



Bonneville
POWER ADMINISTRATION



QUARTERLY BUSINESS REVIEW

NOV. 7, 2018



INTRODUCTION

Scott Simms, DIRECTOR OF COMMUNICATIONS

AGENDA

Time	Presentation	Speaker
9:00 a.m.	Introductions	Scott Simms <i>Director of Communications</i>
9:01 a.m.	State of the business including an update on the BP-20 Rate Case	Elliot Mainzer <i>Administrator</i>
9:20 a.m.	Finance update	Michelle Manary <i>Chief financial officer</i>
9:29 a.m.	Power Services update	Joel Cook <i>Senior VP of Power Services</i>
9:38 a.m.	Transmission Services update	Richard Shaheen <i>Senior VP of Transmission Services</i>
9:47 a.m.	FY 2019 preview	Janet Herrin <i>Chief operating officer</i>
9:51 a.m.	Upcoming involvement opportunities	Scott Simms
9:53 a.m.	Question and answer session	



STATE OF THE BUSINESS

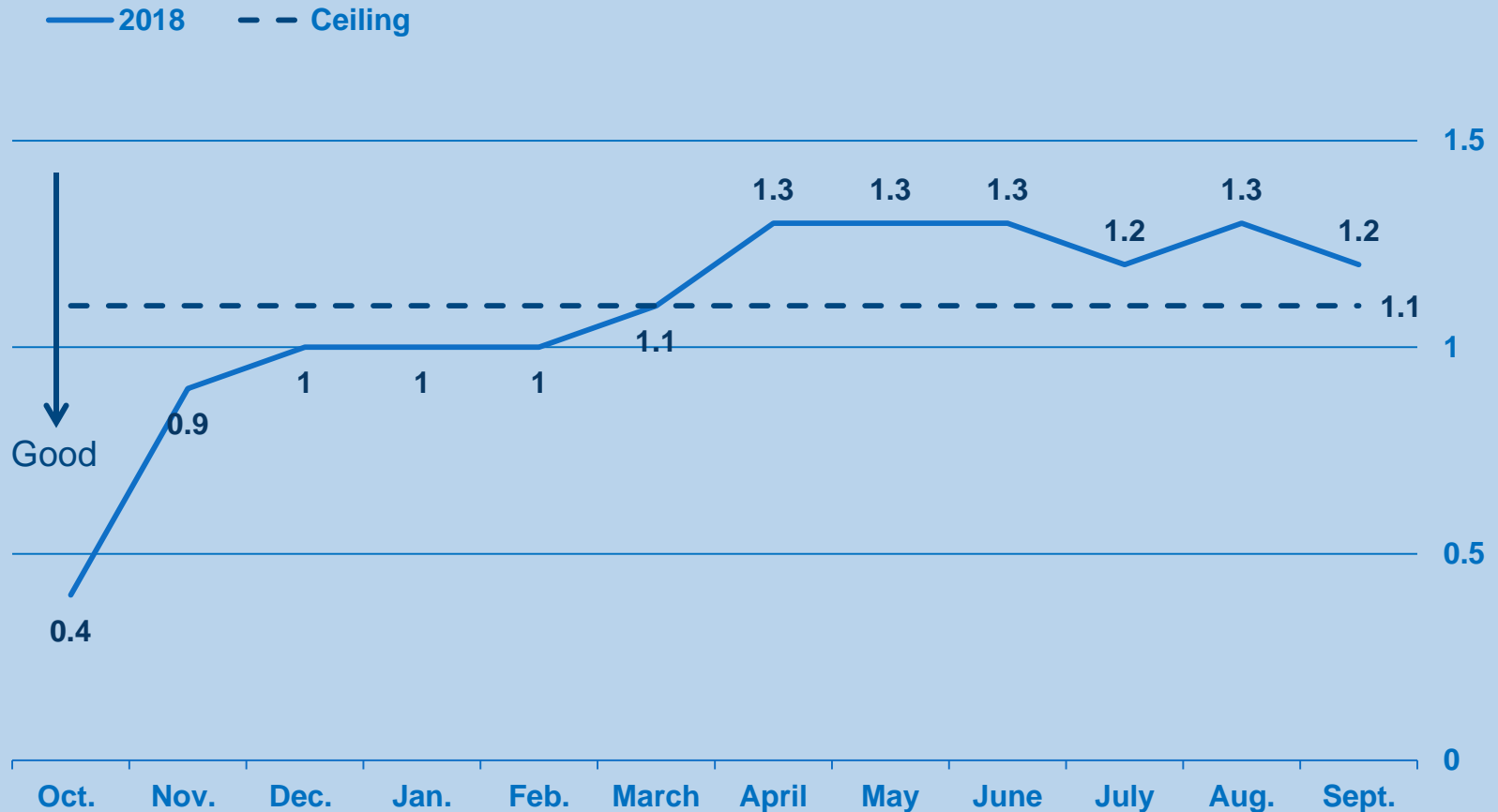
Elliot Mainzer, ADMINISTRATOR AND CHIEF EXECUTIVE OFFICER

SAFETY



Incident frequency rate

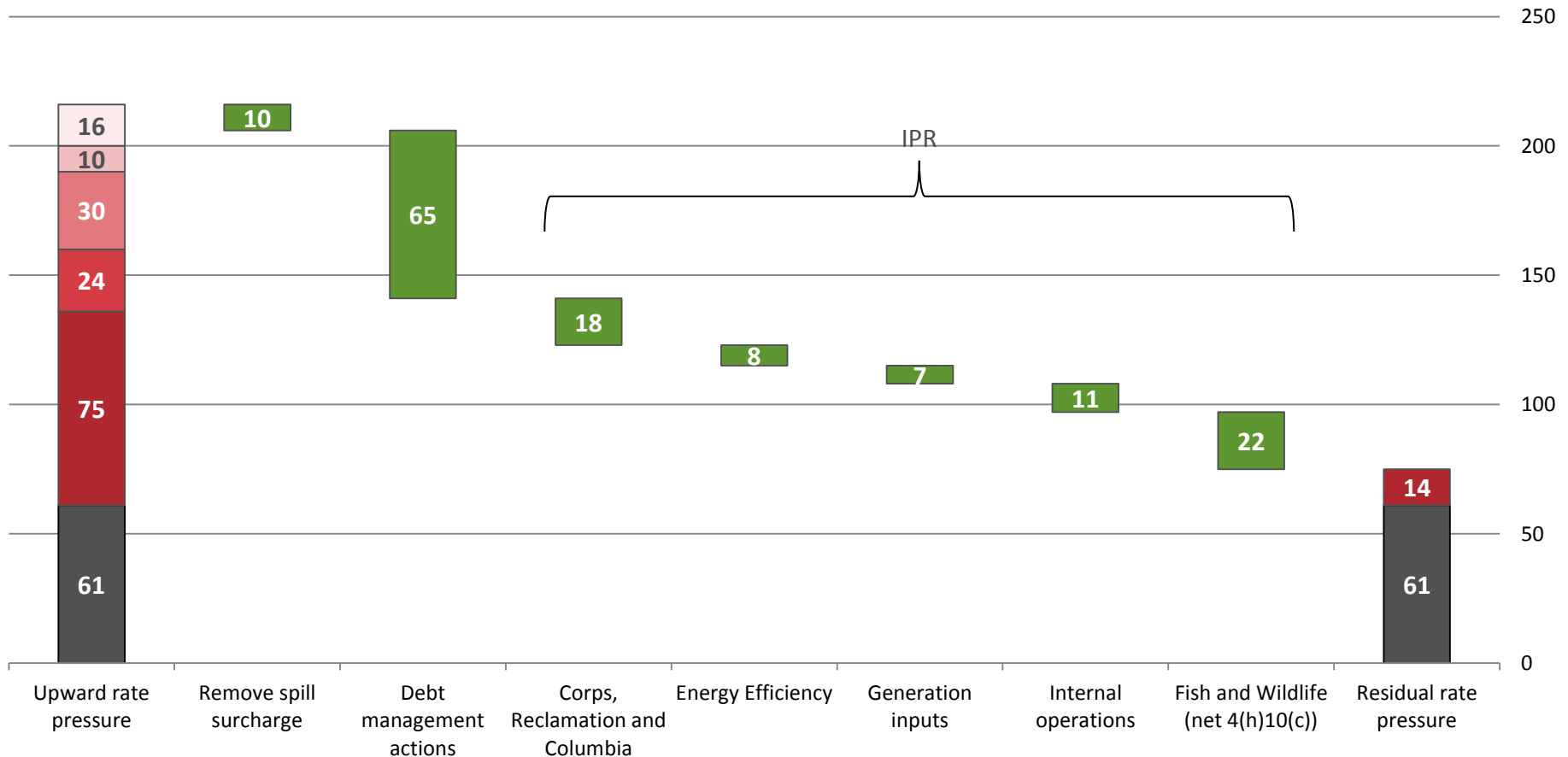
Number of injuries and illnesses per 200,000 hours worked



BP-20 PROPOSED POWER RATES

Power rate drivers in \$ millions

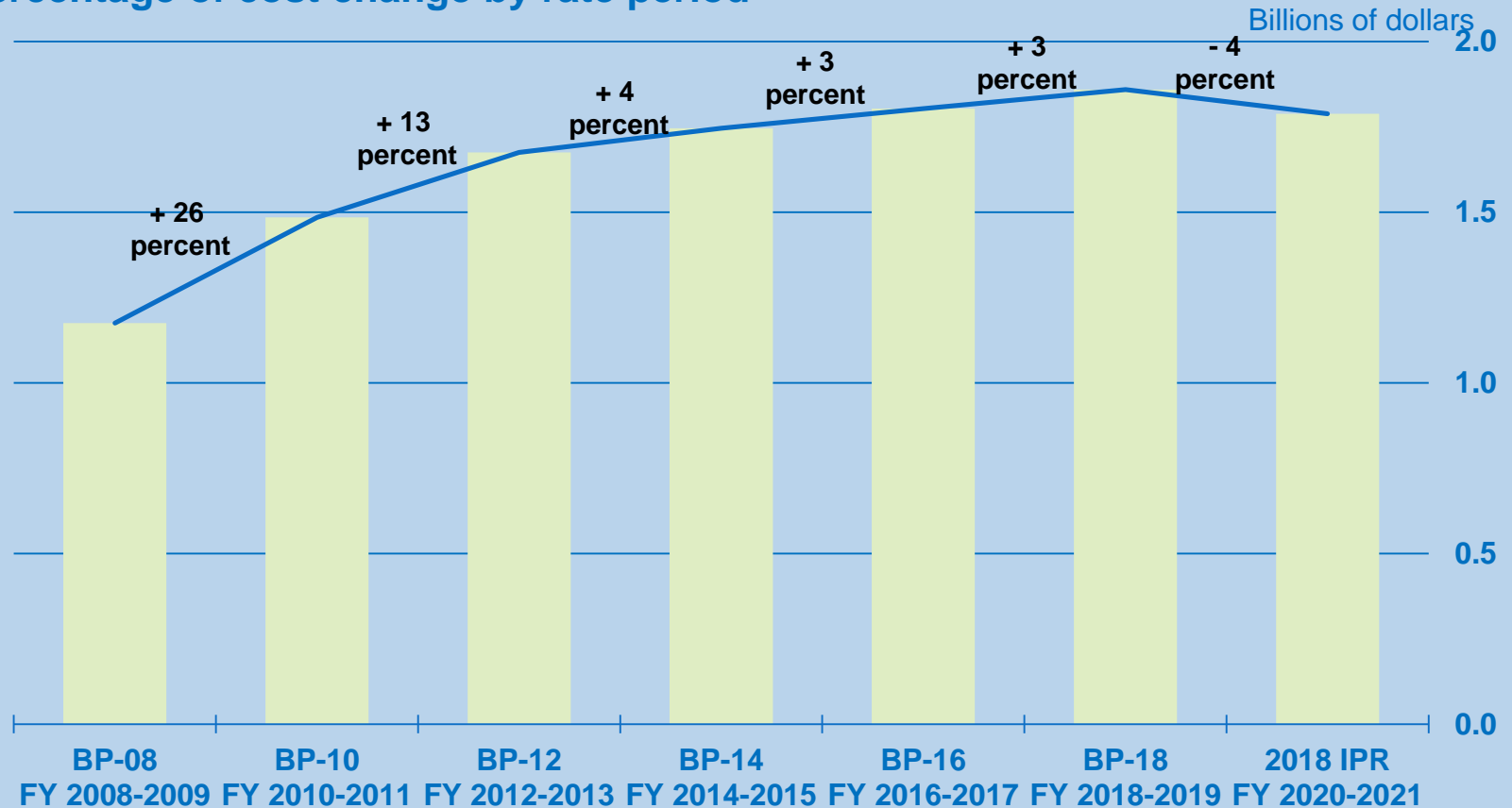
■ Energy Efficiency expense ■ Secondary ■ DSI sales ■ Load loss ■ FRP phase-in ■ Other ■ Reductions



BENDING THE COST CURVE

Bending the cost curve

Average annual program costs in billions of dollars and percentage of cost change by rate period



BP-20 PROPOSED TRANSMISSION RATES

- 9.5 percent – average increase under initial proposal
 - Initial proposal delayed. Anticipated no later than early December.
- 4 percent average transmission rate increase under tariff settlement
 - Signed settlement deadline: Nov. 30

FISH AND WILDLIFE – FISH ACCORDS

FISH ACCORDS EXTENDED

- Columbia Basin Fish Accords extended for up to four more years.
- \$400 million for fish and wildlife mitigation and protection.



FINANCE

Michelle Manary, CHIEF FINANCIAL OFFICER



Financial Health Objectives

COST MANAGEMENT

Maintain low rates;
enhance asset value
and reliability

DEBT UTILIZATION

Reduce interest expense;
maintain financial flexibility

DEBT CAPACITY

Maintain access to secure and
low-cost debt financing

LIQUIDITY

Maintain financial reserves
for solvency and stability

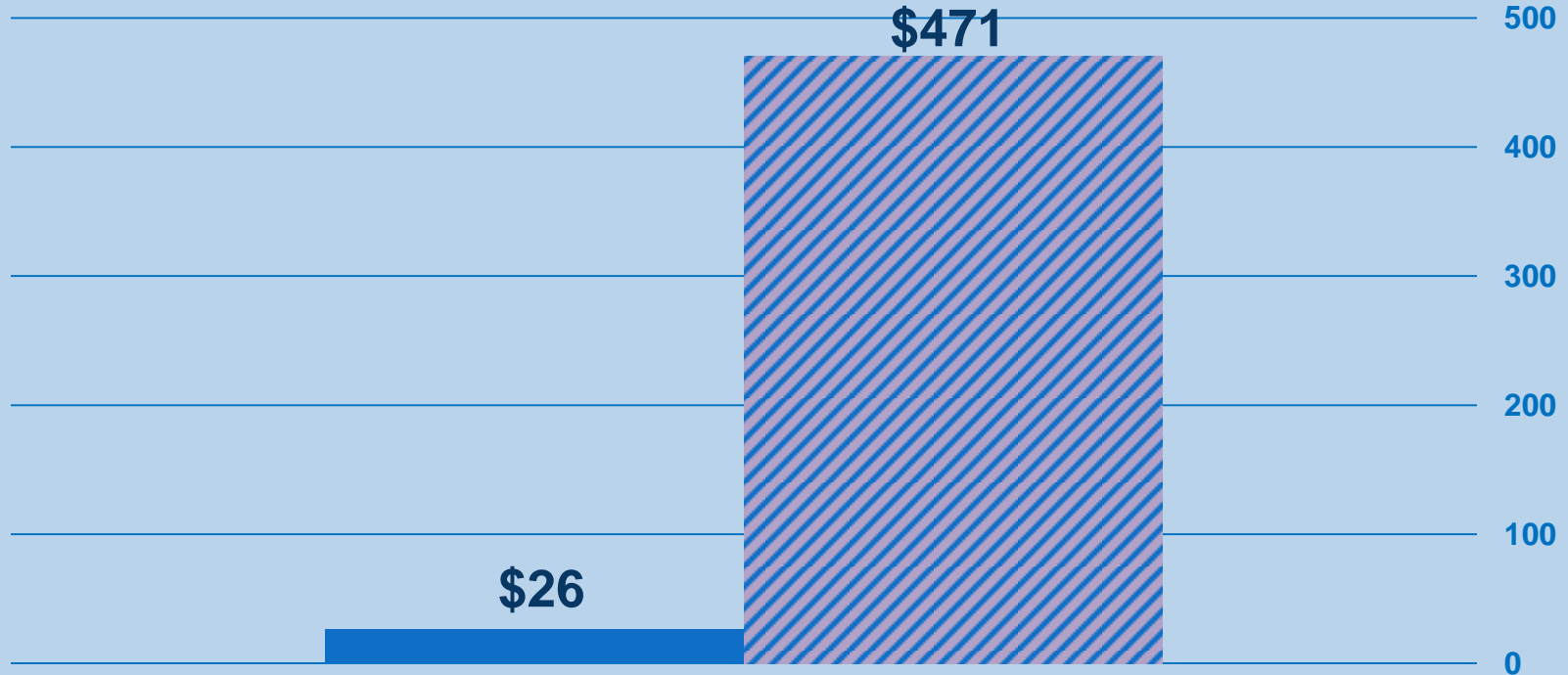
AGENCY NET REVENUES



FCRPS net revenues

In millions of dollars

■ BP-18 Rate Case ■ Actuals



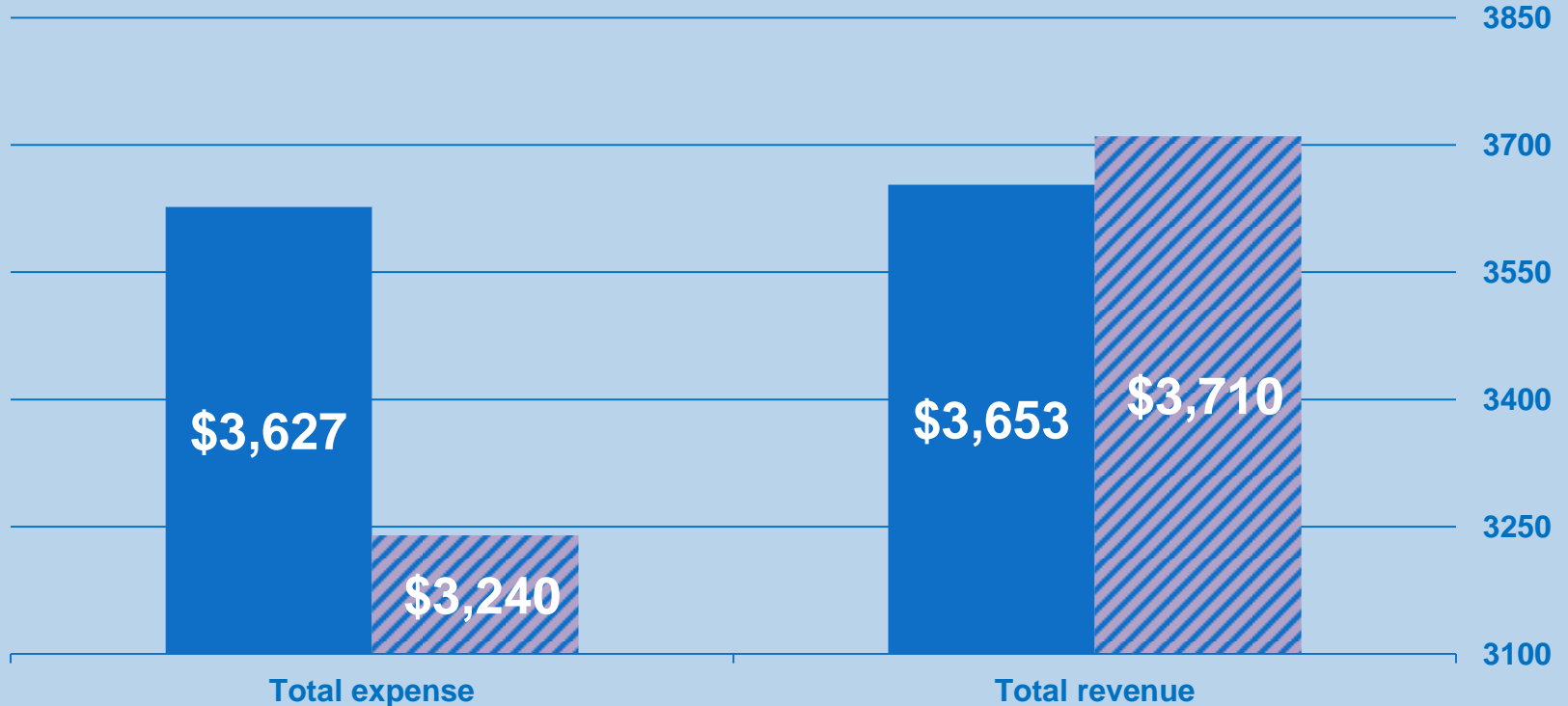
AGENCY FINANCIAL HEALTH



Federal Columbia River Power System

Total revenue and expense in millions of dollars

■ BP-18 Rate Case ■ Actuals



FY 2018 FINANCIAL HIGHLIGHTS

\$52 million

less than expected
POWER EXPENSES

\$19 million

less than expected
TRANSMISSION EXPENSES

\$35 million

more than expected
POWER REVENUES

\$38 million

more than expected
TRANSMISSION REVENUES

DEBT-TO-ASSET RATIO



- The proportion of BPA's revenue-generating assets that are financed through debt.

	Debt-to-asset ratio (%)	
	Sept. 30, 2017	Sept. 30, 2018
Agency	90	88
Power	98	96
Transmission	79	78

- Moody's top 50 utility average is 54 percent.

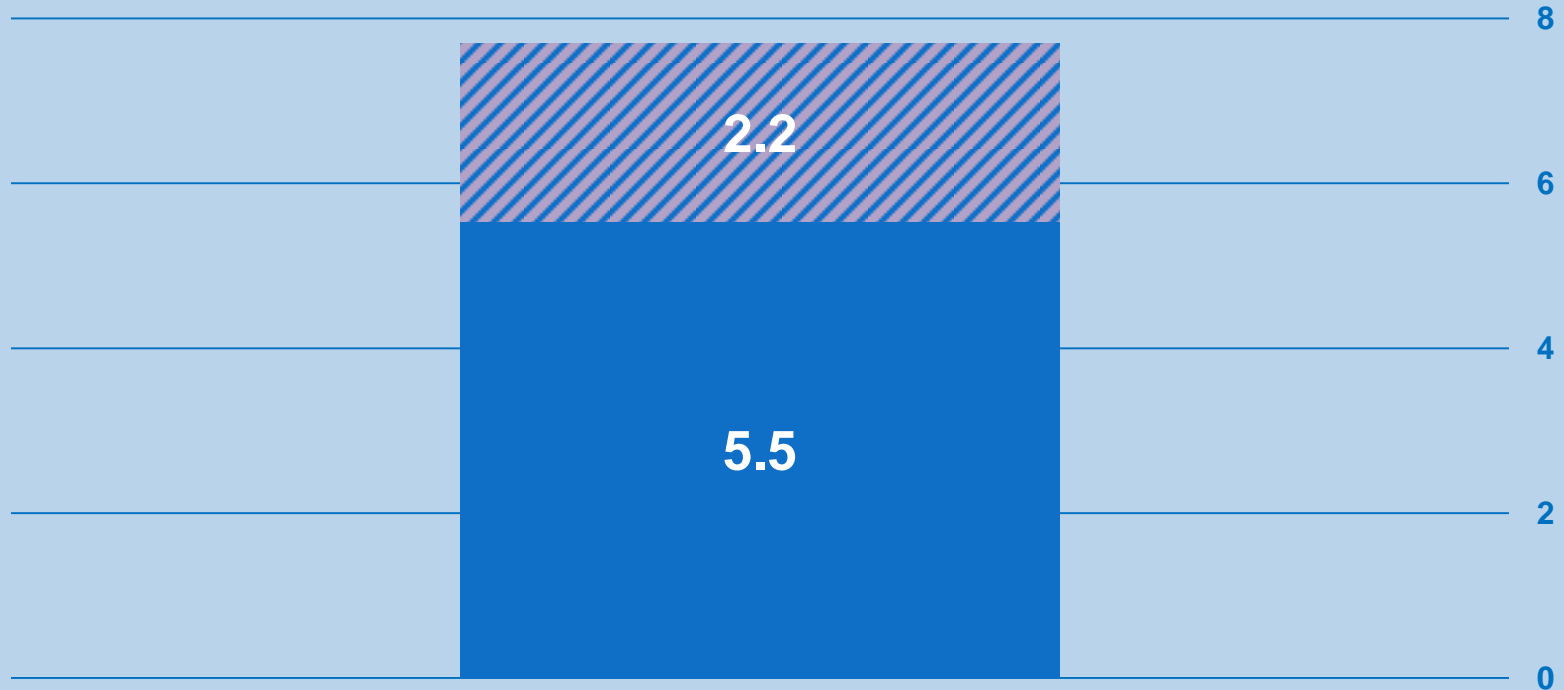
CURRENT BORROWING POSITION



Borrowing authority as of Sept. 30, 2018

In billions of dollars

■ Debt Outstanding ■ Available



DAYS CASH ON HAND



	BP-18 Rate Case			FY 2018 actuals		
	Power	Trans.	Agency	Power	Trans.	Agency
EOY Reserves	170	468	638	191	648	840

**Reserves in millions of dollars*



POWER SERVICES

Joel Cook, SENIOR VICE PRESIDENT OF POWER SERVICES

POWER SERVICES EXPENSE

Power Services total expense

Total expenses in millions of dollars

■ BP-18 Rate Case ▨ Actuals

Total expense (in millions of dollars)

BP-18
Rate Case

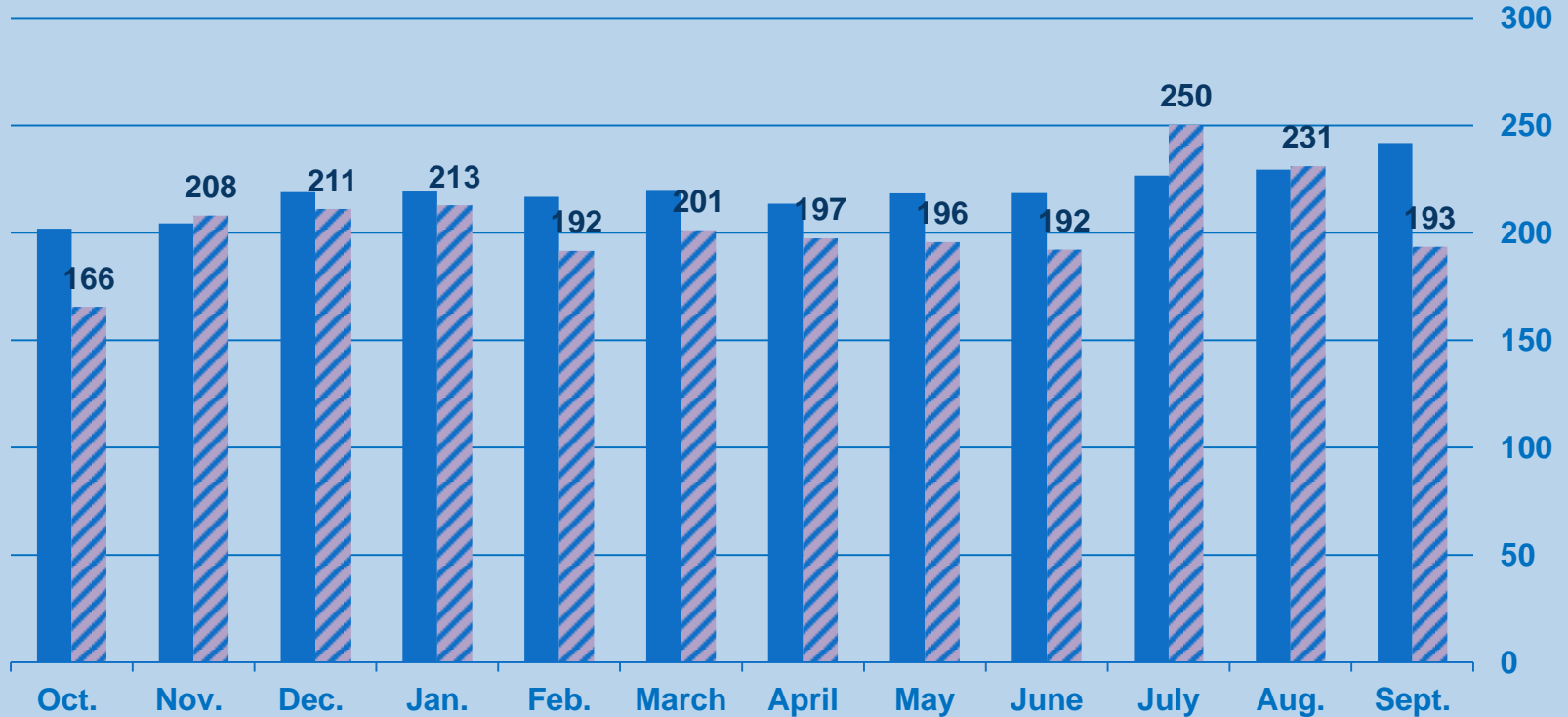
FY 2018
actuals

Variance

2,629

2,450

(179)



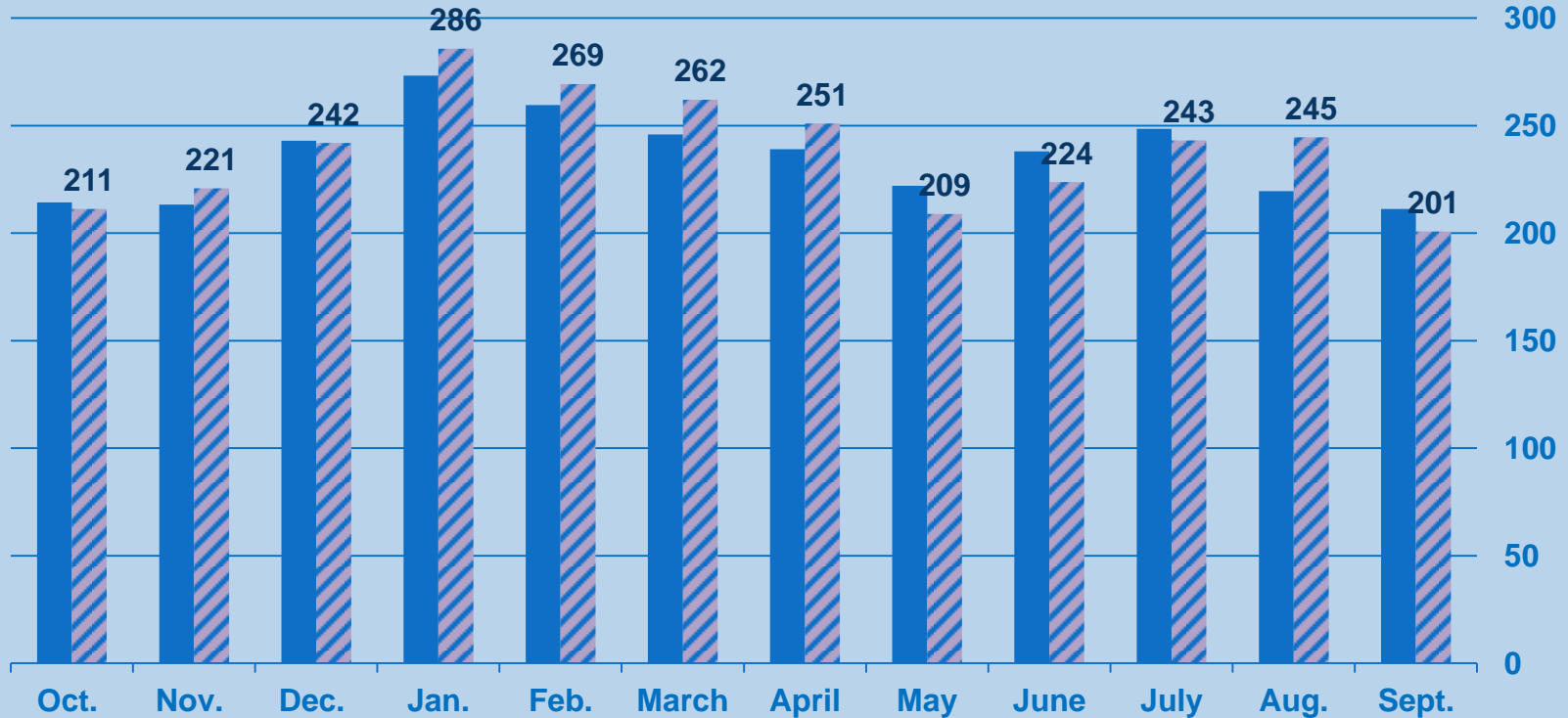
POWER SERVICES REVENUES

Power Services total revenues

Total revenues in millions of dollars

■ BP-18 Rate Case ▨ Actuals

Total revenues (in millions of dollars)		
BP-18 Rate Case	FY 2018 actuals	Variance
2,827	2,863	35

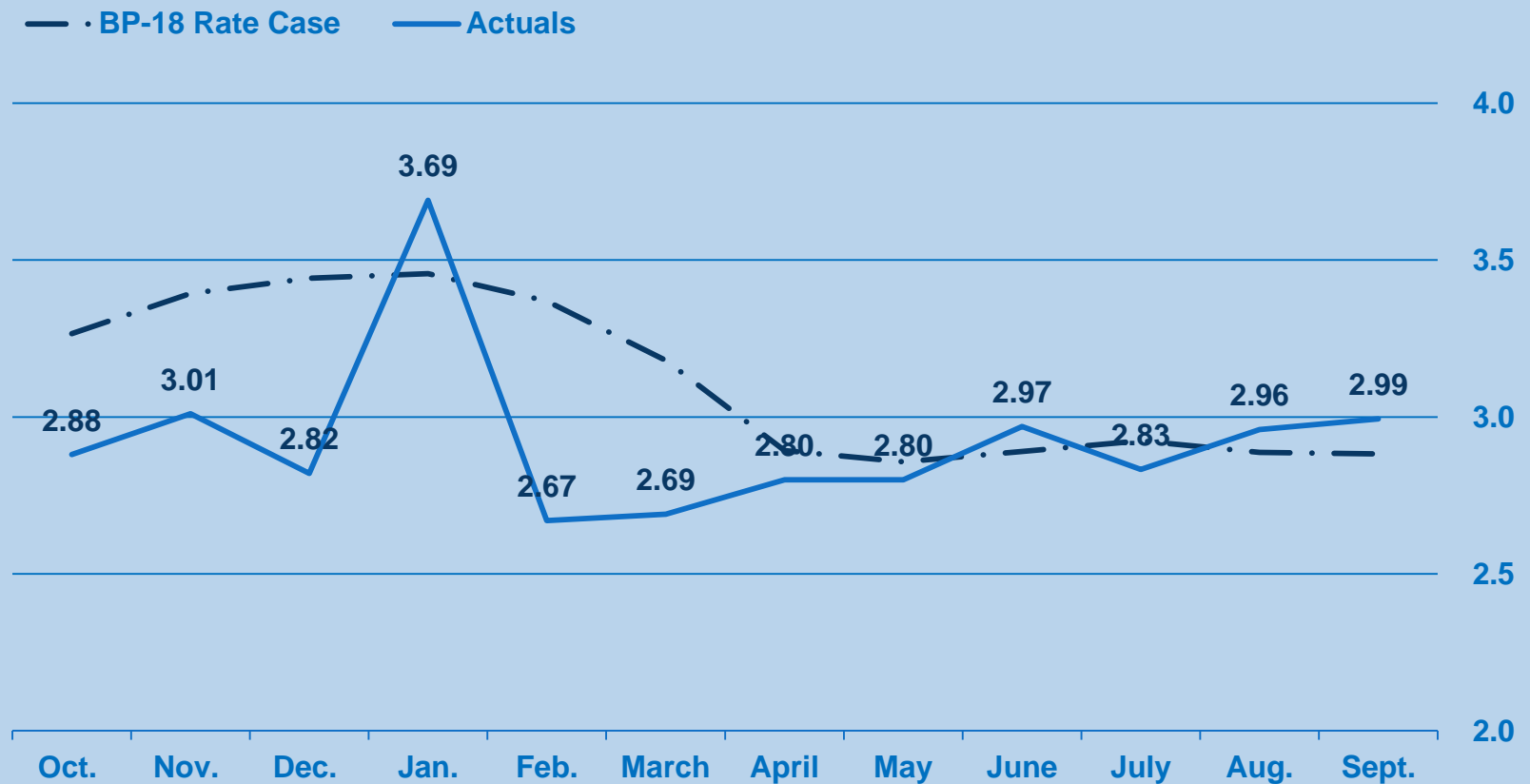


HENRY HUB PRICES

Henry Hub prices

In dollars per one million British thermal units

BP-18 avg.: \$3.12
FY 2018 avg.: \$2.93



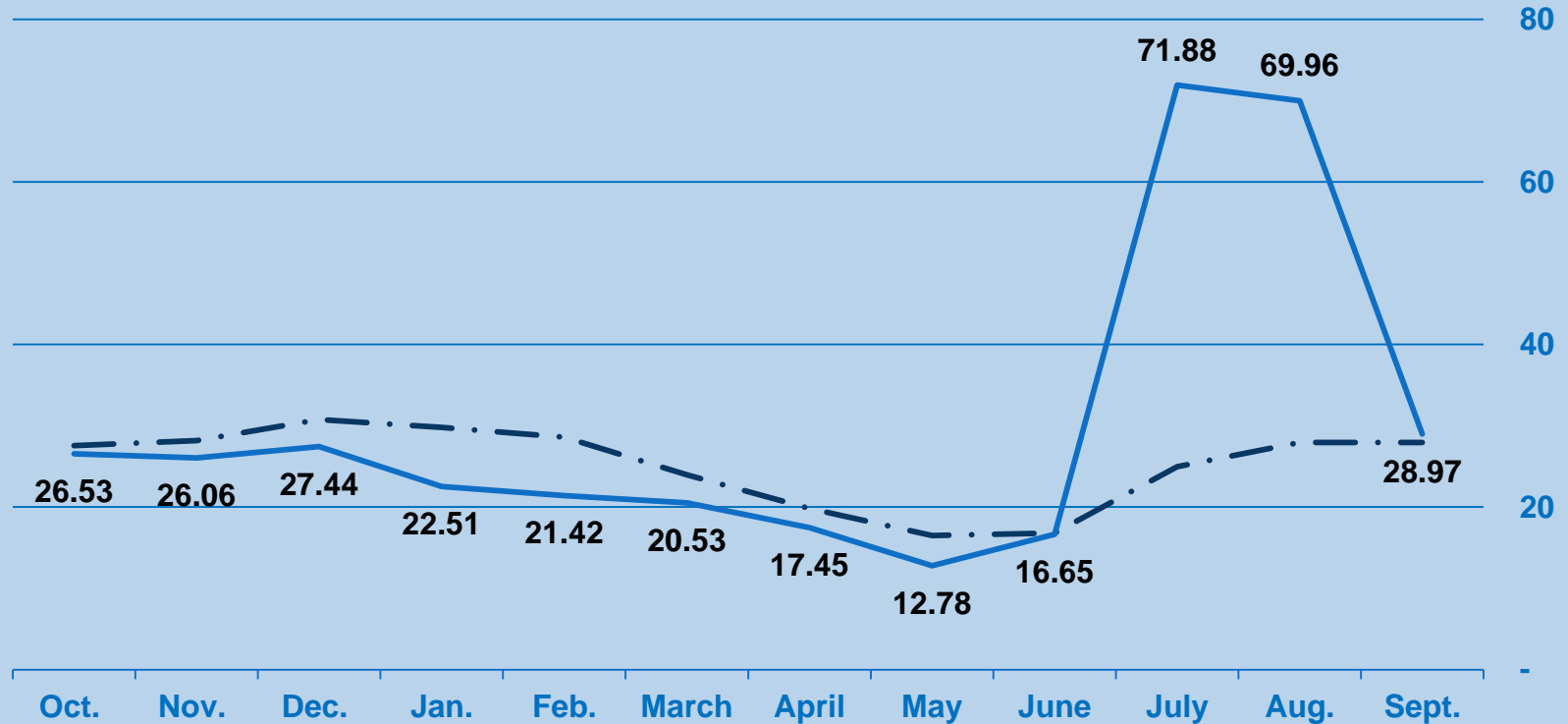
MID-C PRICES

Mid-C heavy load hour prices

In dollars per megawatt hour

BP-18 avg.: \$25.23
FY 2018 avg.: \$24.78

— • BP-18 Rate Case — Actuals



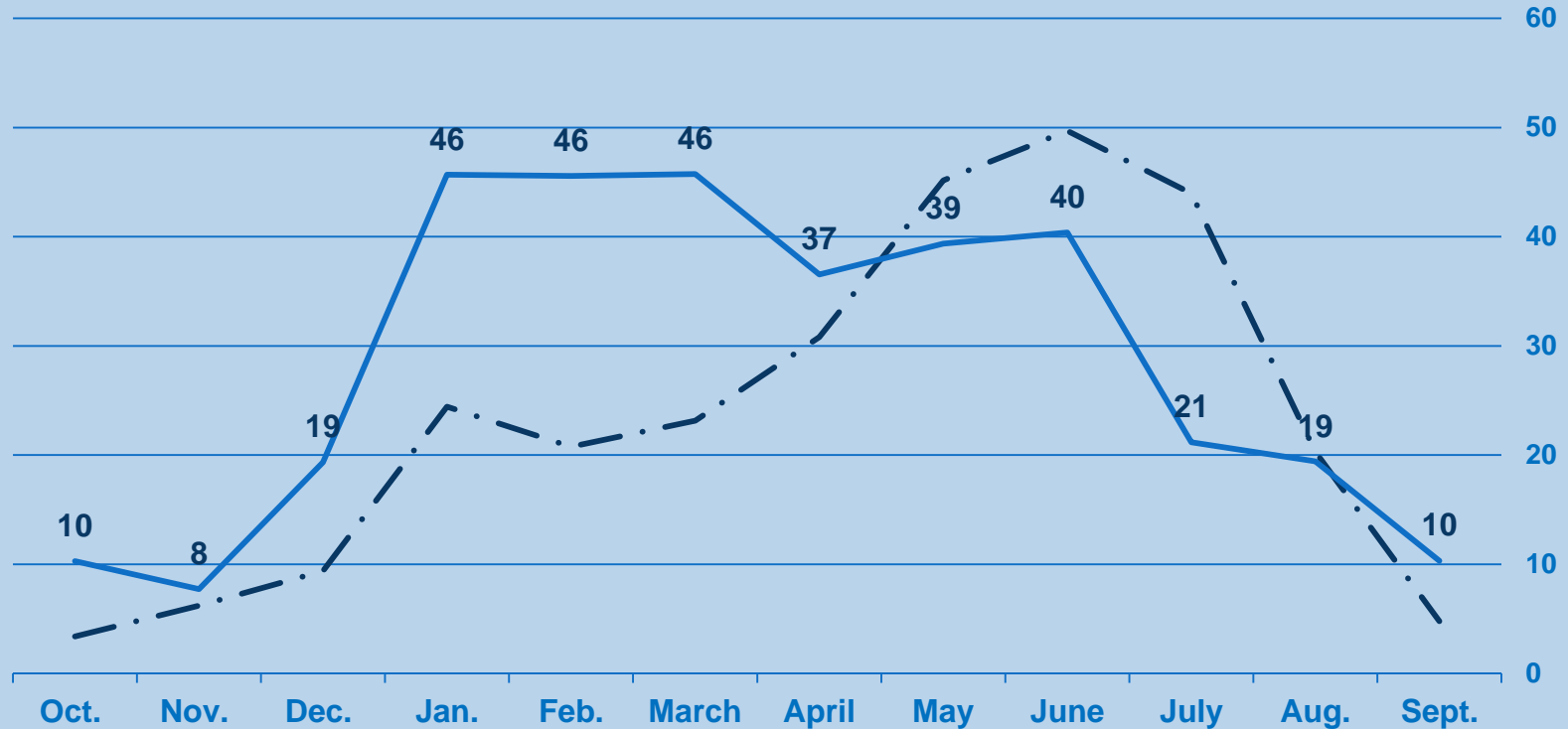
NET SECONDARY REVENUE

Net secondary revenue

In million of dollars

— · BP-18 (non-slice) — FY 2018 actuals

NSR (in millions of dollars)		
BP-18 Rate Case	FY 2018 actuals	Variance
282	345	63

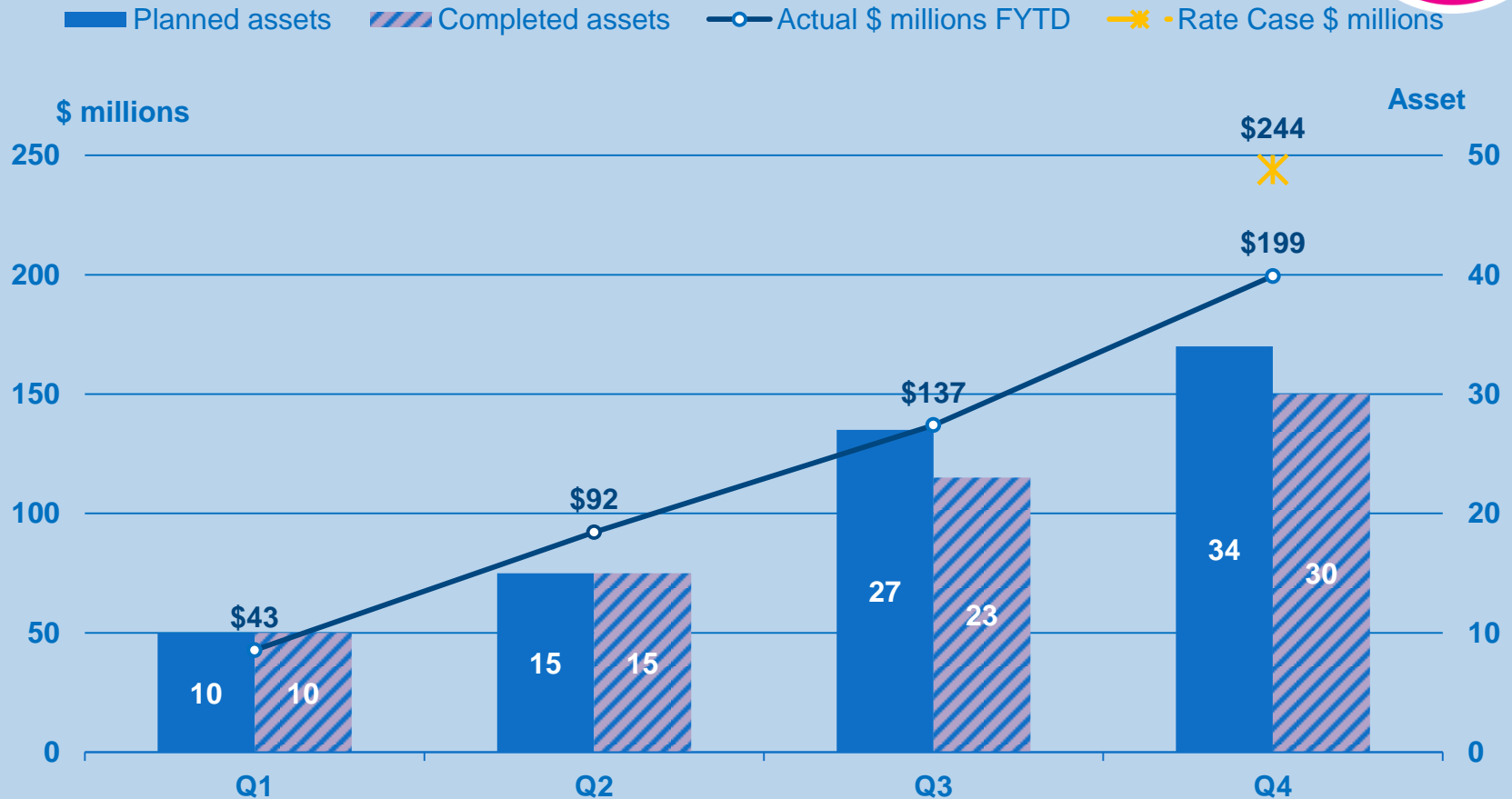


POWER SERVICES CAPITAL



Capital expenditure and work completed

Tracks capital expenditure and percent of workplan completed



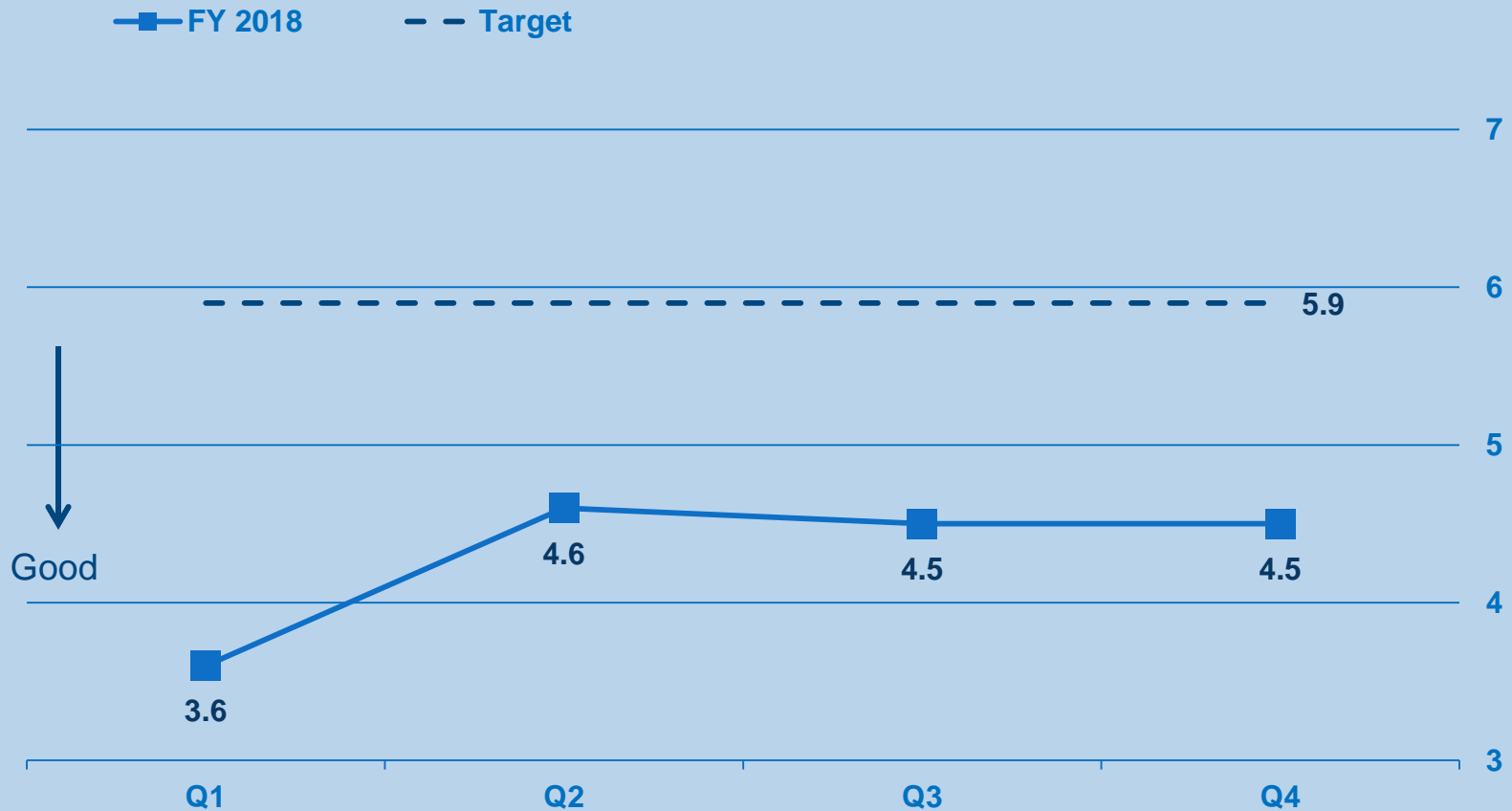
Note: capital expenditure KPI includes only direct-funded federal hydropower capital.

FEDERAL HYDROPOWER RELIABILITY



Federal hydropower forced outage factor

Percentage of hours fed hydro projects are offline due to unplanned outages



COLUMBIA GENERATING STATION RELIABILITY



Columbia Generating Station availability factor

Percentage of time Columbia is available to serve demand



ACCOMPLISHMENTS

- 2018 Resource Program
- Portland General Electric capacity agreement
- River operations



TRANSMISSION SERVICES

Richard Shaheen, SENIOR VICE PRESIDENT OF TRANSMISSION SERVICES

TRANSMISSION SERVICES EXPENSE

Transmission Services total expense

Total expense in millions of dollars

■ BP-18 Rate Case ▨ Actuals

Total expense (in millions of dollars)

BP-18
Rate Case

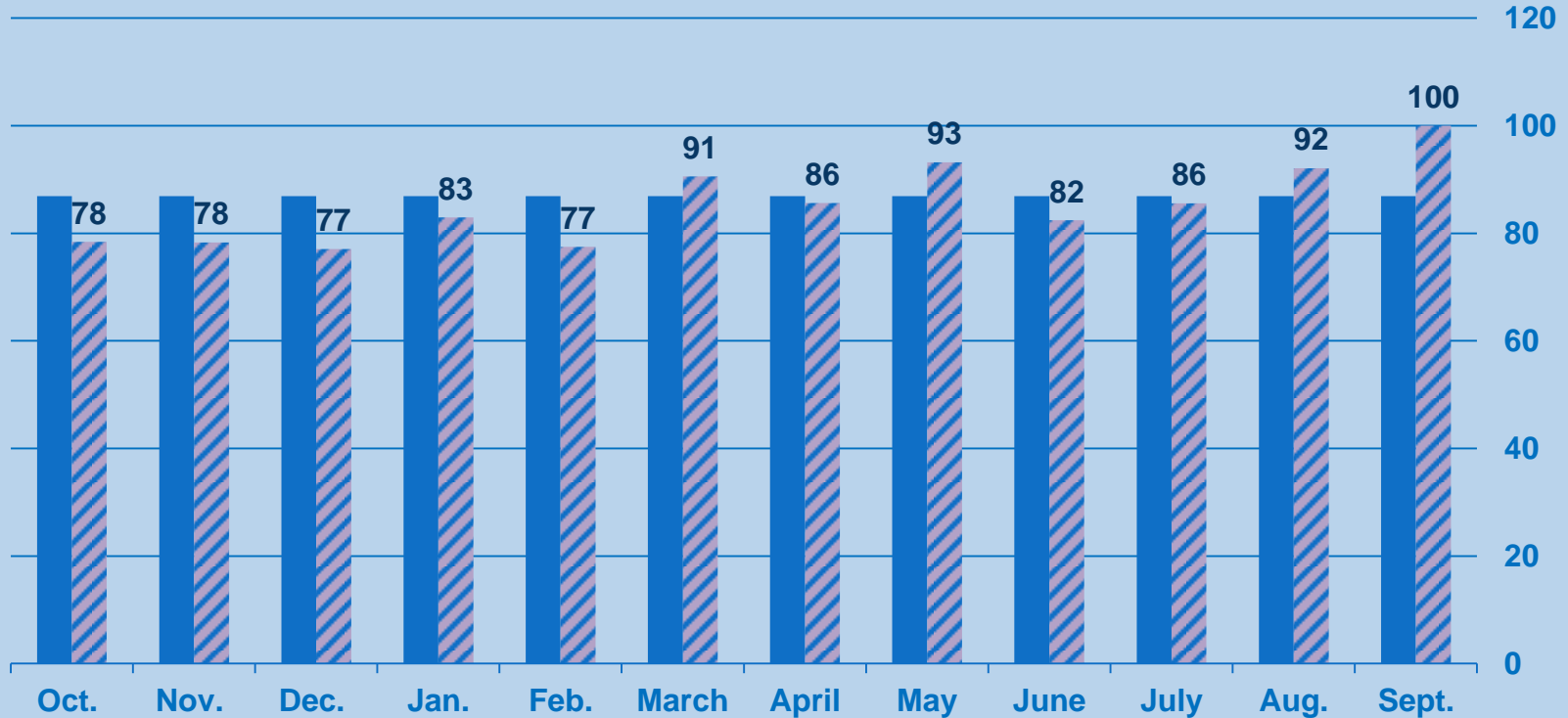
FY 2018
actuals

Variance

1,043

1,024

(19)



TRANSMISSION SERVICES REVENUES

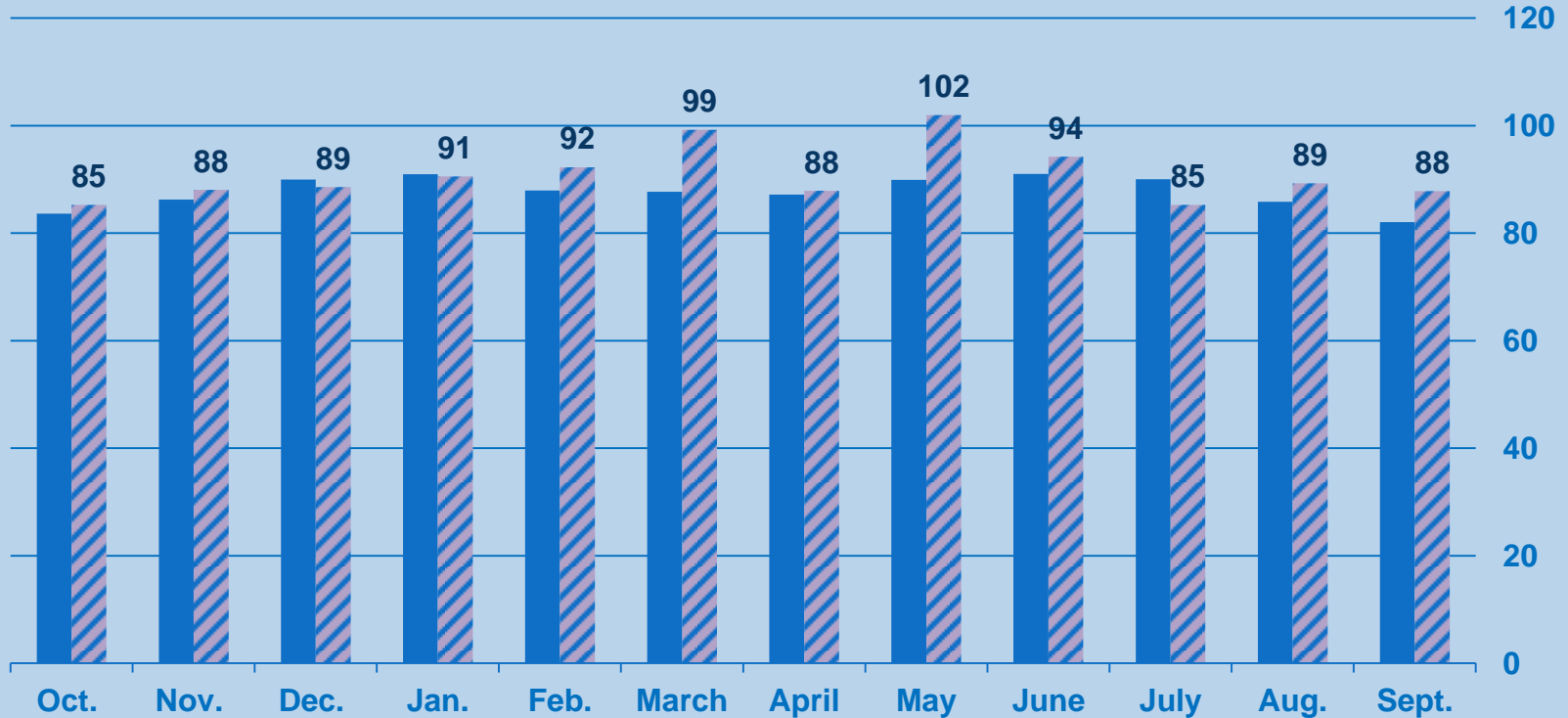
Transmission Services total revenues

Total revenues in millions of dollars

■ BP-18 Rate Case ▨ Actuals

Total revenues (in millions of dollars)

BP-18 Rate Case	FY 2018 actuals	Variance
1,052	1,090	38

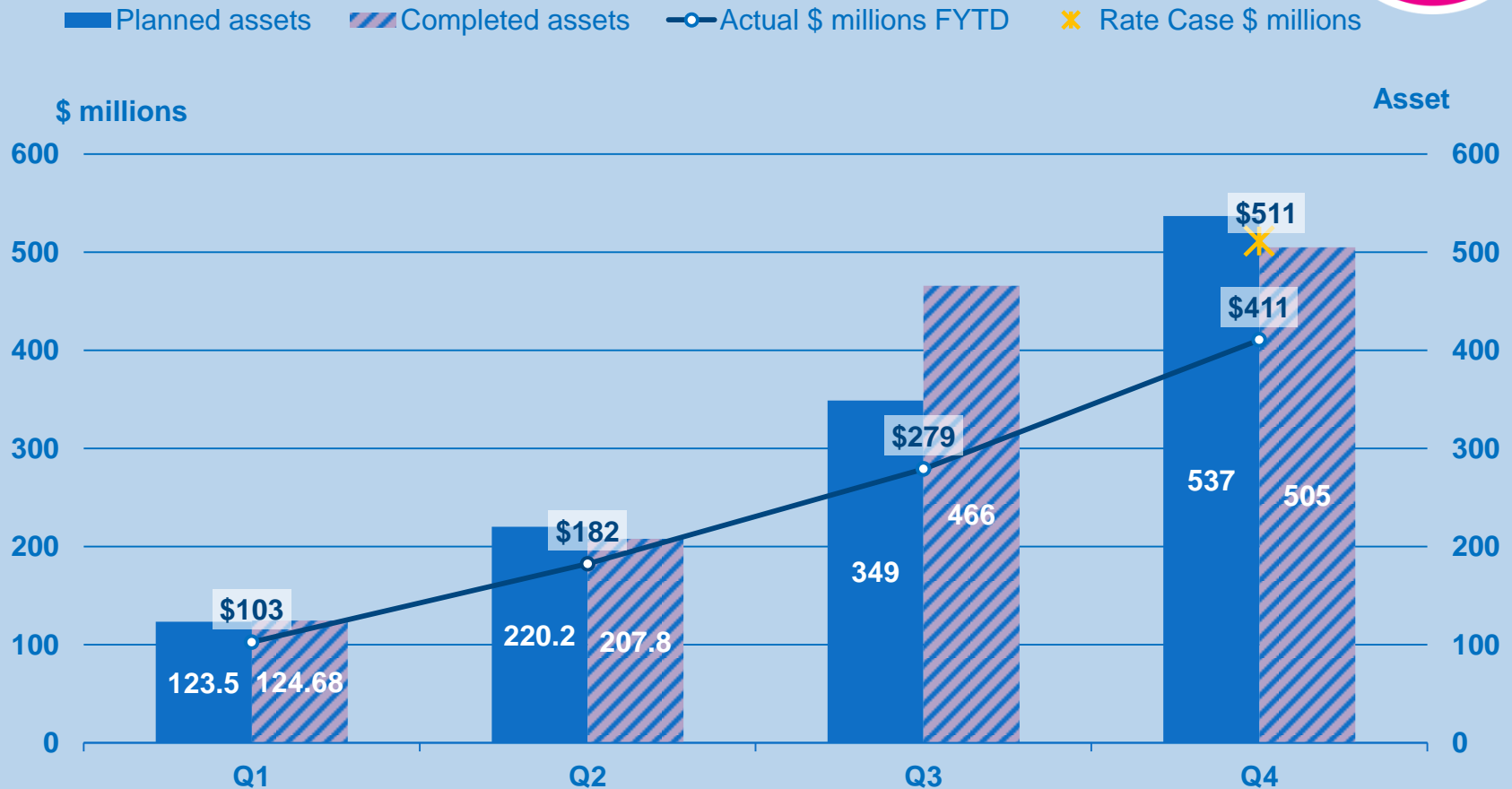


TRANSMISSION SERVICES CAPITAL



Capital expenditure and work completed

Tracks capital expenditure and percent of workplan completed



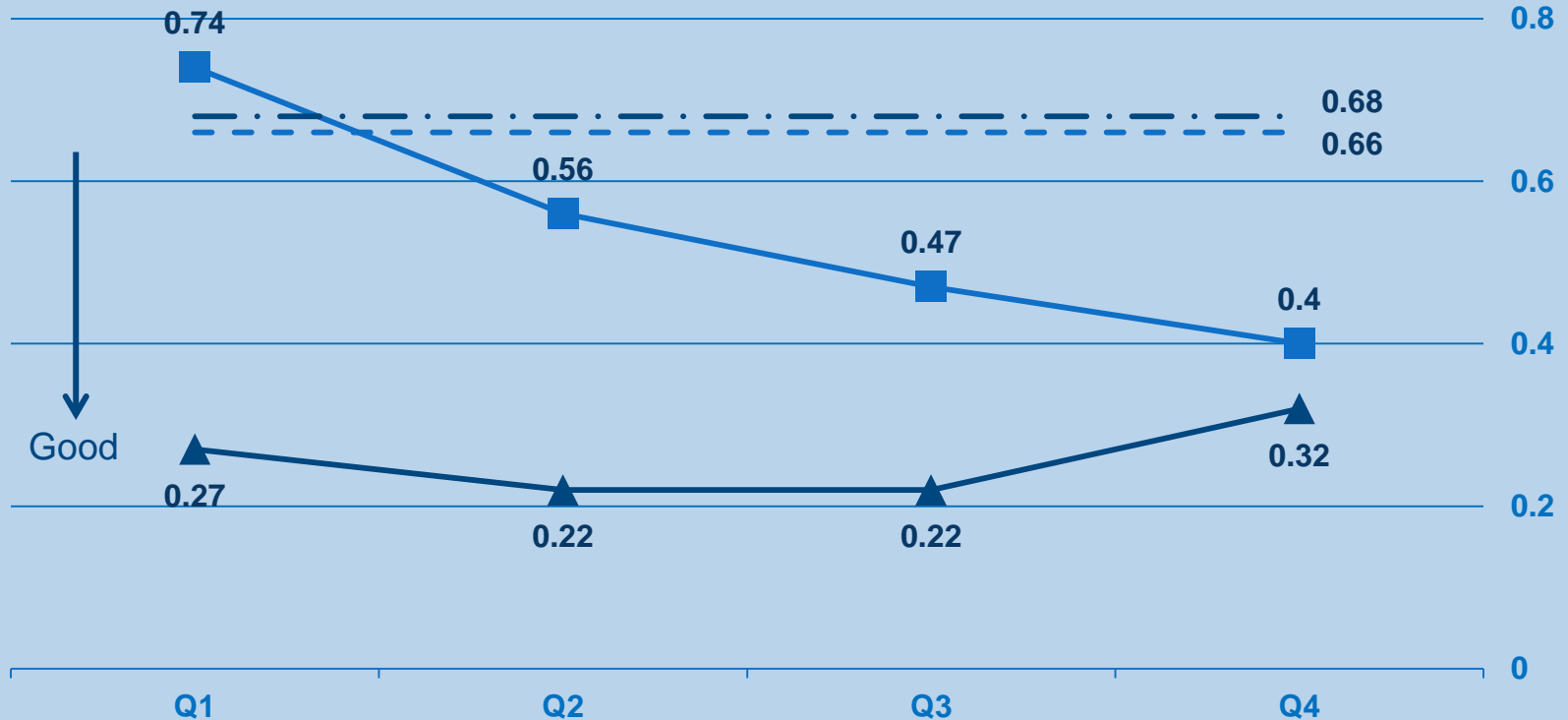
TRANSMISSION RELIABILITY - SAIFI



System average interruption frequency index

Tracks frequency of unplanned outages

■ Low voltage (< 200kV) ▲ High voltage (≥ 200 kV) - - Low voltage warning level — · High voltage warning level



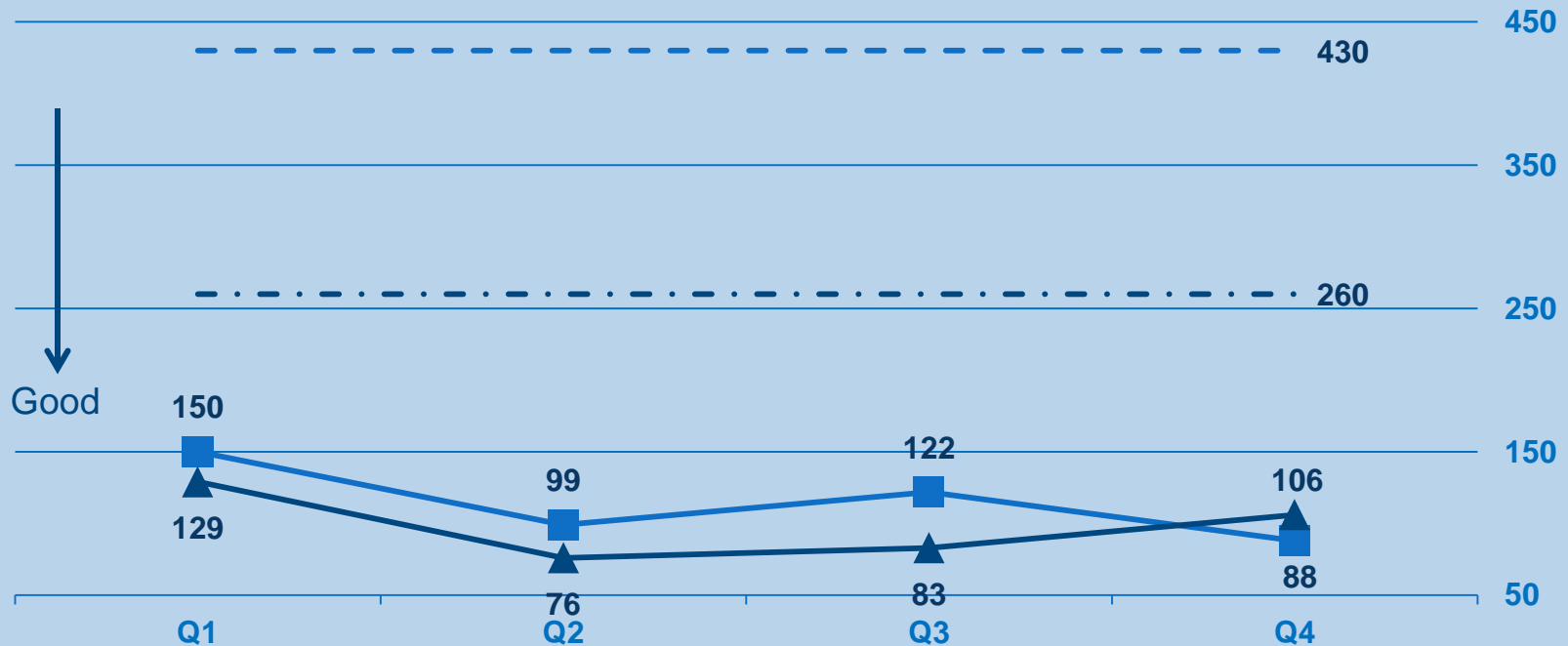
TRANSMISSION RELIABILITY - SAIDI



System average interruption duration index

Tracks duration of unplanned outages

■ Low voltage (< 200kV) ▲ High voltage (>= 200kV) - - Low voltage warning level - . - High voltage warning level



ACCOMPLISHMENTS

- Reliability coordinator services.
- TC-20 schedule and settlement discussions.
- Planning work:
 - Transmission Integrated Planning Process.
 - Evolving demand.



FY 2019 PREVIEW

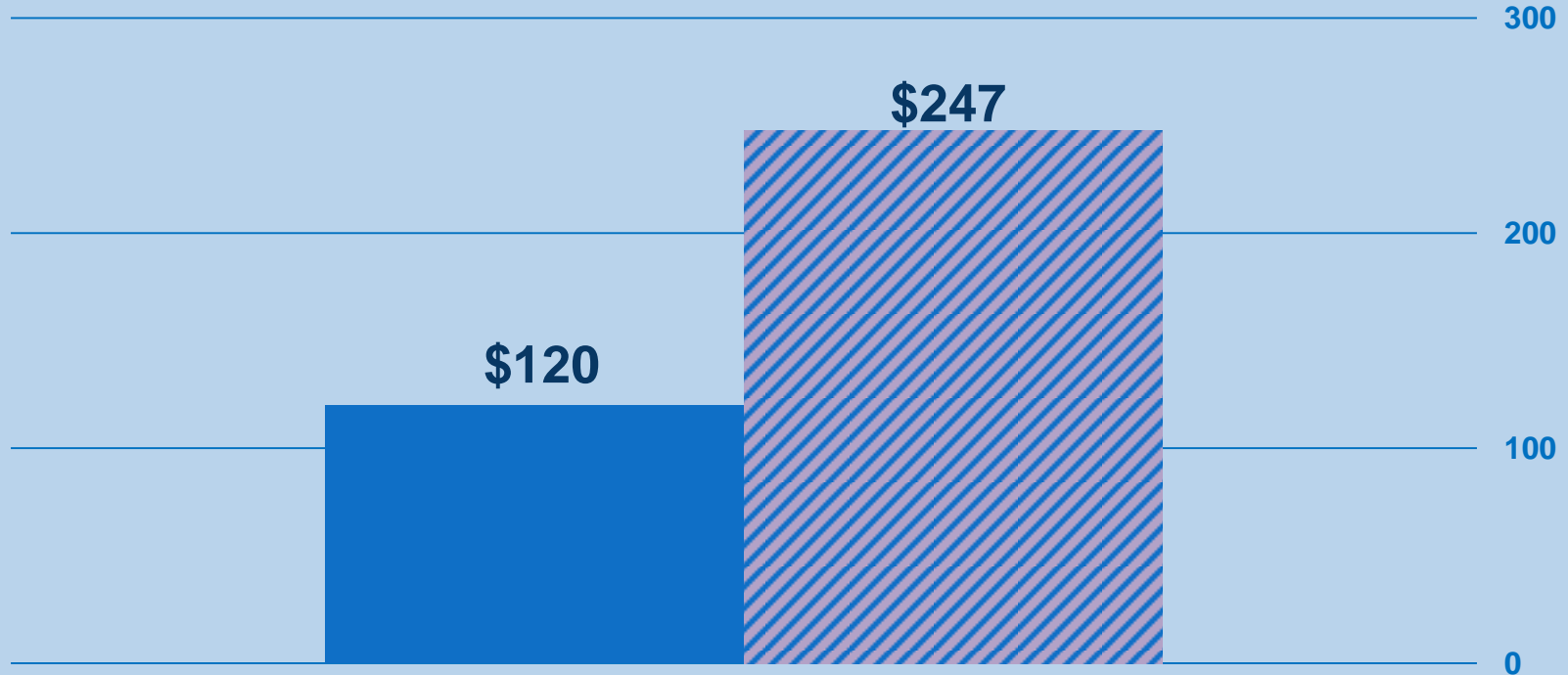
Janet Herrin, CHIEF OPERATING OFFICER

2019 AGENCY NET REVENUES

FCRPS net revenues

In millions of dollars

■ BP-18 Rate Case ■ FY 2019 start-of-year forecast

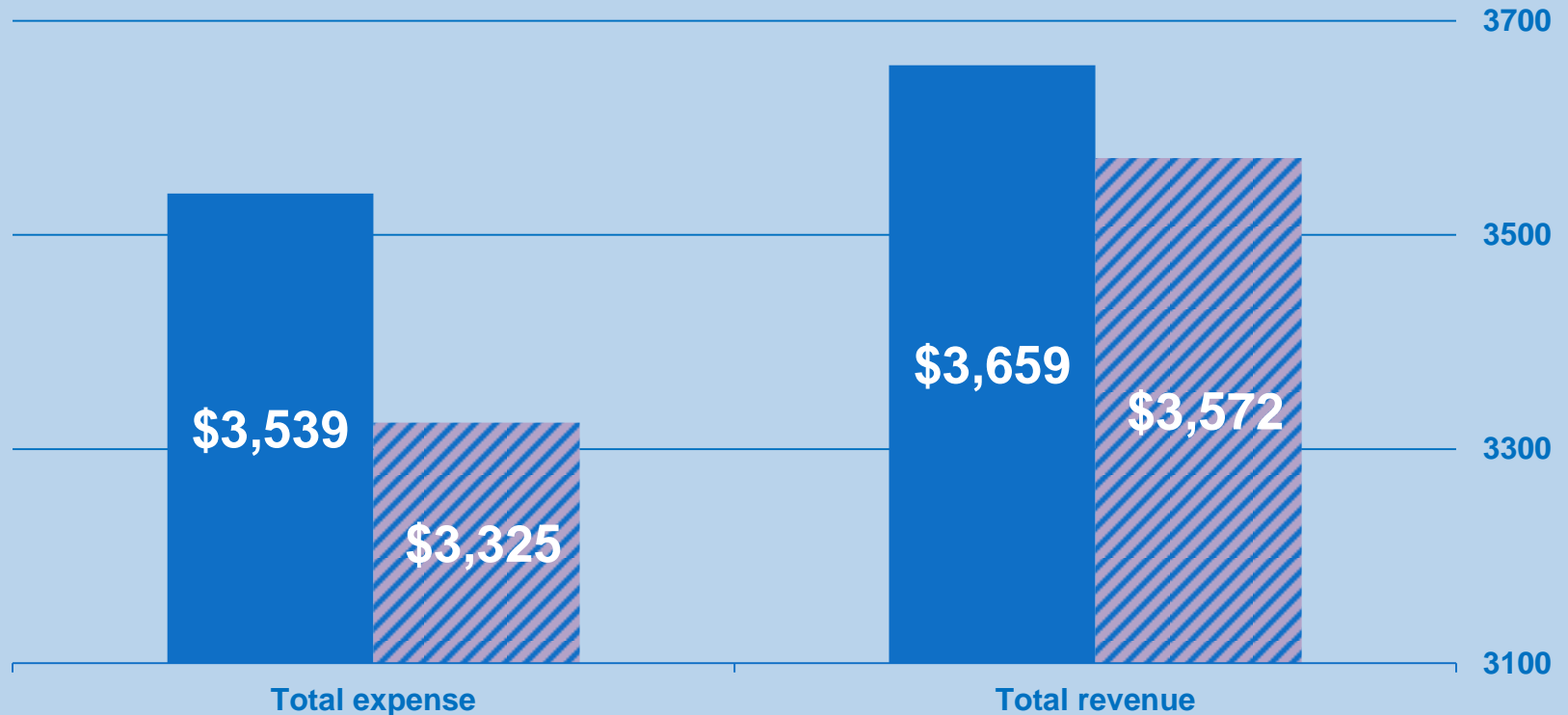


2019 AGENCY FINANCIAL HEALTH

Federal Columbia River Power System

Total revenue and expense in millions of dollars

■ BP-18 Rate Case ■ FY 2019 start-of-year forecast



GRID MODERNIZATION

- Mission critical information technology
 - Modernize the systems necessary to do core power and transmission functions; the foundation to all other grid mod projects.
- Outage management projects
 - Improves outage coordination across agencies and reduces risk of non-compliance.
- Automatic generation control
 - Enables additional capacity marketing from hydro system.



PUBLIC ENGAGEMENT

Scott Simms, DIRECTOR OF COMMUNICATIONS

PUBLIC PROCESSES

- **Nov. 14** – BPA energy imbalance market stakeholder meeting.
- **Dec. 7** – South of Allston bilateral redispatch pilot review.

COMMENT PERIODS

- **Nov. 13** – Nez Perce tribal hatchery operations and Snake River steelhead kelt reconditioning project.
- **Nov. 23** – Columbian white-tailed deer translocation project.



QUESTION AND ANSWER

THANK YOU

The next QBR is scheduled for
Jan. 29, 2019.

**Strategic plan is available at
www.bpa.gov/StrategicPlan.**

Didn't get your question answered?
Email Communications@bpa.gov. Answers will be
posted to www.bpa.gov/goto/QBR.

FINANCIAL DISCLOSURE

This information was publicly available on Nov. 7, 2018, and contains information not sourced directly from BPA financial statements.