

# Webex Accessibility tools

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

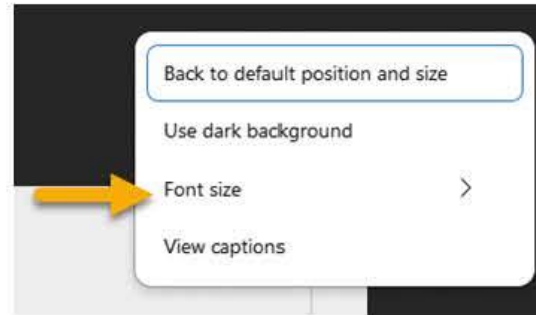


*Note: CC is set individually by each person who wants to enable them.*

## Change font size

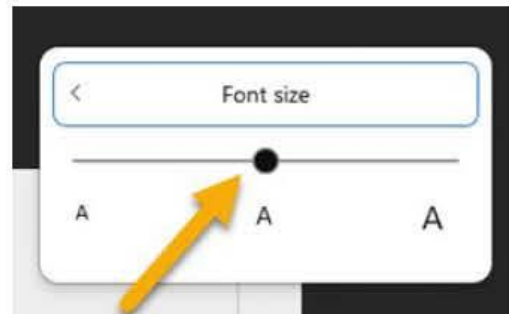
Select the **ellipsis** in the lower right

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Select **font size**

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Use the slider to select the desired size

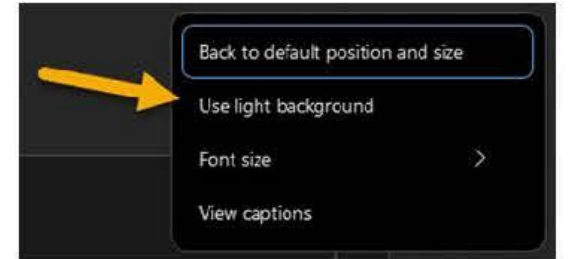
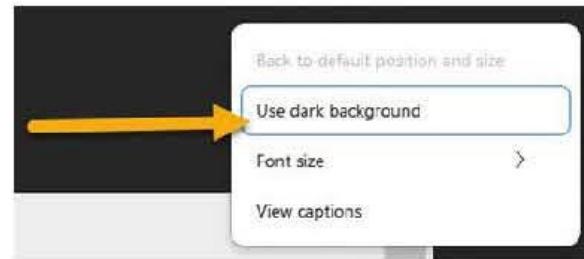
## Change background contrast

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

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Bonneville  
POWER ADMINISTRATION



# QUARTERLY BUSINESS REVIEW TECHNICAL WORKSHOP

May 23, 2024

# AGENDA

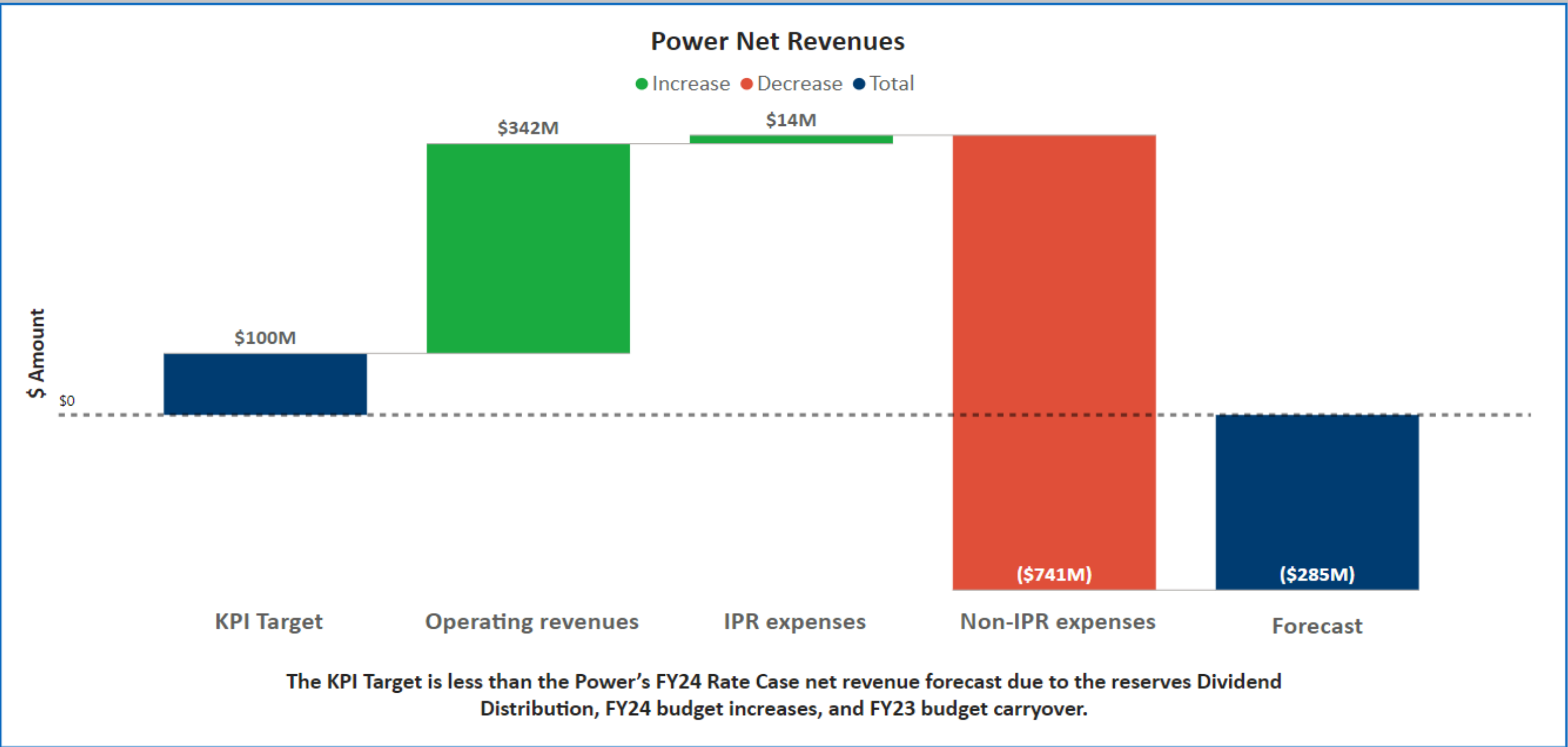
Time	Min.	QBRTW Topic	Presenter
1:00	5	Introduction	Amber Mulvey
1:05	15	FY24 Q2 Forecast: Agency Net Revenues	Karlee Manary, Pablo Zepeda-Martinez
1:20	10	Fish and Wildlife RDC	Manny Holowatz, Binh Phung
1:30	15	FY24 Q2 forecast: Reserves for Risk	Mike Kilbride
1:45	10	FY24 Q2 forecast: Agency Capital	Heather Seibert, Gwen Resendes
1:55	15	Fed Hydro capital metrics	Wayne Todd
2:10	15	Transmission capital metrics	Jeff Cook, Mike Miller
2:25	15	BPA EIM Metrics	Matt Germer, Mariano Mezzatesta, Keli Haraguchi
2:40	15	Western Resource Adequacy Program (WRAP)	Steve Belcoff
2:55	5	Questions & Answers / Closing	Amber Mulvey

# FY24 Q2 Forecast: Agency Net Revenues

Presenter: Karlee Manary and Pablo Zepeda-Martinez



# FY24 Q2 FORECAST: POWER NET REVENUE





# QBRTW ANALYSIS: POWER NET REVENUE

## **Operating Revenues increased by \$342M due to the following:**

- Gross sales are \$202M 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 \$157M higher than expected due to a higher forecast of modeled purchases and prices.
- Other revenues are \$36M greater than the target due to Financial Swaps revenues which we do not forecast.
- Inter-business Unit Revenues are forecast to be \$3M greater than the target due to the Generation Inputs forecast increased driven by penalty charges, mostly from the January cold snap. These increases were partially offset by decreases due to delays to three solar plants and one wind project whose service dates were pushed out from FY24 to FY25.
- Partially offset by:
  - \$57M 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 \$10.4M, mainly due to higher revenue credits.

## **Integrated Program Review Operating Expenses decreased \$14M due to the following:**

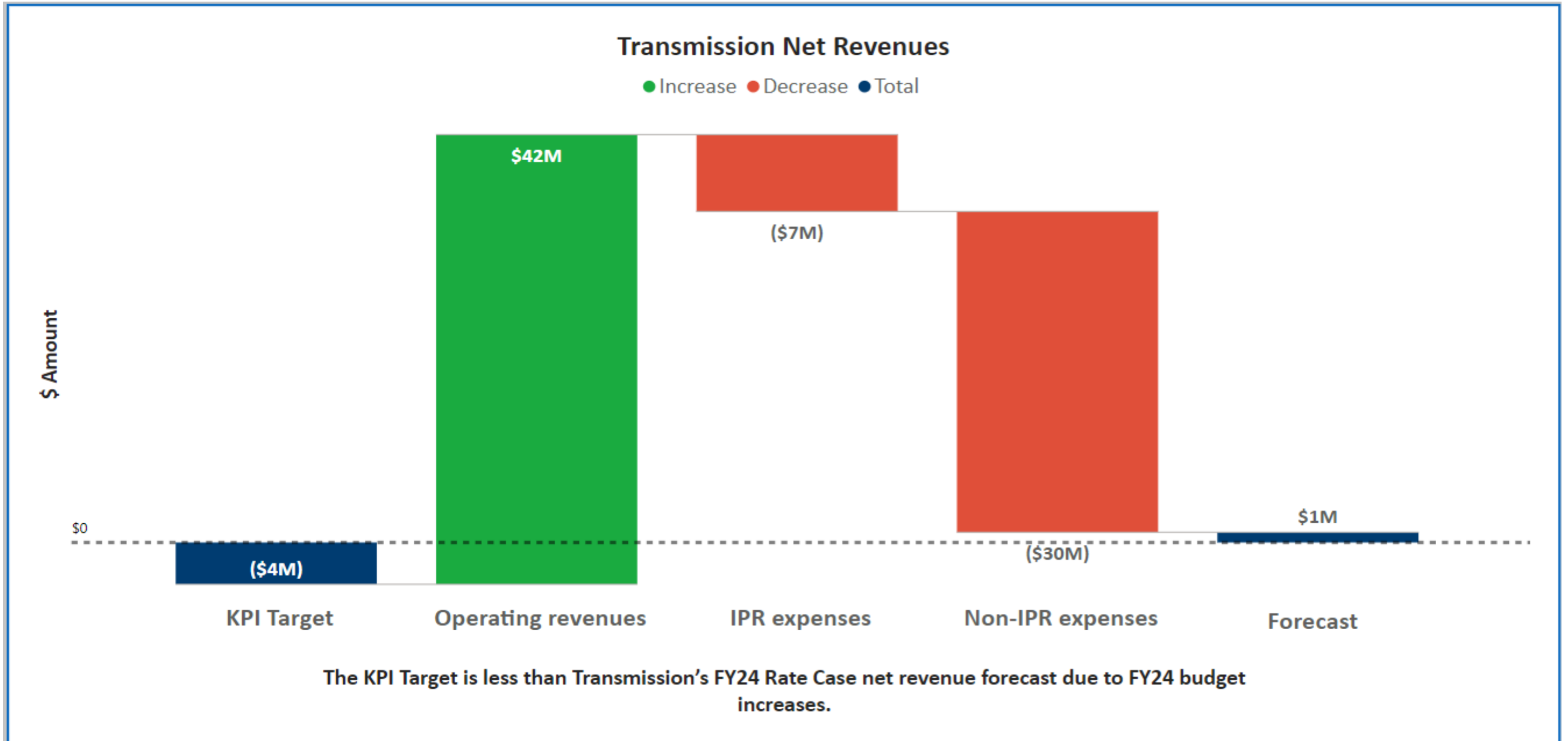
- Asset management expenses are \$1M below Target primarily due to a reduced F&W forecast due to hiring and contract delays, partially offset by higher forecasts for the U.S. Army Corps of Engineers, Bureau of Reclamation and CRFM Studies due to higher costs from inflation.
- Operations expenses are \$8M below Target primarily due to lower staffing, travel and training, and lower Conservation Infrastructure spending.
- \$5M decrease in Enterprise Services Programs mainly driven by hiring delays.

# QBRTW ANALYSIS: POWER NET REVENUE (cont.)

## **Non-IPR Programs increased by \$741M due to the following:**

- The Power Purchases forecast is \$897M higher than the target, driven by dry conditions leading to increased market purchases at higher prices.
- Depreciation and Amortization—a non-cash item—is \$12M higher than Target due to more federal and Columbia Generating Station capital being placed into service than anticipated in the BP-24 Rate Case.
- Fish & Wildlife and Lower Snake Hatcheries forecast to spend \$14M of the Reserves Distribution Clause (RDC) funding they received.
- The Colville and Spokane Generating Settlements came in \$8M higher than Target due to higher average Power sales 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.
- Partially offset by:
  - There will be no Tier 2 Power Purchases. The FY24 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 \$57M but are net revenue neutral due to a like amount in the revenue section.
  - Lower Transmission and Ancillary Services by \$12M, mainly driven by lower total inventory.
  - Year-to-date EIM Scheduling Coordinator credits of \$9M, which were not forecast in the Target but are included in the Q2 forecast.

# FY24 Q2 FORECAST: TRANSMISSION NET REVENUE





# QBRTW ANALYSIS: TRANSMISSION NET REVENUE

## **Operating Revenues increased \$42M primarily due to the following:**

- \$62M increase in Sales driven by:
  - Increased Ancillary Service revenues because of a significant increase in EIM Sub-allocated charges that were not forecast in the Target and had 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:
  - \$27M decrease in Inter-Business Unit Revenues 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.

## **Integrated Program Review Operating Expenses increased \$7m primarily due to the following:**

- \$12M increase in the Asset Management, Operations and Other Income, Expenses and Adjustments Programs driven by:
  - Less G&A 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
- \$5M decrease in Commercial Activities and Enterprise Services Programs driven by unexpected hiring delays and a reduction in the Additional Post Retirement Contribution.

# QBRTW ANALYSIS: TRANSMISSION NET REVENUE

## **Non-IPR Program Expenses increased by \$30M primarily due to the following:**

- \$36M increase in Commercial Activities Non-IPR primarily driven by increased EIM Entity Scheduling Coordinator Settlements Charges which experienced significant activity during January's cold snap.
- \$8M decrease in Depreciation expense resulting from less capital being placed in service during prior periods than forecast in the Target. This is partially offset by a \$5M increase in forecast Amortization expense resulting from the Lease accounting change in a previous year.
- \$3M decrease in Net Interest expense and other income primarily driven by:
  - Increased AFUDC due to a higher AFUDC rate and Construction Work in Progress balance then assumed in the Target.
  - Increased interest income due to significantly higher interest rates.Partially offset by:
  - Increased interest expense on federal debt and increased Customer Advances because of higher interest rates than assumed in the Target.

# Fish and Wildlife RDC

Presenter: Manny Holowatz and Binh Phung



# 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

The screenshot shows the Bonneville Power Administration website. The top navigation bar includes 'Energy & services', 'Environment & land', 'Learn & participate', and 'About & careers'. A dropdown menu is open under 'About & careers', showing 'Newsroom', 'Finance', 'Who We Are', and 'Careers'. The main content area is titled 'Quarterly Reports' and contains the following sections:

- Information & Reports** (left sidebar):
  - Investor Relations
  - Annual Reports
  - Quarterly Reports** (highlighted)
  - 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](#)
- Older Quarterly Reports**:

Fiscal Year 2023	+
Fiscal Year 2022	+
- Quarterly Financial Packages - Fiscal Year 2024**:

BPA's Quarterly Financial Packages are prepared by BPA's Finance organization and provide easy access to detailed rate case, budget, forecast and actual financial performance, either for an annual period or the fiscal year-to-date. The detailed financial information in the Quarterly Financial Packages is used to create the Quarterly Business Review and Quarterly Business Review Technical Workshop presentation materials.

  - [First Quarter](#)
  - [Second Quarter](#) (highlighted with a red box)
- Older Financial Overview Documents**:

Fiscal Year 2023	+
Fiscal Year 2022	+

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

The screenshot shows the cover of the 'Q2 FY 2024 Quarterly Financial Package' report. The cover features a blue and white image of water ripples at the top, with the text 'BONNEVILLE POWER ADMINISTRATION' in a light blue font. Below this is a red banner with the text 'Q2 FY 2024 Quarterly Financial Package' and 'As of March 31, 2024'. The Bonneville Power Administration logo is in the bottom right corner. Below the banner is a grid of document thumbnails. A red arrow points to the '0160FY24 - Detailed POWER I.S.' document. The bottom navigation bar shows the following documents: 'Title', '0120FY24-QBR Analysis', '0120FY24-Program Plan View', '0121FY24 - Summary POWER I.S.', '0160FY24 - Detailed POWER I.S.', and '0064FY24 - POWER Rev by Pr'.

# FY22 RDC 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: April 23,2024 / 15:11
Unit of Measure: \$ Thousands	Through the Month Ended March 31, 2024	% of Year Elapsed = 50%
	Unaudited	

	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>Non-Integrated Program Review Programs</b>							
<b>Asset Management</b>							
53 Billing Credits Generation	5,765	5,300	5,300	5,300	5,300	3,012	57%
54 Clearwater Hatchery Generation	1,367	1,368	1,368	1,368	1,488	651	48%
55 Colville Generation Settlement	25,946	22,000	22,000	22,000	29,101	18,101	82%
56 Cowlitz Falls O&M	8,946	8,600	8,600	8,600	15,462	7,212	84%
57 Fish & Wildlife RDC Funds	24	-	-	-	6,000	797	
58 Lower Snake Hatcheries RDC Funds	4,106	-	-	-	8,000	2,728	
59 Spokane Generation Settlement	6,487	5,749	5,749	5,749	7,275	4,525	79%
60 Trojan Decommissioning	1,794	1,200	1,200	1,200	1,100	491	41%
61 WNP-1,3&4 O&M	1,139	1,141	1,141	1,141	1,200	586	51%
62 <b>Sub-Total</b>	55,576	45,359	45,359	45,359	74,926	38,102	84%
<b>Operations</b>							
63 3rd Party GTA Wheeling	70,221	91,278	91,278	92,843	84,973	38,302	42%
64 3rd Party Trans & Ancillary Services	2,217	3,300	3,300	3,300	3,757	2,838	86%
65 New Resources Integrtn Wheeling	782	768	768	768	810	531	69%
66 PNCA Headwater Benefits	2,832	3,100	3,100	3,100	2,911	1,455	47%
67 Residential Exchange Program	267,350	274,777	274,777	274,777	274,777	148,723	54%
68 <b>Sub-Total</b>	343,402	373,223	373,223	374,788	367,228	191,849	51%

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

Report ID: 0121FY24		Power Services Summary Statement of Revenues and Expenses				Data Source: PFMS		
Requesting BL: POWER BUSINESS UNIT		Program Plan View				Run Date/Time: April 23, 2024 / 15:09		
Unit of measure: \$ Thousands		Through the Month Ended March 31, 2024				% of Year Elapsed = 50%		
Unaudited								
	FY 2023		FY 2024				FY 2024	
	Actuals: FYTD	Actuals	Rate Case	SOY Budget	Target	Current EOY Forecast	Actuals: FYTD	
<b>Operating Revenues</b>								
1	Gross Sales (excluding bookout adjustment)	\$ 1,569,060	\$ 2,873,213	\$ 2,870,373	\$ 2,711,812	\$ 2,704,973	\$ 2,907,359	\$ 1,608,506
2	Bookout Adjustment to Sales	(66,322)	(93,781)	-	-	-	(56,854)	(56,854)
3	Other Revenues	21,627	53,680	24,230	24,516	24,230	60,692	48,322
4	Inter-Business Unit	54,380	100,940	110,911	110,063	110,911	113,487	58,518
5	U.S. Treasury Credits	162,994	262,336	115,888	147,838	115,888	272,865	226,508
6	<b>Total Operating Revenues</b>	<b>1,741,739</b>	<b>3,196,388</b>	<b>3,121,402</b>	<b>2,994,230</b>	<b>2,956,002</b>	<b>3,297,549</b>	<b>1,885,001</b>
<b>Operating Expenses</b>								
<b>Integrated Program Review Programs</b>								
7	Asset Management	508,929	1,027,011	1,034,291	1,066,555	1,071,203	1,069,748	498,950
8	Operations	49,569	117,435	136,916	143,069	144,177	135,907	49,736
9	Commercial Activities	39,060	103,278	99,584	96,567	107,058	106,861	29,373
10	Enterprise Services G&A and Post-Retirement Contributions	46,684	96,345	103,972	110,948	112,270	107,175	46,041
11	Undistributed Reduction	-	-	-	-	-	-	-
12	Other Income, Expenses & Adjustments (IPR O&M)	276	-	-	-	-	1,104	1,104
13	<b>Sub-Total Integrated Program Review Operating Expenses</b>	<b>644,518</b>	<b>1,344,069</b>	<b>1,374,763</b>	<b>1,417,140</b>	<b>1,434,709</b>	<b>1,420,795</b>	<b>625,204</b>
<b>Operating Expenses</b>								
<b>Non-Integrated Program Review Programs</b>								
14	Asset Management	29,019	55,576	45,359	45,359	45,359	74,926	38,102
15	Operations	196,967	343,402	373,223	373,223	374,788	367,228	191,849
16	Commercial Activities	740,409	1,075,403	307,905	346,001	306,341	1,014,122	886,719
17	Other Income, Expenses & Adjustments (Non-IPR O&M)	299	(586)	-	-	-	-	34
18	Non-Federal Debt Service <Note 2	-	-	-	-	-	-	-
19	Depreciation, Amortization & Accretion	249,850	501,394	492,233	509,860	492,233	504,091	252,042
20	<b>Sub-Total Non-Integrated Program Review Operating Expenses</b>	<b>1,216,543</b>	<b>1,975,189</b>	<b>1,218,721</b>	<b>1,274,443</b>	<b>1,218,721</b>	<b>1,960,367</b>	<b>1,368,747</b>
21	<b>Total Operating Expenses</b>	<b>1,861,061</b>	<b>3,319,258</b>	<b>2,593,484</b>	<b>2,691,583</b>	<b>2,653,430</b>	<b>3,381,162</b>	<b>1,993,951</b>
22	<b>Net Operating Revenues (Expenses)</b>	<b>(119,322)</b>	<b>(122,870)</b>	<b>527,919</b>	<b>302,647</b>	<b>302,573</b>	<b>(83,614)</b>	<b>(108,951)</b>
<b>Interest expense and other income, net</b>								
23	Interest Expense	137,912	268,928	239,394	271,550	239,394	269,295	130,771
24	AFUDC	(9,177)	(17,628)	(17,821)	(19,000)	(17,821)	(21,000)	(9,912)
25	Interest Income	(23,713)	(48,629)	(14,887)	(45,747)	(14,887)	(35,511)	(19,257)
26	Other, net	(5,760)	(11,675)	(4,335)	(8,907)	(4,335)	(11,053)	(8,718)
27	<b>Total interest expense and other income, net</b>	<b>99,261</b>	<b>190,995</b>	<b>202,351</b>	<b>197,896</b>	<b>202,351</b>	<b>201,731</b>	<b>92,884</b>
28	<b>Total Expenses</b>	<b>1,960,322</b>	<b>3,510,253</b>	<b>2,795,834</b>	<b>2,889,478</b>	<b>2,855,781</b>	<b>3,582,893</b>	<b>2,086,835</b>
28	<b>Net Revenues (Expenses)</b>	<b>\$ (218,583)</b>	<b>\$ (313,865)</b>	<b>\$ 325,568</b>	<b>\$ 104,751</b>	<b>\$ 100,222</b>	<b>\$ (285,345)</b>	<b>\$ (201,835)</b>

A higher-level RDC spending report is included in the “0120FY24 – QBR Analysis” and “0121FY24 – Summary POWER I.S.” of the Quarterly Report Financial Packages.

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

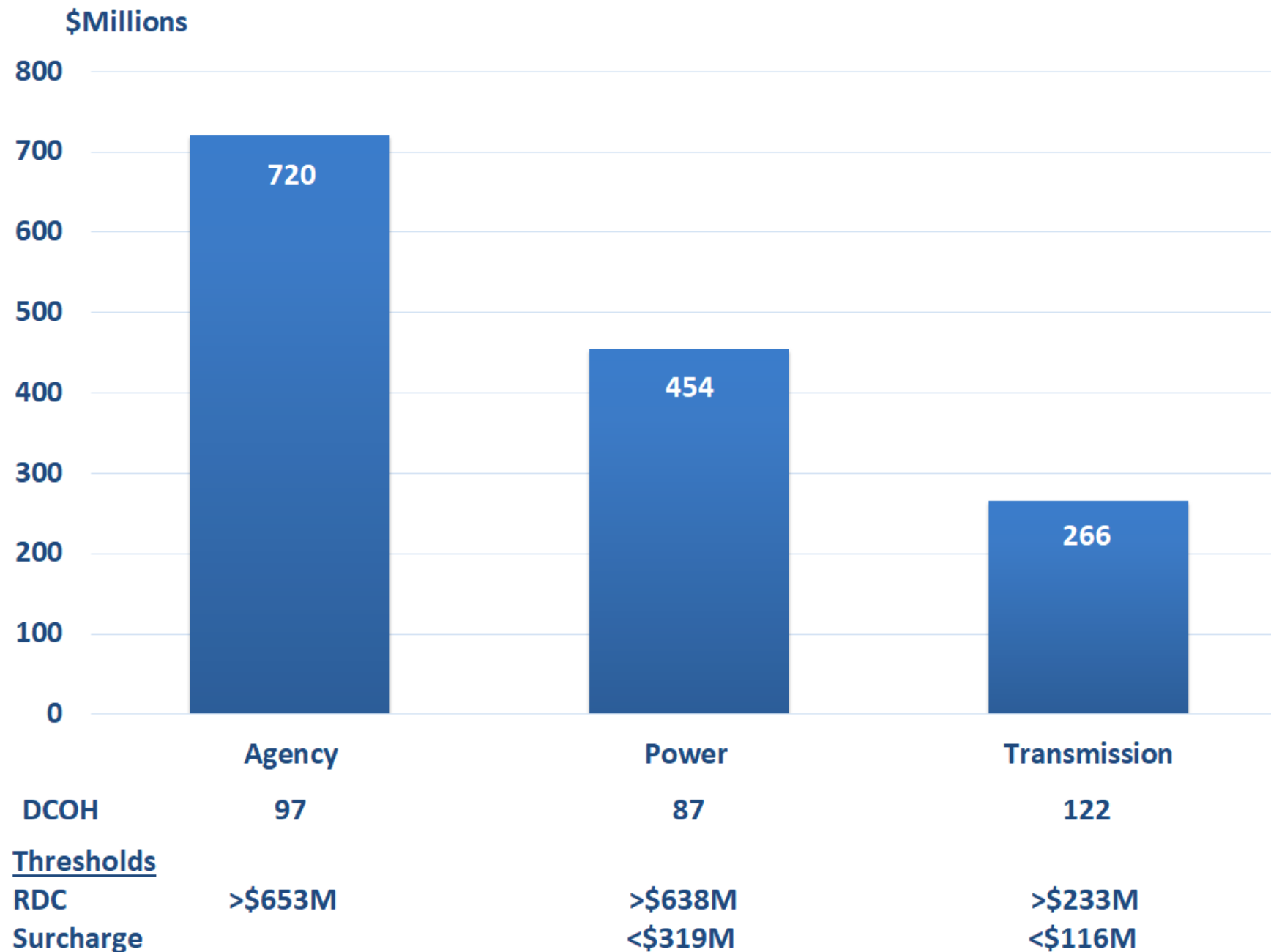
- Our FY24 forecast is \$14M. So far, YTD spending has tracked \$3.5M.
- Spending has been slow to show up as the projects were being planned and contracts established, but much of this work is now complete and spending will be increasing in the periods and years to come.
- Note: Based on FY23 financial 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 and reporting mechanism of these additional funds are work in progress and we will be reporting back to you when decisions have been finalized.

# RESERVES

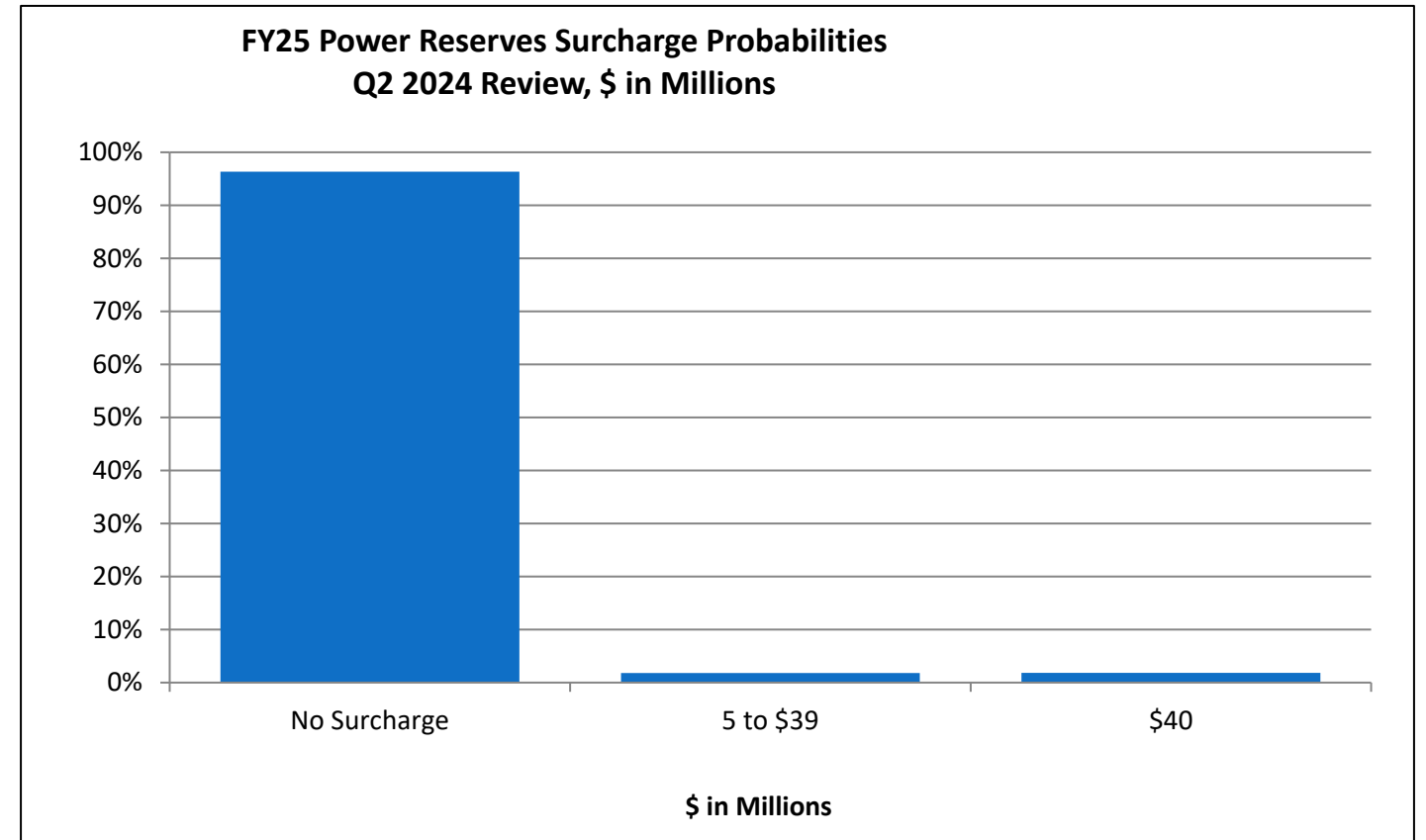
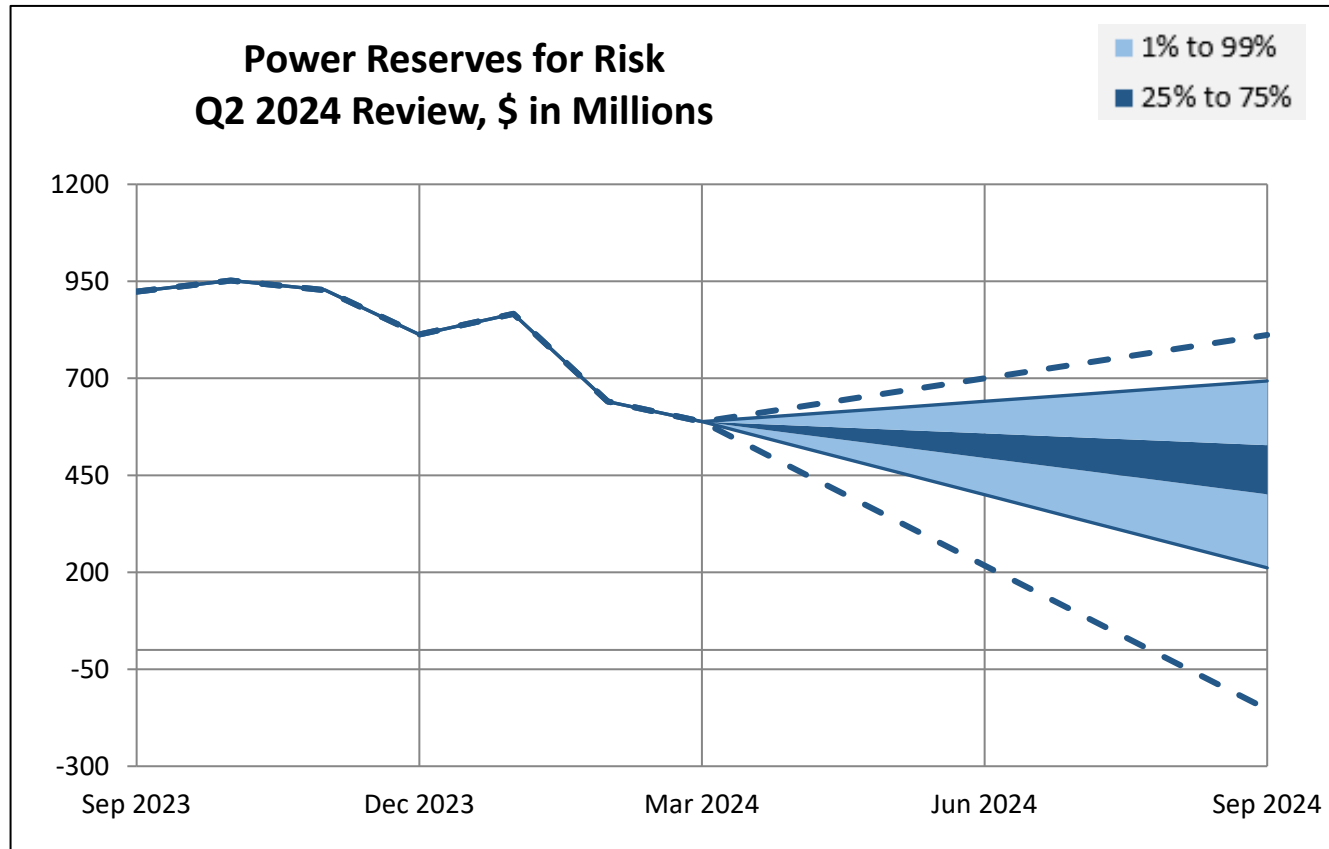
Presenters: Mike Kilbride



# Q2 FY24 FORECAST: RESERVES FOR RISK



# Q2 FY24 FORECAST: POWER FINANCIAL RESERVES



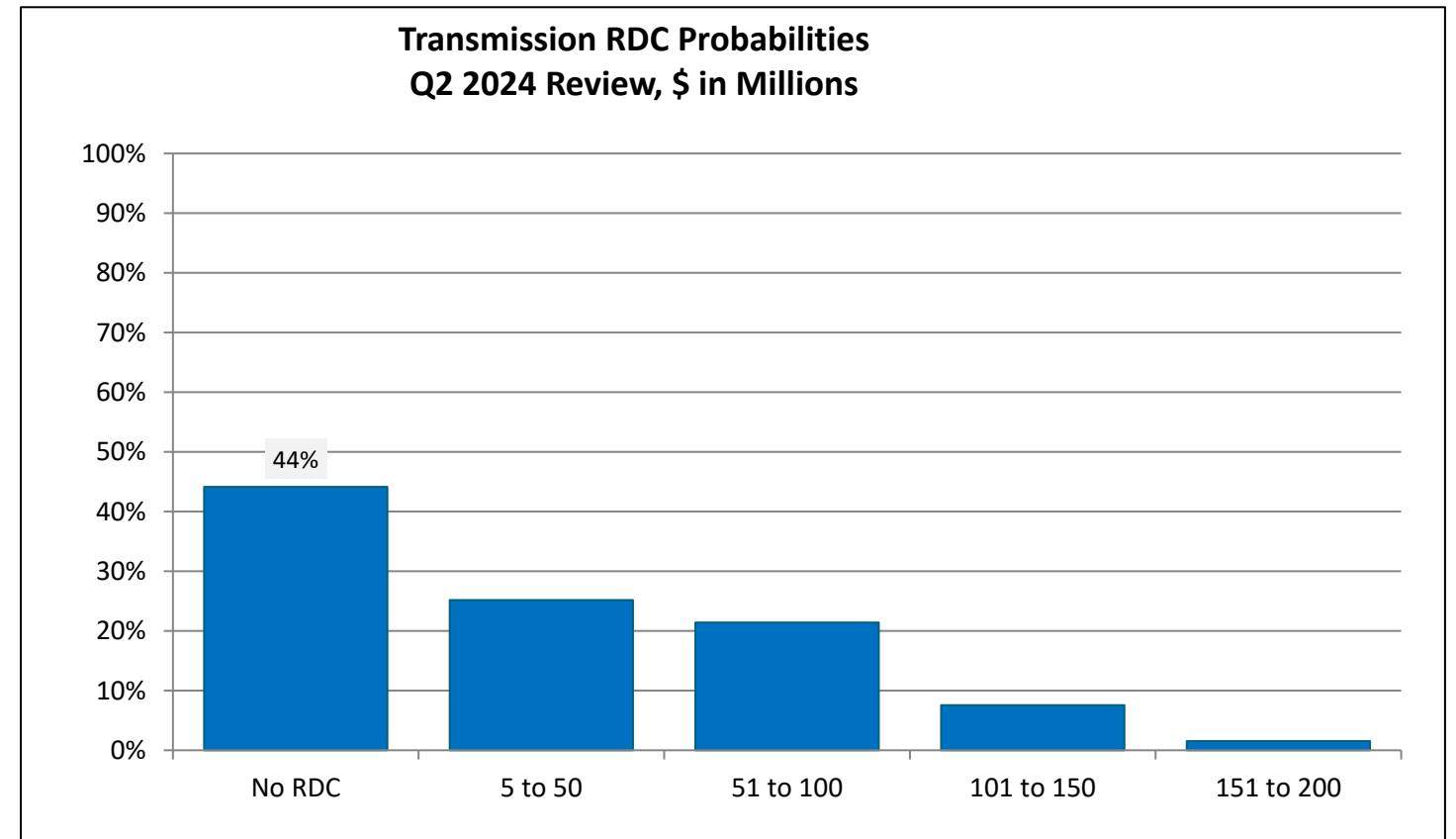
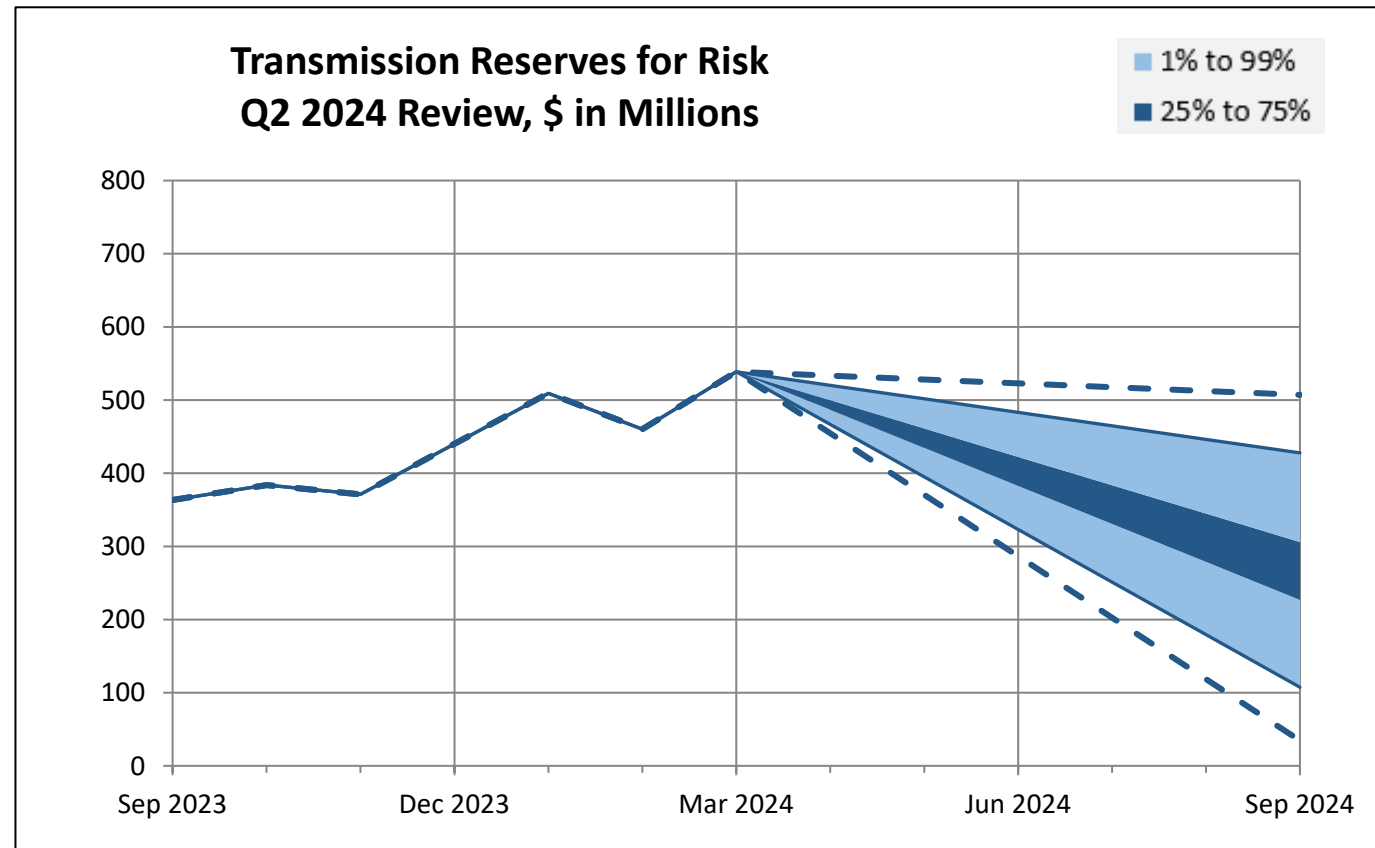
## Power Reserves Range

- 1% to 99% Range: \$200m to \$682m
- 25% to 75% Range: \$390m to \$516m

## Power Risk Mechanisms

- 2% modeled probability of an RDC with an expected value of \$1m
- 4% modeled probability of an FRP Surcharge with an expected value of \$1m
- <1% modeled probability of a CRAC

# Q2 FY24 FORECAST: TRANSMISSION FINANCIAL RESERVES



## Transmission Reserves Range

- 1% to 99% Range:  
\$108m to \$428m
- 25% to 75% Range:  
\$227m to \$306m

## Transmission Risk Mechanisms

- 56% modeled probability of an RDC with an expected value of \$34m
- <1% modeled probability of a CRAC or FRP Surcharge

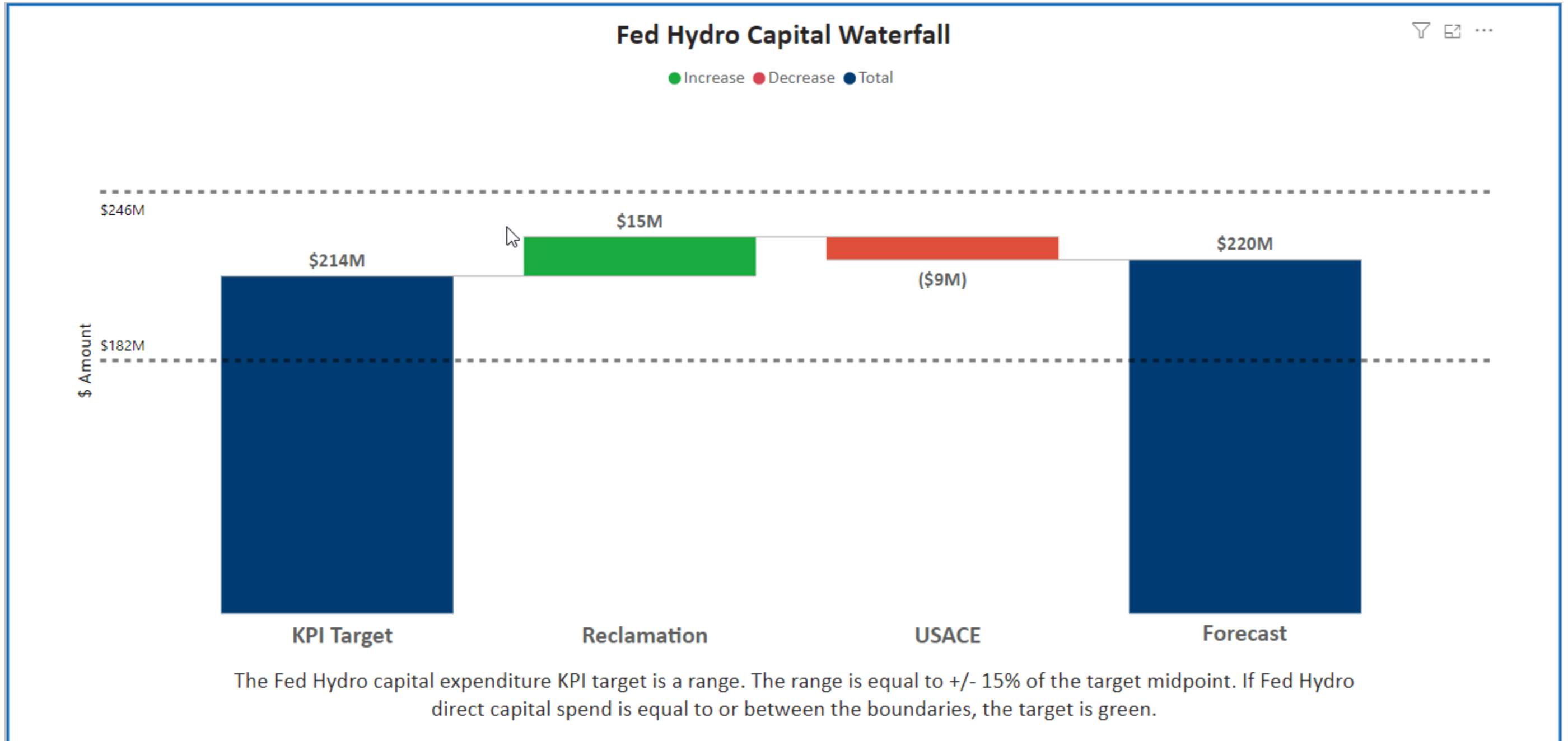


# FY24 Q2 Forecast: Agency Capital

Presenters: Heather Seibert and Gwen Resendes



# FY24 Q2 FORECAST: FED HYDRO CAPITAL



# QBRTW ANALYSIS: FED HYDRO

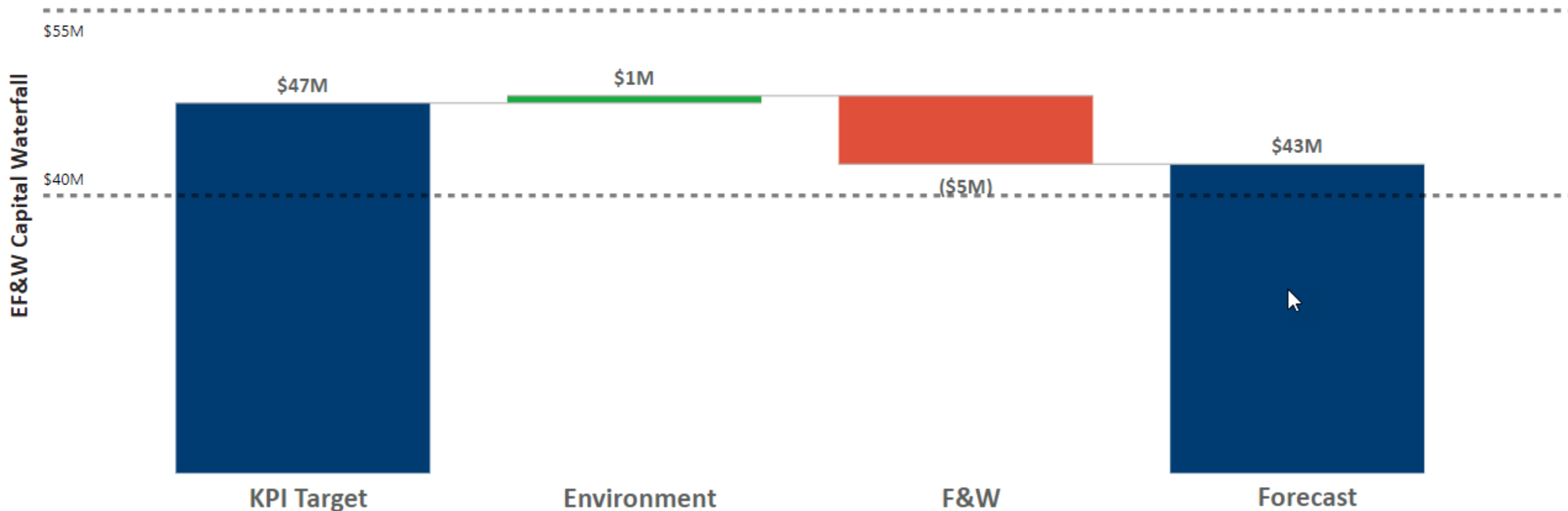
**Power Fed Hydro direct capital forecast increased \$6M overall in Q2 compared to the KPI Target midpoint primarily due to:**

- \$15M forecast increase in the Bureau of Reclamation due to ramping up of large projects such as the McNary dam levee drainage pump station upgrades and the Chief Joseph Dam generator windings.
- \$6M forecasted decrease in United States Army Corps of Engineers due to schedule delays.
  - 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 Q2 FORECAST: EF&W CAPITAL

## EF&W Capital Waterfall

● Increase ● Decrease ● Total



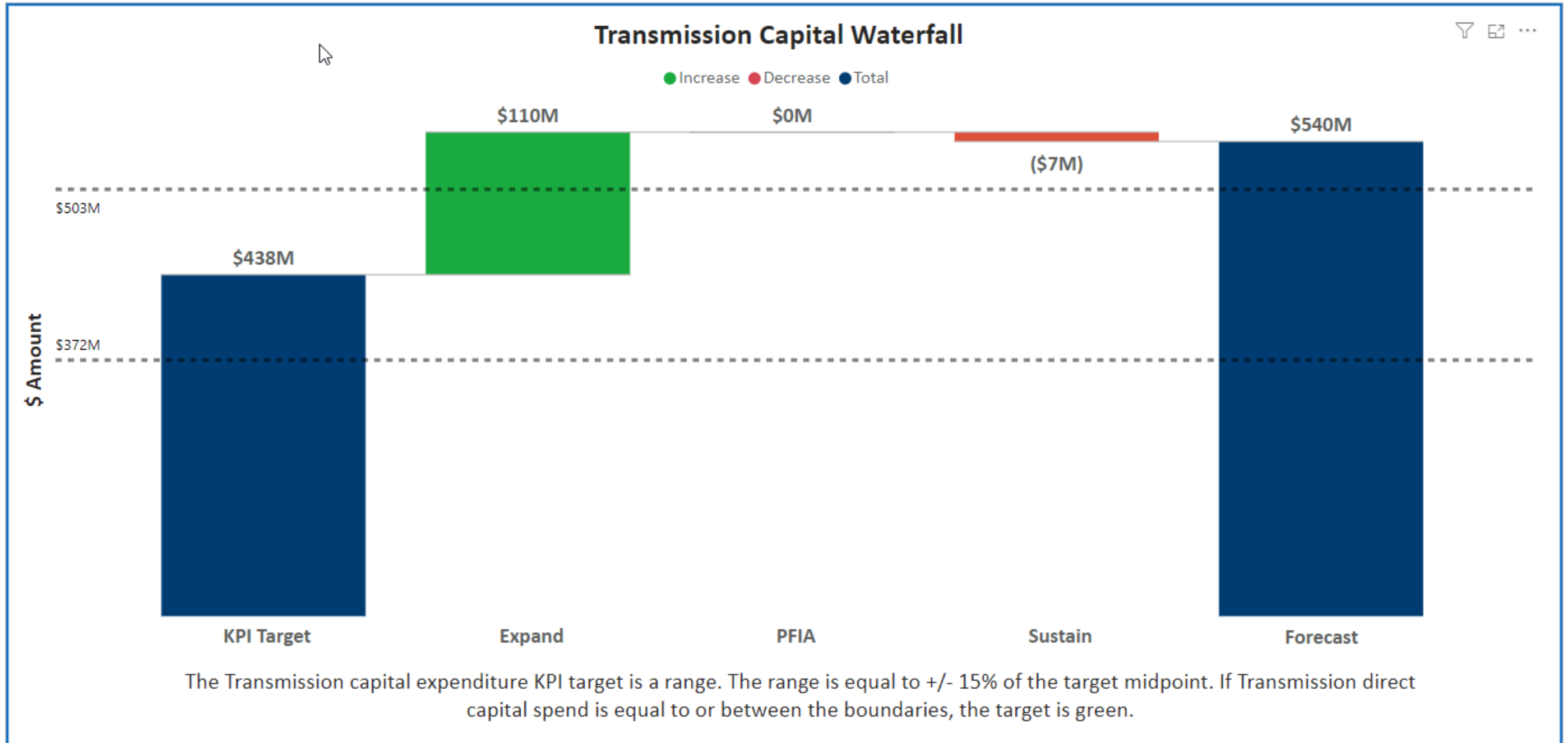
EF&W capital does not have its own KPI, but does roll up into the Agency Capital KPI. The +/- 15% range is based on approved Operating Year budget and is displayed to support tracking capital execution and how these expenditures could impact the Agency KPI target.

# QBRTW ANALYSIS: EF&W

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

- \$1M increase in Environment due to increase in contract estimated costs.
- \$5M decrease in Fish and Wildlife due to hatchery project delays.

# FY24 Q2 FORECAST: TRANSMISSION CAPITAL





# QBRTW ANALYSIS: TRANSMISSION

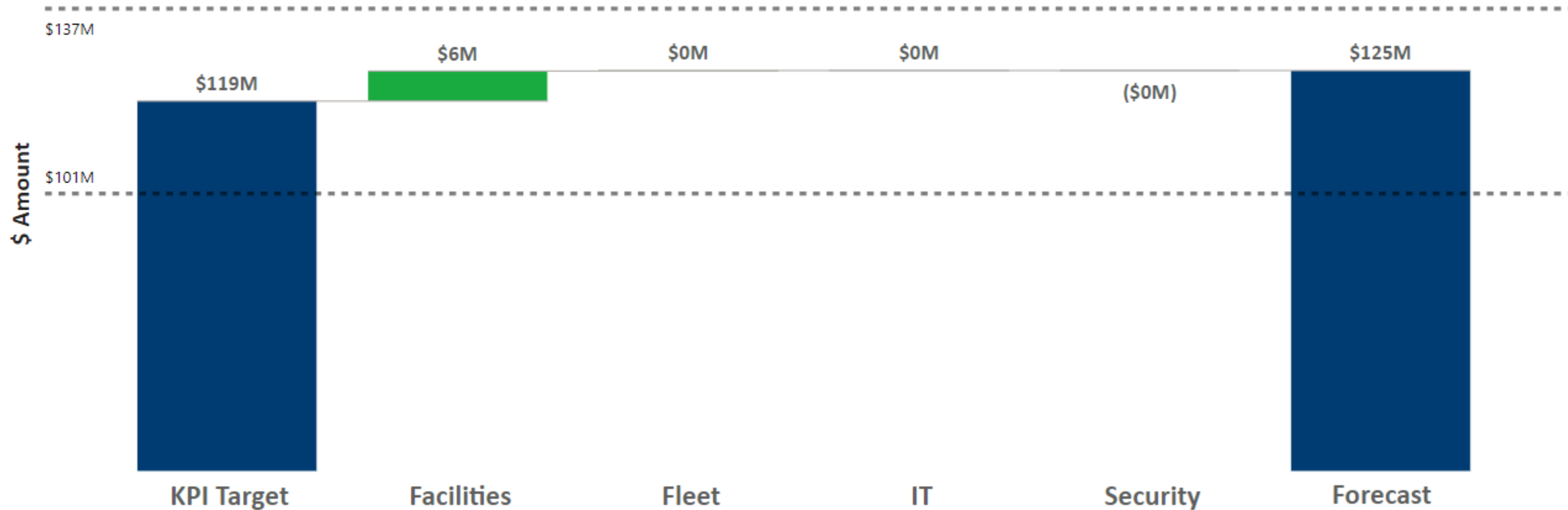
**Transmission's direct capital forecast increased by \$103M compared to the KPI Target midpoint primarily due to:**

- Transmission's Expand forecast increased by \$110M primarily due to successful risk mitigation & avoidance of delays on the Longhorn project which increased spending requirements in FY24.
- Transmission's Sustain program decreased by \$7M to accommodate for lower-than-anticipated spending in multiple programs included wood and steel pole replacements.

# FY24 Q2 FORECAST: ENTERPRISE SERVICES CAPITAL

## Enterprise Services Capital Waterfall

● Increase ● Decrease ● Total



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

# QBRTW ANALYSIS: ENTERPRISE SERVICES

**Enterprise Services direct capital forecast increased by \$6M primarily due to:**

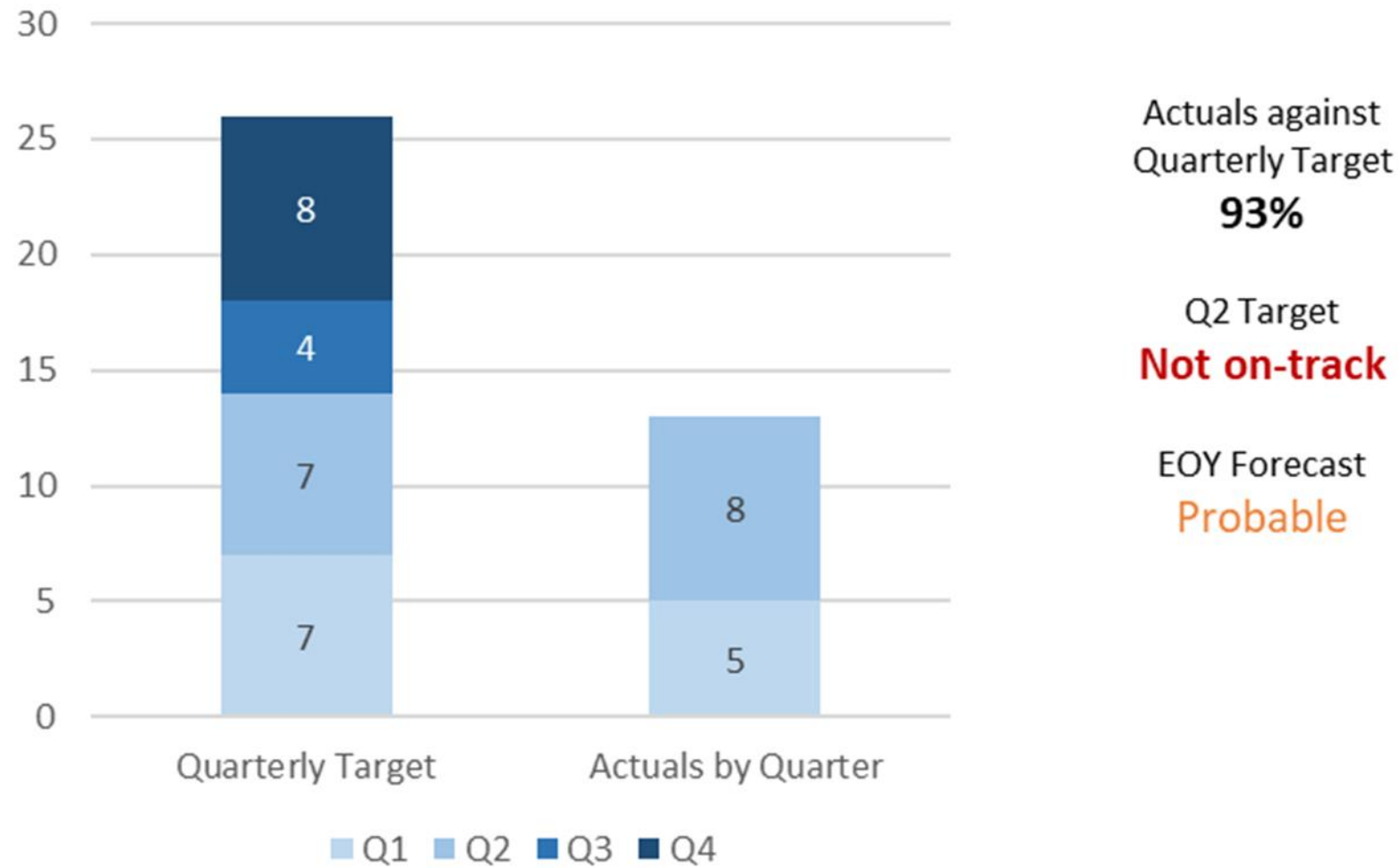
- Facilities increased forecast driven by early procurement of materials for the Vancouver Control Center project.

# FEDERAL HYDRO CAPITAL METRICS

Presenter: Wayne Todd



# FED HYDRO CAPITAL MILESTONES



## Key Takeaway:

Quarterly target not on track. End-of-year target is achievable but there isn't much more room for schedule slippage. This year, we added 'Design Completion' and 'Contract Award' milestones rather than only tracking 'Assets Placed Into Service'.

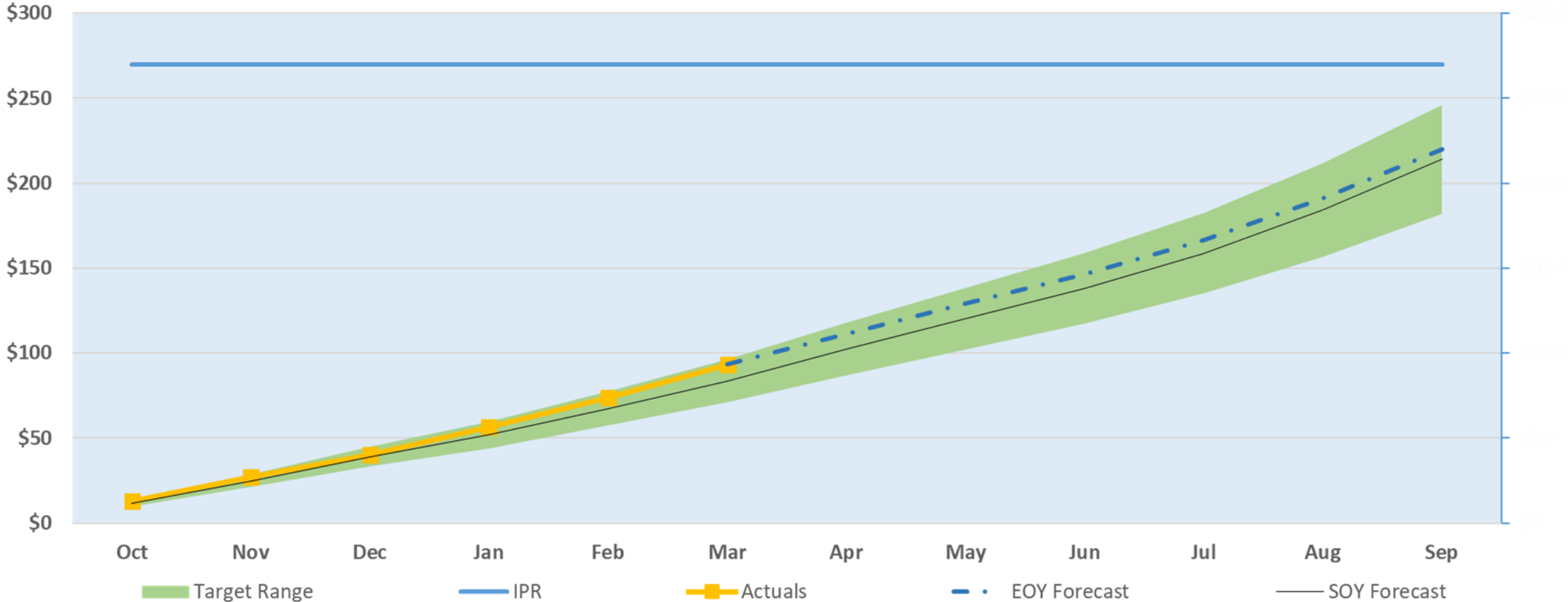
# FED HYDRO CAPITAL PROJECT MILESTONES

Major 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	Delayed to Q3	
	DEX Intake Gantry Crane	Physical Completion	Delayed to Q3	
	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	Delayed to Q3	
	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 Q3	
GCL LPH/RPH Cyclops Semi-Gantry Crane Replacement #3917		Complete Design	Complete	
BON Spillway Gate Repair & Storage Pits		Award Contract	Delayed to Q3	
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	

## 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 Q2 w/ \$93 million in actuals; +/-15% range thru Q2 is \$71-\$96 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

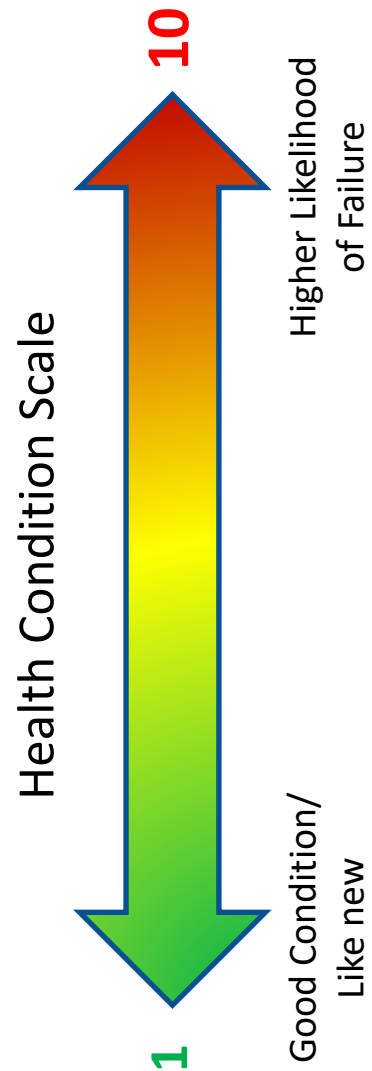


# TRANSMISSION SERVICES CAPITAL METRICS

Presenters: Jeff Cook and Mike Miller

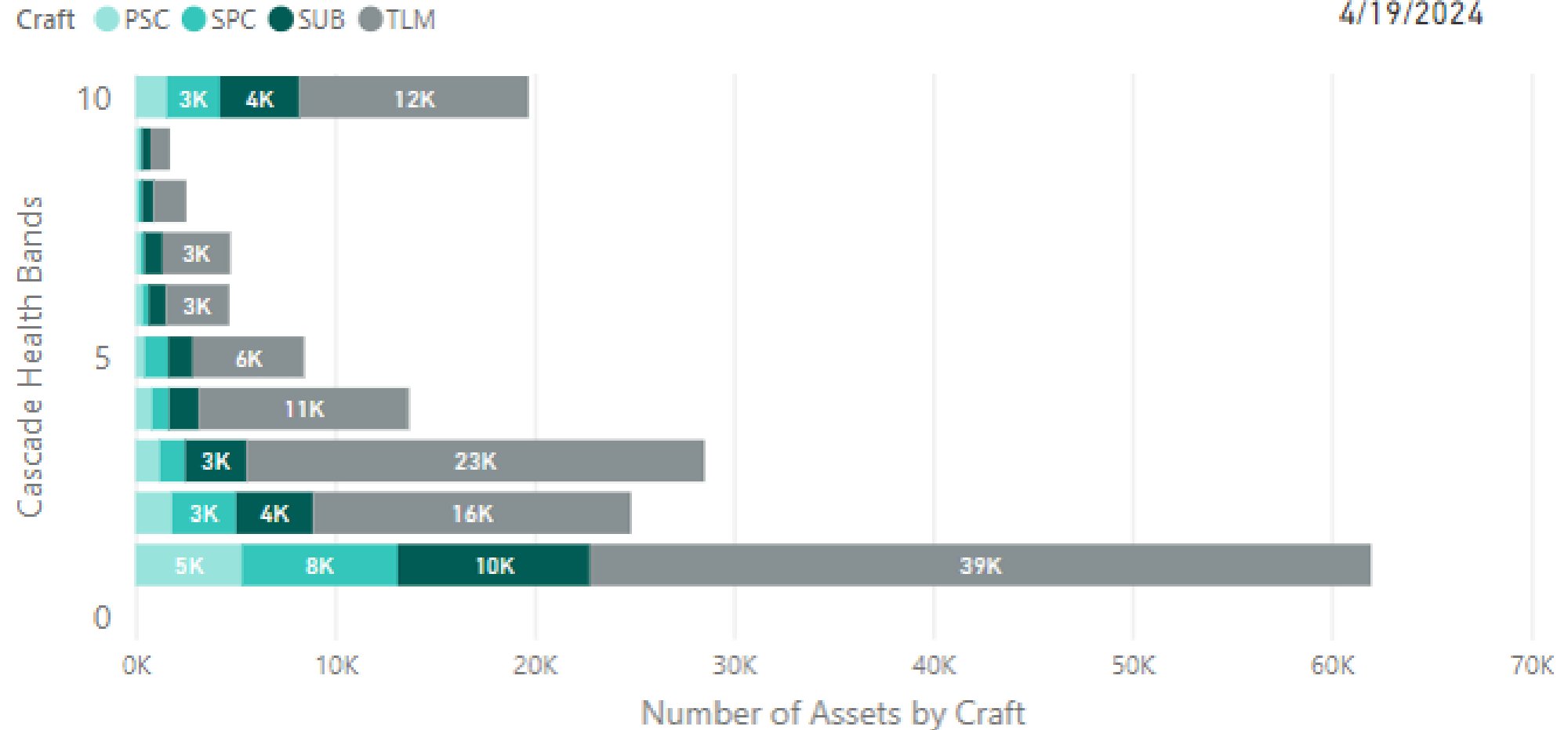


# ASSET MANAGEMENT HEALTH METRIC



Asset Condition by Health

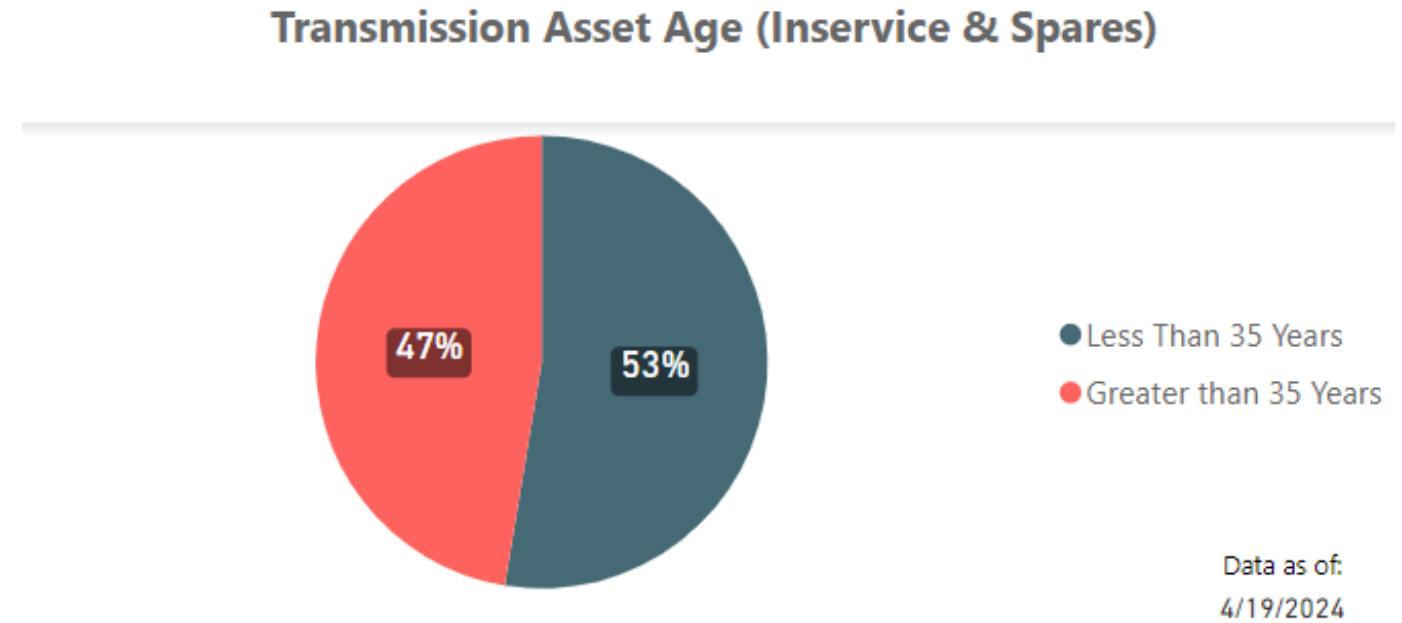
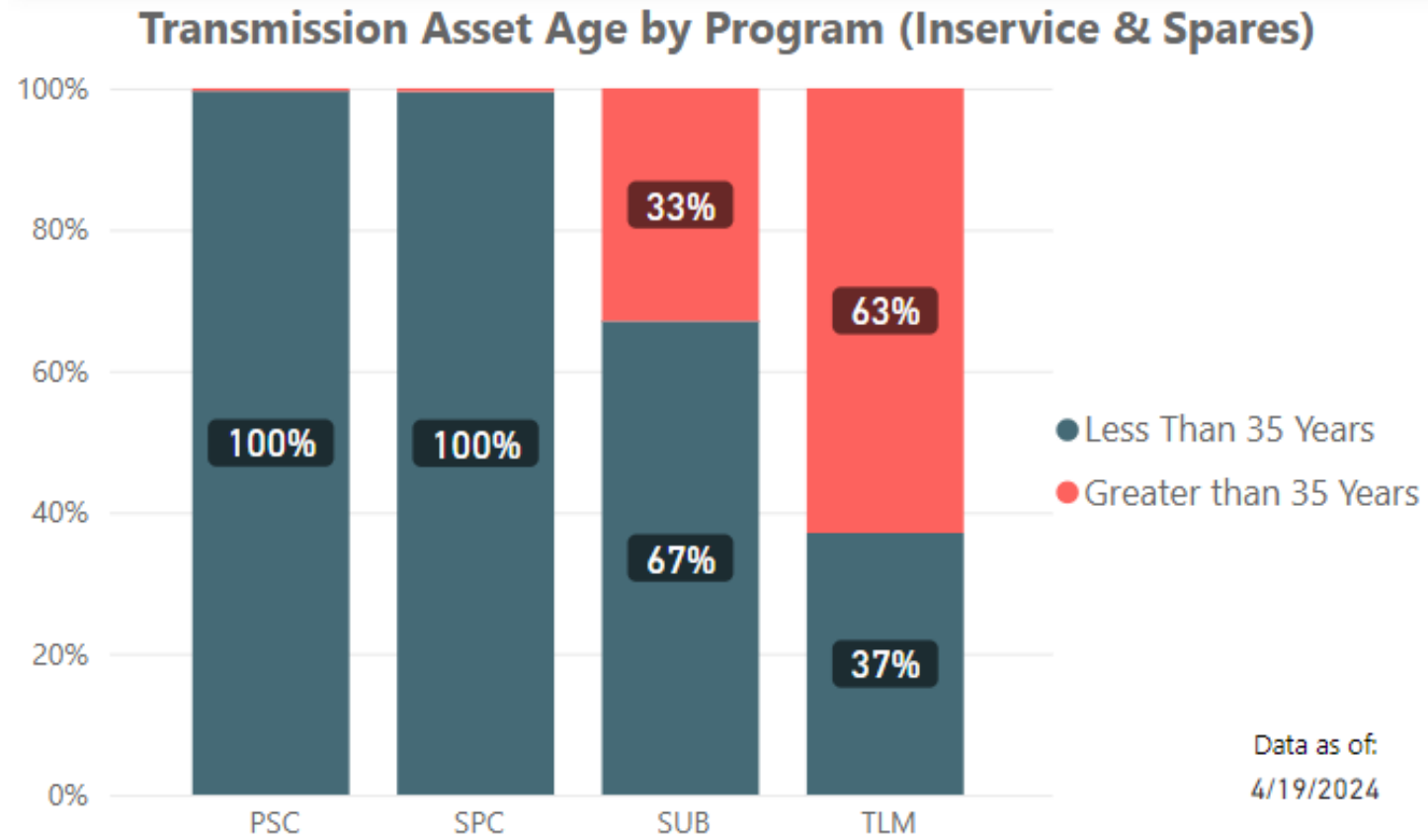
Data as of:  
4/19/2024



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.

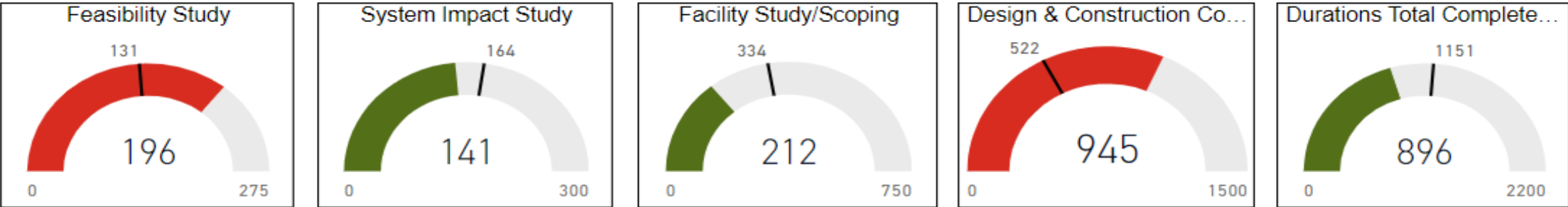
# ASSET MANAGEMENT HEALTH METRIC



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

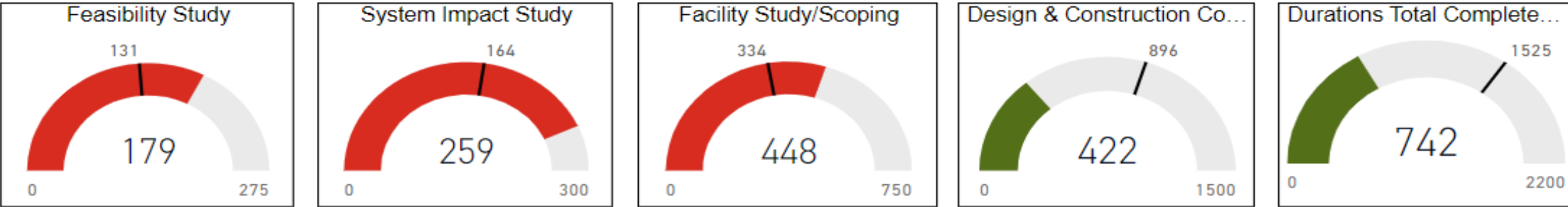


Includes LGI, LLI, SGI projects with a Queue date on or after 01/01/2015

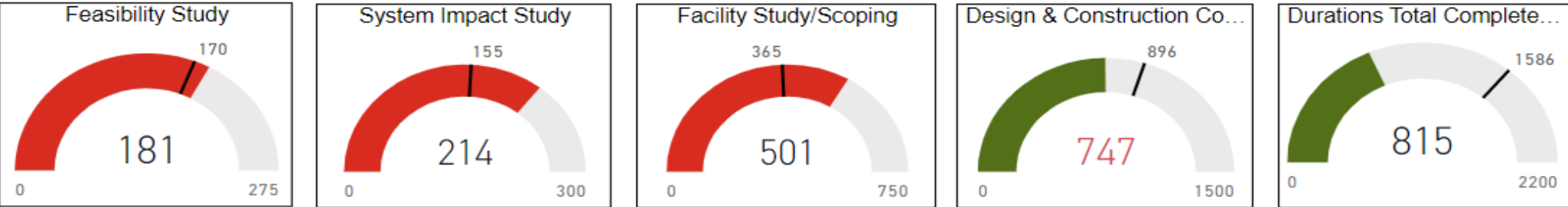
Optimal performance is below the lines, which denote the target ceiling levels

\* Completed Projects Only

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

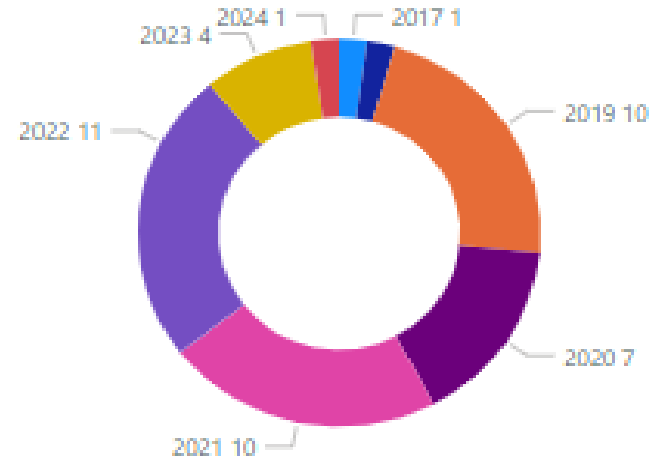


**Line and Load Interconnection Projects:** Projects can be a customer owned line terminated at a BPA facility, a tap of a BPA owned line or other plans of service

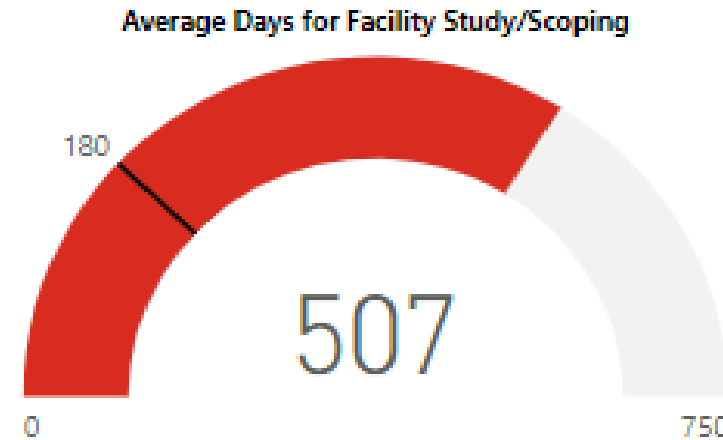


# CUSTOMER DURATION METRIC (NEW)

FAS Study Completion by Year



PCM Process | FAS with CDD (42 Projects)



Primary Capacity Model  
(Internal Scoping Resources)

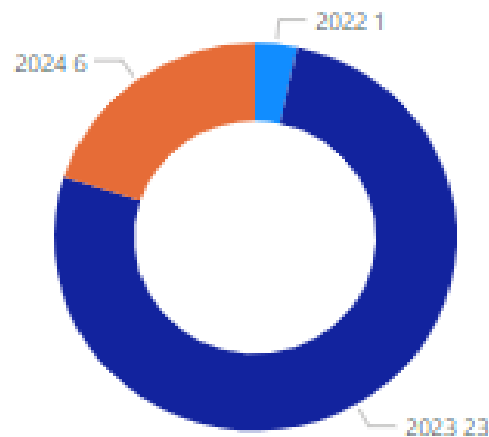
Includes LGI, LLI, SGI projects with a Queue date on or after 01/01/2017

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

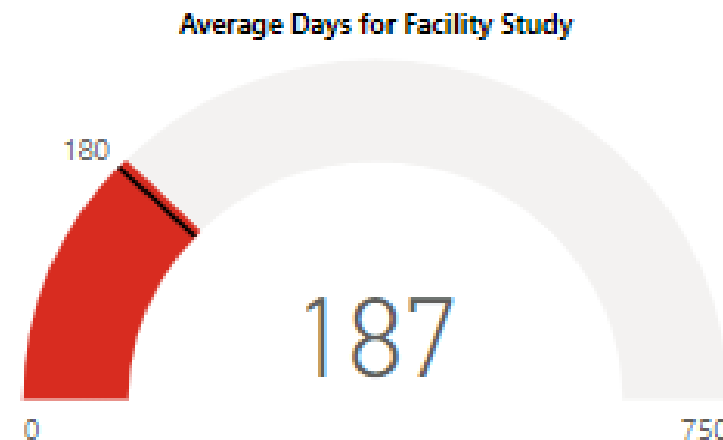
Completed Projects Only

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

FAS Study Completion by Year



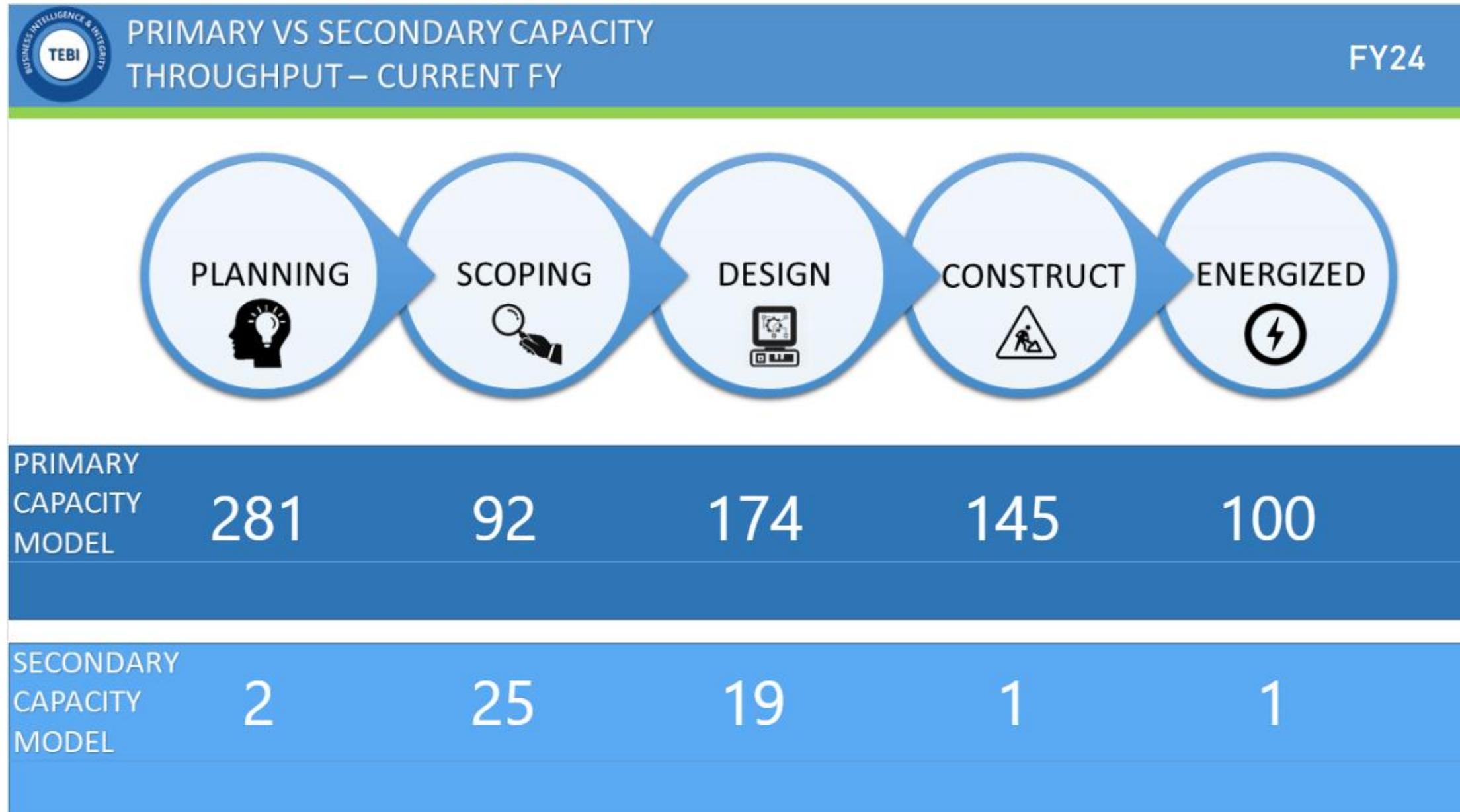
ECM Process | FAS/Scoping No CDD (30 Projects)



Engineering Capacity Model  
(Internal Consulting Resources)

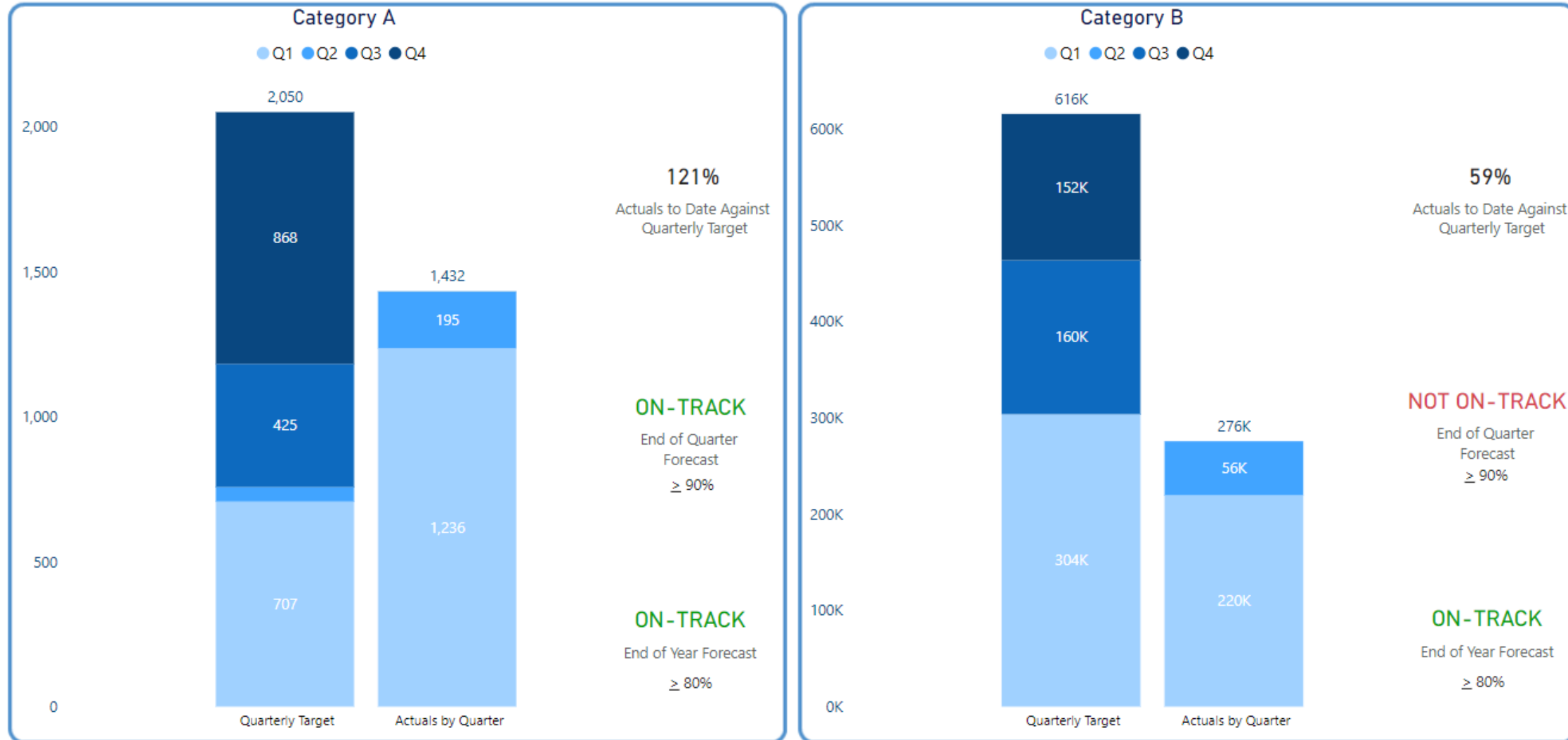
# PRIMARY VS SECONDARY CAPACITY THROUGHPUT

Transmission as of FY24 Q2:



# CAPITAL ASSETS PLANNED VS COMPLETED

## Transmission as of FY24 Q2:



### Key Takeaway:

Not On Track – Category B assets are not on track for close of Q2. 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 Q2:

### FY24 Capital Work Plan Complete Project Milestones

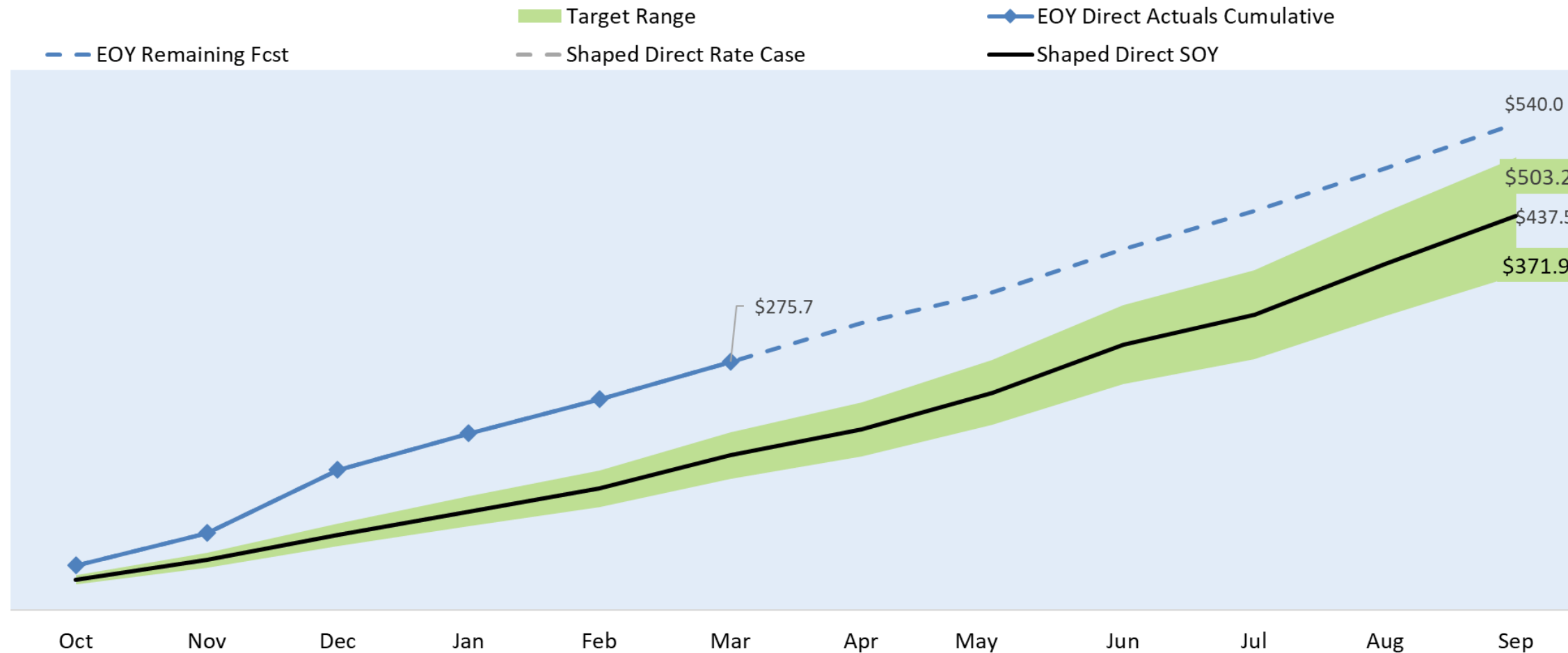
	Priority Projects	Target Milestones	Model	On Track
Q1	P04342 Longhorn Substation	Substantial completion of below grade construction and start of foundation	SCM	Complete
Q2	P03890 Vancouver Control Center	Receive contractor estimate for VCC	PCM	Complete
	P05157 FIN Remediation	80% of design complete for 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	Yes
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 Boardman)	Finalize preferred substation location	SCM	Yes
	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



## FY24 Key Performance Indicator

- 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:** Not on Track for EOY – Target reset in progress

# BPA EIM Metrics Q2 FY2024

Presenters:  
Matt Germer  
Mariano Mezzatesta  
Kelii Haraguchi



# External Reporting Background

- In the Final EIM Close out letter, BPA committed to work with customers to develop metrics.
- This collaboration took place at stakeholder workshops in FY21 and FY22.
- At the January 27, 2022 workshop, BPA committed to two phases of metrics.

# Phase 1 Metrics

1. Provide the quantity of unspecified purchases made through the EIM. BPA will also consider a metric on the amount delivered to California and the associated premium/costs.
2. Provide how frequently BPA passes the Resource Sufficiency (RS) balancing test, RS capacity test and RS flexibility test.
3. Provide data on EIM transfer limits and use.
4. Provide summary data on BA scheduling error and the frequency with which CAISO BA forecast was targeted on a quarterly basis. The scheduling error will be measured against either the CAISO BA forecast and/or actual load. BPA will collect and share data on how the BA did as a whole with every entity scheduling to their own best forecast. **Note that the scheduling error relative to the CAISO forecast is included in the Balancing Test results.**

BPA committed to reporting on Phase 1 metrics within six months of EIM go-live (November 2022 QBR Technical Workshop).

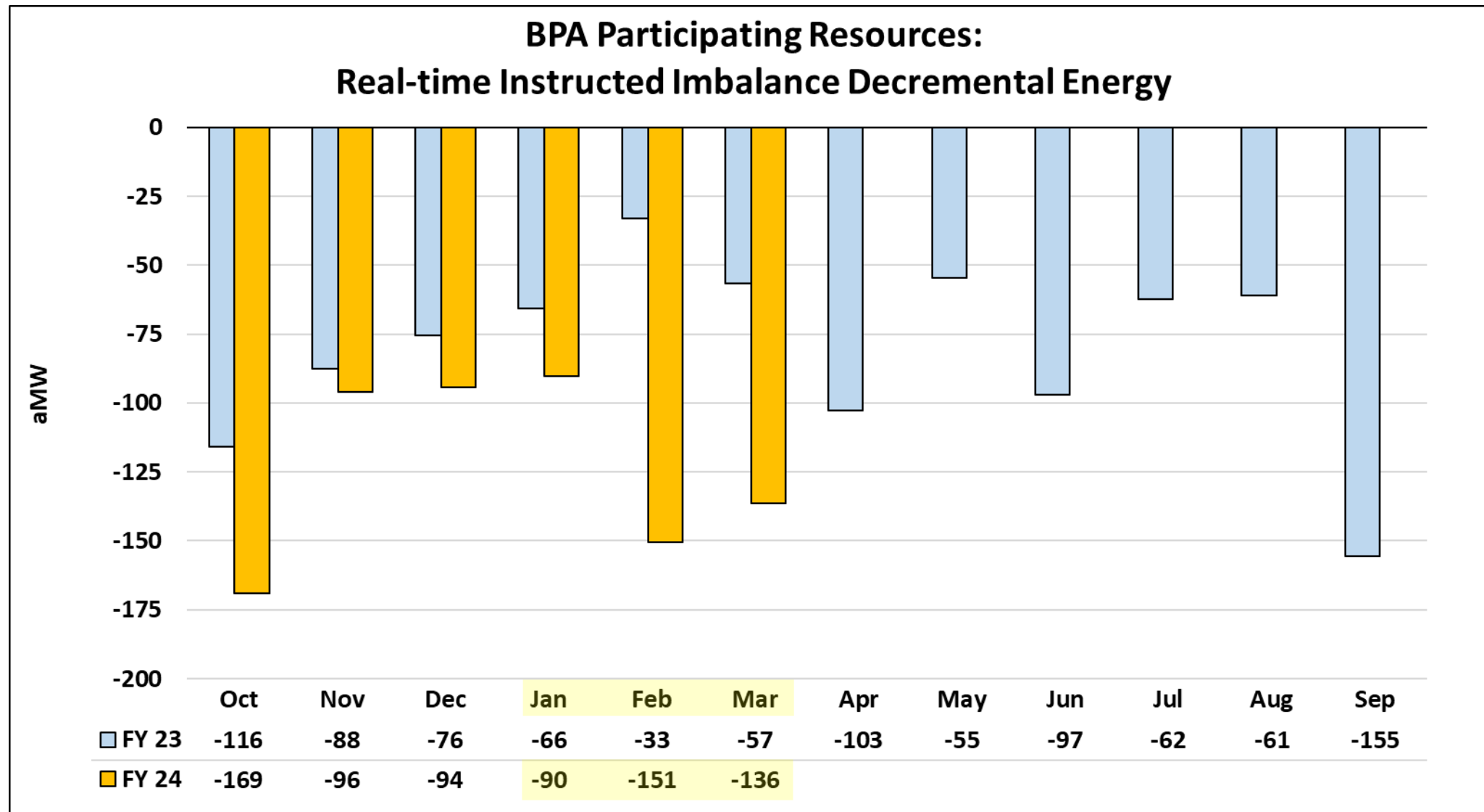
# Phase 2 Metrics

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 on EIM impacts to BPA System carbon emission rate may transition to a different forum in the future as BPA engages on broader regional carbon issues and regulation.

These metrics will be reported by BP-26.

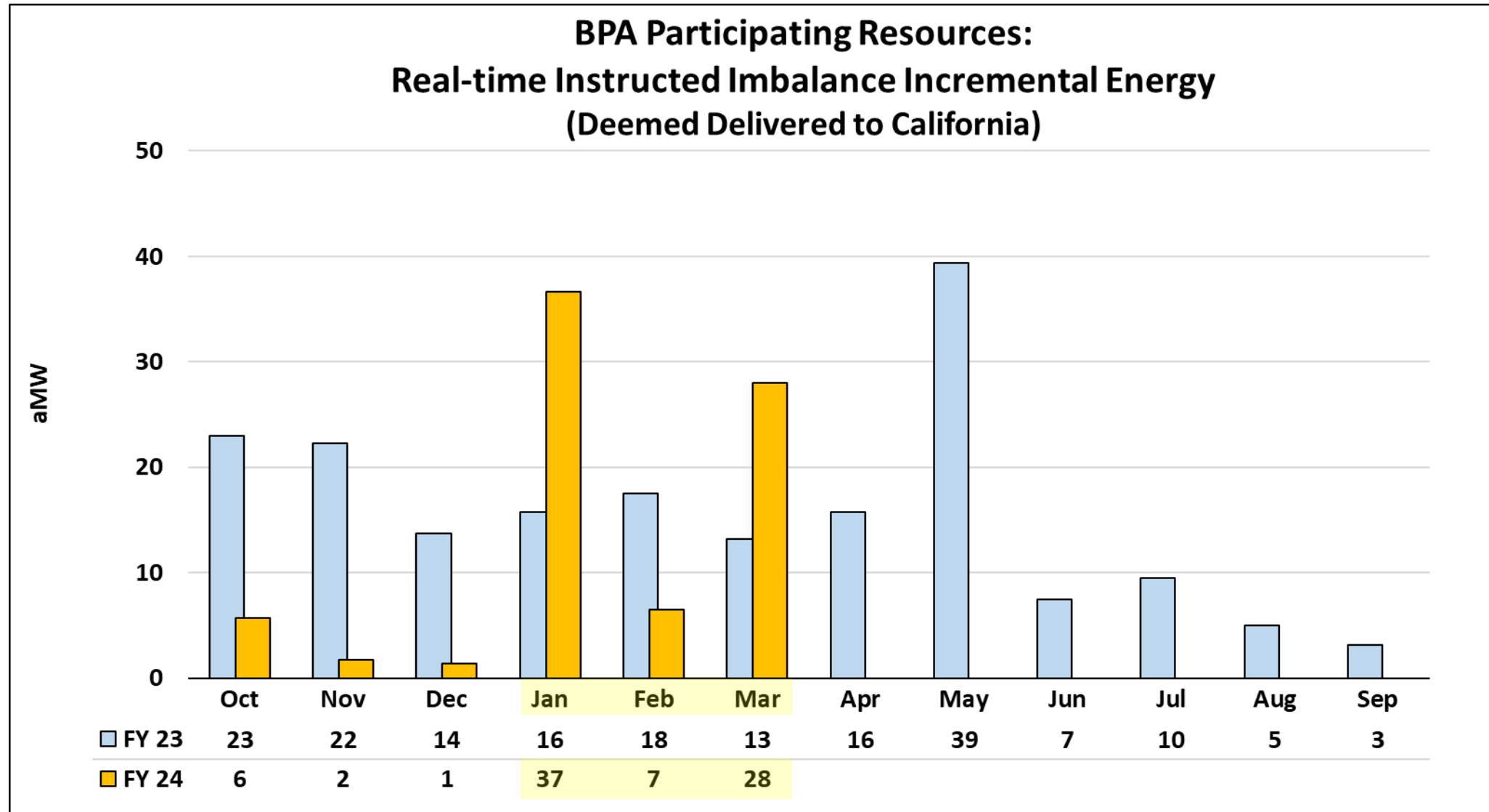
# Metric 1a: Unspecified purchases



FY 24 Q2 (Jan – Mar) volume: **-125 aMW**

FY24 decremental energy volumes are tracking higher than FY 23

# Metric 1b: Amount Delivered to California



**FY 24 Q2 (Jan – Mar) volume:**

**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>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Mean</b>
<b>Failed Over</b>	0.40%	0.29%	0.40%	0.36%
<b>Failed Under</b>	0.94%	0.00%	0.54%	0.49%
<b>Passed Both</b>	98.66%	99.71%	99.06%	99.14%

# 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>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Mean</b>
<b>Failed</b>	0.27%	0.00%	0.00%	0.09%
<b>Passed</b>	99.73%	100.00%	100.00%	99.91%

# 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>Jan</b>	<b>Feb</b>	<b>Mar</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>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Mean</b>
<b>Failed</b>	0.37%	0.04%	0.00%	0.14%
<b>Passed</b>	99.63%	99.96%	100.00%	99.86%

# 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

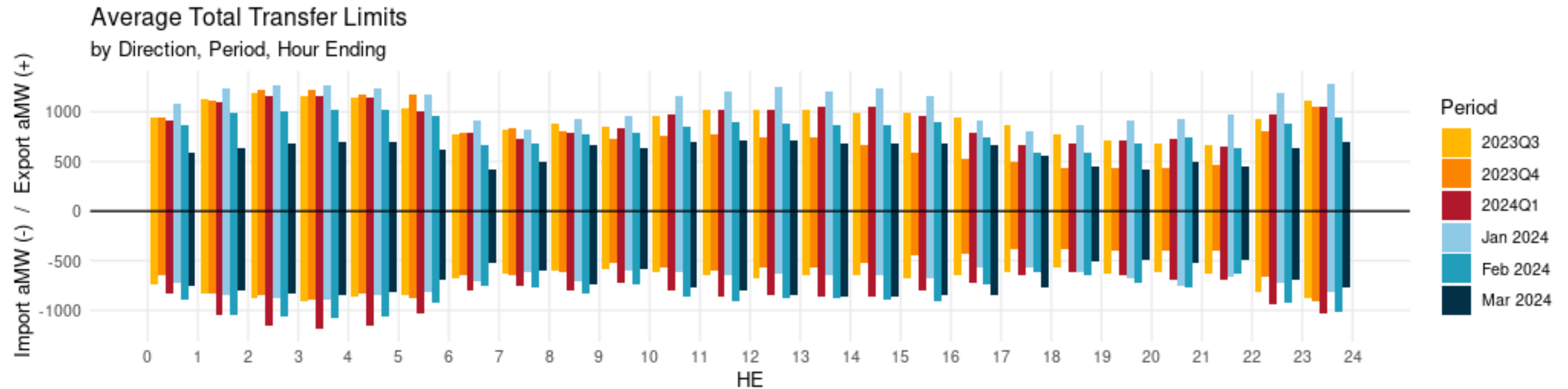
Percent of 15 minute intervals passed/failed

<b>Flex Test Down</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Mean</b>
<b>Failed</b>	0.44%	0.14%	0.00%	0.19%
<b>Passed</b>	99.56%	99.86%	100.00%	99.81%

# Metric 3: EIM Transfers

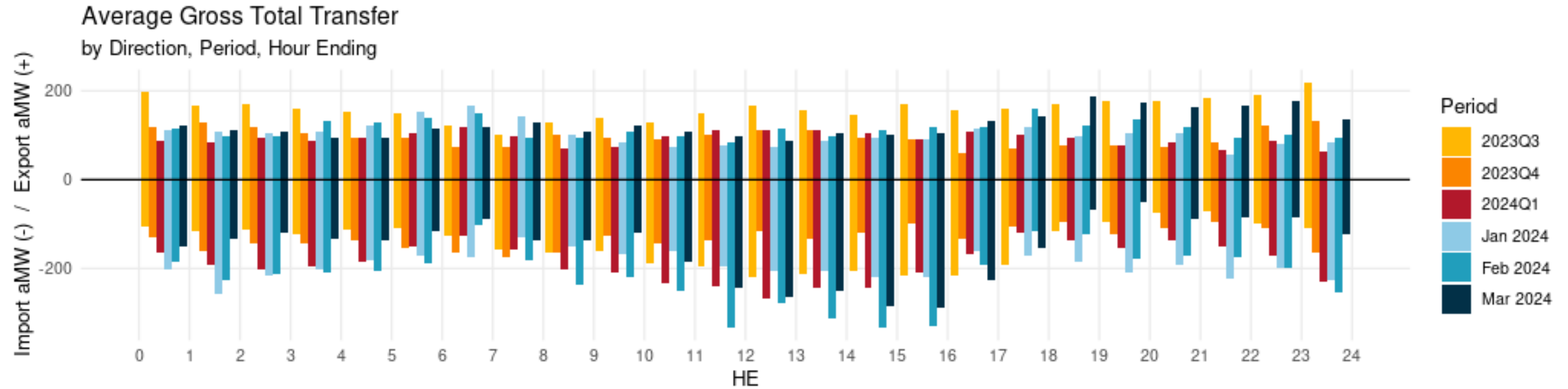


# EIM Transfer Limits: Q2 2023 – Q1 2024



- Intra-day shape in Q2 2024 is consistent with previous quarters – less donation in morning and evening peaks
- **March 2024** featured noticeably less donation than in other periods, particularly in the export direction

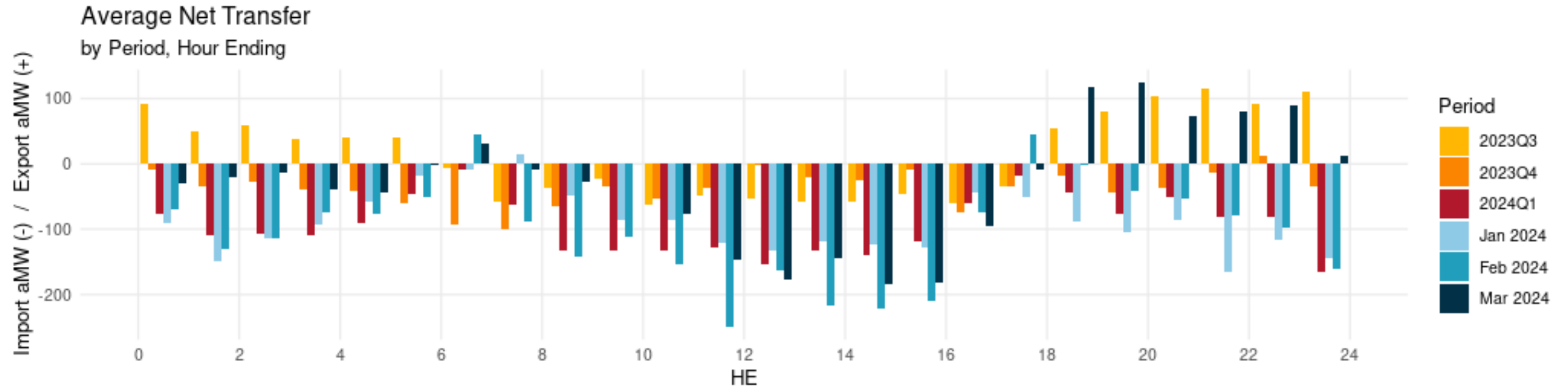
# EIM Gross Transfer: Q2 2023 – Q1 2024



- Clear bias toward import transfers, particularly in the midday hours
- **March 2024** featured a shift toward exporting in the evening peak hours



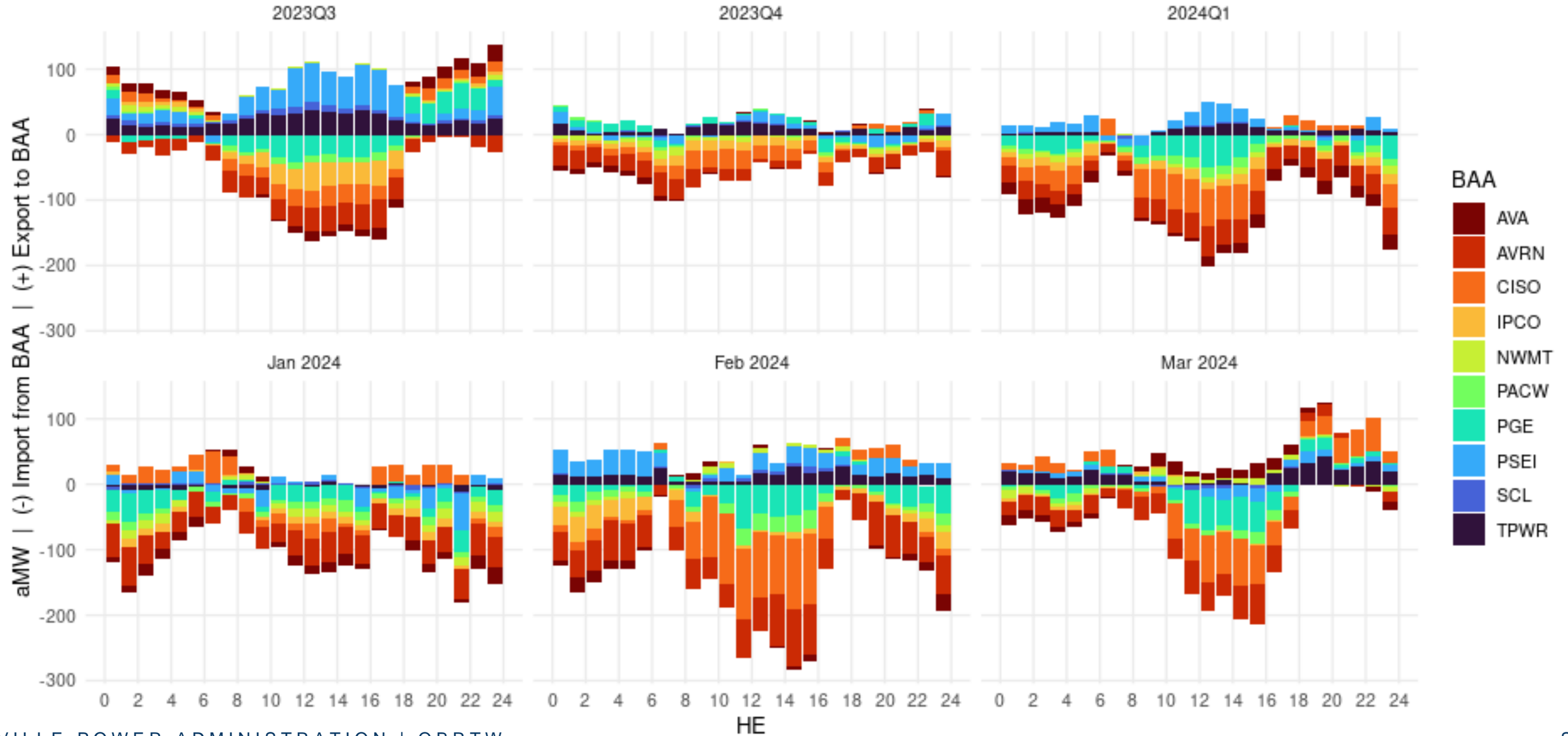
# EIM Net Transfer: Q2 2023 – Q1 2024



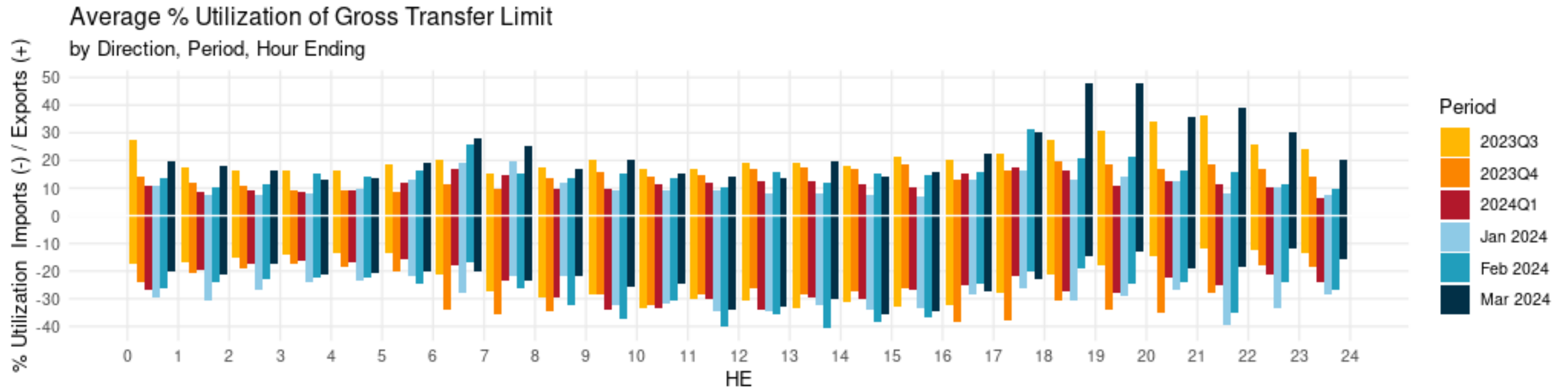
- Clear bias toward import transfers, particularly in the midday hours
- **March 2024** featured a shift toward exporting in the evening peak hours

# EIM Net Transfer by BAA: Q2 2023 – Q1 2024

Average Net Transfer with BPAT  
by BAA, Period, Hour Ending

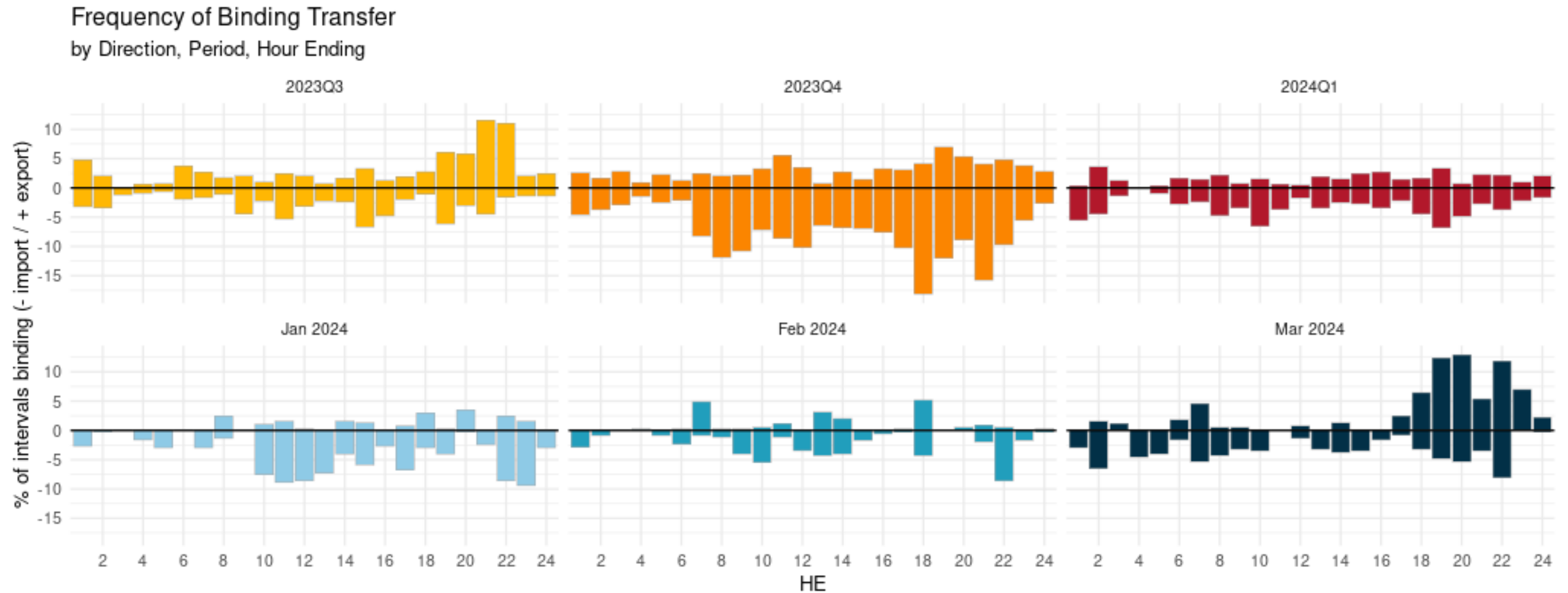


# EIM Utilization of Transfer Limits: Q2 2023 – Q1 2024



- Greater utilization in the export direction in morning and evening peaks in **March 2024**
- Consistently high utilization in the import direction in the midday hours

# Frequency of binding EIM transfers: Q2 2023 – Q1 2024



- Generally more binding incidence in the import direction across all periods
- **March 2024** evening peak exports stand out, but remember that these hours had 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.*

# Metric 4: Not reporting at this time

- Metric: Provide summary data on BA scheduling error and the frequency with which CAISO BA forecast was targeted on a quarterly basis. The scheduling error will be measured against either the CAISO BA forecast and/or actual load. BPA will collect and share data on how the BA did as a whole with every entity scheduling to their own best forecast.
- The CAISO reports publically\* on the accuracy of its area load forecast. In addition, the balancing test results show how frequently the BPA BAA has scheduled to CAISO's load forecast, and the BPA BAA has scheduled thus far to the CAISO's load forecast the majority of the time. When BPA proposed this metric, it was envisioned that BPA would not schedule to the CAISO's load forecast as frequently. However, throughout implementation, BPA has consistently scheduled to the CAISO's load forecast.

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

# Appendix



# 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

Presenters:

**Matt Hayes**

May 23, 2024



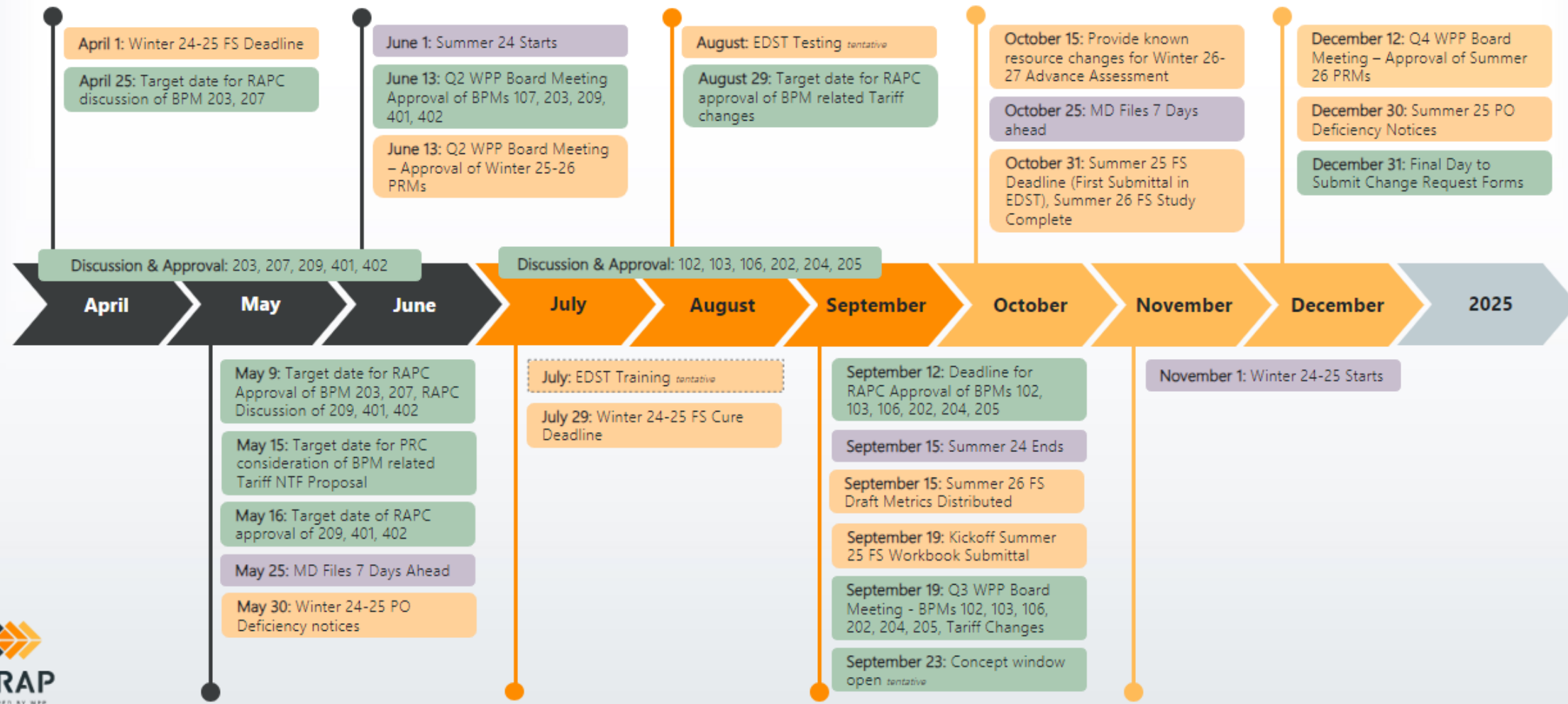


# Agenda

- What's Happening in WRAP
  - WPP Implementation Plan
  - Planning Reserve Margin (PRM) and WRAP Data
- BPA Active Work with WRAP
  - Participation
  - Business Practice Manuals (BPM's)
  - BPA Technical Solution
- Revisiting our commitments
  - Stakeholder engagement

# WPP Implementation Plan

## WRAP 2024 TIMELINE



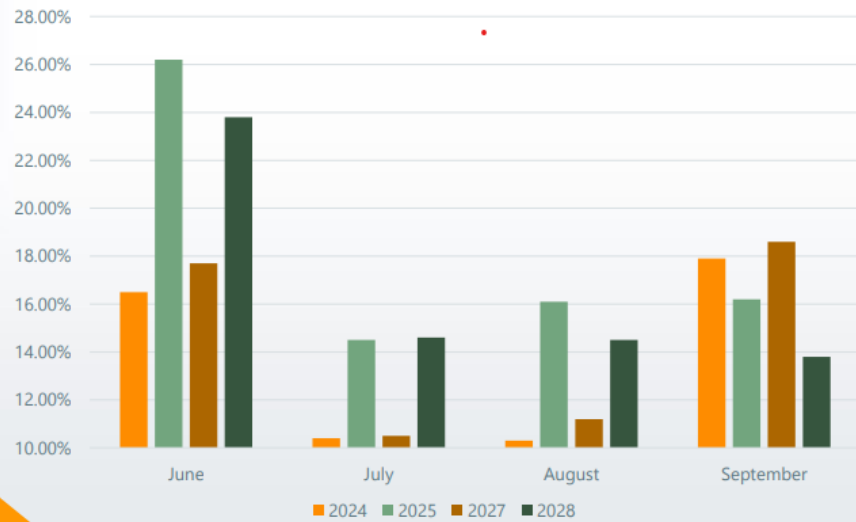
# Planning Reserve Margins and WRAP Data

- WPP BOD approved Summer 2025 PRMs (Jan 31, 2024)
  - [WRAP Summer 2025 PRM Memo](#)
- WRAP Data Released (PRM and QCC results)
  - [Summer 2025 and advisory data for Summer 2028](#)
  - [Winter 2024-2025 and advisory data for Winter 2027-2028](#)

See January 31, 2024 WPP Members Meeting [materials](#)

# Summer Highlights

## PRMs – MIDC SUBREGION

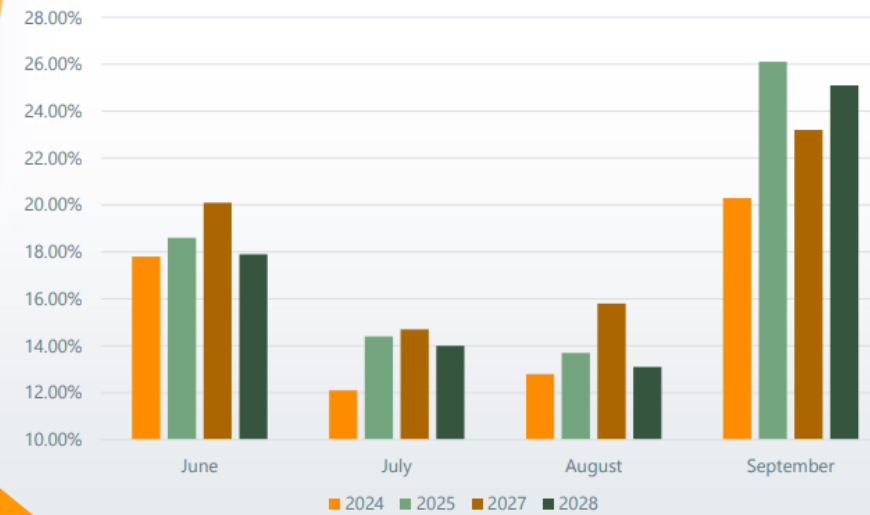


- » 2024 and 2027 studies were done in 2022 with a slightly different footprint and different methodology
- » 2027 and 2028 are advisory only



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## PRMs – SWEDE SUBREGION



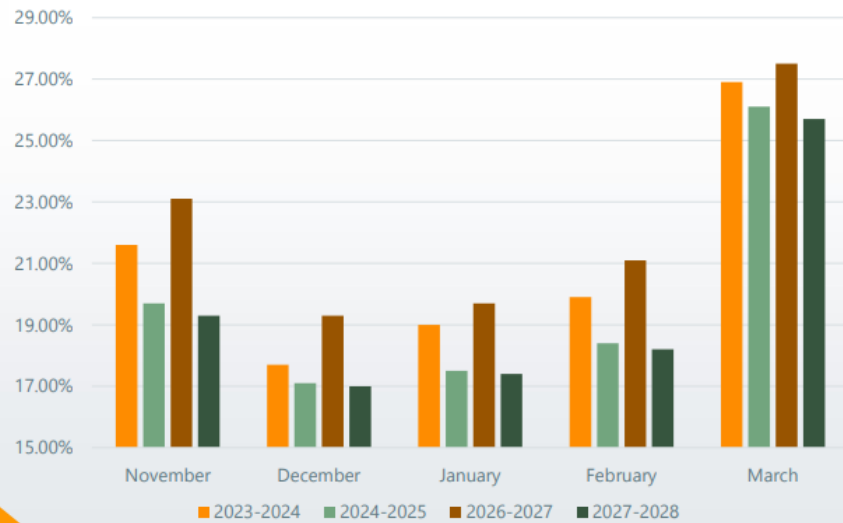
- » 2024 and 2027 studies were done in 2022 with a slightly different footprint and different methodology
- » 2027 and 2028 are advisory only



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# Winter Highlights

## PRMs – NORTHWEST

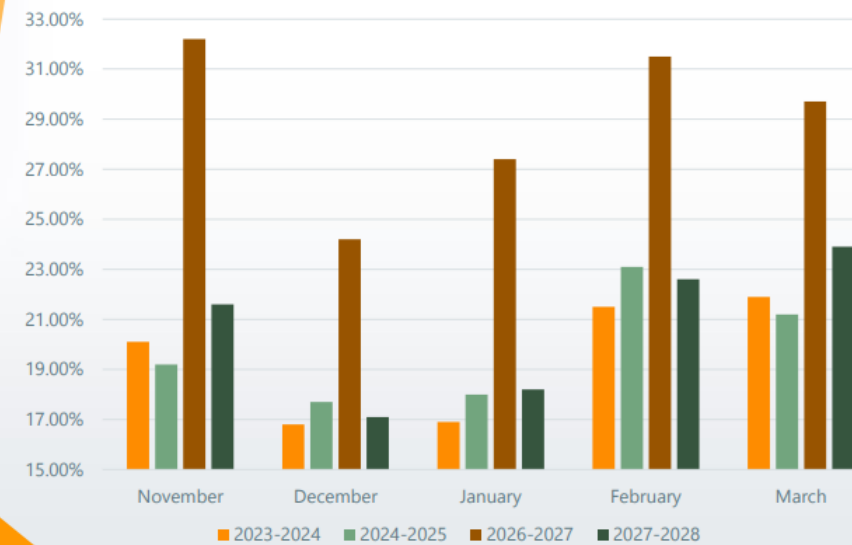


- » 2023-2024 and 2026-2027 studies were done in 2022 with a slightly different footprint and different methodology
- » 2026-2027 and 2027-2028 are advisory only



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## PRMs – SOUTHWEST



- » 2023-2024 and 2026-2027 studies were done in 2022 with a slightly different footprint different methodology
- » 2026-2027 and 2027-2028 are advisory only



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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

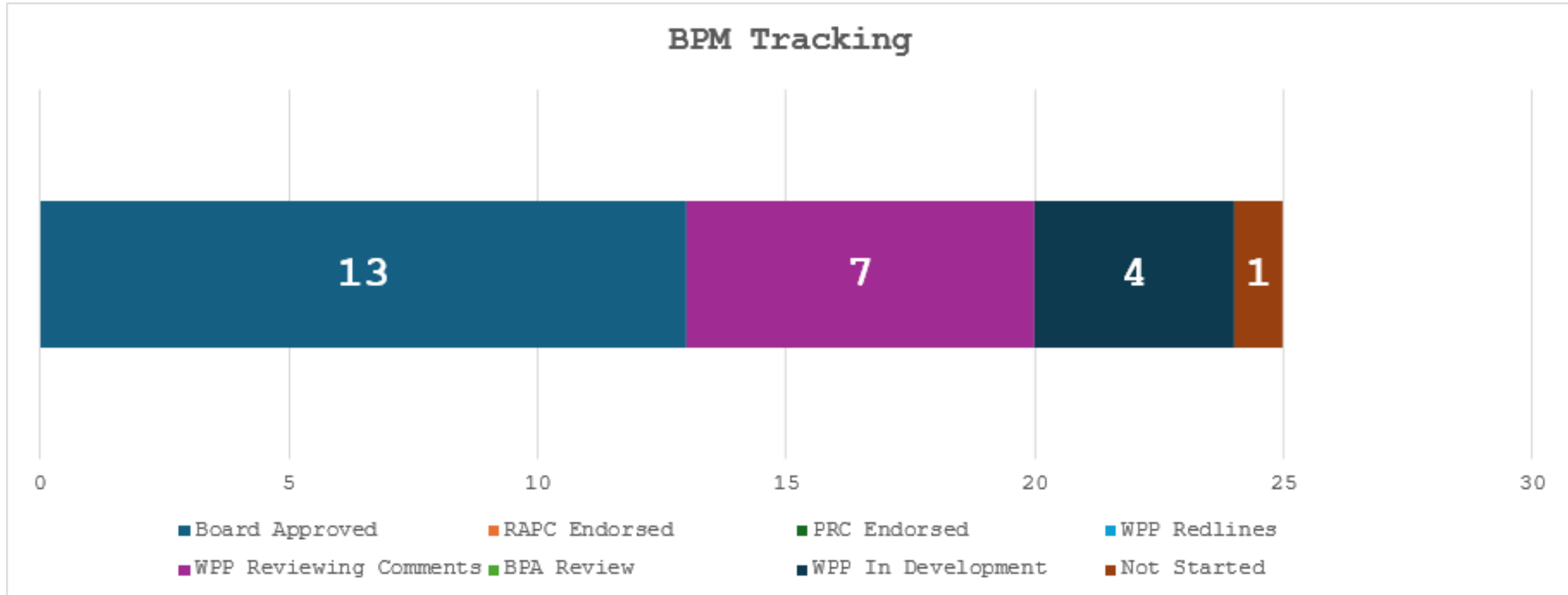
# BPA Active Work with WRAP

## 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

# BPM Progress





## BPA Technical Solution for WRAP Participation:

BPA has a contract in place to provide a technical solution. Our first major milestone delivery is to be able to upload files to SPP as we work toward production quality data.

- Advanced Assessment and Forward Showing programs - require infrequent data submissions. Data is assembled from multiple BPA systems; with a goal of implementing repeatable and streamlined processes to gather this data for the WRAP program.

# Revisiting Our Commitments

## Stakeholder Engagement

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

## Program Implementation Updates that impact BPA and its customers

- Being provided based on information availability from WRAP and applicability
- Addressing topics raised in comments related to WRAP implementation

## Address any items raised in comments by customers

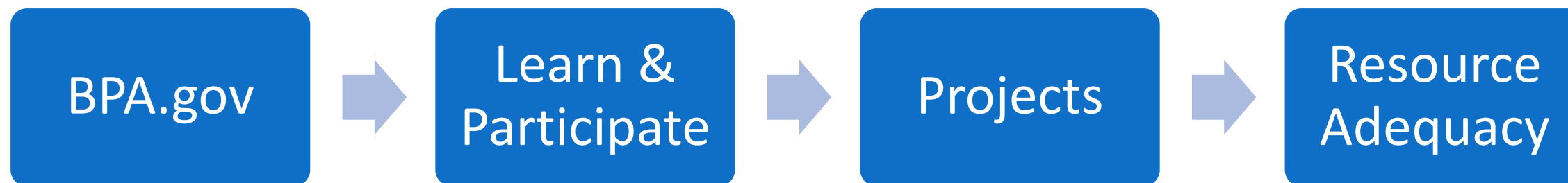
- BPA will continue to meet with individual or groups of customers, upon request, to focus on their unique questions or needs.
- BPA will coordinate discussion with other BPA meetings or initiatives if there is a nexus between the implications of the WRAP and other issues of focus for customers,
- Resolution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

# Stakeholder Engagement

- Slice Customer Data Sharing Engagement - ongoing
- Load Exclusion – coming soon
  - Expected to be part of BPM 103 - Participant Forward Showing Capacity Requirement
  - Impacted customer – NLSL customers
    - Holding a series of meeting to discuss
    - Please send message to [Steve Bellcoff](#) or [Matt Hayes](#) if interested and not identified

# 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.westernpowerpool.org/)



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

# 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  
**August 15, 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).

# APPENDIX SLICE REPORTING

Composite Cost Pool Review

Forecast of Annual Slice True-Up Adjustment



# Q1 True-Up of FY 2024 Slice True-Up Adjustment

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

\*Negative = Credit; Positive = Charge

# Summary of Differences From Q2 to FY24 (BP-24)

#		Composite Cost Pool True-Up Table Reference	Q2 – Rate Case \$ in thousands
1	Total Expenses	Row 100	\$90,992
2	Total Revenue Credits	Rows 119 + 128	\$146,087
3	Minimum Required Net Revenue	Row 156	\$4,190
4	TOTAL Composite Cost Pool (1 - 2 + 3) $\$90,992 - \$146,087 + \$4,190 = \$(50,906)$	Row 158	$\$(50,906)$
5	TOTAL in line 4 divided by <u>0.9706591</u> sum of TOCAs $\$(50,906) / 0.9706591 = \$(52,444)$	Row 163	$\$(52,444)$
6	QTR Forecast of FY24 True-up Adjustment 19.74071 percent of Total in line 5 $0.1974071 * \$(52,444) = \$(10,353)$	Row 164	$\$(10,353)$

# FY24 Impacts of Debt Management Actions

#	Description	FY24 Q2 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)		\$ 341,581,000		\$ 341,581,000
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 res)	\$ 90,000,000	\$ -		\$ (90,000,000)
8	<b>Total Principal Payment of Fed Debt</b>	<b>\$ 190,818,000</b>	<b>\$ 459,999,000</b>	row 131	<b>\$ 269,181,000</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>Q2 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	4.24%
5 Composite Interest Credit	(24,857)
6 Prepay Offset Credit	0
7 Total Interest Credit for Power Services	(31,600)
8 Non-Slice Interest Credit (Line 7 – (Line 5 + Line 6))	(6,743)



# Net Interest Expense in Slice True-Up Q2

	<b>FY24 Rate Case</b>	<b>Q2</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	51,899
• Prepay Interest Expense	5,694	5,694
• <b>Interest Expense</b>	<b>44,811</b>	<b>51,117</b>
• AFUDC	(17,821)	(21,000)
• Interest Income (composite)	(2,274)	(24,857)
• Prepay Offset Credit	0	0
• <b>Total Net Interest Expense</b>	<b>24,716</b>	<b>5,260</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 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				
		April (Q2) (\$000)	Rate Case forecast for FY 2024 (\$000)	April (Q2) - 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)	\$ 305,435	\$ 296,477	\$ 8,958
5	BUREAU OF RECLAMATION	\$ 171,200	\$ 154,364	\$ 16,836
6	CORPS OF ENGINEERS	\$ 273,437	\$ 265,146	\$ 8,291
7	CRFM STUDIES	\$ 10,349	\$ 9,349	\$ 1,000
8	LONG-TERM CONTRACT GENERATING PROJECTS	\$ 23,060	\$ 16,036	\$ 7,024
9	<b>Sub-Total</b>	<b>\$ 783,481</b>	<b>\$ 741,372</b>	<b>\$ 42,109</b>
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>	<b>\$ 36,376</b>	<b>\$ 27,749</b>	<b>\$ 8,627</b>
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>	<b>\$ 2,300</b>	<b>\$ 2,341</b>	<b>\$ (41)</b>
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)	\$ (26,006)	\$ -	\$ (26,006)
21	<b>Sub-Total</b>	<b>\$ (23,095)</b>	<b>\$ 3,100</b>	<b>\$ (26,195)</b>
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>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
26	<b>Exchanges and Settlements</b>			
27	RESIDENTIAL EXCHANGE PROGRAM (REP)	\$ 274,777	\$ 274,777	\$ -
28	OTHER SETTLEMENTS	\$ -	\$ -	\$ -
29	<b>Sub-Total</b>	<b>\$ 274,777</b>	<b>\$ 274,777</b>	<b>\$ -</b>
30	<b>Renewable Generation</b>			
31	RENEWABLES (excludes Kill)	\$ 14,246	\$ 17,809	\$ (3,563)
32	<b>Sub-Total</b>	<b>\$ 14,246</b>	<b>\$ 17,809</b>	<b>\$ (3,563)</b>
33	<b>Generation Conservation</b>			
34	CONSERVATION ACQUISITION	\$ 79,566	\$ 69,027	\$ 10,539
35	CONSERVATION INFRASTRUCTURE	\$ 23,778	\$ 26,044	\$ (2,266)
36	LOW INCOME WEATHERIZATION & TRIBAL	\$ 6,005	\$ 6,005	\$ 0
37	ENERGY EFFICIENCY DEVELOPMENT	\$ -	\$ -	\$ -
38	DISTRIBUTED ENERGY RESOURCES	\$ 215	\$ 215	\$ (0)
39	LEGACY	\$ 590	\$ 590	\$ 0
40	MARKET TRANSFORMATION	\$ 11,800	\$ 11,800	\$ (0)
41	<b>Sub-Total</b>	<b>\$ 121,954</b>	<b>\$ 113,681</b>	<b>\$ 8,273</b>
42	<b>Power System Generation Sub-Total</b>	<b>\$ 1,210,039</b>	<b>\$ 1,180,830</b>	<b>\$ 29,209</b>
43				

# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE				
		April (Q2) (\$000)	Rate Case forecast for FY 2024 (\$000)	April (Q2) - 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	\$ 3,298	\$ 4,443	\$ (1,145)
49	ASSET MGMT ENTERPRISE SVCS	\$ 2,260	\$ -	\$ 2,260
50	SLICE IMPLEMENTATION	\$ 788	\$ 608	\$ 180
51	<b>Sub-Total</b>	<b>\$ 6,346</b>	<b>\$ 7,428</b>	<b>\$ (1,081)</b>
52	<b>Power Services Scheduling</b>			
53	OPERATIONS SCHEDULING	\$ 11,908	\$ 9,505	\$ 2,404
54	OPERATIONS PLANNING	\$ 9,320	\$ 9,739	\$ (419)
55	<b>Sub-Total</b>	<b>\$ 21,228</b>	<b>\$ 19,244</b>	<b>\$ 1,984</b>
56	<b>Power Services Marketing and Business Support</b>			
57	GRID MOD	\$ 507	\$ -	\$ 507
58	EIM INTERNAL SUPPORT	\$ -	\$ -	\$ -
59	POWER INTERNAL SUPPORT	\$ 21,644	\$ 28,410	\$ (6,766)
60	COMMERCIAL ENTERPRISE SVCS	\$ 6,933	\$ 4,348	\$ 2,585
61	OPERATIONS ENTERPRISE SVCS	\$ 6,344	\$ 4,573	\$ 1,771
62	POWER R&D	\$ 2,126	\$ 3,537	\$ (1,411)
63	SALES & SUPPORT	\$ 14,347	\$ 17,871	\$ (3,524)
64	STRATEGY, FINANCE & RISK MGMT (REP support costs included here)	\$ -	\$ -	\$ -
65	EXECUTIVE AND ADMINISTRATIVE SERVICES (REP support costs included here)	\$ -	\$ -	\$ -
66	CONSERVATION SUPPORT	\$ 10,088	\$ 7,045	\$ 3,043
67	<b>Sub-Total</b>	<b>\$ 61,988</b>	<b>\$ 65,784</b>	<b>\$ (3,795)</b>
68	<b>Power Non-Generation Operations Sub-Total</b>	<b>\$ 89,563</b>	<b>\$ 92,455</b>	<b>\$ (2,892)</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	\$ 84,973	\$ 91,278	\$ (6,305)
72	POWER 3RD PARTY TRANS & ANCILLARY SVCS (Composite Cost)	\$ 3,757	\$ 3,300	\$ 457
73	TRANS ACQ GENERATION INTEGRATION	\$ 19,894	\$ 19,894	\$ (0)
74	EESC CHARGES (Composite)	\$ 19,801	\$ -	\$ 19,801
75	TELEMETERING/EQUIP REPLACENT	\$ -	\$ -	\$ -
76	<b>Power Services Trans Acquisition and Ancillary Serv Sub-Total</b>	<b>\$ 160,633</b>	<b>\$ 146,680</b>	<b>\$ 13,953</b>
77	<b>Fish and Wildlife/USF&amp;W/Planning Council/Environmental Req</b>			
78	<b>Fish &amp; Wildlife</b>	\$ 270,447	\$ 269,235	\$ 1,213
79	<b>USF&amp;W Lower Snake Hatcheries</b>	\$ 32,765	\$ 32,765	\$ (0)
80	<b>Planning Council</b>	\$ 11,989	\$ 11,942	\$ 47
81	<b>Fish &amp; Wildlife RDC Funds</b>	\$ 6,000	\$ -	\$ 6,000
82	<b>Lower Snake Hatcheries RDC Funds</b>	\$ 8,000	\$ -	\$ 8,000
83	<b>Fish and Wildlife/USF&amp;W/Planning Council Sub-Total</b>	<b>\$ 329,201</b>	<b>\$ 313,942</b>	<b>\$ 15,260</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>	\$ 88,837	\$ 84,662	\$ 4,175
87	<b>BPA Internal Support Sub-Total</b>	<b>\$ 107,175</b>	<b>\$ 103,972</b>	<b>\$ 3,203</b>

# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE				
		April (Q2) (\$000)	Rate Case forecast for FY 2024 (\$000)	April (Q2) - Rate Case Difference
88	Bad Debt Expense	\$ -	\$ -	\$ -
89	Other Income, Expenses, Adjustments	\$ 1,104	\$ -	\$ 1,104
90	Depreciation	\$ 146,089	\$ 139,703	\$ 6,386
91	Amortization	\$ 318,832	\$ 312,487	\$ 6,345
92	Accretion (CGS)	\$ 39,170	\$ 40,043	\$ (873)
93	<b>Total Operating Expenses</b>	<b>\$ 2,401,806</b>	<b>\$ 2,330,112</b>	<b>\$ 71,694</b>
94				
95	<b>Other Expenses and (Income)</b>			
96	Net Interest Expense	\$ 226,588	\$ 203,494	\$ 23,094
97	LDD	\$ 33,957	\$ 37,701	\$ (3,743)
98	Irrigation Rate Discount Costs	\$ 21,718	\$ 21,770	\$ (53)
99	<b>Sub-Total</b>	<b>\$ 282,263</b>	<b>\$ 262,964</b>	<b>\$ 19,298</b>
100	<b>Total Expenses</b>	<b>\$ 2,684,069</b>	<b>\$ 2,593,077</b>	<b>\$ 90,992</b>
101				
102	<b>Revenue Credits</b>			
103	Generation Inputs for Ancillary, Control Area, and Other Services Revenues	\$ 113,487	\$ 110,911	\$ 2,576
104	Downstream Benefits and Pumping Power revenues	\$ 21,376	\$ 20,607	\$ 769
105	4(h)(10)(c) credit	\$ 268,265	\$ 111,288	\$ 156,977
106	PRSC Net Credit (Composite)	\$ (14,153)	\$ -	\$ (14,153)
107	Colville and Spokane Settlements	\$ 4,600	\$ 4,600	\$ 0
108	Energy Efficiency Revenues	\$ -	\$ -	\$ -
109	PF Load Forecast Deviation Liquidated Damages	\$ -	\$ -	\$ -
110	Miscellaneous revenues	\$ 11,964	\$ 12,104	\$ (140)
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 RHWM)	\$ 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>\$ 546,503</b>	<b>\$ 400,473</b>	<b>\$ 146,030</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	\$ 4,056	\$ 3,998	\$ 57
128	<b>Total DSI revenues</b>	<b>\$ 4,056</b>	<b>\$ 3,998</b>	<b>\$ 57</b>



# Composite Cost Pool True-Up Table

COMPOSITE COST POOL TRUE-UP TABLE				
		April (Q2)	Rate Case forecast	April (Q2) - Rate
		(\$000)	for FY 2024	Case Difference
			(\$000)	
129				
130	<b>Minimum Required Net Revenue Calculation</b>			
131	Principal Payment of Fed Debt for Power	\$ 190,818	\$ 459,999	\$ (269,181)
132	Repayment of Non-Federal Obligations (EN Line of Credit)	\$ -	\$ -	\$ -
133	Repayment of Non-Federal Obligations (CGS, WNP1, WNP3, N. Wasco, Cowlitz Falls)	\$ 27,167	\$ 27,167	\$ -
134	Irrigation assistance	\$ 8,275	\$ 8,067	\$ 208
135	<b>Sub-Total</b>	<b>\$ 226,261</b>	<b>\$ 495,233</b>	<b>\$ (268,973)</b>
136	Depreciation	\$ 146,089	\$ 139,703	\$ 6,386
137	Amortization	\$ 318,832	\$ 312,487	\$ 6,345
138	Accretion	\$ 39,170	\$ 40,043	\$ (873)
139	Capitalization Adjustment	\$ (45,937)	\$ (45,937)	\$ -
140	Amortization of Refinancing Premiums/Discounts (MRNR - Reverse Sign)	\$ (34,767)	\$ (34,767)	\$ -
141	Amortization of Cost of Issuance (MRNR-reverse sign)	\$ 500	\$ 500	\$ -
142	Cash freed up by DSR refinancing	\$ -	\$ 17,600	\$ (17,600)
143	Gains/Losses on Extinguishment	\$ -	\$ -	\$ -
144	Non-Cash Expenses	\$ -	\$ -	\$ -
145	Prepay Revenue Credits	\$ (30,600)	\$ (30,600)	\$ -
146	Non-Federal Interest (Prepay)	\$ 5,694	\$ 5,694	\$ -
147	Contribution to decommissioning trust fund	\$ (15,100)	\$ (15,100)	\$ -
148	Gains/losses on decommissioning trust fund	\$ (11,469)	\$ (11,469)	\$ -
149	Interest earned on decommissioning trust fund	\$ (4,335)	\$ (4,335)	\$ -
150	Revenue Financing Requirement	\$ (33,743)	\$ (33,743)	\$ 0
151	Capital Financing (RCD)	\$ (247,420)	\$ -	\$ (247,420)
152	Other Adjustments	\$ -	\$ -	\$ -
153	Payments for Litigation Stay Agreements	\$ (20,000)	\$ -	\$ (20,000)
154	<b>Sub-Total</b>	<b>\$ 66,913</b>	<b>\$ 340,075</b>	<b>\$ (273,162)</b>
155	Principal Payment of Fed Debt plus Irrigation assistance exceeds non cash expenses	\$ 159,347	\$ 155,158	\$ 4,190
156	Minimum Required Net Revenues	\$ 159,347	\$ 155,158	\$ 4,190
157				
158	Annual Composite Cost Pool (Amounts for each FY)	\$ 2,303,806	\$ 2,354,711	\$ (50,906)
159				
160	<b>SLICE TRUE-UP ADJUSTMENT CALCULATION FOR COMPOSITE COST POOL</b>			
161	TRUE-UP AMOUNT (Diff. between Rate Case and Forecast)	(50,906)		
162	Sum of TOCAs	0.9706591		
163	Adjustment of True-Up Amount when actual TOCAs < 100 percent	(52,444)		
164	TRUE-UP ADJUSTMENT CHARGE BILLED (19.74071 percent)	(10,353)		

# FINANCIAL DISCLOSURES

This information has been made publicly available by BPA on May 20, 2024 and contains information not sourced directly from BPA financial statements.