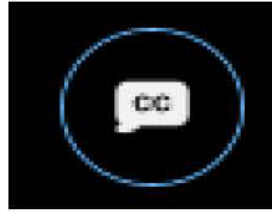


# Webex Accessibility tools

## To enable Closed Captions

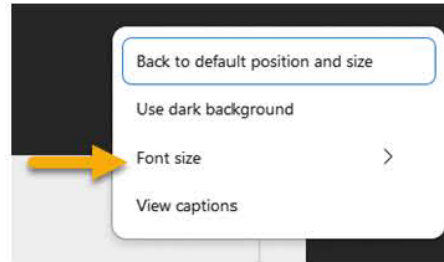
Select the **CC icon** in the lower-left of the WebEx screen



*Note: CC is set individually by each person who wants to enable them.*

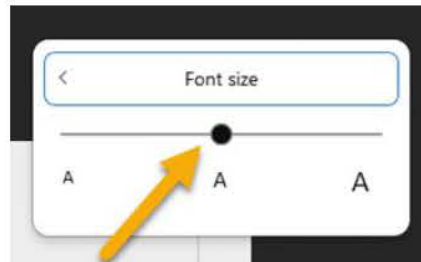
## Change font size

Select the **ellipsis** in the lower right



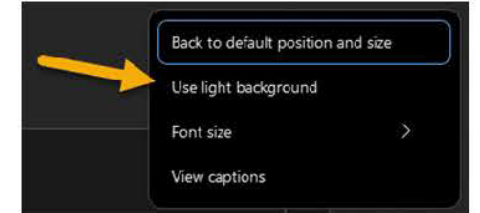
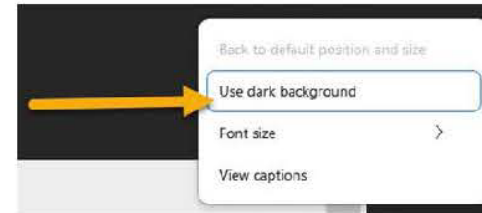
Select **font size**

Use the slider to select the desired size



## Change background contrast

1. Select the **ellipsis** in the lower right
2. Select the **dark or light background**





Bonneville  
POWER ADMINISTRATION



# QUARTERLY BUSINESS REVIEW TECHNICAL WORKSHOP

August 15, 2024

# AGENDA

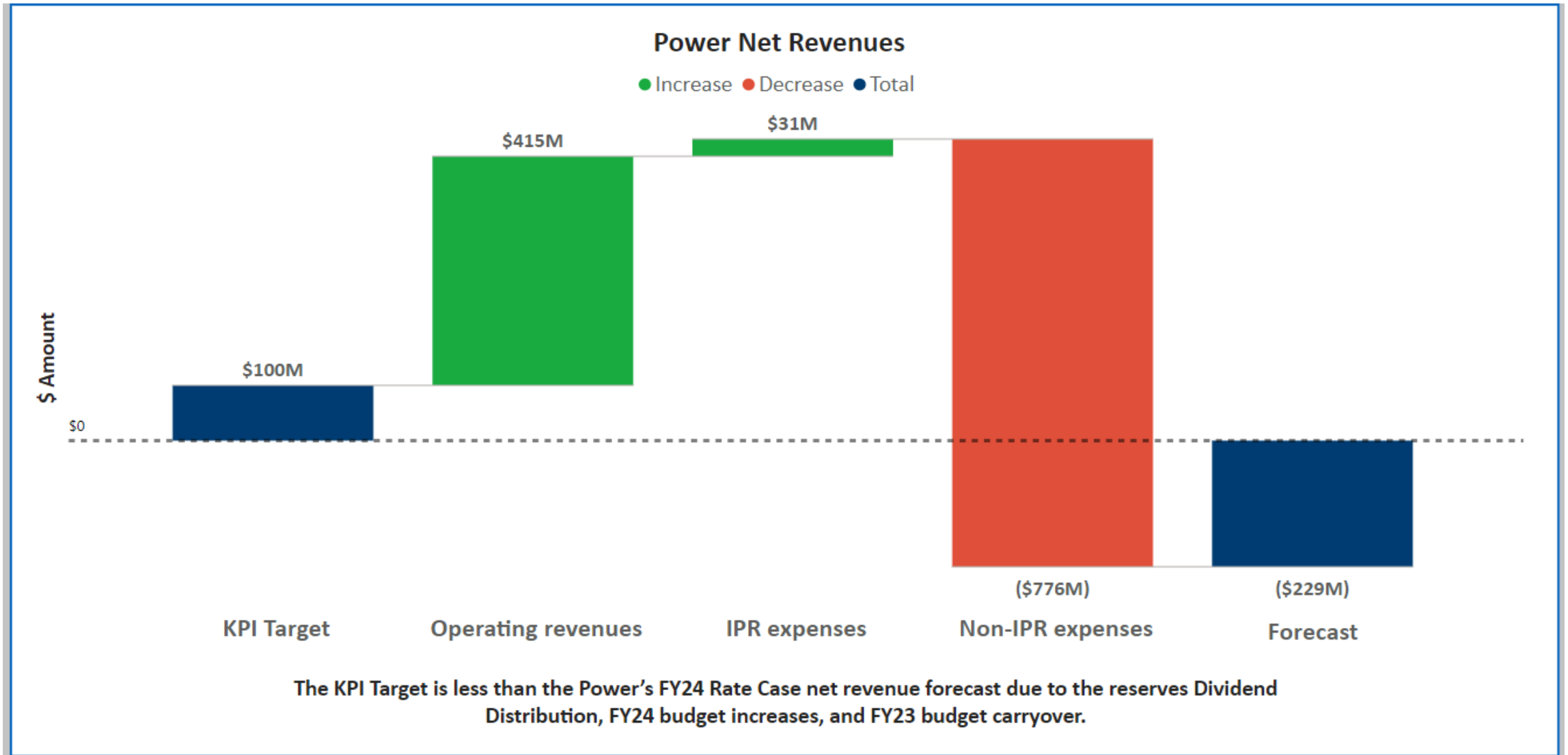
Time	Min.	QBRTW Topic	Presenter
1:00	5	Introduction	Amber Mulvey
1:05	15	FY24 Q3 Forecast: Agency Net Revenues	Karlee Manary, Pablo Zepeda-Martinez
1:20	15	FY24 Q3 forecast: Reserves for Risk	Mike Kilbride
1:35	15	FY24 Q3 forecast: Agency Capital	Heather Seibert, Gwen Resendes
1:50	15	Fed Hydro capital metrics	Wayne Todd
2:05	15	Transmission capital metrics	Jeff Cook, Mike Miller
2:20	15	BPA EIM Metrics	Matt Germer, Mariano Mezzatesta, Kelii Haraguchi
2:35	15	Western Resource Adequacy Program (WRAP)	Russ Mantifel
2:50	10	Questions & Answers / Closing	Amber Mulvey

# FY24 Q3 Forecast: Agency Net Revenues

Presenter: Karlee Manary and Pablo Zepeda-Martinez



# FY24 Q3 FORECAST: POWER NET REVENUE



# QBRTW ANALYSIS: POWER NET REVENUE

## Forecast for Operating Revenues: **\$415M above the target.**

- Gross sales are forecast to be \$308M greater than the target largely due to increases in trading floor sales driven by high prices, especially during the January cold snap.
- U.S treasury credits from 4h10c are \$150M higher than expected due to a higher forecast of modeled purchases and prices.
- Other revenues are \$38M greater due to financial swap revenues.
- These increases are partially offset by:
  - \$63M forecast reduction for bookouts which are net revenue neutral.
  - The slice true-up (included in the appendix of this presentation) is forecast to be a credit to customers of \$19M, mainly due to higher revenue credits (e.g., 4h10c).

## Forecast for Integrated Program Review Operating Expenses: **\$31M below target**

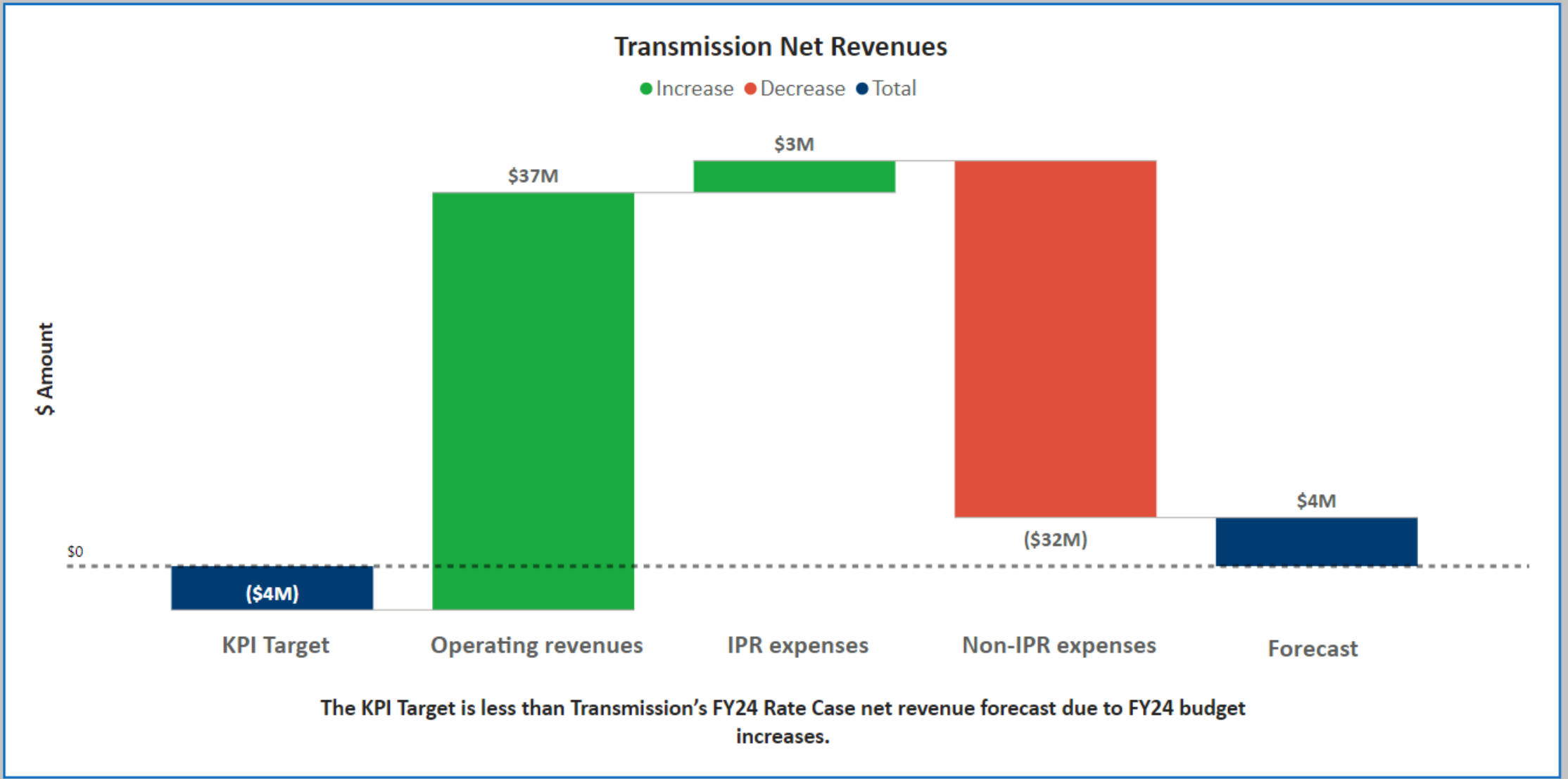
- Asset management expenses increased \$5M primarily due higher costs for Energy Northwest and Bureau of Reclamation. In addition, Columbia River Fish Mitigation (CRFM) studies cost are higher due to inflation. Partially offsetting these costs are lower Fish & Wildlife program costs due to hiring and contract delays, and a lower Corps of Engineers expenses.
- Operations expenses decreased \$20M primarily due to lower wind output for renewable energy purchases, lower staffing, travel and training, and lower Conservation Infrastructure program spending.
- Commercial activities decreased \$9M primarily due to Conservation Purchases program spending resulting from lower work performed in FY24.
- Enterprise Services programs decreased \$7M mainly driven by lower staffing levels than planned.

# QBRTW ANALYSIS: POWER NET REVENUE (cont.)

## Forecast for Non-IPR Program expenses: **\$776M above target**

- The power purchases forecast is \$948M higher, driven by the January cold snap and dry conditions leading to increased market purchases at higher prices.
- Depreciation and amortization—a non-cash item—is \$13M higher due to more federal and Columbia Generating Station capital being placed into service than anticipated.
- Fish & Wildlife and Lower Snake Hatcheries program forecast to spend \$11M of the Reserves Distribution Clause (RDC) funding they received, which wasn't included in the target. So far, \$7M has been spent (\$2M for Fish & Wildlife RDC, \$5M for Lower Snake Hatcheries RDC).
- The Colville and Spokane Generating Settlements are up \$8M to higher average power sales, the actual price per megawatt hour and inflation per the Consumer Price Index experienced in fiscal year 2023, which are factors that increased the settlement payment made in fiscal year 2024.
- These increases are partially offset by the following:
  - There will be no recorded Tier 2 power purchase expenses. The target included a rate case forecast of Tier 2 power purchases of \$112M is higher than historical years due to more customers electing to put their Tier 2 load on BPA than in the past, creating a higher Tier 2 load obligation this rate period, which is being served by the FCRPS system mix.
  - Bookouts reduce Non-IPR expenses by \$63M but are net revenue neutral due to a like amount in the revenue section.
  - Lower Transmission and Ancillary Services by \$18M, mainly driven by lower total inventory.
  - Lower 3<sup>rd</sup> Party GTA wheeling expense by \$8M due to lower rate increases than expected.
  - The remaining \$3M delta is due to small forecast reductions from multiple Non-IPR program expense.

# FY24 Q3 FORECAST: TRANSMISSION NET REVENUE





# QBRTW ANALYSIS: TRANSMISSION NET REVENUE

## Forecast for Operating Revenues : **\$37M above target**

- \$63M increase in sales driven primarily by:
  - Increased ancillary service revenues because of a significant increase in EIM sub-allocated charges mainly due to substantial activity during January's cold snap.
  - Increased Southern Intertie short-term revenues resulting from increased wheeling due to favorable market prices.
- \$7M increase in Other Revenues driven by increased reimbursable and other revenues.
- Partially offset by:
  - \$33M decrease in revenues from the Power Business Line driven by:
    - Lower hydro inventory forecast resulting in a lower forecast of Short-Term Point-to-Point purchases from the Transmission Business Line by the Power Business Line.
    - Increased EIM Sub-allocated revenue to the Power Business Line which experienced significant activity during January's cold snap.

## Forecast for Integrated Program Review Operating Expenses: **\$3m below target**

- \$6M increase in the Asset Management and Operations driven by:
  - Less corporate allocations leading to an increase in direct charging to support various Asset Management programs.
  - Increased maintenance work and fleet costs coming in above the target.
- Offset by:
  - \$9M decrease in Commercial Activities and Enterprise Services programs driven by lower staffing levels.

# QBRTW ANALYSIS: TRANSMISSION NET REVENUE

## Forecast for Non-IPR Program Expenses: **\$32M above target**

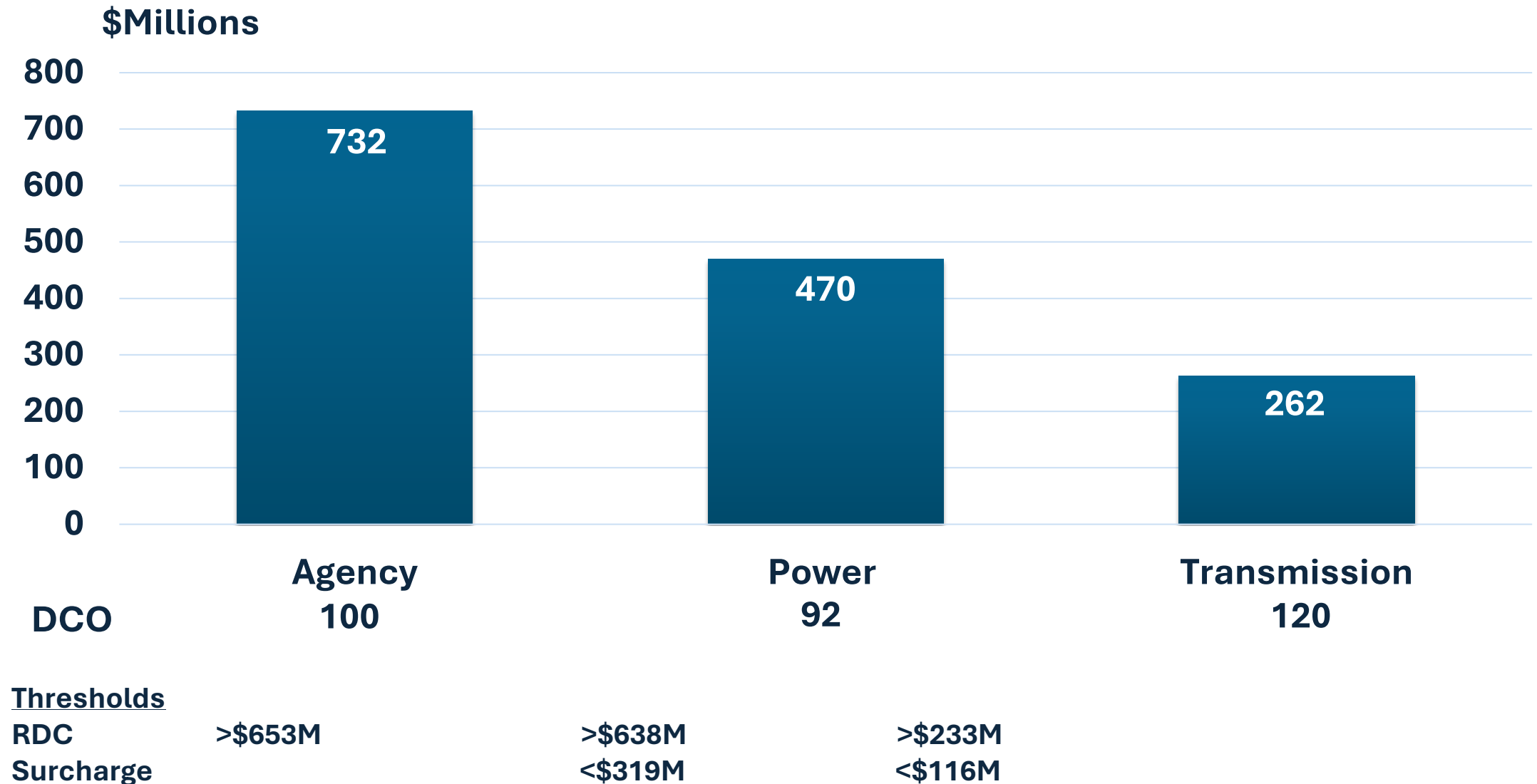
- \$41M increase in the Commercial Activities Non-IPR program primarily driven by increased EIM entity scheduling coordinator settlements charges which experienced significant activity during January's cold snap.
- Partially offset by:
  - \$9M decrease in net interest expense and other income primarily driven by:
    - Increased AFUDC due to a higher AFUDC rate and construction work in progress.
    - Increased interest income due to significantly higher interest rates.

# RESERVES

Presenters: Mike Kilbride

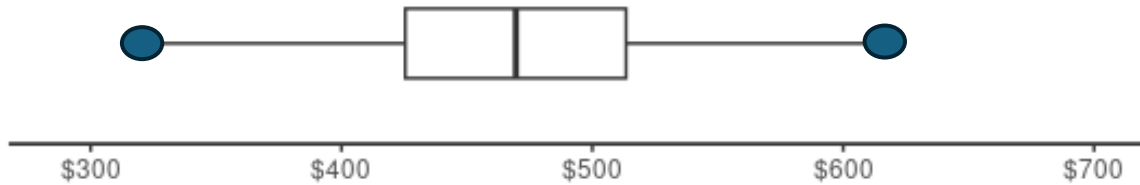


# Q3 FY24 FORECAST: RESERVES FOR RISK



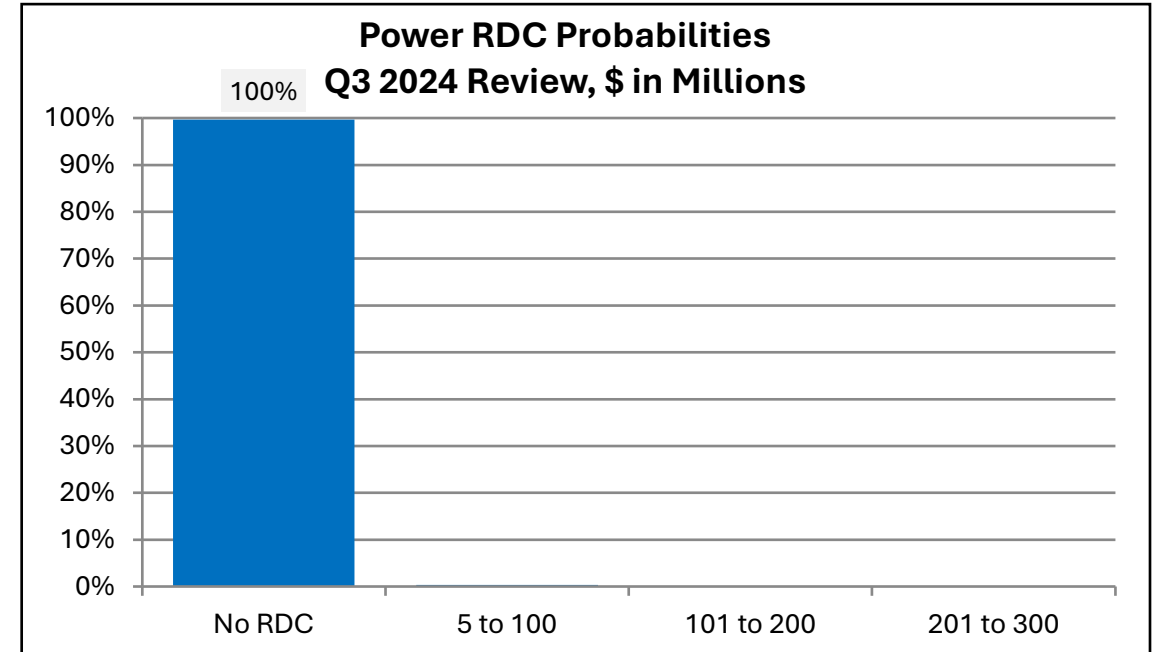
# Q3 FY24 FORECAST: POWER FINANCIAL RESERVES

FY24 EOY Power Reserves for Risk Distribution



## **Power Reserves Range**

- 1% to 99% Range:  
\$322m to \$614m
- 25% to 75% Range:  
\$425m to \$514m

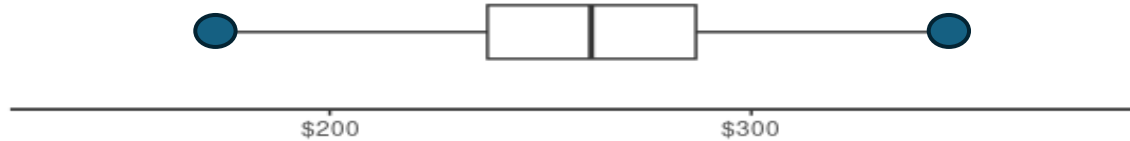


## **Power Risk Mechanisms**

- <1% modeled probability of an RDC with an expected value of <\$1M
- <1% modeled probability of an FRP Surcharge with an expected value of <\$1m
- 0% modeled probability of a CRAC

# Q3 FY24 FORECAST: TRANSMISSION FINANCIAL RESERVES

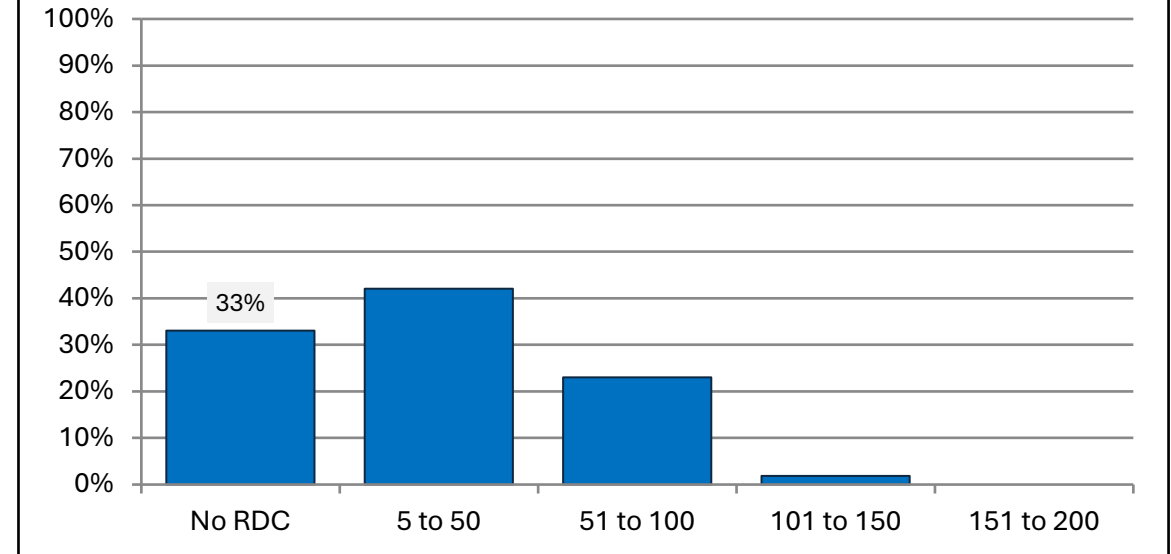
## FY24 EOY Transmission Reserves for Risk Distribution



### Transmission Reserves Range

- 1% to 99% Range:  
\$175m to \$344m
- 25% to 75% Range:  
\$237m to \$287m

## Transmission RDC Probabilities Q3 2024 Review, \$ in Millions



### Transmission Risk Mechanisms

- 67% modeled probability of an RDC with an expected value of \$29M
- 0% modeled probability of an FRP Surcharge
- 0% modeled probability of a CRAC

# FY24 Q3 Forecast: Agency Capital

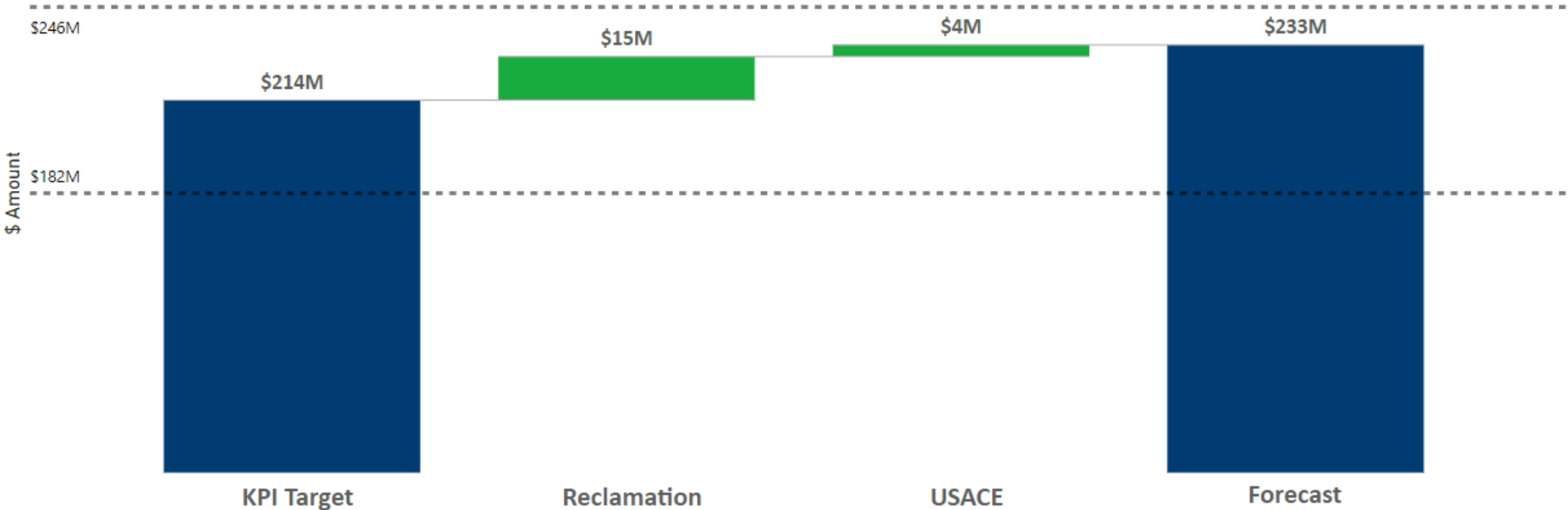
Presenters: Heather Seibert and Gwen Resendes



# FY24 Q3 FORECAST: FED HYDRO CAPITAL

## Fed Hydro Capital Waterfall

● Increase ● Decrease ● Total



The Fed Hydro capital expenditure KPI target is a range. The range is equal to +/- 15% of the target midpoint. If Fed Hydro direct capital spend is equal to or between the boundaries, the target is green.



# QBRTW ANALYSIS: FED HYDRO

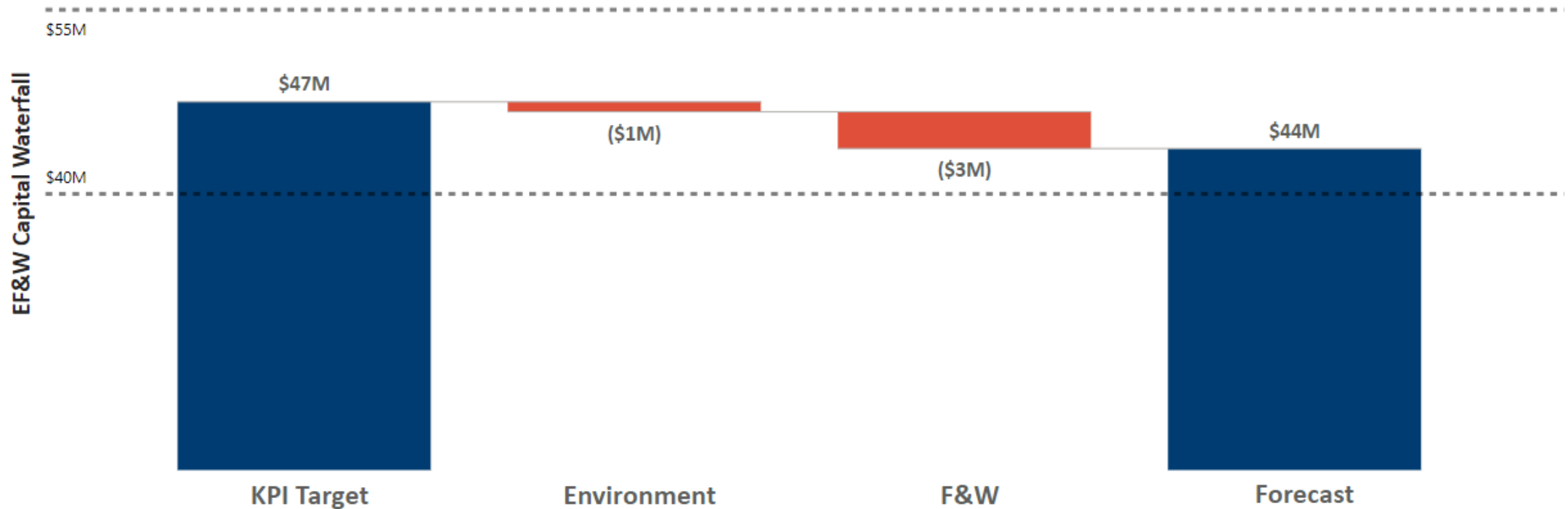
## **Power Fed Hydro direct capital forecast increased \$19M overall in Q3 compared to the KPI Target midpoint primarily due to:**

- \$15M forecast increase in the Bureau of Reclamation due to ramping up of large projects such as the Grand Coulee Dam K22 transformer replacement and the Chief Joseph Dam generator rewinds.
- \$4M increase in the United States Army Corps of Engineers due to work ramping up at McNary Dam's major projects, including turbine design and replacement, powerhouse control system upgrade, and spillway gate hoist replacement.
- Roughly 60% of forecasted Fed Hydro capital spend this FY is associated with major capital projects, easily the highest we've seen in the program.
  - This indicates that we are beginning construction on the larger projects we've identified as key to closing the historical gap between actual capital expenditures and asset planning targets.

# FY24 Q3 FORECAST: EF&W CAPITAL

## EF&W Capital Waterfall

● Increase ● Decrease ● Total



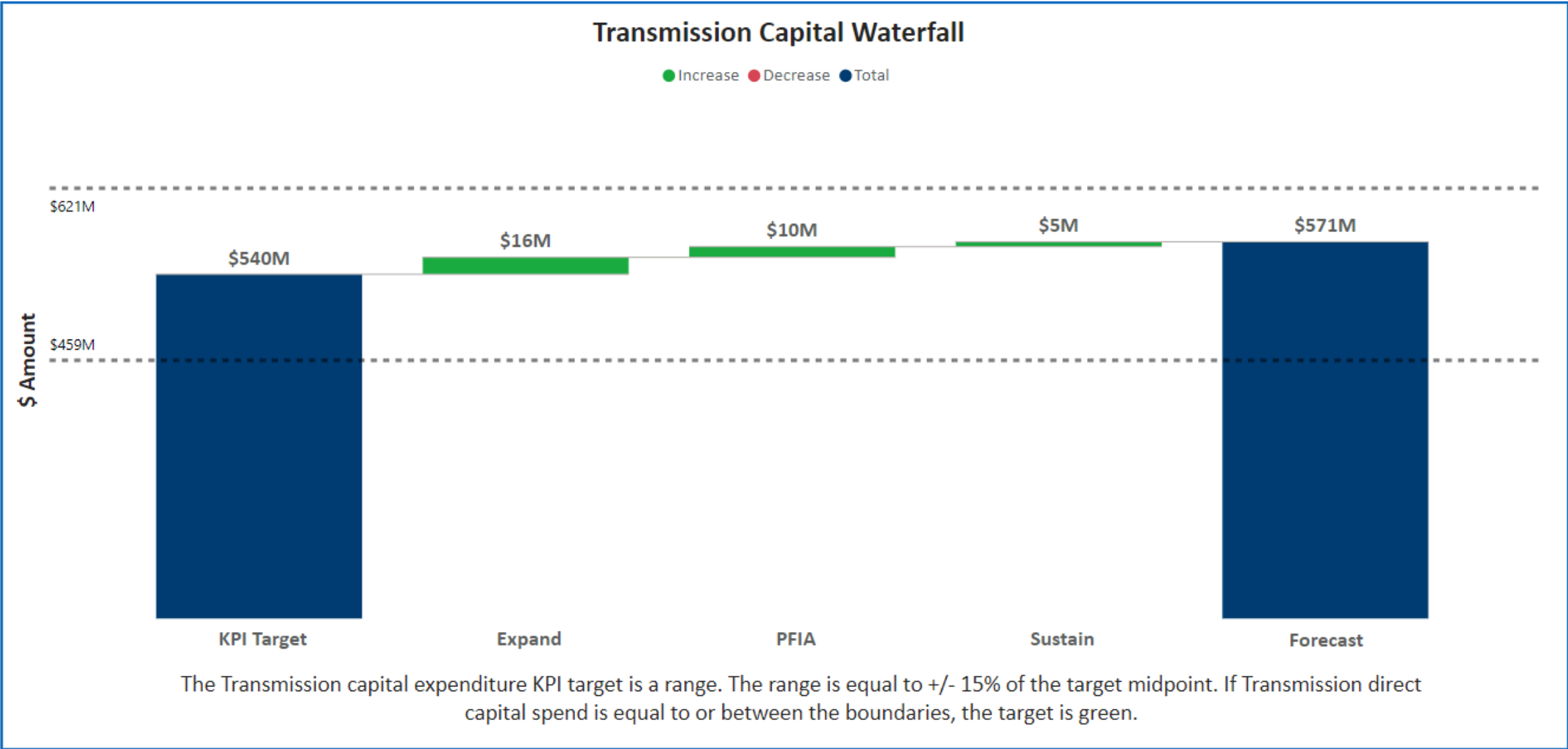
EF&W capital does not have its own KPI, but does roll up into the Agency Capital KPI. The +/- 15% range is based on approved Operating Year budget and is displayed to support tracking capital execution and how these expenditures could impact the Agency KPI target.

# QBRTW ANALYSIS: EF&W

**Environment, Fish and Wildlife direct capital decreased \$4M overall compared to the Target midpoint primarily due to:**

- \$1M decrease in Environment.
- \$3M decrease in Fish and Wildlife due to hatchery project delays, partially balanced out by higher than expected land purchases.

# FY24 Q3 FORECAST: TRANSMISSION CAPITAL

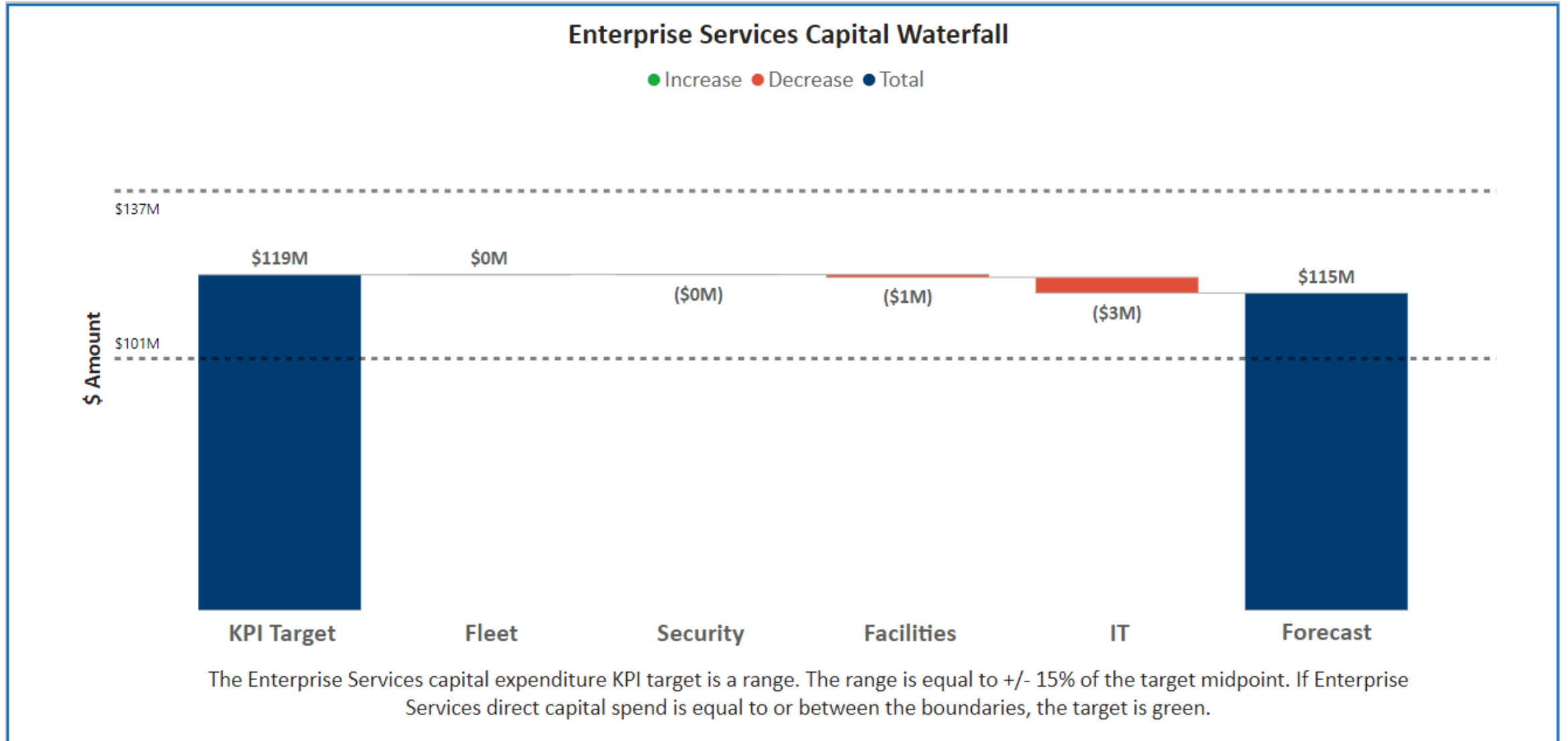


# QBRTW ANALYSIS: TRANSMISSION

## **Transmission's direct capital forecast increased by \$31M compared to the KPI Target midpoint broken down as follows:**

- Transmission's Expand forecast increased by \$16M primarily due strong execution on the Midway-Ashe, South of Tri Cities, McNary Paterson Tap and Tucannon Shunt Reactor projects.
- Transmission's Sustain program increased by \$5M primarily due to increasing Subs DC work, an aircraft purchase and additional costs in land.
- Transmission's PFIA also increased by \$10M to accommodate budget transfers from Expand to the customer-funded portion of the Longhorn project.

# FY24 Q3 FORECAST: ENTERPRISE SERVICES CAPITAL



# QBRTW ANALYSIS: ENTERPRISE SERVICES

## **Enterprise Services direct capital forecast decreased by \$4M primarily due to:**

- IT which reduced by \$3M in total. IT's Transmission specific forecast reduced by \$2M to account for the cancellation of the Transmission Circuit Info System project which will be reset with a different solution slated for FY25, and their Power specific forecast reduced by \$1M to reflect updated forecasts on multiple projects.
- Additionally, Facilities reduced their forecast by \$1M due to updated project forecasts.

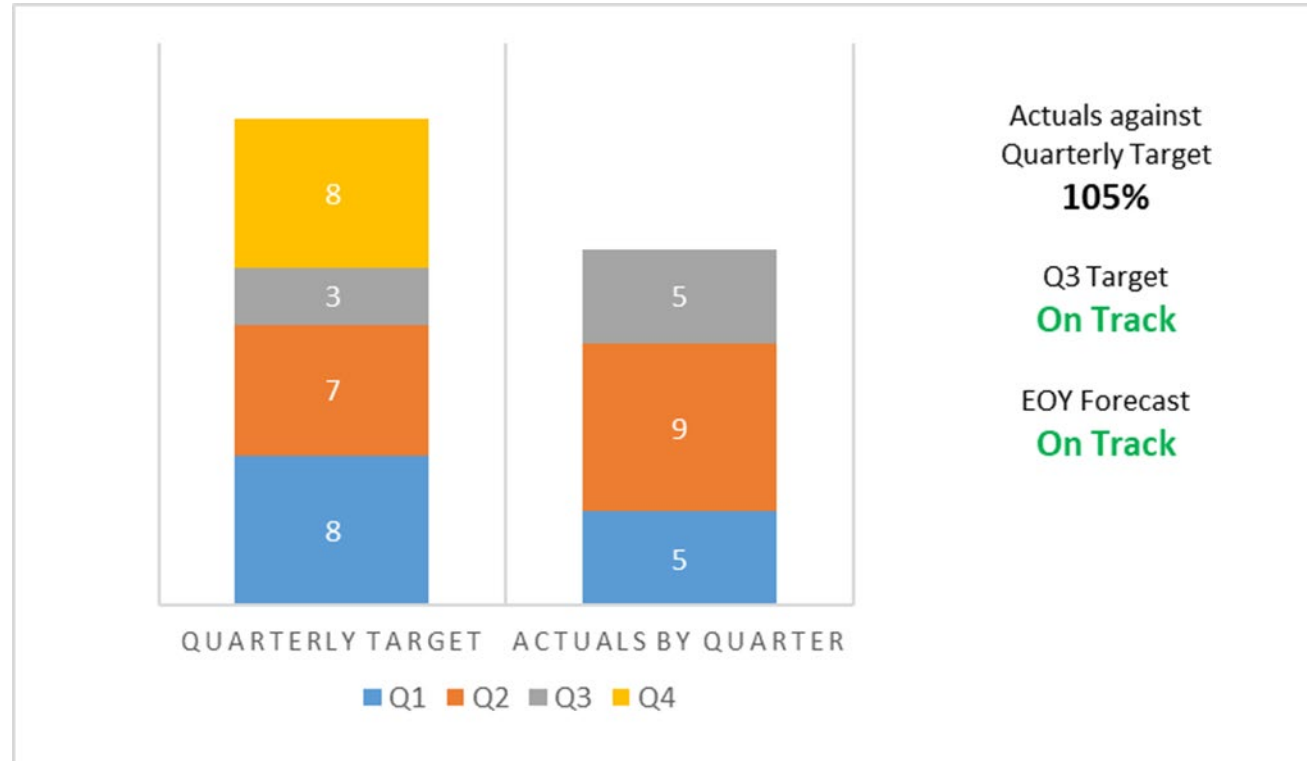
# FEDERAL HYDRO CAPITAL METRICS

Presenter: Wayne Todd





# FED HYDRO CAPITAL MILESTONES



**Key Takeaway:** Quarterly target on track. End-of-year target is on track.

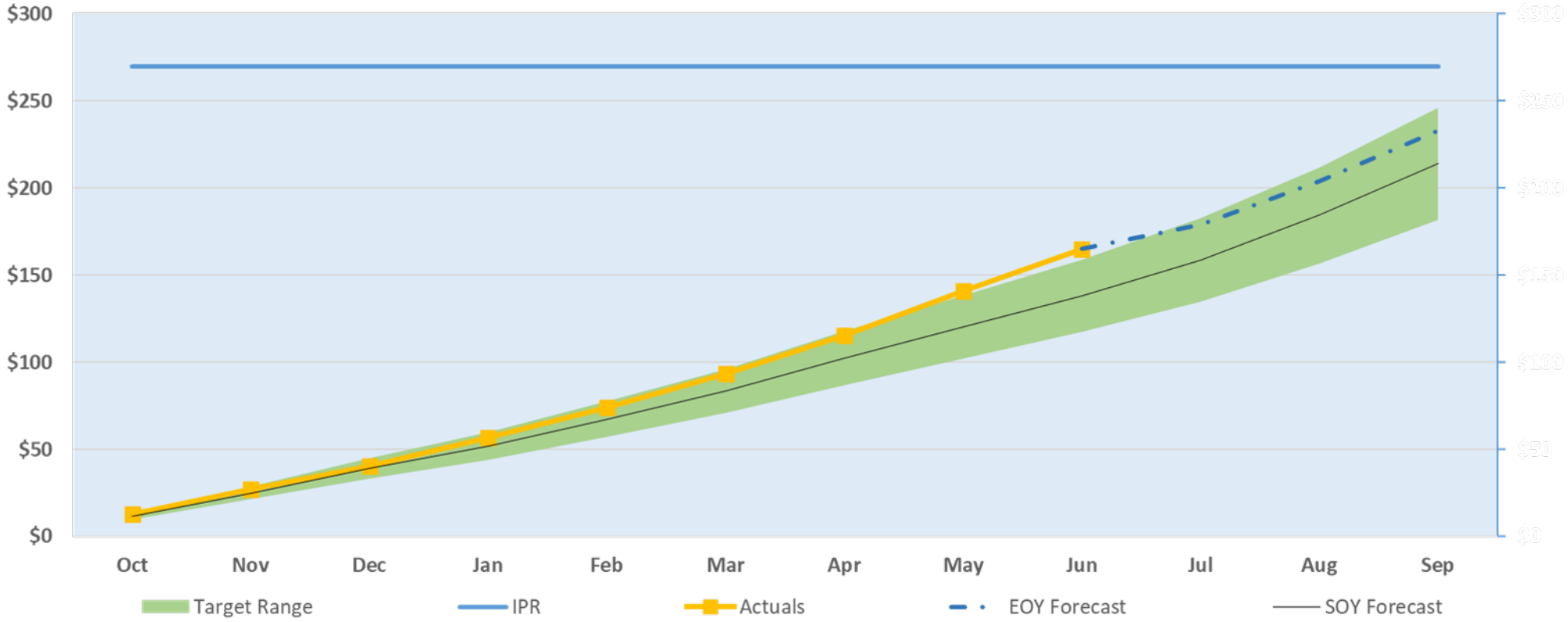
# FED HYDRO CAPITAL PROJECT MILESTONES

Capital Projects		Target Milestone	On Track
Q1	MCN Intake Gantry Crane 5	Physical Completion	Complete
	MCN Tailrace Gantry Crane 4	Physical Completion	Complete
	TDA Thrust Bearing Oil Coolers	Physical Completion	Delayed to FY25
	BCL CERCLA	Award Contract	Delayed to FY25
	BCL CERCLA	Physical Completion	Delayed to FY25
	BON 1 Main Unit Breaker Replacement	Award Contract	Delayed to Q4
	LGS Headgate Repair Pit Upgrade	Physical Completion	Complete
	DEX Intake Gantry Crane	Physical Completion	Delayed to FY25
	JDA Generator Cooling Water System	Award Contract	Delayed to Q4
	LOP Unit 2 Bus	Physical Completion	Complete
	JDA Control Room Fire Protection Upgrades	Physical Completion	Complete
	MCN Station Service Turbine Rehab Unit 1	Physical Completion	Complete
Q2	LMN Headgate Repair Pit Upgrade	Physical Completion	Complete
	BON 2 Bradford Island Service Building PRQ Switchgear Upgrade	Award Contract	Delayed to Q4
	GCL Powerplant Battery Replacement #2947	Award Contract 1	Delayed to Q4
	GCL LPH/RPH Cyclops Semi-Gantry Crane Replacement #3917	Complete Design	Complete
	BON Spillway Gate Repair & Storage Pits	Award Contract	Complete
	GCL Radio System Modernization #3918	I.E. Contract Awarded	Complete
	CHJ Powerhouse sump pump and controls	Physical Completion	Complete
	LIB T1 Transformer	Award Contract	Complete
	GCL P1-P6 Exciters, Relays & Controls, PG7-PG12 Governors, Exciters, Relays & Controls	Physical Completion	Delayed to FY29
	MCN Levee Drainage Pump Station Upgrades	Contract Award	Complete
	HCR Spillway Gate Rehab	Physical Completion	Complete
	JDA Fish Pumps Emergency Repair	Physical Completion	Complete
	BON 1 Metering Enhancements	Complete Design	Complete
	MCN Spillway Deck Safety Handrail	Award Contract	Complete
Q3	CHJ Powerbus- Units 1-16	Award Contract	Delayed to FY25
	GCL K21-K24 Transformers Replacement	Complete Design	Complete

## Key Takeaway:

Roughly 60% of forecasted capital spend this FY is associated with major capital projects, easily the highest we've seen in the program. This indicates that we are beginning construction on the larger projects we've identified as key to closing the historical gap between actual capital expenditures and asset planning targets.

# FED HYDRO CAPITAL SPEND



**FY24 Key Performance Indicator**

- IPR: \$270 million
- SOY Forecast: \$214 million
- Target Range: \$182 - \$246 million

**Key Takeaway:** On Track through Q3 w/ \$165 million in actuals; +/-15% range thru Q3 is ~\$117-\$159 million; EOY forecast is \$233 million.

# FED HYDRO CAPITAL BREAKDOWN BY PHASE OF WORK

## ACTIVE PROJECTS BY PHASE OF WORK:

Phase 1a (scoping and alternatives analysis):	53 (21% of projects, 5% of budget)
Phase 1 (design):	36 (14% of projects, 9% of budget)
Phase 2 (construction):	160 (64% of projects, 86% of budget)

## HIGHLIGHTS:

- Work is ramping up at McNary, making up about one quarter of total spend this FY
- Generator Windings at Chief Joseph are underway

### Key Takeaway:

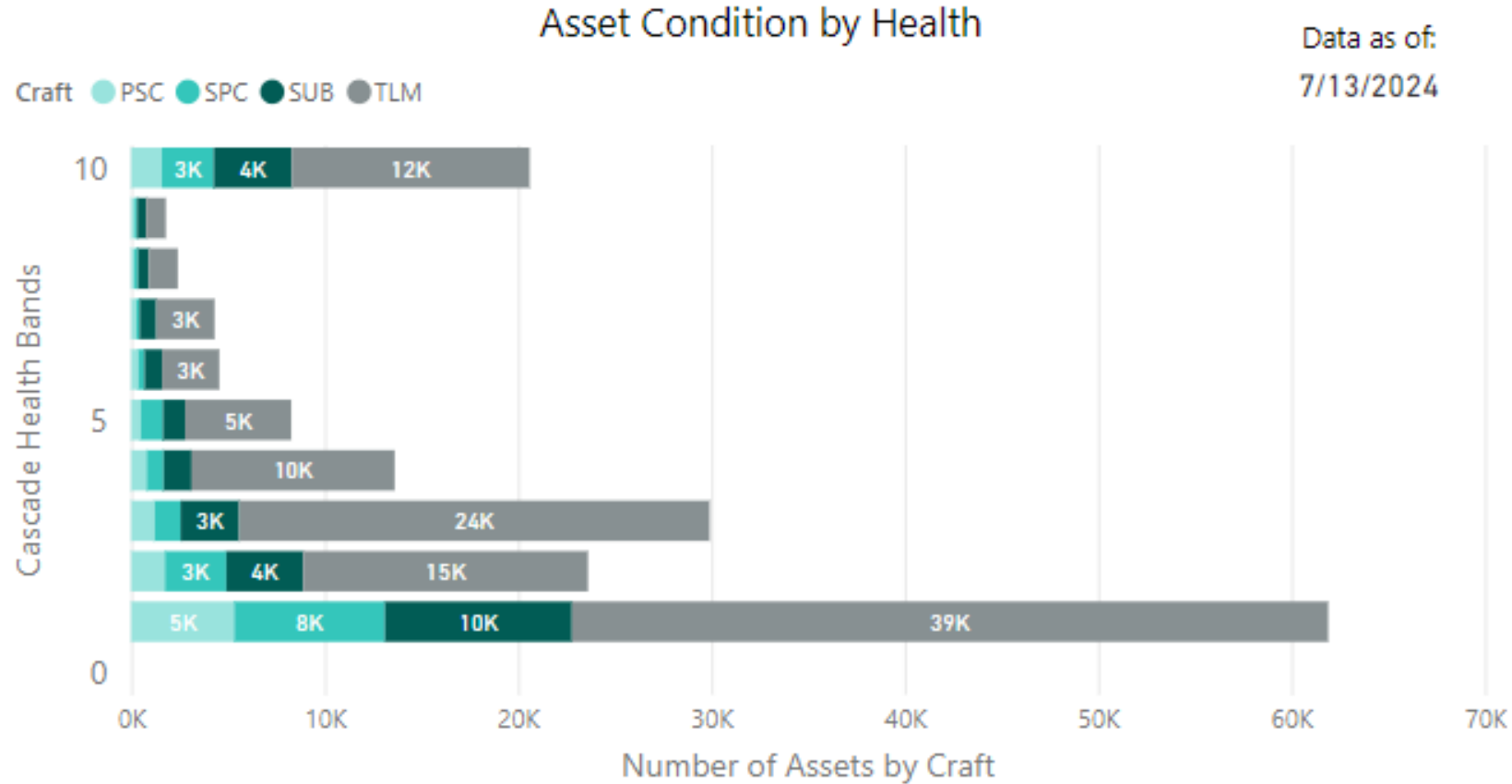
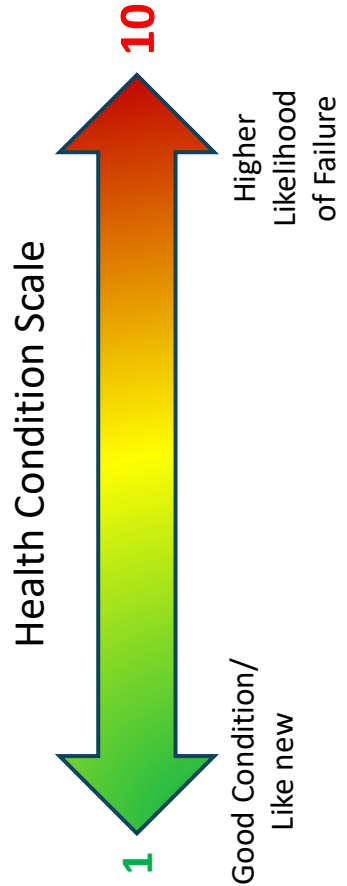
249 active projects in hydro portfolio  
Larger projects are going to create a solid floor for annual capital spend for the foreseeable future

# TRANSMISSION SERVICES CAPITAL METRICS

Presenters: Jeff Cook and Mike Miller



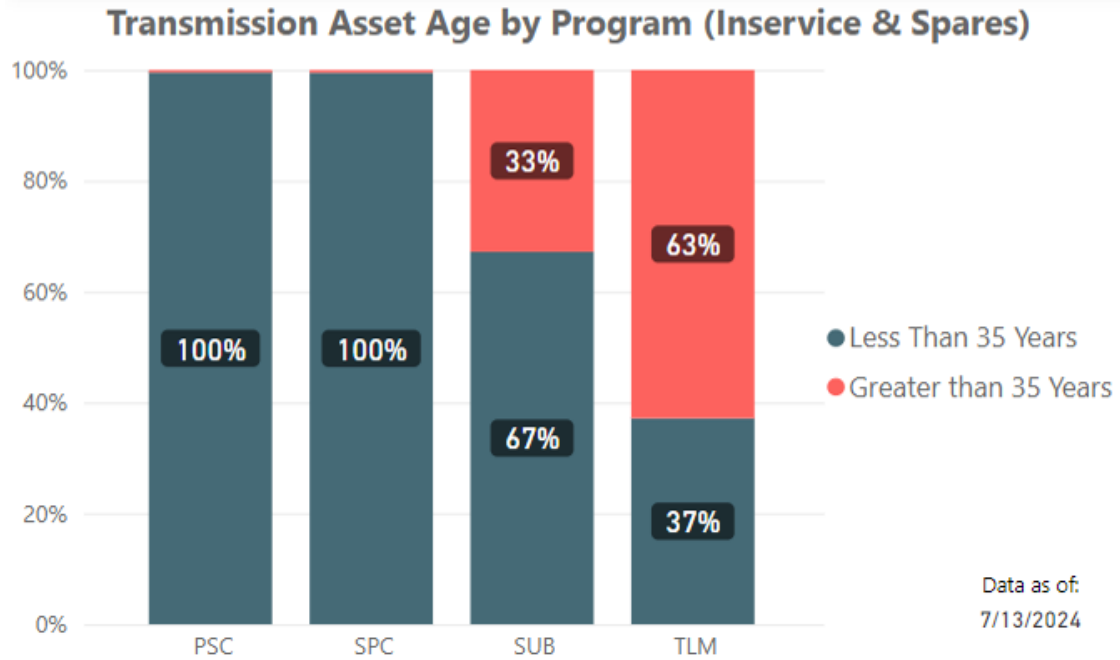
# ASSET MANAGEMENT HEALTH METRIC



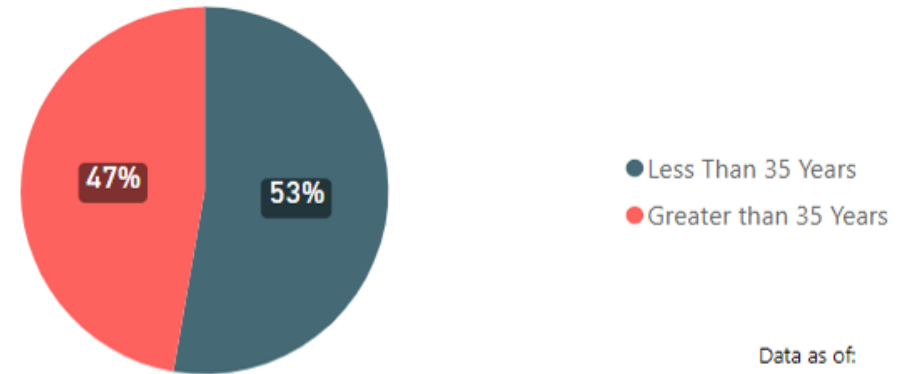
PSC: Power System Control, SPC: System Protection Control, Sub: Substation, TLM: Trans Line Maintenance

\*\*\*Transmission is defining its population of critical assets as assets represented in Transmission’s sustain program. The definition of critical assets will continue to evolve as we get further into the Asset Hierarchy effort. Transmission’s health scoring methodology is most mature for substations and some lines assets, or about 40% of the assets included in Transmission’s sustain program.

# ASSET MANAGEMENT HEALTH METRIC



### Transmission Asset Age (Inservice & Spares)

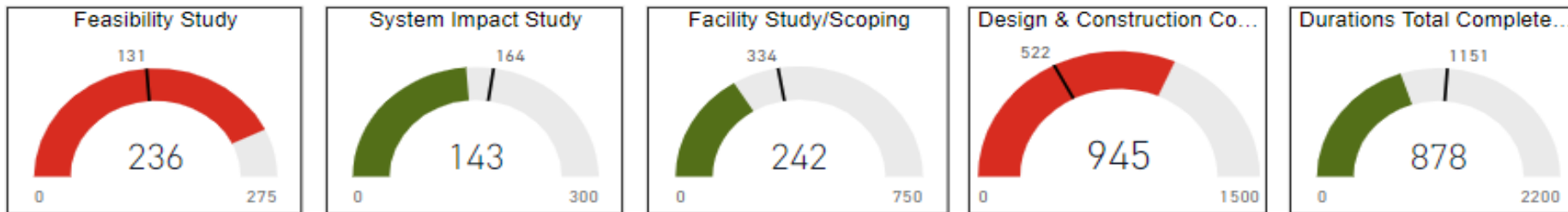


Data as of:  
7/13/2024

PSC: Power System Control, SPC: System Protection Control, Sub: Substation, TLM: Trans Line Maintenance

# CUSTOMER DURATION METRIC

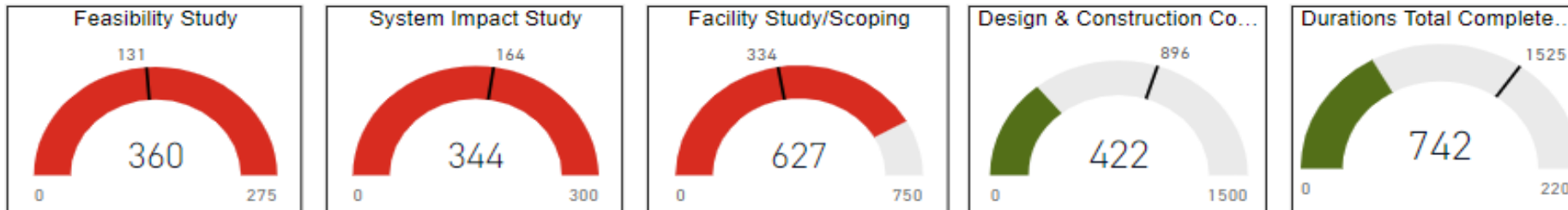
**Small Generation Interconnection projects:** Projects with an aggregation of generators, whose single or combined generating capacity is > than 0.2MW and = to or < 20MW



Includes LGI, LLI, SGI projects with a Queue date on or after 01/01/2015

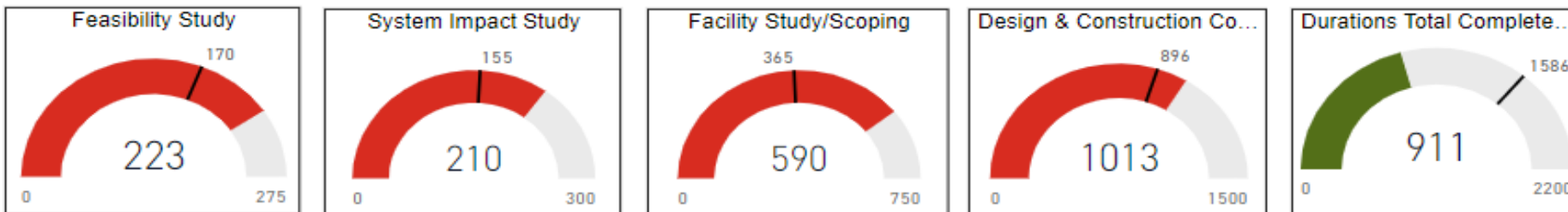
Optimal performance is below the lines, which denote the target ceiling levels

**Large Generation Interconnection Projects:** Projects with an aggregation of generators, whose single or combined generating capacity is greater than 20MW



\* Completed Projects Only

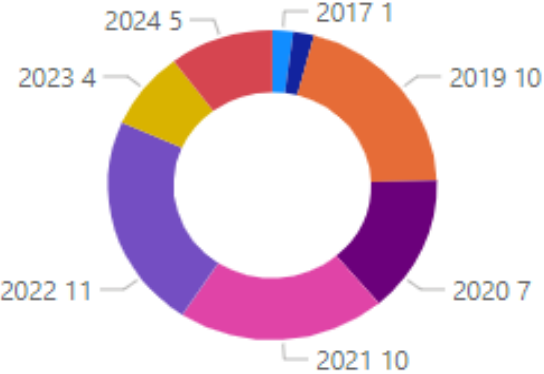
**Line and Load Interconnection Projects:** Projects can be a customer owned line terminated at a BPA facility, a tap of a BPA owned line or other plans of service





# CUSTOMER DURATION METRIC (NEW)

FAS Study Completion by Year



PCM Process | FAS with CDD (48 Projects)



Primary Capacity Model  
(Internal Scoping Resources)

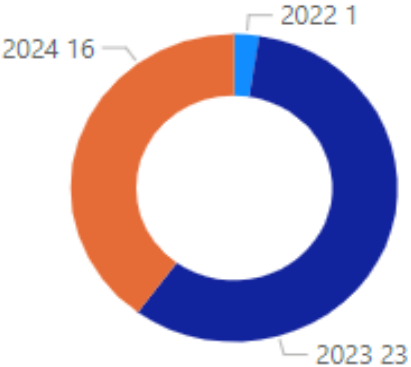
Includes LGI, LLI, SGI projects with a Queue date on or after 01/01/2017

Optimal performance is below the lines, which denote the target ceiling levels

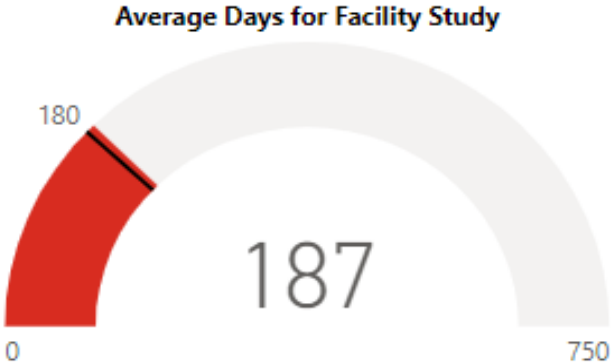
Completed Projects Only

Does not includes the time projects were waiting for Scoping Resources prior to New Process starting

FAS Study Completion by Year



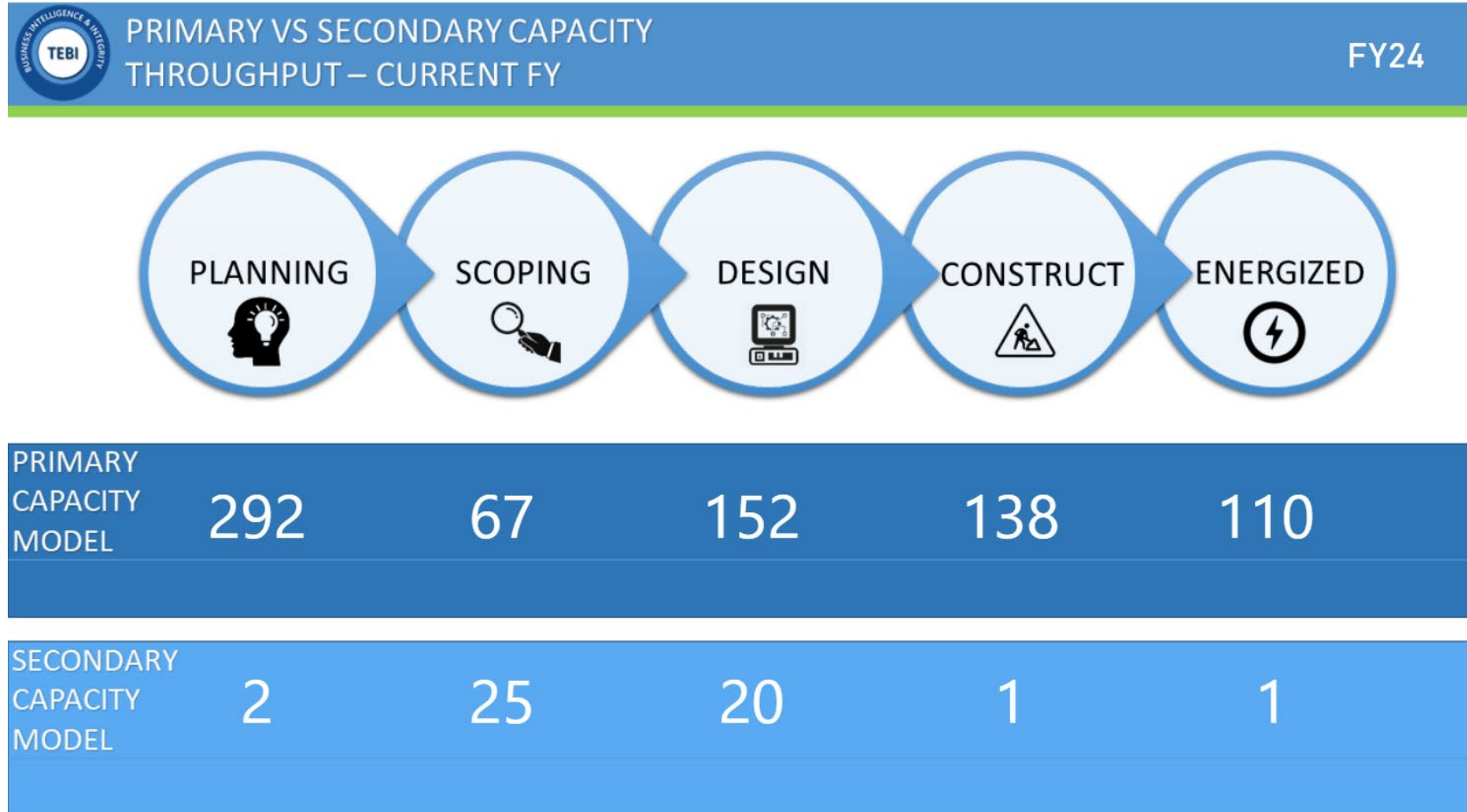
ECM Process | FAS/Scoping No CDD (40 Projects)



Engineering Capacity Model  
(Internal Consulting Resources)

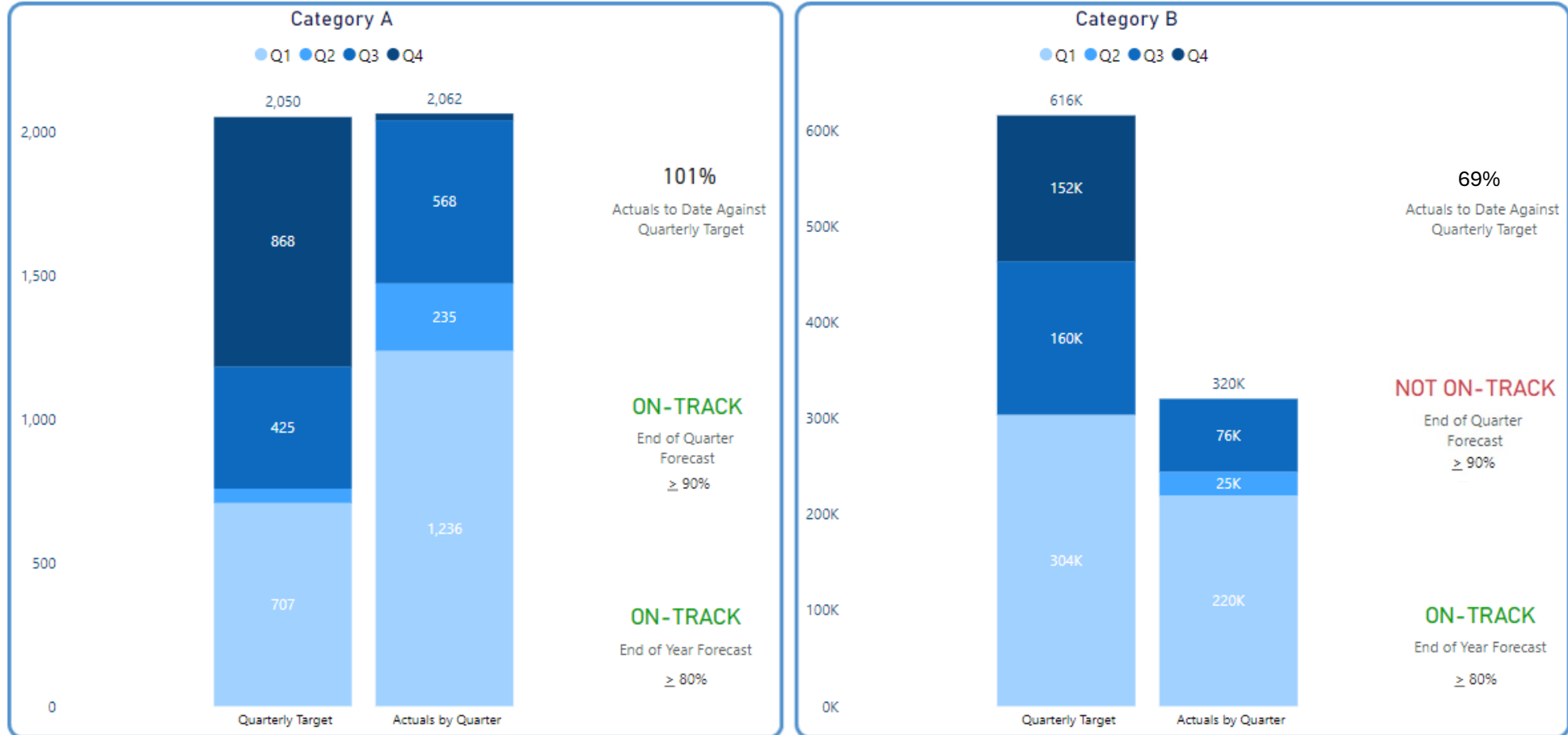
# PRIMARY VS SECONDARY CAPACITY THROUGHPUT

## Transmission as of FY24 Q3:



# CAPITAL ASSETS PLANNED VS COMPLETED

## Transmission as of FY24 Q3:



### Key Takeaway:

Not On Track – Category B assets are not on track for close of Q3. Work that was originally planned to complete in Q1/Q2 has moved out to Q4. Current forecast shows that we will meet the year end target

# WORK PLAN COMPLETE

## Transmission as of FY24 Q3:

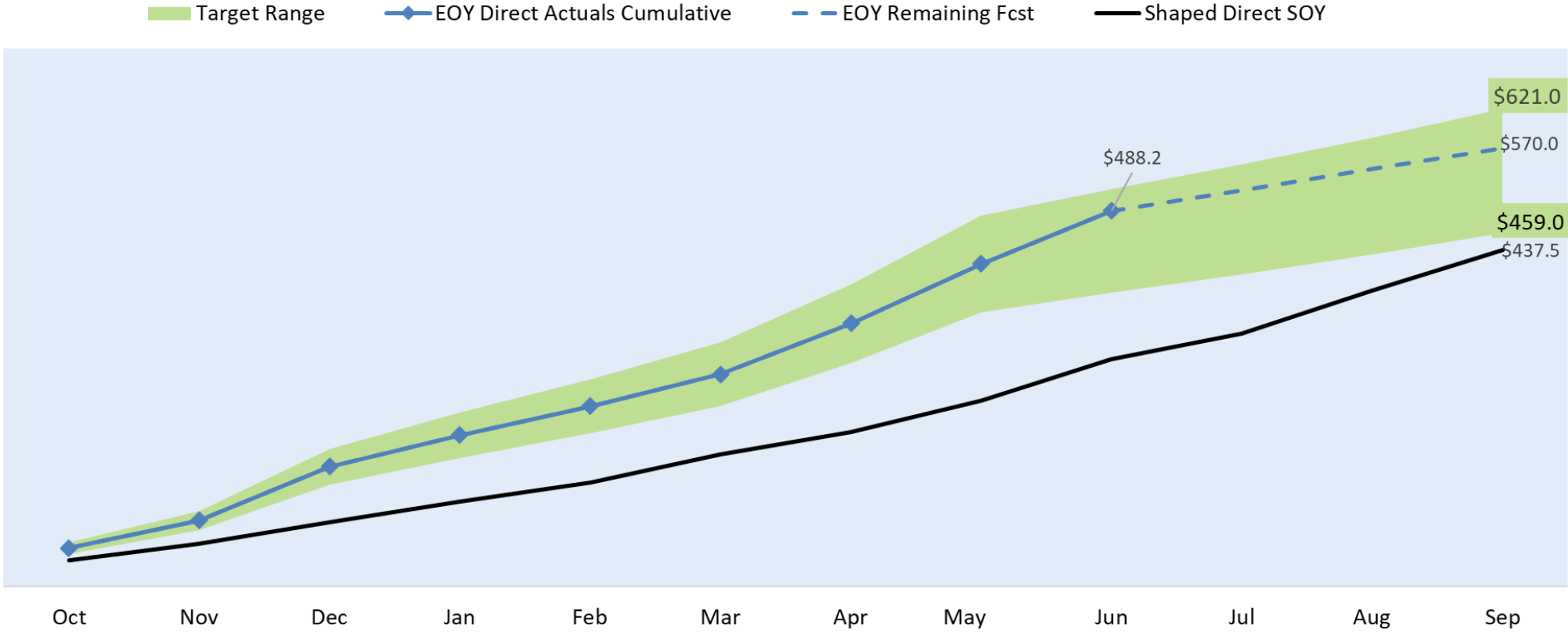
### FY24 Capital Work Plan Complete Project Milestones

	Priority Projects	Target Milestones	Model	On Track
Q1	P04342 Longhorn Substation	Substantial completion of below grade construction and start of foundation	SCM	Complete
Q2	P03890 Vancouver Control Center	Receive contractor estimate for VCC	PCM	Complete
	P05157 FIN Remediation	80% of design complete for South Region	PCM	Complete
	P00621 Hot Springs-Rattlesnake rebuild	Complete Phase 1 Land Rights Analysis	PCM	Complete
Q3	P05847 Bonanza Substation	Award OC Scoping contract	SCM	At Risk
	P01361 New Midway-Ashe 230 kV line	Complete tower assembly and erection	PCM	Complete
Q4	P02281 Longview Integrated Project.	Cap group is Energized	PCM	Complete
	P04691 South Tri-Cities Reinforcement Project	Draft Environmental Review Complete	PCM	Yes
	P05473 Chehalis – Cowlitz Tap	Complete 20% design (scoping)	SCM	At Risk
	P05580 Sixmile Canyon Substation (formerly West of Boardm	Finalize preferred substation location	SCM	Complete
	P03999 Buckley Substation Rebuild	Complete 50% design	SCM	Yes

#### Key Takeaway:

Not on Track – Significant changes in the plan of service on the Chehalis-Cowlitz Tap and the Bonanza Substation projects has resulted in delays in scoping.

# CAPITAL SPEND



- Structured differently than previous years
- This includes Transmission Only

- Range using Direct Budget (no loadings)
- High end is +15% = \$503.2M
- Midpoint is = \$437.5M
- Low end is -15% = \$371.9M

**Key Takeaway:** On Track for EOY

# BPA EIM Metrics FY2024 Q3

Presenters:

Matt Germer

Mariano Mezzatesta

Kelii Haraguchi



# Phase 1 Metrics

## **BPA committed to reporting Phase 1 metrics within six months of EIM go-live**

1. Report the quantity of unspecified purchases made through the EIM and the quantity of sales to California
2. Report how frequently BPA passes the Resource Sufficiency (RS) balancing test, RS capacity test and RS flexibility test
3. Report on EIM transfer limits and use

# Phase 2 Metrics

## **These metrics will be reported by BP-26**

1. Provide data on charge code allocations
2. Provide data on transmission donations and how often they are used
3. Provide information on EIM impacts to BPA system carbon emission rate
  - Reporting may transition to a different forum in the future as BPA engages on broader regional carbon issues and regulation

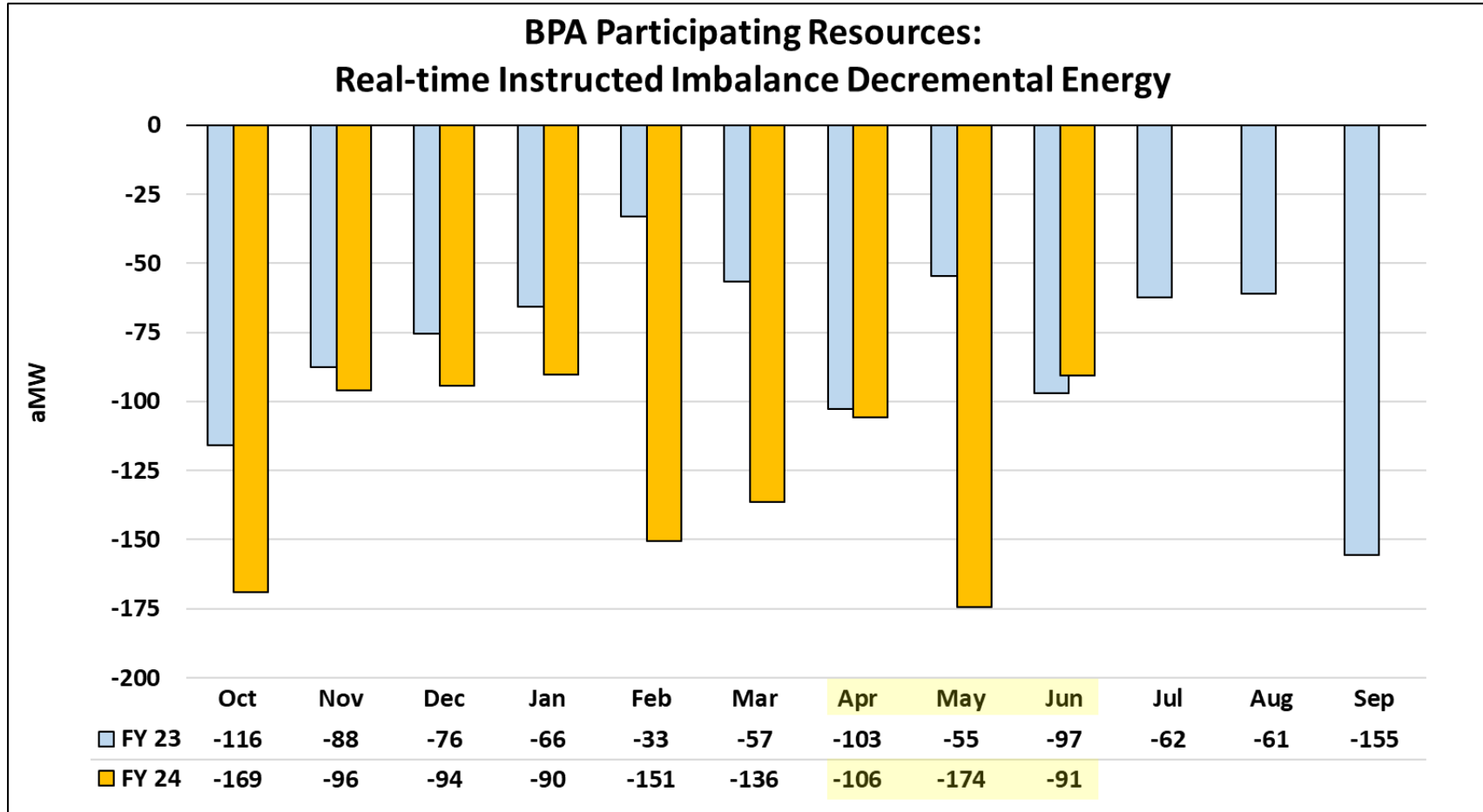


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Metric 1:  
EIM unspecified purchases,  
and sales to California



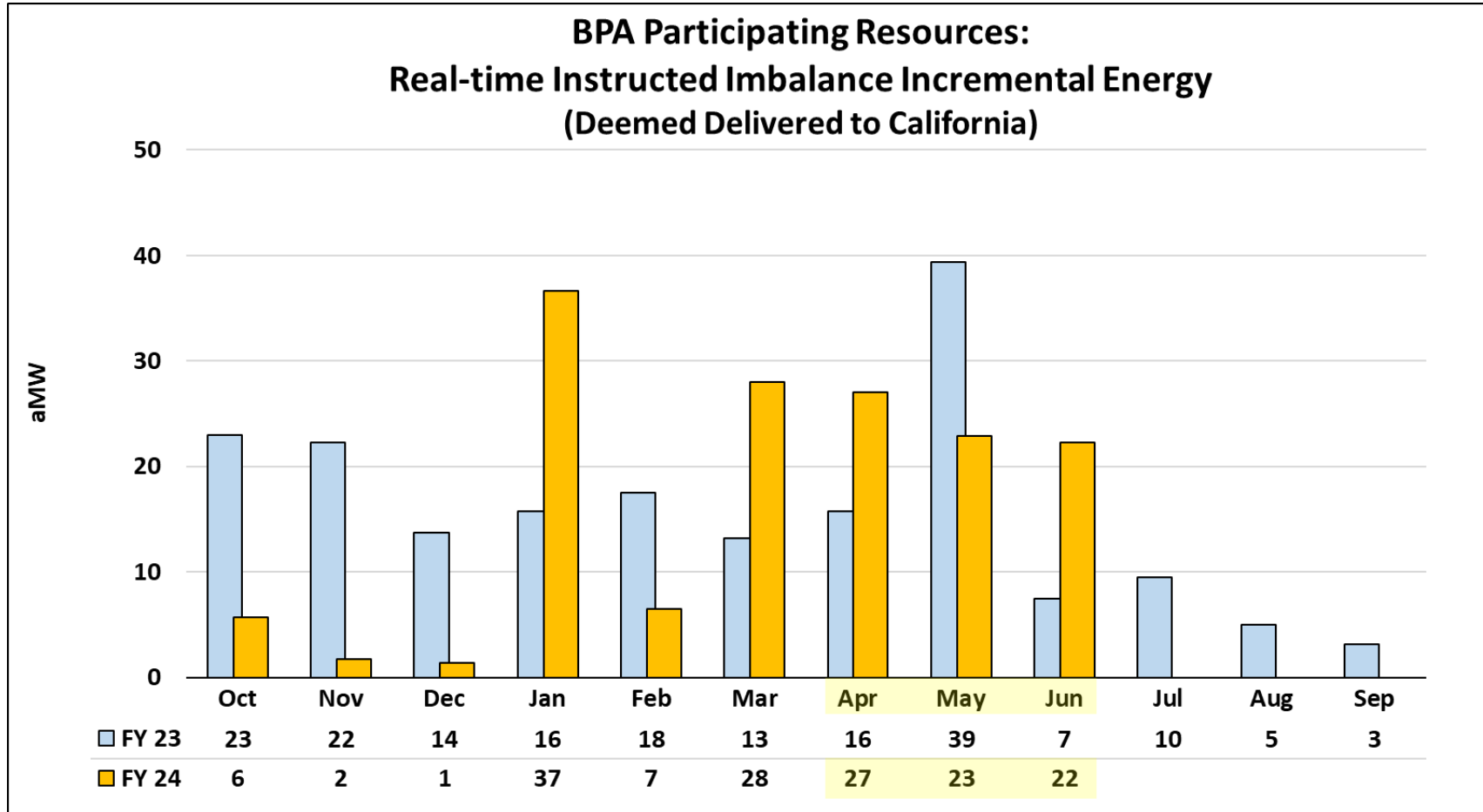
# Metric 1: Unspecified purchases



**FY 24 Q3 (Apr – Jun) quantity: -125 aMW**

**FY 24 decremental energy is tracking higher than FY 23: (-125 aMW vs. -75 aMW)**

# Metric 1: Sales to California



**FY 24 Q3 (Apr – Jun) quantity:** 25 aMW  
**GHG Premium:** +\$17/MWh  
**GHG Cost:** -\$0.65/MWh

---

# Metric 2: Resource Sufficiency (RS) Evaluation Pass rates



# Balancing Test Results

- The Balancing Test evaluates whether the BAA scheduled within +/-1% of the CAISO area load forecast
- A failure means the BAA scheduled outside of +/-1% of the CAISO's area load forecast
- A failure does not mean the BAA necessarily incurred an Over/Under scheduling penalty

## Percent of hours passed/failed

<b>Balancing Test</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Mean</b>
<b>Failed Over</b>	0.28%	0.54%	0.28%	0.37%
<b>Failed Under</b>	0.00%	0.40%	0.00%	0.13%
<b>Passed Both</b>	99.72%	99.06%	99.72%	99.50%

# Capacity Test Over Results

- The Capacity Test Over evaluates whether the BAA had sufficient upward bid range to meet the upward 15-min load imbalance
- The over requirement is calculated as the upward imbalance between the BAA's hourly load base schedule and the 15-min CAISO area load forecast

Percent of 15 minute intervals passed/failed

<b>Capacity Test Over</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Mean</b>
<b>Failed</b>	0.00%	0.00%	0.00%	0.00%
<b>Passed</b>	100.00%	100.00%	100.00%	100.00%

# Capacity Test Under Results

- The Capacity Test Under evaluates whether the BAA had sufficient downward bid range to meet the downward 15-min load imbalance
- The under requirement is calculated as the downward imbalance between BAA's hourly load base schedule and the 15-min CAISO area load forecast

Percent of 15 minute intervals passed/failed

<b>Capacity Test Under</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Mean</b>
<b>Failed</b>	0.00%	0.00%	0.00%	0.00%
<b>Passed</b>	100.00%	100.00%	100.00%	100.00%

# Flex Test Up Results

- The Flex Ramp Test Up evaluates whether the BAA had sufficient ramp up capability to meet the flex ramp up requirement
- The BAA's ramp up capability depends on participating resources, non-participating resources, and net interchange

Percent of 15 minute intervals passed/failed

<b>Flex Test Up</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Mean</b>
<b>Failed</b>	0.07%	0.07%	0.07%	0.07%
<b>Passed</b>	99.93%	99.93%	99.93%	99.93%



# Flex Test Down Results

- The Flex Ramp Test Down evaluates whether the BAA had sufficient ramp down capability to meet the flex ramp down requirement
- The BAA's ramp down capability depends on participating resources, non-participating resources, and net interchange

Percent of 15 minute intervals passed/failed

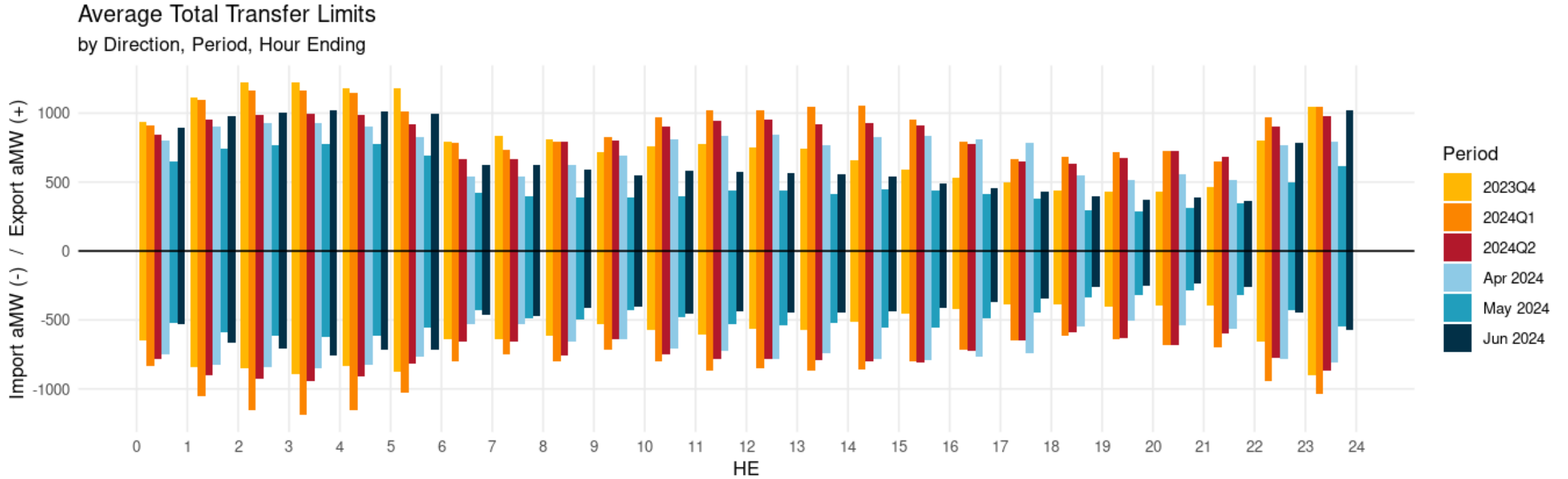
<b>Flex Test Down</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Mean</b>
<b>Failed</b>	0.04%	0.14%	0.14%	0.11%
<b>Passed</b>	99.96%	99.86%	99.86%	99.89%

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# Metric 3: EIM Transfers

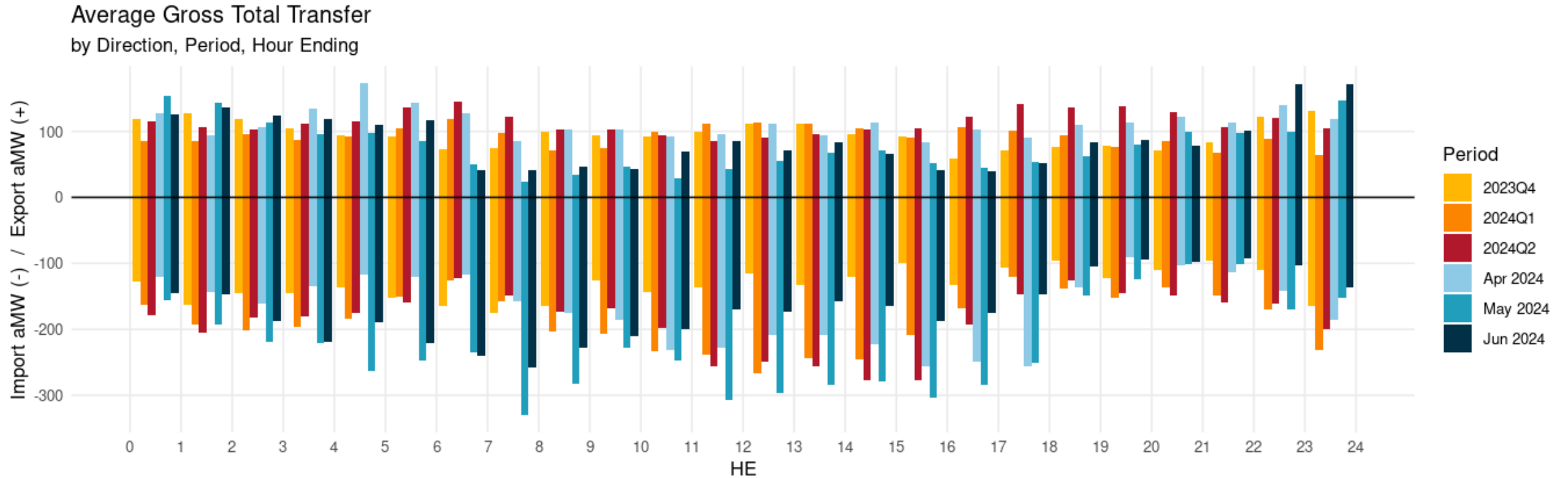


# EIM Transfer Limits: Q4 2023 – Q3 2024



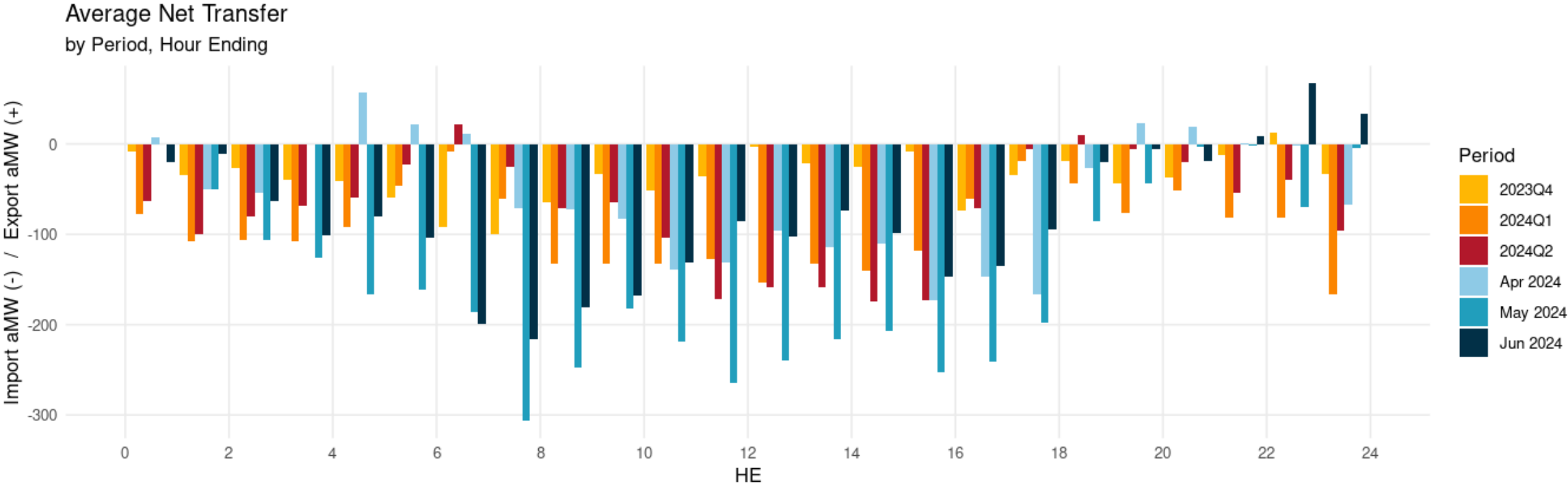
- Intra-day shape in Q3 2024 is consistent with previous quarters – less donation in morning and evening peaks

# EIM Gross Transfer: Q4 2023 – Q3 2024



- Clear bias toward import transfers, focused on morning peak and midday hours

# EIM Net Transfer: Q4 2023 – Q3 2024

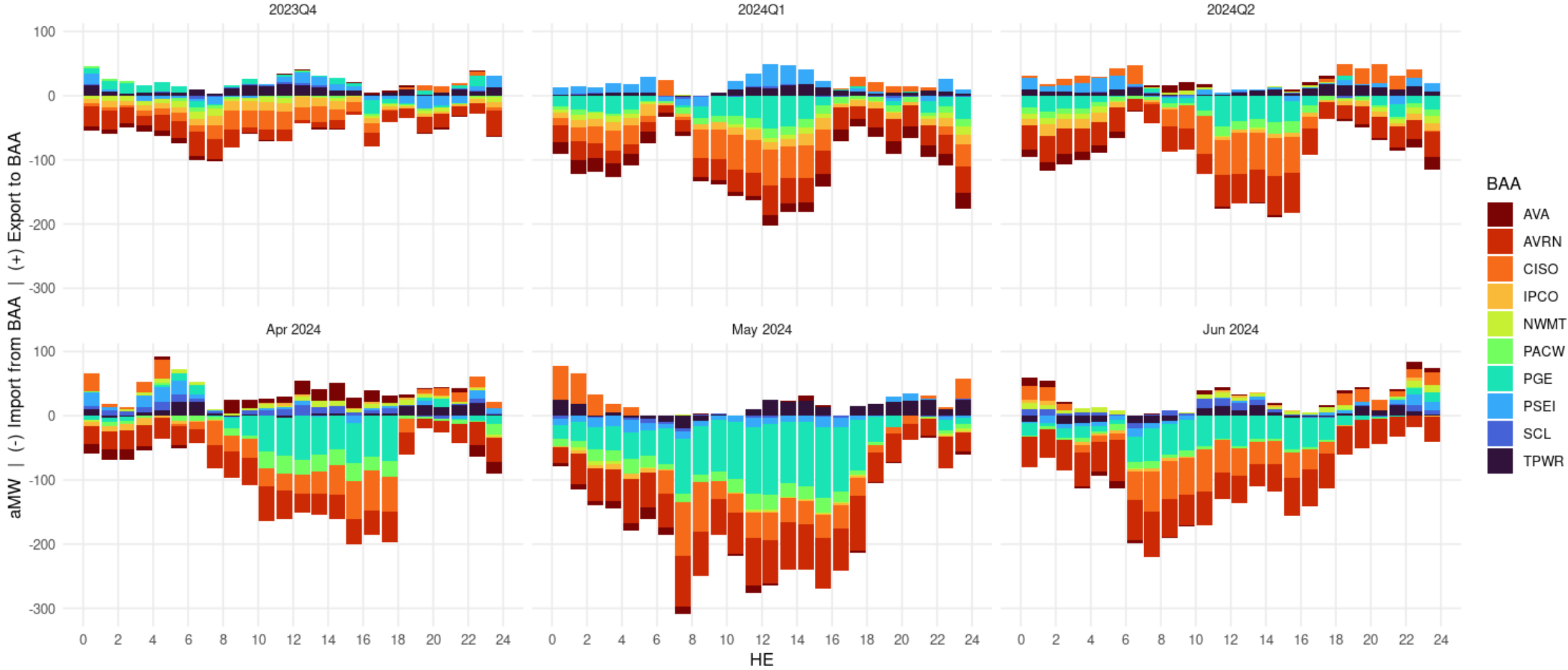


- Clear bias toward import transfers, focused on morning peak and midday hours

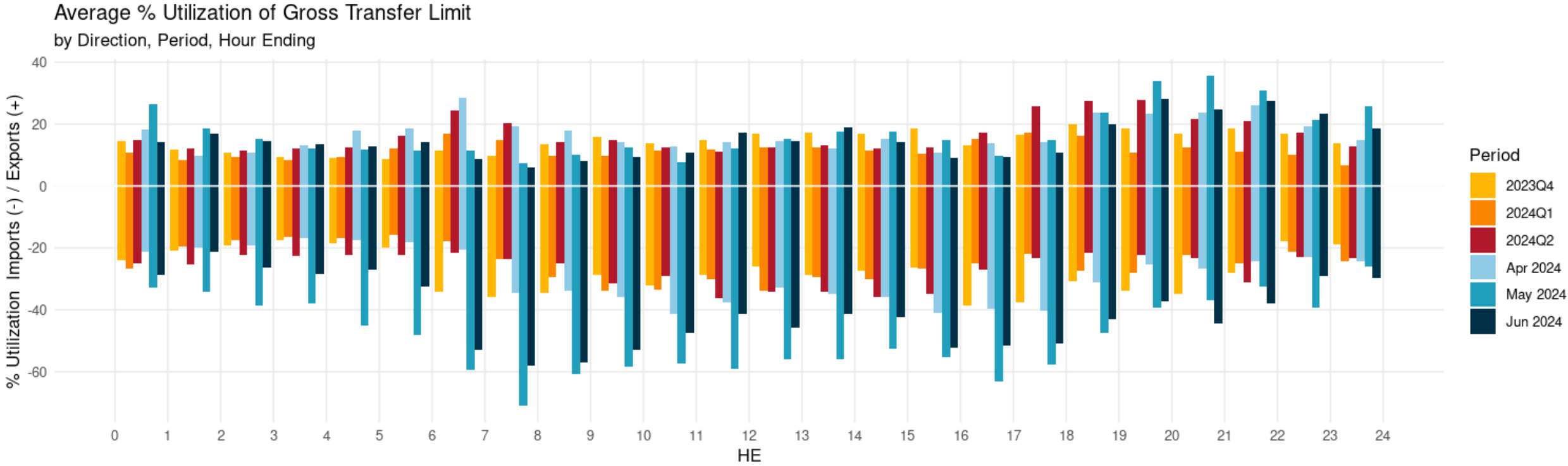
# EIM Net Transfer by BAA: Q4 2023 – Q3 2024

## Average Net Transfer with BPAT

by BAA, Period, Hour Ending

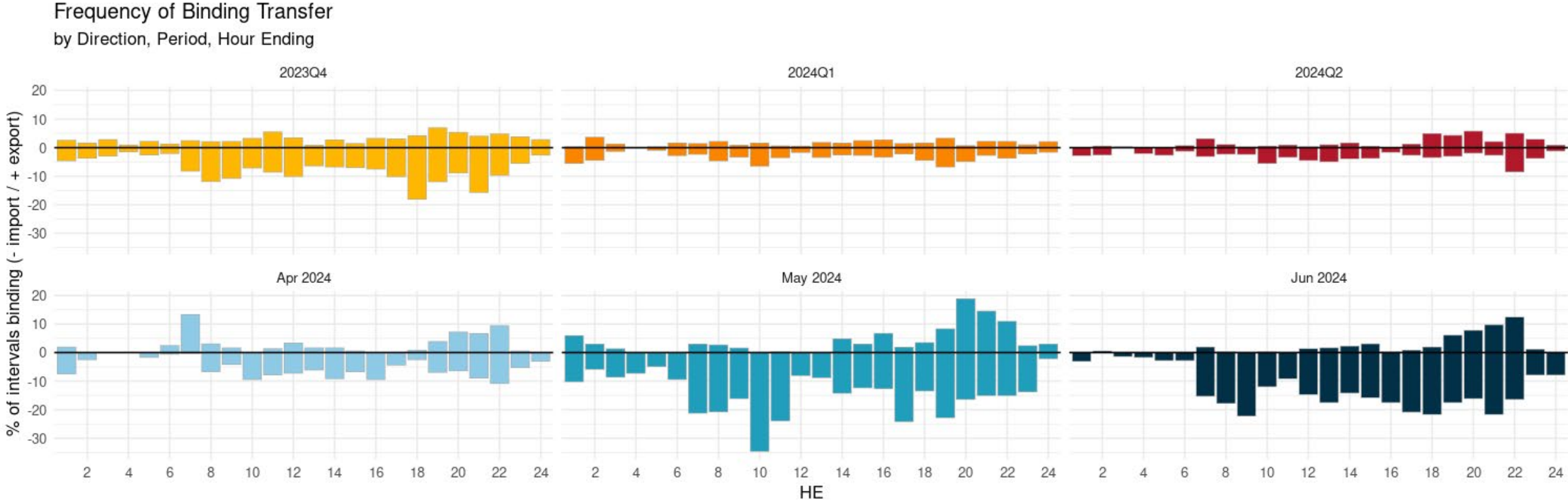


# EIM Utilization of Transfer Limits: Q2 2023 – Q1 2024



- Greater utilization in the export direction in evening peaks
- Consistently high utilization in the import direction in the midday hours

# Frequency of binding EIM transfers: Q4 2023 – Q3 2024



- Generally more binding incidence in the import direction across all periods
- Evening peak exports stand out in **May** and **June** (recall, these hours have low average donation levels)

*Note: Transfers and limits include both static and dynamic transmission. Binding incidence flagged anytime gross transfer reaches gross import limit or gross export limit.*



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# Appendix



# Phase 1: Metric 4 not reported

- **Metric 4:** Provide data on BAA scheduling error and the frequency with which CAISO BAA forecast was targeted on a quarterly basis. The scheduling error will be measured against either the CAISO BAA forecast and/or actual load.
- **The CAISO reports publically\* on the accuracy of its area load forecast.** The balancing test results show how frequently the BPA BAA has scheduled to CAISO's load forecast, and the BPA BAA has scheduled to the CAISO's load forecast most of the time. When BPA proposed this metric, it was envisioned that BPA would not schedule to the CAISO's load forecast as frequently.

\* **CAISO reports quarterly at:** [Market Performance and Planning Forum](#)

# Background on RS Tests

- Balancing Test
  - The Balancing Test evaluates whether the BAA scheduled within +/-1% of the CAISO area load forecast
  - To incur an O/U scheduling penalty, the BAA must have scheduled 1). outside of +/-1% of the CAISO area load forecast and 2). outside of +/- 5% of the actual area load
- Bid Capacity Test
  - The Bid Capacity Test Over/Under evaluates whether the BAA had sufficient upward and downward bid range to meet the upward/downward 15-min load imbalance
  - During a failure, CAISO caps EIM Transfers in the direction of the failure, which may limit market participation during the failed 15-min interval
- Flex Ramp Test
  - The Flex Ramp Test evaluates whether the BAA had sufficient ramp up and down capability to meet the flex ramp up/down requirement from the current hour to the next hour
  - During a failure, CAISO caps EIM Transfers in the direction of the failure, which may limit market participation during the failed 15-min interval

# Western Resource Adequacy Program (WRAP) Update

Presenter:

Russ Mantifel

August 15, 2024



# Agenda

- What's Happening in WRAP
  - WPP Implementation Plan
  - Approved BPM's
  - WPP/WRAP Public Meetings/Workshops
- BPA Active Work with WRAP
  - Participation
  - Business Practice Manuals (BPM's)
  - BPA Technical Solution

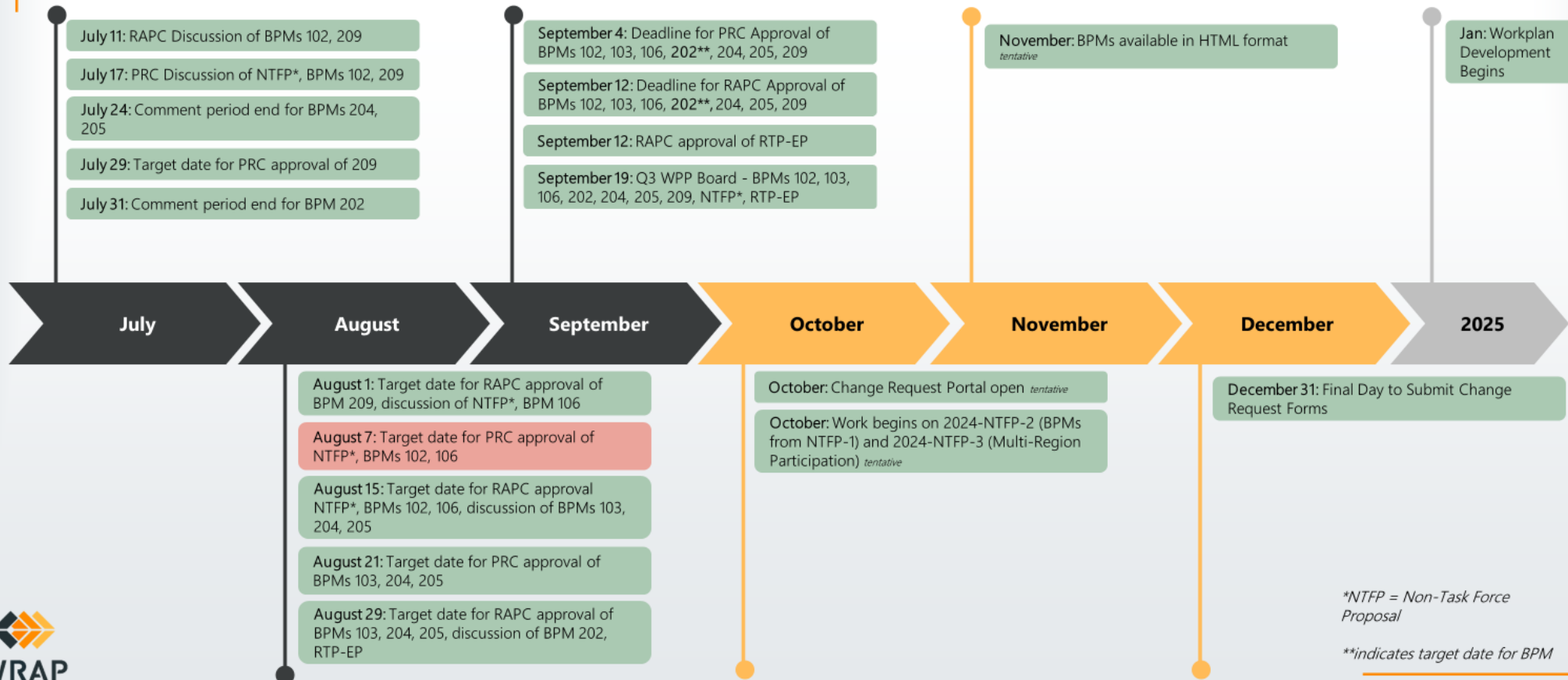
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# What's Happening in WRAP



# Western Power Pool WRAP Implementation Plan

## BPM & STAKEHOLDER ENGAGEMENT TIMELINE



# WRAP Approved Business Practice Manuals

- WPP Board of Directors has approved 17 BPM's

Forward Showing	Operations Program	Stakeholder Process	Auxillary
<a href="#">101: Advance Assessment Data Collection</a>	<a href="#">201: Operations Timeline</a>	<a href="#">301: Workplan Development and Approval</a>	<a href="#">401: New Participant Onboarding</a>
<a href="#">104: Capacity Critical Hours</a>	<a href="#">203: Program Sharing Calculation Inputs</a>	<a href="#">302: Proposal Development and Approval</a>	<a href="#">402: Confidentiality</a>
<a href="#">105: Qualifying Resources</a>	<a href="#">206: Settlement Pricing</a>	<a href="#">303: Exigent Changes</a>	
<a href="#">107: Forward Showing Deficiency Charge</a>	<a href="#">207: Settlement Process</a>	<a href="#">304: Changes to Schedule 1 and WRAPA</a>	
<a href="#">108: Submittal Process</a>	<a href="#">210: Operations Program Transition Period</a>		
<a href="#">109: Forward Showing Transition Period</a>			



# WPP/WRAP Public Meetings/Workshops

- **Program Review Committee (PRC)**
  - The sector-representative PRC will be responsible for receiving, considering, and proposing changes to the WRAP design. The PRC will also be responsible for documenting proposed changes and overseeing public and committee comments and feedback processes to inform consideration of those recommendations by the RAPC and Board. In developing recommendations, the PRC will incorporate feedback and suggestions from the public process, Participants, committees, the PA and PO, and the Board
  - [PRC Information and meeting schedule](#)
- **Resource Adequacy Participant Committee (RAPC)**
  - RAPC will be the main venue for participants in the program to engage in program implementation and compliance, as well as the highest form of participant engagement in the governance and decision-making of the program. The RAPC will be recommended changes to the program design as they relate to participation in the program and vote on all proposed changes prior to Board review. RAPC recommendations will be considered by the Board in conjunction with feedback from the public, stakeholders, and other committees.
  - [RAPC Information and meeting schedule](#)
- **General WPP/WRAP Events (WPP)**
  - [All WPP Events](#)

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# BPA Active Work with WRAP



## WRAP participant work:

- Resource Adequacy Participants Committee (RAPC) – reviewing and continuing development and design getting to full binding seasons
- Forward Showing Work Group – engaged in activities and discussion for FS submittals and well as discussions/suggestions/ feedback on development of Business Practice Manuals.
- Ops Work Group – engaged in setting up, WRAP system testing, and participating in Ops Trials, discussions/suggestions/ feedback on development of Business Practice Manuals.
- Program Review Committee (PRC) – participating member, actively reviewing materials as available
- Other ongoing workgroups

## Business Practice Manual work:

BPA is actively reviewing BPM's in the Review Process before BPMs are sent to WPP Board of Directors

- Work Group Review – Subject Mater Expert input during development and review of BPMs
- Public Review – Subject Mater Expert review and comment in the public comment process
- PRC Review/Approval – PRC Representative question, review, and vote on approval of BPMs
- RAPC Review/Approval – RAPC Representative question, review, and vote on approval of BPMs

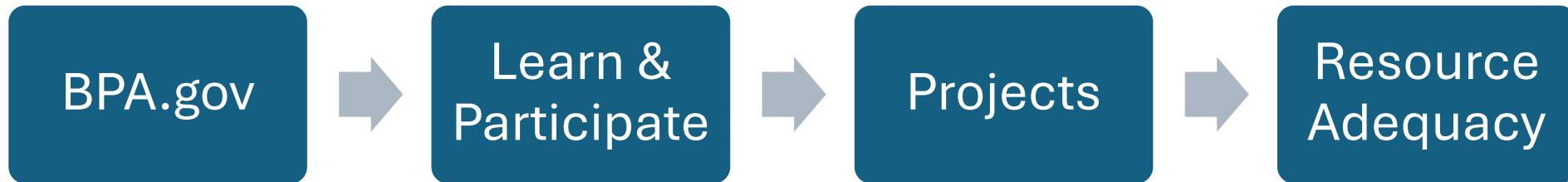
## BPA Technical Solution for WRAP Participation:

- BPA has a contract in place to provide a technical solution for Operations Program data submission to the WRAP Operations Program
  - On June 1 we began submitting static data (based on Forward Showing summaries) to the Operations Program
  - Currently in User Acceptance Testing phase of project, reviewing and testing system requirements
  - Solution will also provide needed WRAP Operations Program data to Slice customers (through Slice Computer Application) to be included in participant WRAP submittals
  - Expected to move into Production environment in Fall 2024

# Questions

- More information on BPA's participation in the Western Resource Adequacy Program can be found at

[Western Resource Adequacy Program - Bonneville Power Administration \(bpa.gov\)](https://www.bpa.gov)



- For more information on the Western Power Pool's Western Resource Adequacy Program at

<https://www.westernpowerpool.org/>

# Appendix

# Final Closeout Letter Commitments

- On December 16, 2022, BPA issued its decision to join Phase 3B. In the WRAP Final Closeout Letter, BPA committed to:
  - sharing its stakeholder engagement plan for Phase 3B participation (goal is within the first half of 2023);
  - providing program implementation updates that impact BPA and its customers; and
  - continue working with customers on outstanding items raised in comments related to WRAP implementation.



# Stakeholder Engagement Plan

- Provide transparency of program design updates and information that may impact BPA and its customers, outcomes from BPA's participation in non-binding forward showing and operations program, and resolving BPA and customer raised issues in the Final Closeout Letter
- Engagement will be consistent with external WRAP engagement outside of BPA's process
- Pursue effective and efficient two-way communication between BPA and customers, stakeholders, and external interested parties
- Engage on a predictable, standardized cadence provided there is adequate content or relevant information to discuss
- Ensure engagement opportunities occur sufficiently to inform interested parties based on program timelines and information availability and applicability

# Stakeholder Engagement Plan cont.

- Engagement with customers and stakeholders will consist of:
  - Public meetings with a minimum of 4 meetings, preferably through the QBR Technical Workshops
  - Short-term Issue-focused workshops, as needed
  - Customer-impacted meetings focused by topic, upon request
- BPA proposes to host meetings through the completion of BPA's first binding season (winter 2027-2028). BPA will work with customers to reevaluate its engagement plan and the need for its proposed meeting schedule on an annual basis through its first binding season
- Meetings will focus on BPA's participation, the development of the business practice manuals, and updates to the WRAP policies as determined by the WRAP project schedule

# Stakeholder Engagement Plan cont.

## Public meetings

- Regularly scheduled meetings four times per year, utilizing a combination of stand-alone workshops preferably the Quarterly Business Review (QBR) Technical Workshops
  - Typically February, May, August, and November
- Provide program design updates and information that may include any topics relevant to customer stakeholder questions on BPA's WRAP participation

## Issue –focused workshops

- Workshops will be scheduled based on information availability from WRAP and applicability
- Will address topics raised in comments related to WRAP implementation

## Customer-impacted meetings focused by topic

- BPA will continue to meet with individual or groups of customers, upon request, to focus on questions or needs.
- To the extent that there is a nexus between the implications of the WRAP and other issues customers, BPA will coordinate discussion with other BPA meetings or initiatives
- Resolution timing of customer identified items may depend on information availability from

# Stakeholder Engagement Topics

- Topics raised in comments related to WRAP implementation, including:
  - Considerations related to BPA's binding season (Winter 2027-2028)
    - The availability of transmission between loads in the SWEDE region and the FCRPS create risks that may create costs in the Forward Showing Program,
    - the uncertainty in details and requirements for the Operations Program,
    - identifying Bonneville system updates and business processes to support participation in the binding program, and
    - alignment with the timing for joining emerging regional markets
  - Treatment of NLSLs and AHWM loads related to BPA's WRAP participation
    - WRAP load exclusion process update / BPA load exclusion process between BPA and customers
  - Load exclusion process for AHWM loads caused by a single large consumer load and served solely with non-federal resources
  - Resource Adequacy Incentive rates
- Updates on Business Practice Manual development
  - Future BPM on BPA's statutory preference obligations
- Updates on Forward Showing and Operations Program development

# THANK YOU

The next QBR and Technical Workshop will be held on  
**November 12, 2024**

**Didn't get your question answered?**

Email [Communications@bpa.gov](mailto:Communications@bpa.gov).

Answers will be posted to [www.bpa.gov/qbr](http://www.bpa.gov/qbr).

# FINANCIAL DISCLOSURES

This information has been made publicly available by BPA on August 12, 2024 and contains information not sourced directly from BPA financial statements.

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# APPENDIX



# SLICE REPORTING

**Composite Cost Pool Review**

**Forecast of Annual Slice True-Up Adjustment**





# Q3 True-Up of FY 2024 Slice True-Up Adjustment

	<b>FY 2024 Forecast \$ in thousands</b>
February 13, 2024 First Quarter Technical Workshop	\$(1,304)*
May 23, 2024 Second Quarter Technical Workshop	\$(10,353)*
August 15, 2024 Third Quarter Technical Workshop	\$(18,555)*
November 2024 Fourth Quarter Technical Workshop	

\*Negative = Credit; Positive = Charge

# Summary of Differences From Q3 to FY24 (BP-24)

#		Composite Cost Pool True-Up Table Reference	Q3 – Rate Case \$ in thousands
1	Total Expenses	Row 100	\$74,141
2	Total Revenue Credits	Rows 119 + 128	\$137,867
3	Minimum Required Net Revenue	Row 156	\$(27,509)
4	TOTAL Composite Cost Pool (1 - 2 + 3) \$74,141 - \$137,867 + \$(27,509) = \$(91,235)	Row 158	\$(91,235)
5	TOTAL in line 4 divided by <u>0.9706591</u> sum of TOCAs \$(91,235)/ <u>0.9706591</u> = \$(93,993)	Row 163	\$(93,993)
6	QTR Forecast of FY24 True-up Adjustment 19.74071 percent of Total in line 5 0.1974071 * \$(93,993) = \$(18,555)	Row 164	\$(18,555)

# FY24 Impacts of Debt Management Actions

#	Description	FY24 Q3 QBR	FY24 Rate Case	CCP	Delta from the FY24 rate case
1	MRNR Section of Composite Cost Pool Table				\$ -
2	<b>Principal Payment of Federal Debt</b>				\$ -
3	2023 Regional Cooperation Debt (RCD)	\$ 114,500,000	\$ 341,581,000		\$ 227,081,000
4	2023 Debt Service Reassignment (DSR)		\$ 17,600,000		\$ 17,600,000
5	Energy Northwest's Line Of Credit (LOC)	\$ -	\$ -		\$ -
6	Rate Case Scheduled Base Power Principal*	\$ 100,818,000	\$ 100,818,000		\$ -
7	Repayment due to FY24 RDC (based on FY23 resu	\$ 90,000,000	\$ -		\$ (90,000,000)
8	<b>Total Principal Payment of Fed Debt</b>	<b>\$ 305,318,000</b>	<b>\$ 459,999,000</b>	row 131	<b>\$ 154,681,000</b>
9	<b>Prepay</b>	\$ 24,905,736	\$ 24,905,736		\$ -
					\$ -
10	<b>Nonfederal Bond Principal Payment</b>	\$ 27,167,200	\$ 27,167,200	row 133	\$ -

# Composite Cost Pool Interest Credit

## Allocation of Interest Earned on the Bonneville Fund (\$ in thousands)

	<u>Q3 2024</u>
1 Fiscal Year Reserves Balance	570,255
2 Adjustments for pre-2002 Items	<u>16,341</u>
3 Reserves for Composite Cost Pool (Line 1 + Line 2)	586,596
4 Composite Interest Rate	4.39%
5 Composite Interest Credit	(25,772)
6 Prepay Offset Credit	0
7 Total Interest Credit for Power Services	(31,613)
8 Non-Slice Interest Credit (Line 7 – (Line 5 + Line 6))	(5,841)

# Net Interest Expense in Slice True-Up Q3

	<b>FY24 Rate Case</b>	<b>Q3</b>
	<u>(\$ in thousands)</u>	<u>(\$ in thousands)</u>
• Federal Appropriation	34,236	39,461
• Capitalization Adjustment	(45,937)	(45,937)
• Borrowings from US Treasury	50,818	52,402
• Prepay Interest Expense	5,694	5,694
• <b>Interest Expense</b>	<b>44,811</b>	<b>51,621</b>
• AFUDC	(17,821)	(21,074)
• Interest Income (composite)	(2,274)	(25,772)
• Prepay Offset Credit	0	0
• <b>Total Net Interest Expense</b>	<b>24,716</b>	<b>4,775</b>

# Schedule for Slice True-Up Adjustment for Composite Cost Pool True-Up Table and Cost Verification Process

Dates	Agenda
February 13, 2024	First Quarter Technical Workshop
May 23, 2024	Second Quarter Technical Workshop
August 15, 2024	Third Quarter Technical Workshop
October 2024	BPA External CPA firm conducting audit for fiscal year end
Mid-October 2024	Recording the Fiscal Year End Slice True-Up Adjustment Accrual
End of October 2024	Final audited actual financial data is expected to be available
November 2024	Mail notification to Slice Customers of the Slice True-Up Adjustment for the Composite Cost Pool
November 2024	Fourth Quarter Business Review and Technical Workshop Meeting Provide Slice True-Up Adjustment for the Composite Cost Pool (this is the number posted in the financial system; the final actual number may be different)
November 2024	BPA to post Composite Cost Pool True-Up Table containing actual values and the Slice True-Up Adjustment
December 2024	Deadline for customers to submit questions about actual line items in the Composite Cost Pool True-Up Table with the Slice True-Up Adjustment for inclusion in the Agreed Upon Procedures (AUPs) Performed by BPA external CPA firm (customers have 15 business days following the BPA posting of Composite Cost Pool Table containing actual values and the Slice True-Up Adjustment)
December 2024	BPA posts a response to customer questions (Attachment A does not specify an exact date)
January 2025	Customer comments are due on the list of tasks (The deadline can not exceed 10 days from BPA posting)
February 2025	BPA finalizes list of questions about actual lines items in the Composite Cost Pool True-Up Table for the AUPs

# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE				
		July (Q3) (\$000)	Rate Case forecast for FY 2024 (\$000)	July (Q3) - Rate Case Difference
1	<b>Operating Expenses</b>			
2	<b>Power System Generation Resources</b>			
3	<b>Operating Generation</b>			
4	COLUMBIA GENERATING STATION (WNP-2)	\$ 314,633	\$ 296,477	\$ 18,157
5	BUREAU OF RECLAMATION	\$ 172,943	\$ 154,364	\$ 18,579
6	CORPS OF ENGINEERS	\$ 268,200	\$ 265,146	\$ 3,054
7	CRFM STUDIES	\$ 14,000	\$ 9,349	\$ 4,651
8	LONG-TERM CONTRACT GENERATING PROJECTS	\$ 23,631	\$ 16,036	\$ 7,594
9	<b>Sub-Total</b>	\$ 793,407	\$ 741,372	\$ 52,035
10	<b>Operating Generation Settlement Payment and Other Payments</b>			
11	COLVILLE GENERATION SETTLEMENT	\$ 29,101	\$ 22,000	\$ 7,101
12	SPOKANE LEGISLATION PAYMENT	\$ 7,275	\$ 5,749	\$ 1,526
13	<b>Sub-Total</b>	\$ 36,376	\$ 27,749	\$ 8,627
14	<b>Non-Operating Generation</b>			
15	TROJAN DECOMMISSIONING	\$ 1,100	\$ 1,200	\$ (100)
16	WNP-1&3 DECOMMISSIONING	\$ 1,200	\$ 1,141	\$ 59
17	<b>Sub-Total</b>	\$ 2,300	\$ 2,341	\$ (41)
18	<b>Gross Contracted Power Purchases</b>			
19	PNCA HEADWATER BENEFITS	\$ 2,911	\$ 3,100	\$ (189)
20	OTHER POWER PURCHASES (omit, except Designated Obligations or Purchases)	\$ (26,503)	\$ -	\$ (26,503)
21	<b>Sub-Total</b>	\$ (23,592)	\$ 3,100	\$ (26,692)
22	<b>Bookout Adjustment to Power Purchases (omit)</b>			
23	<b>Augmentation Power Purchases (omit - calculated below)</b>			
24	AUGMENTATION POWER PURCHASES	\$ -	\$ -	\$ -
25	<b>Sub-Total</b>	\$ -	\$ -	\$ -
26	<b>Exchanges and Settlements</b>			
27	RESIDENTIAL EXCHANGE PROGRAM (REP)	\$ 274,777	\$ 274,777	\$ -
28	OTHER SETTLEMENTS	\$ -	\$ -	\$ -
29	<b>Sub-Total</b>	\$ 274,777	\$ 274,777	\$ -
30	<b>Renewable Generation</b>			
31	RENEWABLES (excludes Kill)	\$ 12,230	\$ 17,809	\$ (5,579)
32	<b>Sub-Total</b>	\$ 12,230	\$ 17,809	\$ (5,579)
33	<b>Generation Conservation</b>			
34	CONSERVATION ACQUISITION	\$ 68,955	\$ 69,027	\$ (72)
35	CONSERVATION INFRASTRUCTURE	\$ 22,634	\$ 26,044	\$ (3,410)
36	LOW INCOME WEATHERIZATION & TRIBAL	\$ 4,800	\$ 6,005	\$ (1,205)
37	ENERGY EFFICIENCY DEVELOPMENT	\$ -	\$ -	\$ -
38	DISTRIBUTED ENERGY RESOURCES	\$ 184	\$ 215	\$ (31)
39	LEGACY	\$ 521	\$ 590	\$ (69)
40	MARKET TRANSFORMATION	\$ 11,800	\$ 11,800	\$ (0)
41	<b>Sub-Total</b>	\$ 108,894	\$ 113,681	\$ (4,787)
42	<b>Power System Generation Sub-Total</b>	\$ 1,204,392	\$ 1,180,830	\$ 23,562
43				

# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE				
		July (Q3) (\$000)	Rate Case forecast for FY 2024 (\$000)	July (Q3) - Rate Case Difference
44	<b>Power Non-Generation Operations</b>			
45	<b>Power Services System Operations</b>			
46	EFFICIENCIES PROGRAM	\$ -	\$ -	\$ -
47	INFORMATION TECHNOLOGY	\$ -	\$ 2,376	\$ (2,376)
48	GENERATION PROJECT COORDINATION	\$ 4,577	\$ 4,443	\$ 134
49	ASSET MGMT ENTERPRISE SVCS	\$ 3,351	\$ -	\$ 3,351
50	SLICE IMPLEMENTATION	\$ 763	\$ 608	\$ 154
51	<b>Sub-Total</b>	<b>\$ 8,691</b>	<b>\$ 7,428</b>	<b>\$ 1,263</b>
52	<b>Power Services Scheduling</b>			
53	OPERATIONS SCHEDULING	\$ 11,987	\$ 9,505	\$ 2,482
54	OPERATIONS PLANNING	\$ 9,260	\$ 9,739	\$ (479)
55	<b>Sub-Total</b>	<b>\$ 21,247</b>	<b>\$ 19,244</b>	<b>\$ 2,003</b>
56	<b>Power Services Marketing and Business Support</b>			
57	GRID MOD	\$ 534	\$ -	\$ 534
58	EIM INTERNAL SUPPORT	\$ -	\$ -	\$ -
59	POWER INTERNAL SUPPORT	\$ 20,124	\$ 28,410	\$ (8,286)
60	COMMERCIAL ENTERPRISE SVCS	\$ 7,078	\$ 4,348	\$ 2,730
61	OPERATIONS ENTERPRISE SVCS	\$ 5,901	\$ 4,573	\$ 1,328
62	POWER R&D	\$ 2,009	\$ 3,537	\$ (1,529)
63	SALES & SUPPORT	\$ 14,646	\$ 17,871	\$ (3,225)
64	STRATEGY, FINANCE & RISK MGMT (REP support costs included here)	\$ -	\$ -	\$ -
65	EXECUTIVE AND ADMINISTRATIVE SERVICES (REP support costs included here)	\$ -	\$ -	\$ -
66	CONSERVATION SUPPORT	\$ 10,001	\$ 7,045	\$ 2,957
67	<b>Sub-Total</b>	<b>\$ 60,293</b>	<b>\$ 65,784</b>	<b>\$ (5,491)</b>
68	<b>Power Non-Generation Operations Sub-Total</b>	<b>\$ 90,231</b>	<b>\$ 92,455</b>	<b>\$ (2,224)</b>
69	<b>Power Services Transmission Acquisition and Ancillary Services</b>			
70	TRANSMISSION and ANCILLARY Services - System Obligations	\$ 32,208	\$ 32,208	\$ -
71	3RD PARTY GTA WHEELING	\$ 84,508	\$ 91,278	\$ (6,770)
72	POWER 3RD PARTY TRANS & ANCILLARY SVCS (Composite Cost)	\$ 3,940	\$ 3,300	\$ 640
73	TRANS ACQ GENERATION INTEGRATION	\$ 19,894	\$ 19,894	\$ -
74	EESC CHARGES (Composite)*	\$ 19,453	\$ -	\$ 19,453
75	TELEMETERING/EQUIP REPLACEMENT	\$ -	\$ -	\$ -
76	<b>Power Services Trans Acquisition and Ancillary Serv Sub-Total</b>	<b>\$ 160,003</b>	<b>\$ 146,680</b>	<b>\$ 13,323</b>
77	<b>Fish and Wildlife/USF&amp;W/Planning Council/Environmental Req</b>			
78	<b>Fish &amp; Wildlife</b>	\$ 265,624	\$ 269,235	\$ (3,610)
79	<b>USF&amp;W Lower Snake Hatcheries</b>	\$ 32,765	\$ 32,765	\$ (0)
80	<b>Planning Council</b>	\$ 11,983	\$ 11,942	\$ 41
81	<b>Fish &amp; Wildlife RDC Funds</b>	\$ 1,000	\$ -	\$ 1,000
82	<b>Lower Snake Hatcheries RDC Funds</b>	\$ 10,000	\$ -	\$ 10,000
83	<b>Fish and Wildlife/USF&amp;W/Planning Council Sub-Total</b>	<b>\$ 321,372</b>	<b>\$ 313,942</b>	<b>\$ 7,431</b>
84	<b>BPA Internal Support</b>			
85	<b>Additional Post-Retirement Contribution</b>	\$ 18,338	\$ 19,310	\$ (972)
86	<b>Agency Services G&amp;A (excludes direct project support)</b>	\$ 86,367	\$ 84,662	\$ 1,705
87	<b>BPA Internal Support Sub-Total</b>	<b>\$ 104,705</b>	<b>\$ 103,972</b>	<b>\$ 734</b>

\*EESC Charges (Composite) includes actuals data through May.



# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE				
		July (Q3) (\$000)	Rate Case forecast for FY 2024 (\$000)	July (Q3) - Rate Case Difference
88	Bad Debt Expense	\$ -	\$ -	\$ -
89	Other Income, Expenses, Adjustments	\$ 127	\$ -	\$ 127
90	Depreciation	\$ 147,119	\$ 139,703	\$ 7,416
91	Amortization	\$ 318,081	\$ 312,487	\$ 5,594
92	Accretion (CGS)	\$ 39,170	\$ 40,043	\$ (873)
93	<b>Total Operating Expenses</b>	<b>\$ 2,385,200</b>	<b>\$ 2,330,112</b>	<b>\$ 55,088</b>
94				
95	<b>Other Expenses and (Income)</b>			
96	Net Interest Expense	\$ 226,179	\$ 203,494	\$ 22,685
97	LDD	\$ 34,121	\$ 37,701	\$ (3,580)
98	Irrigation Rate Discount Costs	\$ 21,718	\$ 21,770	\$ (53)
99	<b>Sub-Total</b>	<b>\$ 282,017</b>	<b>\$ 262,964</b>	<b>\$ 19,053</b>
100	<b>Total Expenses</b>	<b>\$ 2,667,218</b>	<b>\$ 2,593,077</b>	<b>\$ 74,141</b>
101				
102	<b>Revenue Credits</b>			
103	Generation Inputs for Ancillary, Control Area, and Other Services Revenues	\$ 111,676	\$ 110,911	\$ 765
104	Downstream Benefits and Pumping Power revenues	\$ 21,572	\$ 20,607	\$ 965
105	4(h)(10)(c) credit	\$ 261,630	\$ 111,288	\$ 150,342
106	PRSC Net Credit (Composite)	\$ (13,764)	\$ -	\$ (13,764)
107	Colville and Spokane Settlements	\$ 4,600	\$ 4,600	\$ 0
108	Energy Efficiency Revenues	\$ -	\$ -	\$ -
109	PF Load Forecast Deviation Liquidated Damages	\$ -	\$ -	\$ -
110	Miscellaneous revenues	\$ 11,623	\$ 12,104	\$ (481)
111	Renewable Energy Certificates	\$ -	\$ -	\$ -
112	Net Revenues from other Designated BPA System Obligations (Upper Baker)	\$ 523	\$ 523	\$ (0)
113	RSS Revenues	\$ 3,114	\$ 3,114	\$ -
114	Firm Surplus and Secondary Adjustment (from Unused RHWI)	\$ 98,789	\$ 98,789	\$ -
115	Balancing Augmentation Adjustment	\$ 2,358	\$ 2,358	\$ -
116	Transmission Loss Adjustment	\$ 33,464	\$ 33,464	\$ -
117	Tier 2 Rate Adjustment	\$ 2,713	\$ 2,713	\$ -
118	NR Revenues	\$ 1	\$ 1	\$ -
119	<b>Total Revenue Credits</b>	<b>\$ 538,299</b>	<b>\$ 400,473</b>	<b>\$ 137,827</b>
120				
121	<b>Augmentation Costs (not subject to True-Up)</b>			
122	Tier 1 Augmentation Resources (includes Augmentation RSS and Augmentation RSC adders)	\$ 10,948	\$ 10,948	\$ -
123	Augmentation Purchases	\$ -	\$ -	\$ -
124	<b>Total Augmentation Costs</b>	<b>\$ 10,948</b>	<b>\$ 10,948</b>	<b>\$ -</b>
125				
126	<b>DSI Revenue Credit</b>			
127	Revenues 12 aMW @ IP rate	\$ 4,039	\$ 3,998	\$ 40
128	<b>Total DSI revenues</b>	<b>\$ 4,039</b>	<b>\$ 3,998</b>	<b>\$ 40</b>

# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE			
	July (Q3) (\$000)	Rate Case forecast for FY 2024 (\$000)	July (Q3) - Rate Case Difference
129			
130	<b>Minimum Required Net Revenue Calculation</b>		
131	\$ 305,318	\$ 459,999	\$ (154,681)
132	\$ -	\$ -	\$ -
133	\$ 27,167	\$ 27,167	\$ -
134	\$ 8,275	\$ 8,067	\$ 208
135	<b>\$ 340,761</b>	<b>\$ 495,233</b>	<b>\$ (154,473)</b>
136	\$ 147,119	\$ 139,703	\$ 7,416
137	\$ 318,081	\$ 312,487	\$ 5,594
138	\$ 39,170	\$ 40,043	\$ (873)
139	\$ (45,937)	\$ (45,937)	\$ -
140	\$ (34,767)	\$ (34,767)	\$ -
141	\$ 500	\$ 500	\$ -
142	\$ -	\$ 17,600	\$ (17,600)
143	\$ -	\$ -	\$ -
144	\$ -	\$ -	\$ -
145	\$ (30,600)	\$ (30,600)	\$ -
146	\$ 5,694	\$ 5,694	\$ -
147	\$ (15,100)	\$ (15,100)	\$ -
148	\$ (11,469)	\$ (11,469)	\$ -
149	\$ (4,335)	\$ (4,335)	\$ -
150	\$ (33,743)	\$ (33,743)	\$ 0
151	\$ (101,500)	\$ -	\$ (101,500)
152	\$ -	\$ -	\$ -
153	\$ (20,000)	\$ -	\$ (20,000)
154	<b>\$ 213,112</b>	<b>\$ 340,075</b>	<b>\$ (126,963)</b>
155	\$ 127,648	\$ 155,158	\$ (27,509)
156	\$ 127,648	\$ 155,158	\$ (27,509)
157			
158	\$ 2,263,476	\$ 2,354,711	\$ (91,235)
159			
160	<b>SLICE TRUE-UP ADJUSTMENT CALCULATION FOR COMPOSITE COST POOL</b>		
161		(91,235)	
162		0.9706591	
163		(93,993)	
164		(18,555)	

\* Calculation includes an assumed additional debt repayment of \$90 Million consistent with the Administrators FY23 RDC decision

\*\* Capital Financing (RCD)- RCD funds will be used to directly finance Power FY24 capital investments instead of repaying outstanding debt

\*\*\* Payments for Litigation Stay Agreements- cash payments of \$10m each for the P2IP settlement and the CBRI settlement

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# Fish and Wildlife RDC & Agreements Reporting



# FY22 RDC F&W \$50M Set Aside - Application

- Based on FY22 financial results, \$50M of the Rates Distribution Clause (RDC) was designated to spend on certain non-recurring maintenance needs of existing Fish & Wildlife mitigation assets that (i) BPA anticipates would otherwise need to be addressed during future rate periods and (ii) will result in avoidance of those costs in future rate periods.
  - This \$50M was split evenly between the Fish and Wildlife and Lower Snake programs.
  - The fund is being spent over several years and must be separated from current year rate-funded spending in the aforementioned programs.
  - To track these costs and isolate them from rate funded projects, we created two non-IPR projects that can be seen in our detailed reports found on BPA's Quarterly Reports Portal.

# Locating F&W RDC Report

## Quarterly Reports - Bonneville Power Administration (bpa.gov)

### Information & Reports

Investor Relations

Annual Reports

**Quarterly Reports**

Budget Submission

Debt Management ▼

Financial Plan

Quarterly Business Review

## Quarterly Reports

BPA's Quarterly Financial Report is prepared by BPA's Finance organization and presents current quarter and fiscal year-to-date unaudited financial information, including financial position as of the reporting date.

### Quarterly Reports - Fiscal Year 2024

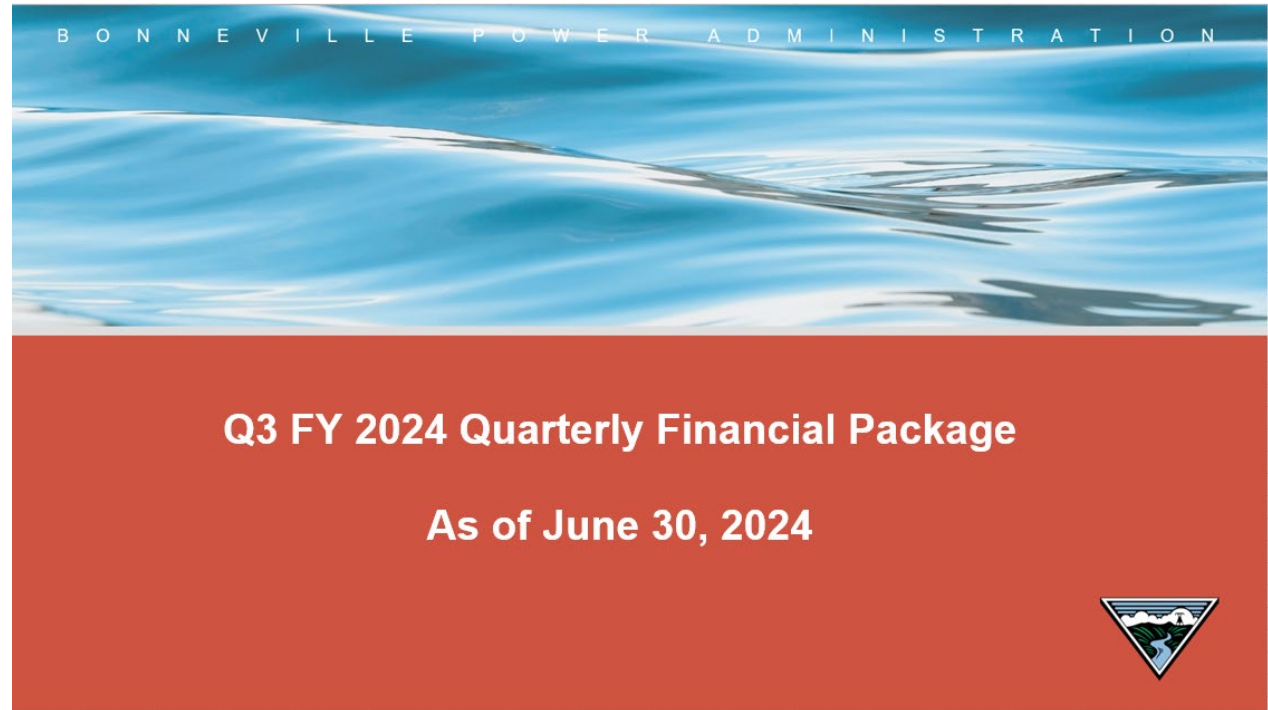
BPA's Quarterly Reports are also prepared by BPA's finance organization. These reports provide current fiscal year-to-date against previous fiscal year to date financial information. The Quarterly Report also includes management's discussion and analysis.

- [First Quarter](#)
- [Second Quarter](#)
- [Third Quarter](#)

### Older Quarterly Reports

Fiscal Year 2023	+
Fiscal Year 2022	+

### Quarterly Financial Packages - Fiscal Year 2024



Title
0120FY24 - Program Plan View
0120FY24 - QBR Analysis
0121FY24 - Summary POWER I.S.
0160FY24 - Detailed POWER I.S.
0064FY24 - POWER

# FY22RDC F&W \$50M Set Aside - Application

Report ID: 0160FY24	<b>Power Services Detailed Statement of Revenues and Expenses</b>	Data Source: PFMS
Requesting BL: Power Business Unit	<b>Program Plan View</b>	Run Date/Time: July 23, 2024 / 06:40
Unit of Measure: \$ Thousands	Through the Month Ended June 30, 2024	% of Year Elapsed = 75%
Unaudited		

	A	B	C	C	D (Rate 1)	E	F	
	FY 2023	FY 2024				FY 2024	FY 2024	
	Actuals	Rate Case	SOY Budget	Target	Current EOY Forecast	Actuals: FYTD	Actuals per Rate Case	
<b>Operating Expenses</b>								
<b>Non-Integrated Program Review Programs</b>								
<b>Asset Management</b>								
56	Billing Credits Generation	5,765	5,300	5,300	5,300	6,000	4,564	86%
57	Clearwater Hatchery Generation	1,367	1,368	1,368	1,368	1,330	973	71%
58	Colville Generation Settlement	25,946	22,000	22,000	22,000	29,101	23,601	107%
59	Cowlitz Falls O&M	8,946	8,600	8,600	8,600	15,462	10,115	118%
60	Fish & Wildlife RDC Funds	24	-	-	-	1,000	1,980	0%
61	Lower Snake Hatcheries RDC Funds	4,106	-	-	-	10,000	4,634	0%
62	Spokane Generation Settlement	6,487	5,749	5,749	5,749	7,275	5,900	103%
63	Trojan Decommissioning	1,794	1,200	1,200	1,200	1,100	794	66%
64	WNP-1,3&4 O&M	1,139	1,141	1,141	1,141	1,200	878	77%
65	<b>Sub-Total</b>	<b>55,576</b>	<b>45,359</b>	<b>45,359</b>	<b>45,359</b>	<b>72,467</b>	<b>53,440</b>	<b>118%</b>
<b>Operations</b>								
66	3rd Party GTA Wheeling	70,221	91,278	91,278	92,843	84,508	55,993	61%
67	3rd Party Trans & Ancillary Services	2,217	3,300	3,300	3,300	3,940	3,392	103%
68	New Resources Integrtn Wheeling	782	768	768	768	839	729	95%
69	PNCA Headwater Benefits	2,832	3,100	3,100	3,100	2,911	2,183	70%
70	Residential Exchange Program	267,350	274,777	274,777	274,777	274,777	209,103	76%
71	<b>Sub-Total</b>	<b>343,402</b>	<b>373,223</b>	<b>373,223</b>	<b>374,788</b>	<b>366,976</b>	<b>271,399</b>	<b>73%</b>

This table can be found in “0160FY24 – Detailed POWER I.S.” tab of the Quarterly Financial Packages – Fiscal Year 2024 mentioned in the previous slide.

# FY22 RDC F&W \$50M Set Aside - Application

- Our FY24 forecast is \$11M. So far, YTD spending has tracked \$6.6M.
- Note: Based on FY23 financial results, the RDC again triggered for Power Services with \$30M of the FY23 RDC being set aside for certain F&W projects/spending. The use of these additional funds is work in progress.

# Long Term Agreements Reporting

- In FY23, BPA Administrator signed 2 new long-term agreements:
  - The Coeur d'Alene Tribal MOA commits an average of \$10M a year for 10 years for resident fish programs as well as wildlife and lands management activities. In addition, Bonneville has committed to \$40M to construct two hatcheries with the Coeur d'Alene Tribe to rear both resident and anadromous fish. The agreement also provides capital funds for lands purchases on and off reservation for the Tribe.
  - The Spokane Tribal MOA commits an average of \$10M a year for 10 years for anadromous and resident fish programs, as well as wildlife mitigation. The MOA also commits up to \$30M in capital funds for lands purchases and \$10M in other capital actions, including the transfer of an anadromous hatchery into tribal ownership/operation.



# Long Term Agreements Reporting

Report ID: 0160FY24	<b>Power Services Detailed Statement of Revenues and Expenses</b>	Data Source: PFMS
Requesting BL: Power Business Unit	<b>Program Plan View</b>	Run Date/Time: July 23,2024 / 06:40
Unit of Measure: \$ Thousands	Through the Month Ended June 30, 2024	% of Year Elapsed = 75%
Unaudited		

This table can be found in “0160FY24 – Detailed POWER I.S.” tab of the Quarterly Financial Packages – Fiscal Year 2024.

	A	B	C	C	D (Note 1)	E	F	
	FY 2023	FY 2024					FY 2024	FY 2024
	Actuals	Rate Case	SOY Budget	Target	Current EOY Forecast	Actuals: FYTD	Actuals per Rate Case	
<b>Operating Expenses</b>								
<b>Integrated Program Review Programs</b>								
<b>Asset Management</b>								
7 Asset Management Enterprise Services	964	-	970	948	3,351	2,391	0%	
8 Bureau of Reclamation	161,861	154,364	170,360	170,360	172,943	124,122	80%	
9 COE CRFM Studies	6,337	9,349	9,349	9,349	14,000	10,582	113%	
10 Columbia Generating Station	315,163	296,477	307,177	307,177	314,633	215,091	73%	
11 Corps Of Engineers	261,338	265,146	272,087	272,087	268,200	190,514	72%	
12 Fish & Wildlife	246,048	269,235	268,622	273,209	265,624	195,157	72%	
13 Generation Project Coordination	3,959	4,443	4,672	4,744	4,577	2,719	61%	
14 Information Technology	-	2,376	-	-	-	-	0%	
15 Long-term Funding Agreements	-	-	-	-	-	-	0%	
16 Lower Snake Hatcheries	30,861	32,765	32,765	32,765	32,765	17,427	53%	
17 Power Internal Support (A)	482	136	553	565	561	439	323%	
18 <b>Sub-Total</b>	1,027,011	1,034,291	1,066,555	1,071,203	1,076,655	758,442	73%	