- 2021
 - 600 FES Exhibits B & C to be drafted
 - 105 other contracts to be drafted



Rates Update

Pick-Sloan Missouri River Basin Program

- 1/1/2018 5-year composite - steady at 24.29 mills/kWh
- FY 2020 Riverton Aid to Irrigation payment - \$44,944,989
- 1/1/2021 Drought Adder customer notification in October
 - Remaining at zero

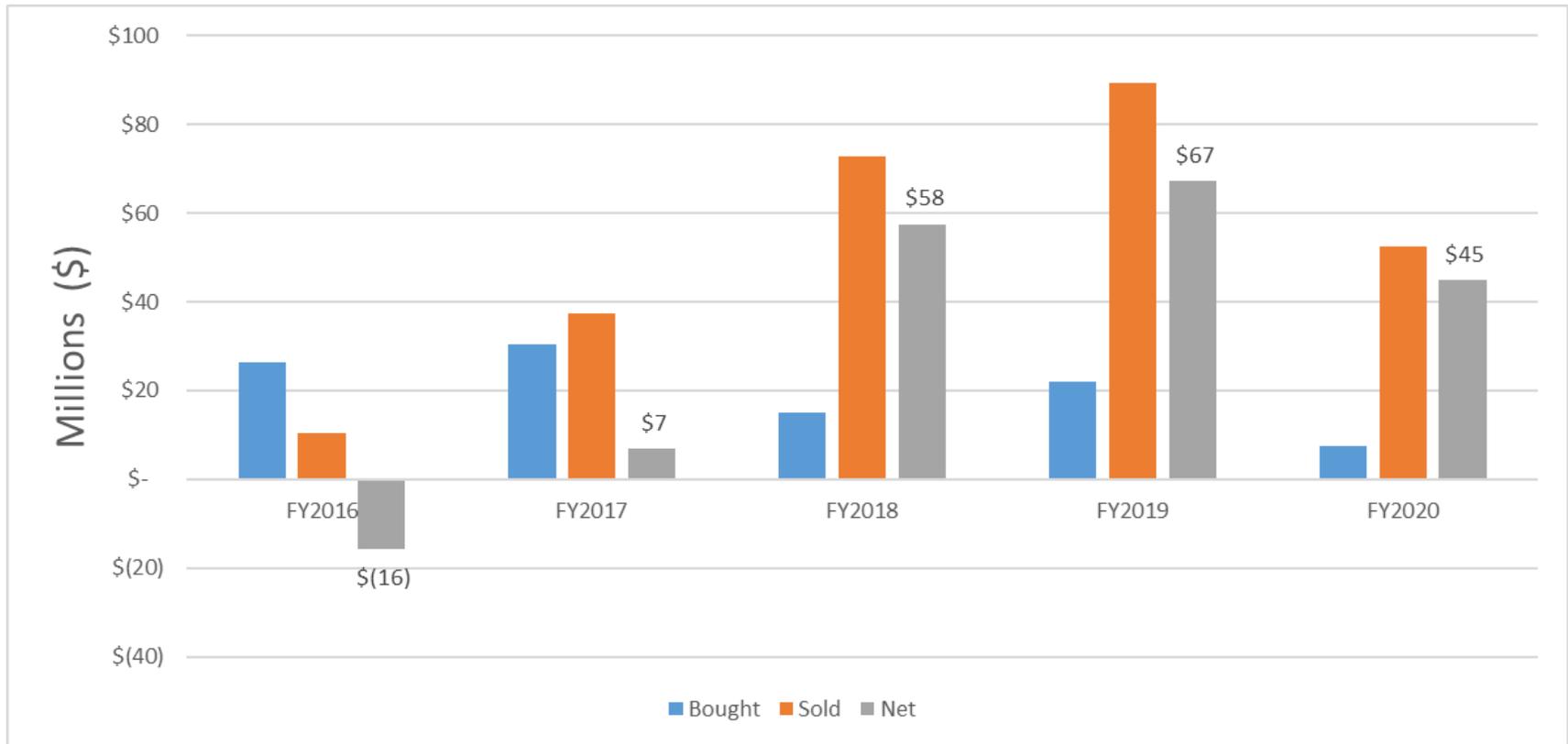


UGP Transmission and Ancillary Services

- Formula rates in effect 10/1/2020-9/30/2025
- 2021 Annual Update Notice posted on OASIS
 - Customer meeting 9/24/2020 at 2 pm CDT/ 1 pm MDT

UGP Marketing Summary SPP & West

As of 09/10/2020



Contact/follow WAPA

Lori Frisk

605-882-7580

frisk@wapa.gov



wapa.gov



@westernareapowr



Western Area Power Administration



WesternAreaPower1



westernareapower



wapa.gov



Background Material

Slides 44-62

- Contracts and Energy Services Status
 - Agreements completed or in progress
 - PMI Tribal Contract update
 - 2020 contract changes
- Rates Activity
- Market Results
- Corp of Engineers Water Graphs

Contracts & Energy Services 2020 Status

As of 09/11/2020

- Contracts Completed in FY 2020 206
 - Firm Electric Service, Native American Tribe Reserve and Bill Crediting, Irrigation, Rural Water Users, Transmission, Operation, Maintenance, Interconnection, LGIA's, Environment, Fiber, Compliance, NDA, Keystone XL, Financial Customer Funding, Airforce RFI, WEIS Market Participant and Meter Agent, SPP NITSA, Assignments, Administrative Services, and Intra Agency Agreements.

- Contracts left to be completed in 2020 136
 - Of the 136 we have offered 86

2021 PMI Tribal contracts update

As of 09/11/2020

- Current Tribal Reserve and Bill Crediting Contracts Expiring December 31, 2020. To date:
 - 16 of the 25 Tribes have signed a Reserve Contract.
 - 9 of the 25 Tribes have signed and returned Bill Crediting Arrangements.
 - 3 of the 9 Tribes have Bill Crediting Arrangements in place.
- 51 Tribal Reserve and Bill Crediting Contracts left to sign.
- Offered Tribal Reserve and Bill Crediting Contracts.

2021 PMI Tribal contracts update (Cont.)

As of 09/11/2020

- Face-to-Face Meetings with Tribes to deliver contract packages.
 - Delivered, in person, to all Tribes all by November 20, 2019
 - All Tribes with contracts to sign have been contacted at least twice
 - Once Bill Crediting Arrangements are signed by the Tribe, the contract package will be sent to the participating regional and local power suppliers for signature.
 - Sent out receipt requested notices to Tribes that had not contacted WAPA.
- Goal: Contracts signed by all Parties by September 2020 then COVID-19 happened
- Project Manager: Darla Helms, (406) 255-2938

2021 PMI contracts update

As of 09/11/2020

- WAPA contract specific updates:
 - Central Power - contract negotiations for FES, IA, and CFA progressing
 - NPPD – contract negotiations for FES, IA, and CFA progressing
 - WAPA Irrigation Contracts – 7 total contracts – 4 executed, 1 offered out to a customer, 2 in development
 - Municipal, Rural, and Industrial (MR&I) Water Contracts – 15 total contracts – 5 executed, 8 offered out to customers, 2 in development

2021 PMI contracts update (Cont.)

As of 09/11/2020

- WAPA/BOR 2021 Indian Irrigation
 - Includes 7 projects (4 active) with 14 total contracts.
 - All 4 active project power contracts have been offered out to the Indian Irrigation customers.
 - WAPA will develop 4 required wheeling contracts for these projects.
- WAPA supported BOR in development of 19 Project Use Power irrigation contracts that BOR has begun to offer out to PUP customers.
 - WAPA will develop 18 required wheeling contracts for the PUP deliveries.

2021 Power Marketing Initiative contracts changes

- Each customer's monthly bill indicates the removal of the discount beginning January 1, 2021. The draft note says...
 - NOTE: If you receive up to 7% losses and/or a 1 mill discount, these discounts will no longer exist in the new 30-year Firm Electric Service Contract effective January 1, 2021.
- Firm Electric Service Contract language similar to...

2.7 The Parties recognize this Contract does not include a 1 mill per kilowatt-hour wheeling discount for customers who made their own transmission arrangements in-lieu of Western making such arrangements, or an up to 7 percent transmission loss adjustment for delivery of [REDACTED]'s CROD over a third-party transmission system(s).

Contracts & Energy Services 2021 List

- Contracts and Projects for 2021
 - FES Exhibit B & C Project 600

EXHIBIT B

(Operating Agreement Including Quantitative Determinations)

1. Exhibit B under the Original Contract is also the Exhibit B under this Contract, Contract No. 12-UGPR-██████, dated December 6, 2012, hereinafter called the Contract, and shall become effective on January 1, 2021, and shall remain in effect until superseded by another Exhibit B or termination of the Contract.

EXHIBIT C

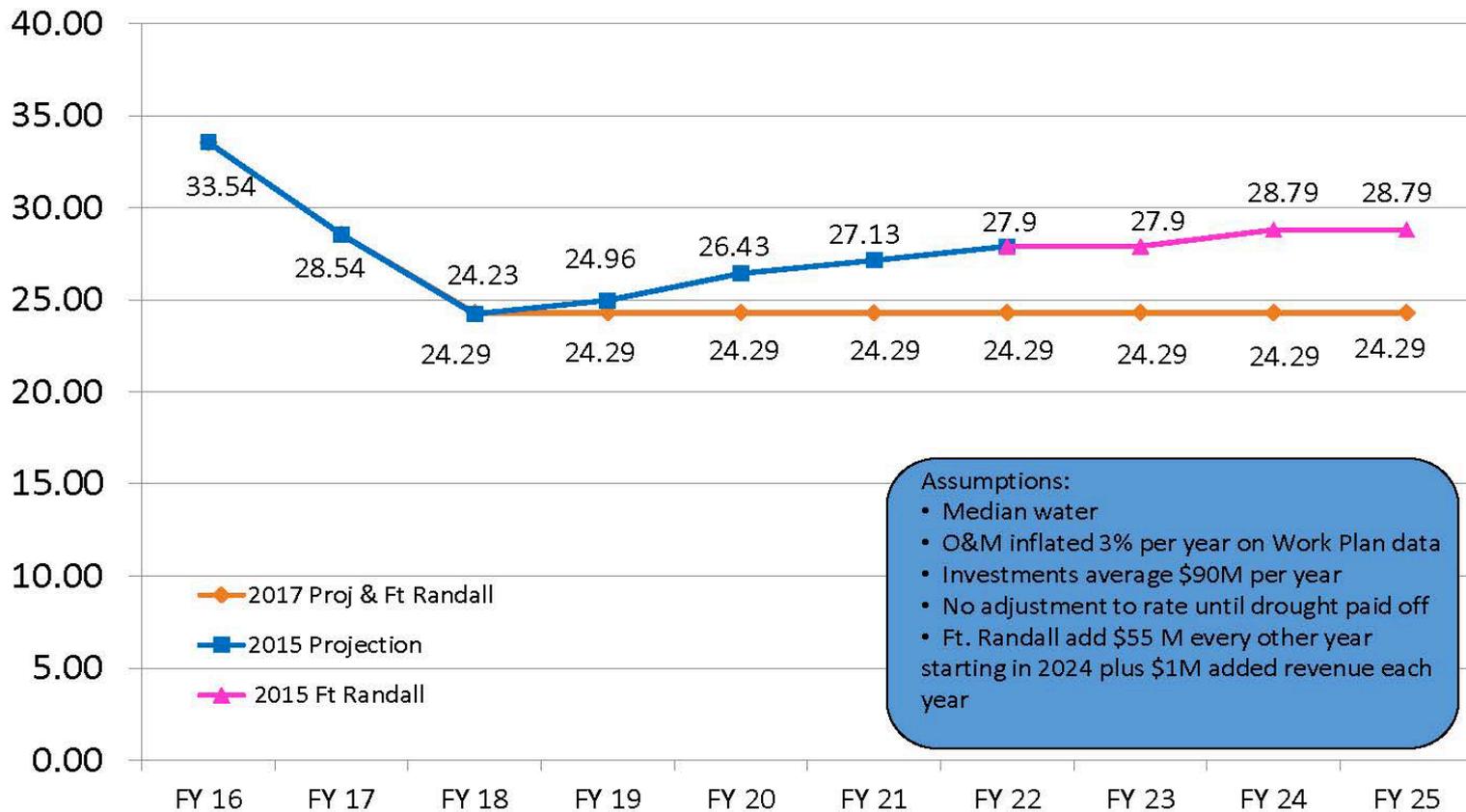
(Transmission Path and Delivery and Measurement Conditions)

1. Exhibit C under the Original Contract, not including any provision for a 1 mill per kilowatthour wheeling discount or an up to 7 percent physical transmission loss adjustment, is also the Exhibit C under this Contract, Contract No. 12-UGPR-██████, dated December 6, 2012, hereinafter called the Contract, and shall become effective on January 1, 2021, and shall remain in effect until superseded by another Exhibit C or termination of the Contract.

Contracts & Energy Services 2021 List (Cont.)

- Contracts and Projects for 2021
 - MRM fee updates in CFA CN 40
 - WEIS/ SPP and other Trans., IA & TOP 20
 - Pallid Sturgeon 10
 - Airforce Offutt to Malmstrom 5
 - Construction, Maintenance, Fiber, Compliance,
Environment, NDAs, 30
 - Total 705

Pick-Sloan Missouri River Basin Program composite rate projection is holding



Drought adder schedule for 2020

As detailed in the FRN

- *Finalize annual Power Repayment Study (Feb-March).*
 - *Determine if base rate and/or drought adder needs adjustment via formal rate adjustment.*
- *Corp snowpack is final—new generation projections April 15.*
- *Perform preliminary review of drought adder early summer – notified customers of and estimated change to the rate.*
- **Perform second review of drought adder in September. Drought Adder for 2021 remaining at zero.**
- **Notify customers in October of drought adder change to be implemented January 2021.**

UGP Transmission and Ancillary Services Update

- Published final *Federal Register* Notice (FRN) (85 FR 42384) July 14, 2020, announcing final formula Transmission and Ancillary Services Rates to be effective October 1, 2020-September 30, 2025.
- Updates include continuing the formula-based methodology of existing rates that includes annual updates to financial data in rate formulas with limited changes to:
 - Formula Rate Templates to increase transparency;
 - Formula Rate Implementation Protocols to clarify UGP's rate implementation and annual update procedures;
 - Operating Reserves formula rates to incorporate costs associated with UGP's current reserve sharing group membership; and
 - Rate Schedules for Energy Imbalance and Generator Imbalance to accommodate possible participation in a Western Interconnection energy imbalance service market.

UGP SPP market results

- FY2016
 - Bought ~\$26M
 - Sold ~(\$10M)
 - Net ~(\$18M) revenues
- FY 2017
 - Bought ~\$30M
 - Sold ~\$36M
 - Net ~\$ 6M revenues = Net increase in revenues over FY16 of \$24M
- FY 2018
 - Bought ~\$15M
 - Sold ~\$67M
 - Net ~\$52M revenues = Net increase in revenues over FY17 of \$46M
- FY 2019
 - Bought ~\$22M
 - Sold ~\$79M
 - Net ~\$57M revenues = Net increase in revenues over FY18 of \$5M
- FY 2020 through 9/10/2020
 - Bought ~\$ 7M
 - Sold ~\$ 48M
 - **Net to Date** ~\$ 41M revenues = Net decrease in revenues over FY19 of \$16M

UGP West-side results

- FY 2016
 - Bought ~\$ 216K
 - Sold ~\$ 363K
 - Net ~\$ 147K revenues
- FY 2017
 - Bought ~\$ 464K
 - Sold ~\$1,401K
 - Net ~\$ 937K revenues
- FY 2018
 - Bought ~\$ 112K
 - Sold ~\$5,650K
 - Net ~\$5,538K revenues
- FY 2019
 - Bought ~\$ 18K
 - Sold ~\$10,340K
 - Net ~\$10,322K revenues
- FY 2020 through 9/10/2020
 - Bought ~\$ 39K
 - Sold ~\$ 4,376K
 - Net ~\$ **4,337K** revenues

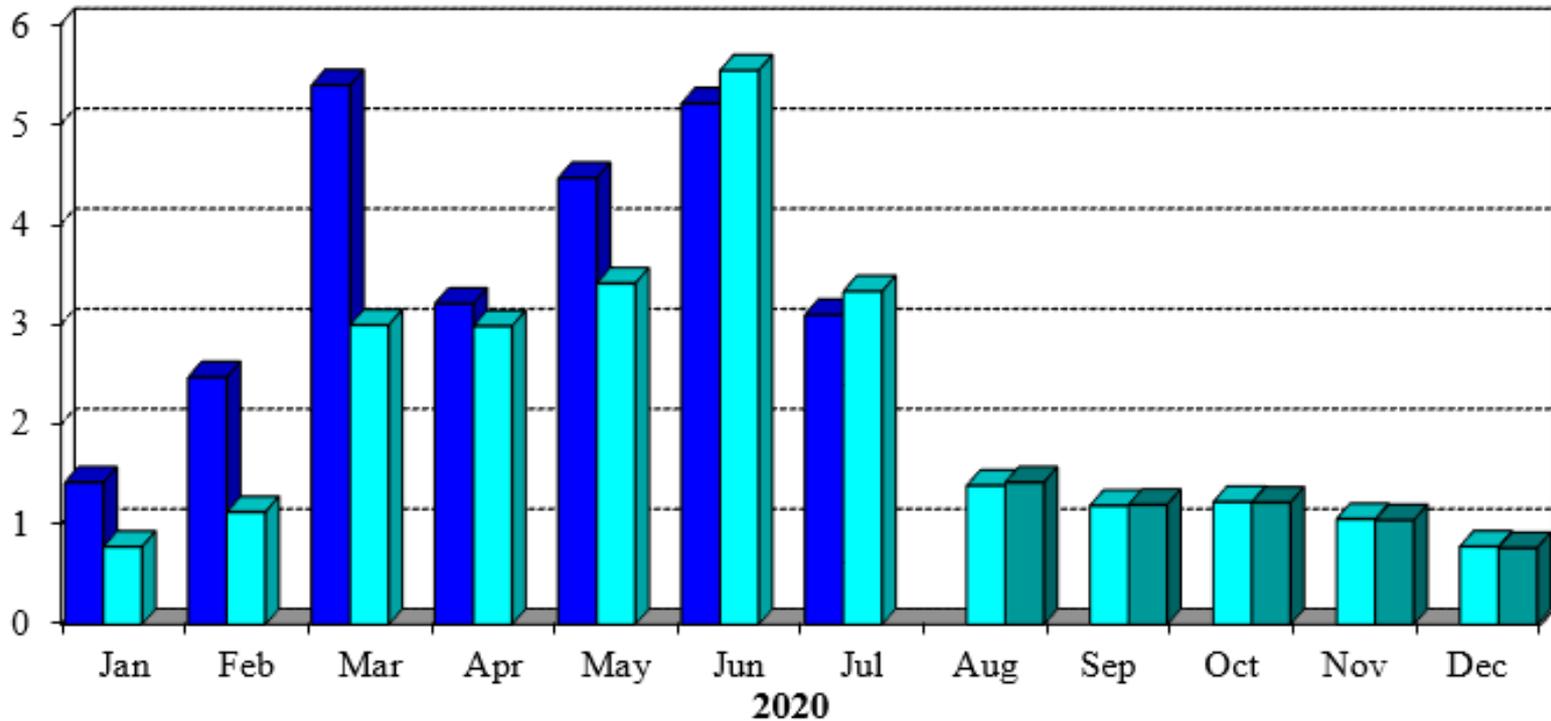
UGP Marketing Summary

SPP & West Comments

- East SPP LMP average is approx. 29% lower year than last year
- West average price is approx. 42% lower than last year
- West market prices were on average is 29% higher than SPP LMPs on the East
- East to West sales are made in the Day-Ahead Market intentionally when the West BA's market prices are higher than SPP's Integrated Marketplace
- Lower Generation due to decreased water discharge rates
 - Last year was a record year, this year is above average, but lower than last year
- Oahe Recovery Event for several days starting July 3rd
 - Cost of reducing flows from Oahe + the other projects was over \$1M
- More off-peak purchases are intentional when prices are lower
 - Keep generation available to serve commitments on-peak
- A greater penetration of wind has artificially depressing LMP
 - This should change slightly in February with the NDVER to DVER conversion on the east

CY 2020 Missouri River Runoff Above Sioux City, Iowa

Million Acre-Feet



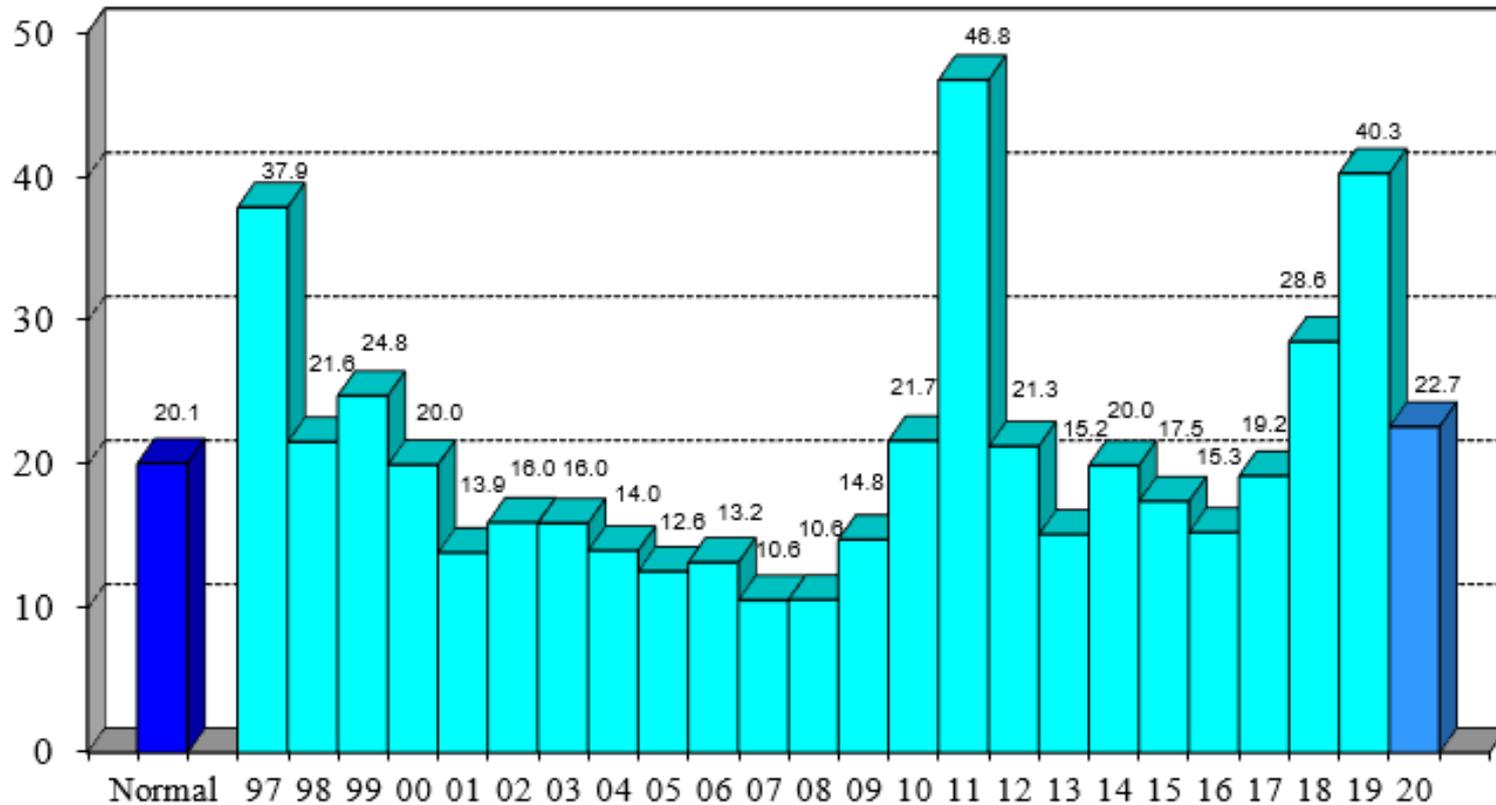
■ **Actual** ■ **Normal** ■ **Forecast**

Aug 1, 2020 Forecast – 30.9 MAF – 120%

Average: 25.8 MAF

Gavins Point Annual Release

Million Acre-Feet



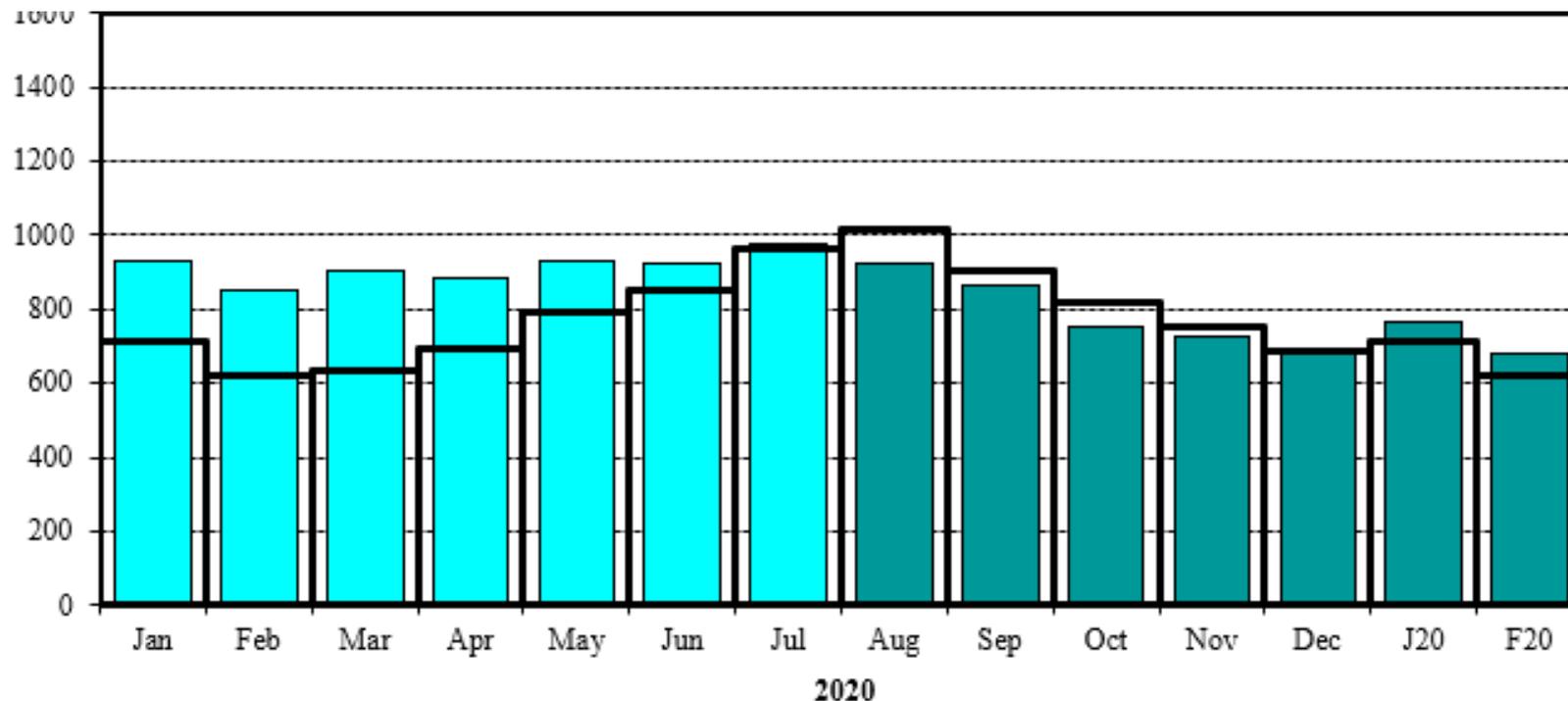
Aug 1, 2020 Forecast

Upper Basic: 24.3 MAF

Lower Basic: 22.3 MAF

Missouri River Mainstem System Forecasted Energy Generation

Energy in GWh



■ Actual
 ■ Forecast
 1967-2019

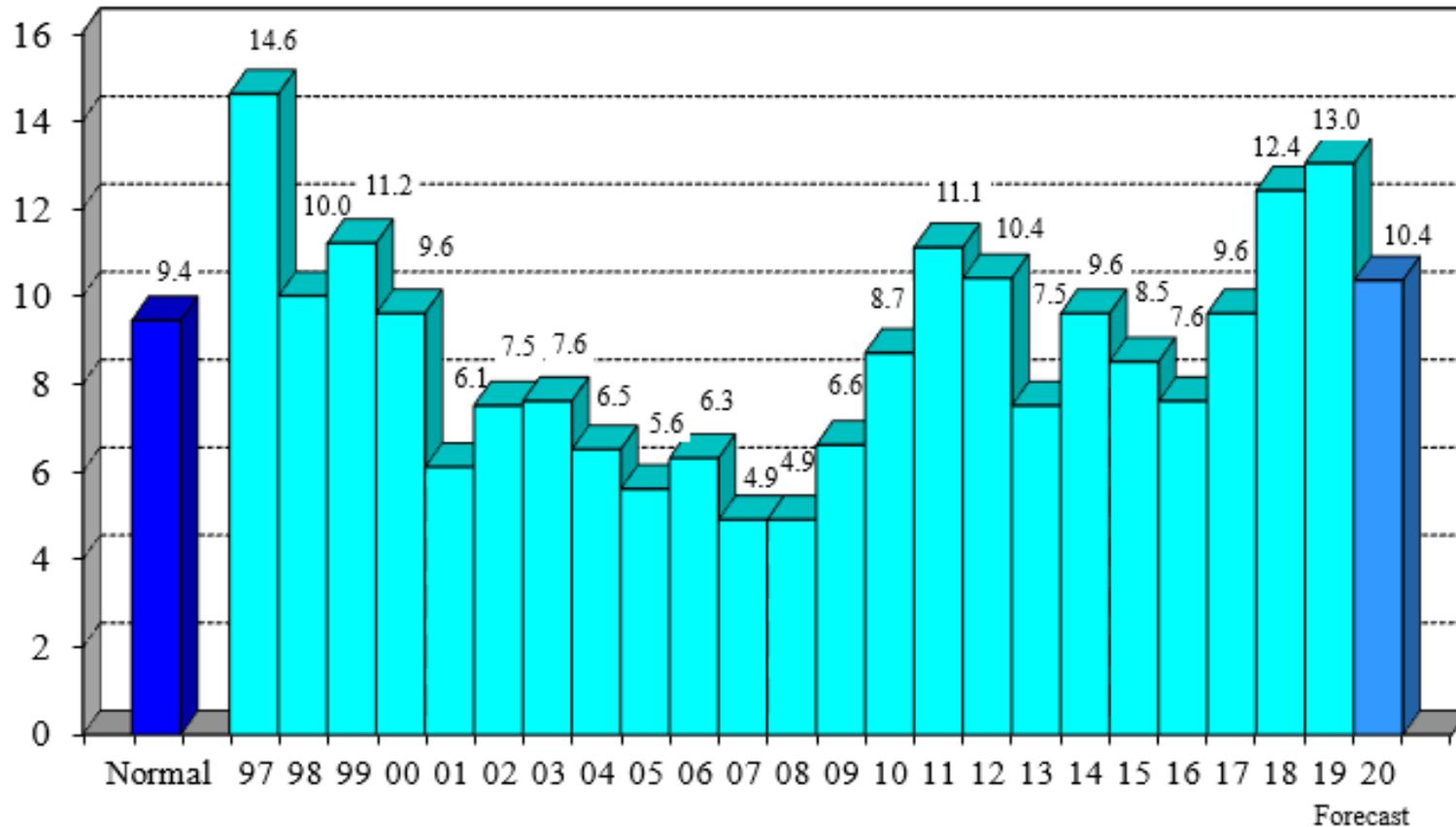
Upper Basic: 10,900 GWh

Basic: 10,400 GWh

Lower Basic: 10,200 GWh

Mainstem System Generation

Millions of Megawatt Hours



Aug 1, 2020 Forecast

Upper Basic: 10.9

Lower Basic: 10.2