



Bonneville
POWER ADMINISTRATION



QUARTERLY BUSINESS REVIEW

Jan. 29, 2019



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: <ul style="list-style-type: none">• Environment, Fish and Wildlife updates	Elliot Mainzer <i>Administrator</i>
9:20 a.m.	Power Services update	Joel Cook <i>Senior VP of Power Services</i>
9:28 a.m.	Transmission Services update	Richard Shaheen <i>Senior VP of Transmission Services</i>
9:36 a.m.	Finance update	Michelle Manary <i>Chief financial officer</i>
9:44 a.m.	Grid modernization update	Nita Zimmerman <i>Deputy executive VP of Business Transformation Office</i>
9:51 a.m.	Upcoming involvement opportunities	Scott Simms
9:53 a.m.	Question and answer	



STATE OF THE BUSINESS

Elliot Mainzer, ADMINISTRATOR AND CHIEF EXECUTIVE OFFICER

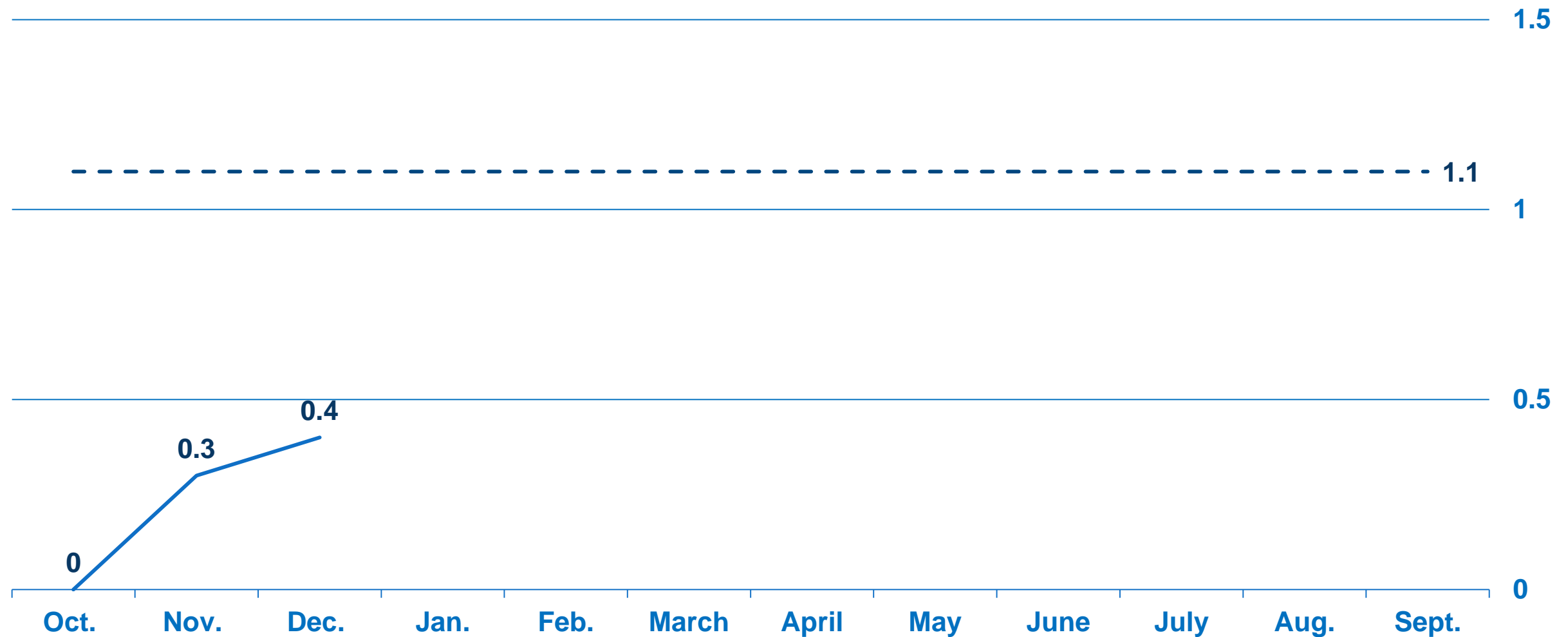
SAFETY

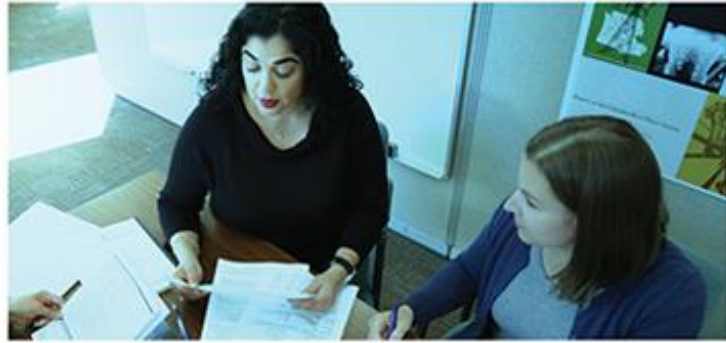


Incident frequency rate

Number of injuries and illnesses per 200,000 hours worked

— 2019 - - Ceiling



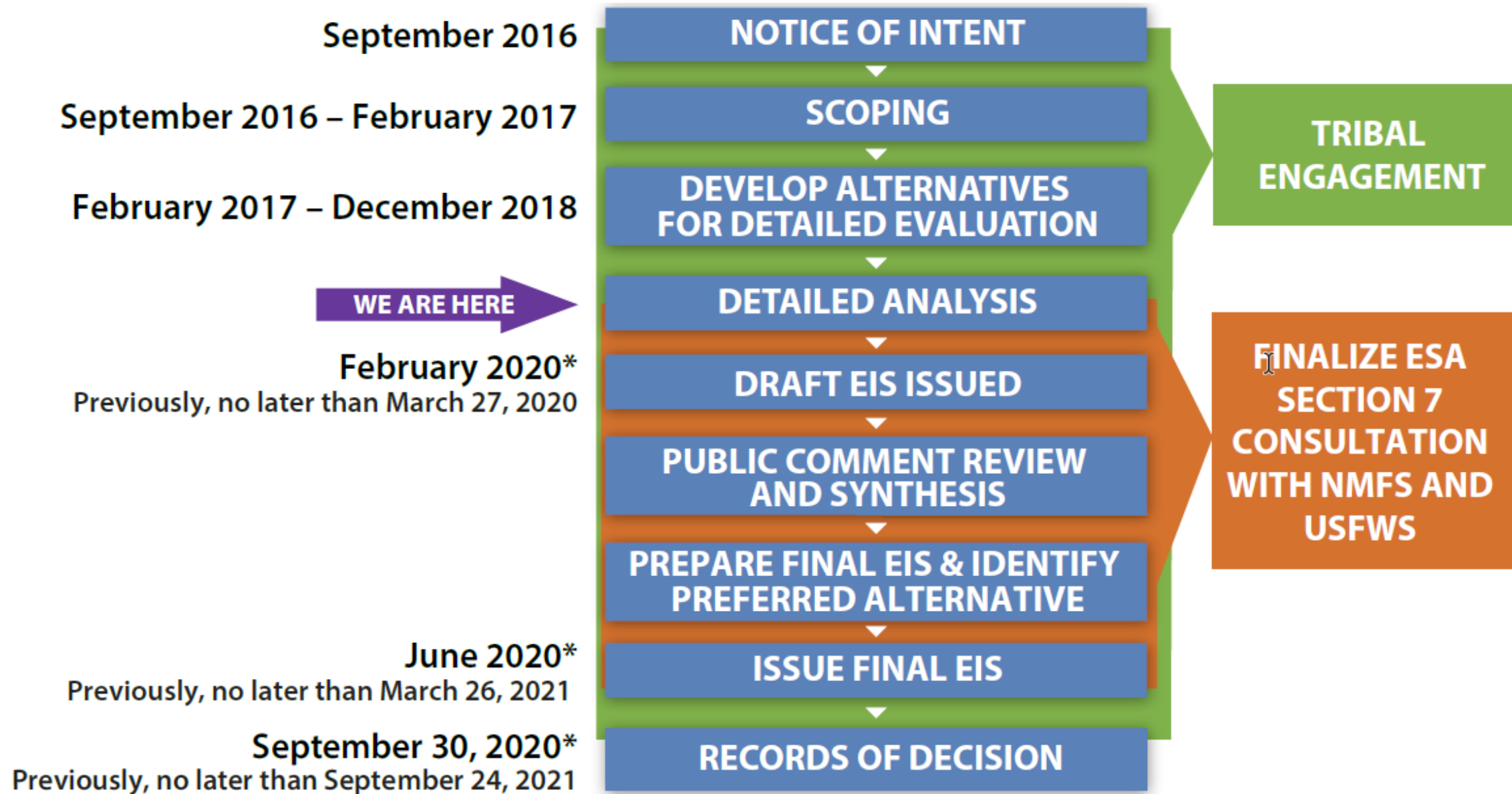


Delivering on our public responsibilities through a commercially successful business



BPA 2018–2023 Strategic Plan

CRSO EIS PROCESS



*Dates reflect commitment to the Council on Environmental Quality based on the October 2018 [presidential memoranda](#).

FLEXIBLE SPILL

- Flexible spill agreement
 - Tests an innovative approach to fish survival while managing costs of hydro generation.
 - In place while we complete the CRSO process.



POWER SERVICES

Joel Cook, SENIOR VICE PRESIDENT OF POWER SERVICES

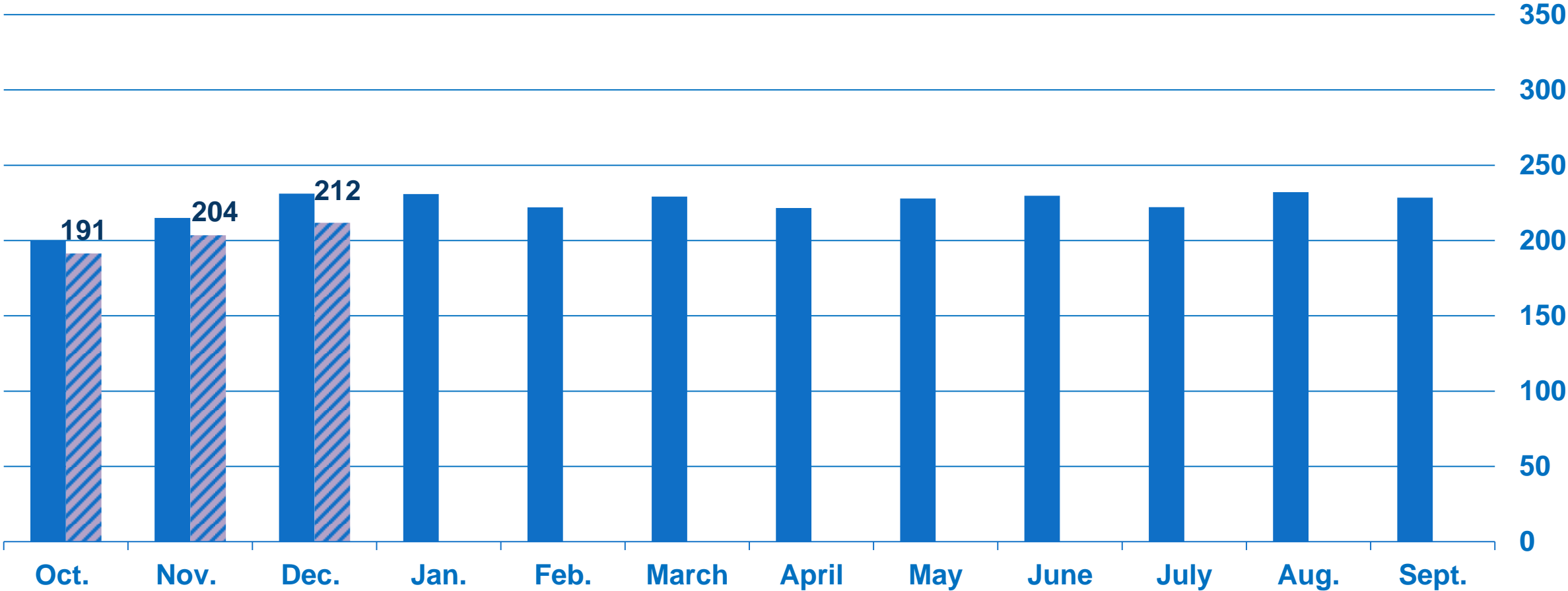
POWER SERVICES EXPENSE

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	Q1 EOY forecast	Variance
Year-to-date	646	607	(40)
FY 2019	2,690	2,486	(204)

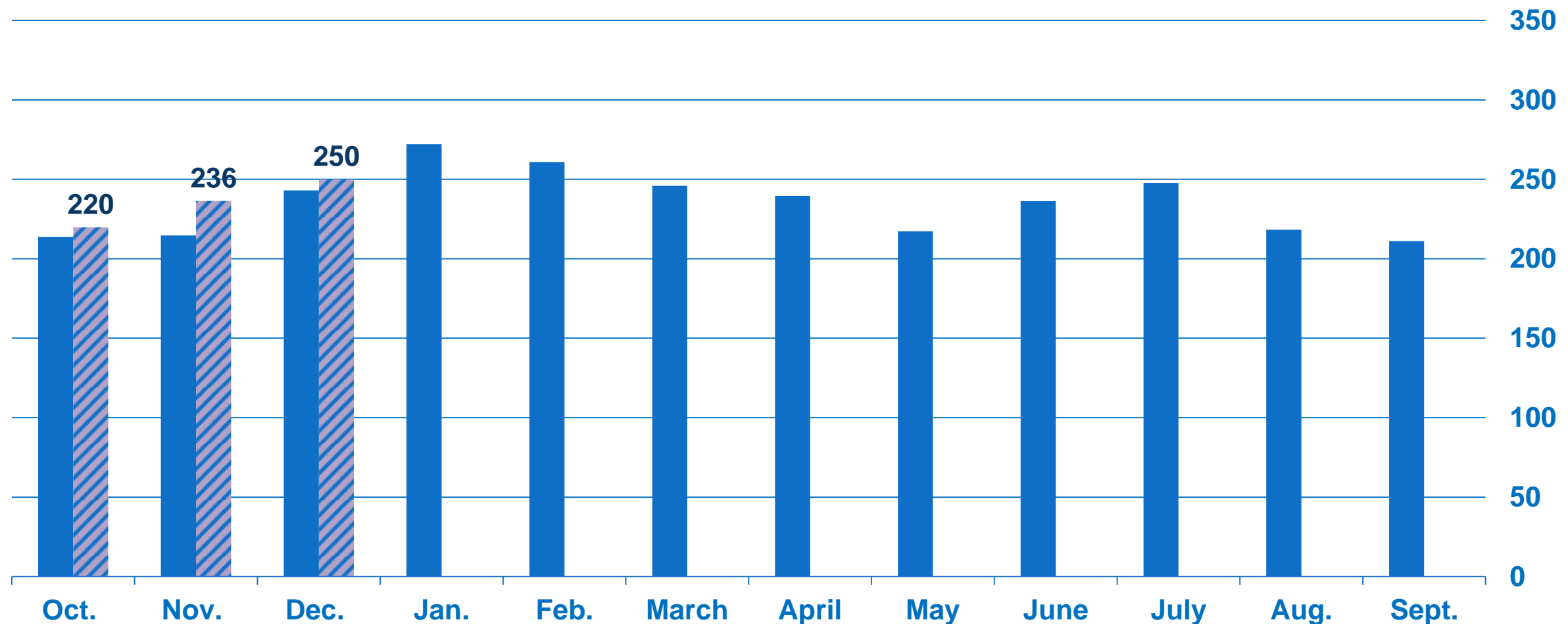


POWER SERVICES REVENUES

Power Services total revenues

Total revenues in millions of dollars

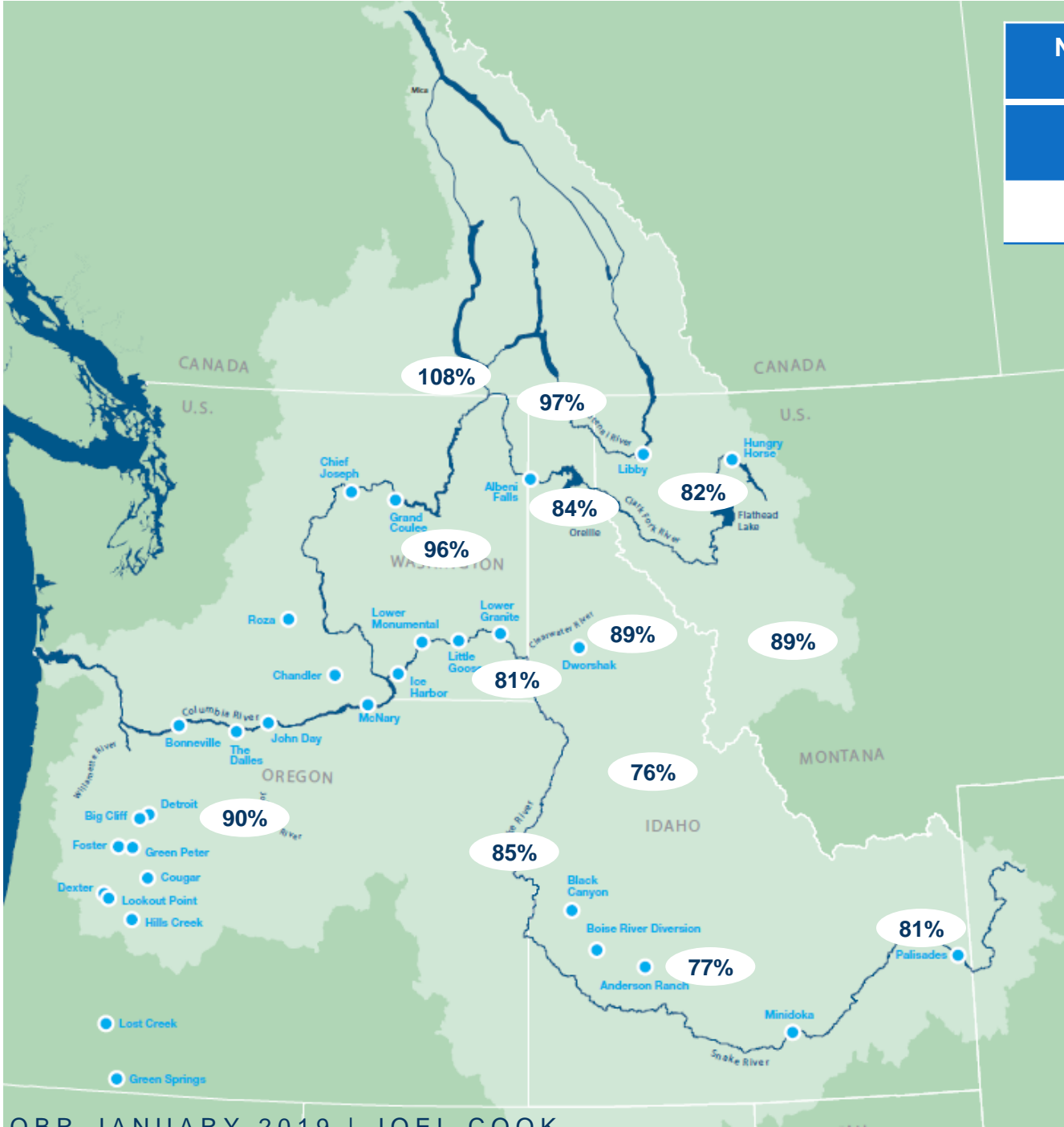
■ BP-18 Rate Case ■ Actuals



Total revenues (in millions of dollars)			
	BP-18 Rate Case	Q1 EOY forecast	Variance
Year-to-date	671	706	35
FY 2019	2,821	2,797	(24)

SNOWPACK CONDITIONS

National Weather Service official water supply forecast as of Jan. 4, 2019	
Jan. – July (million acre feet)	Percent average
93.5	92



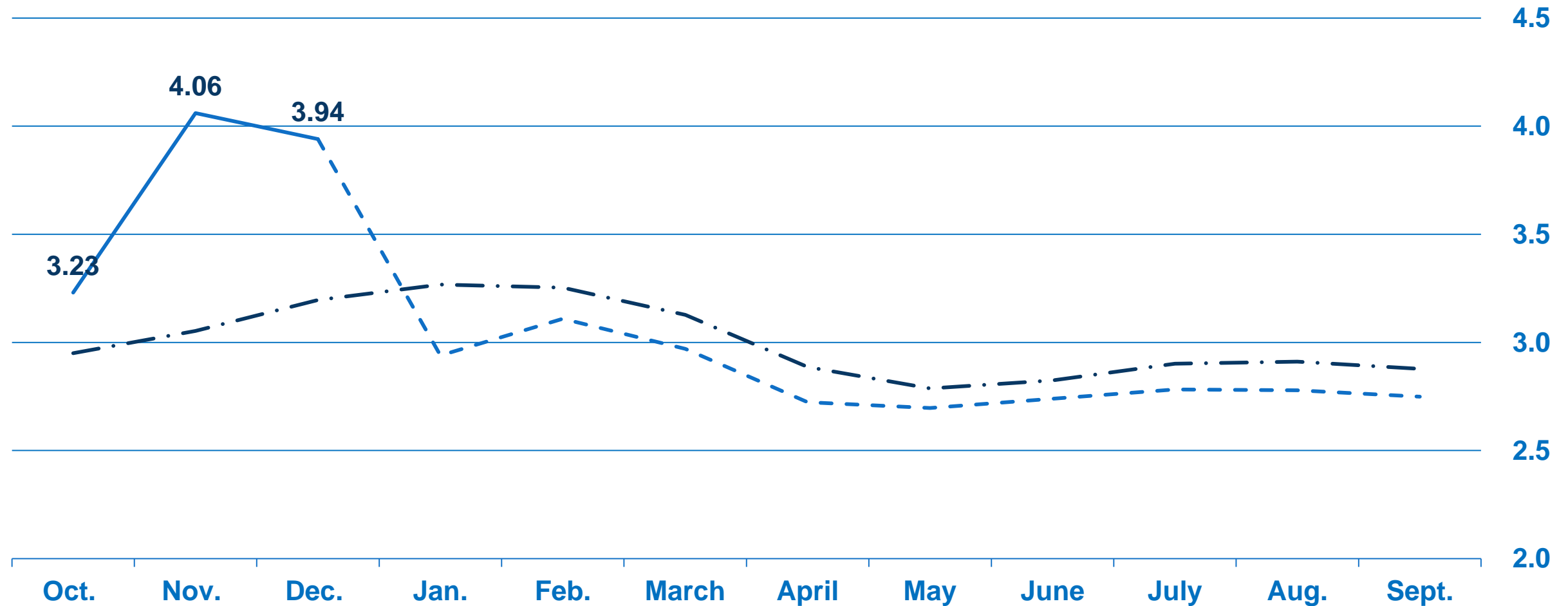
HENRY HUB PRICES

Henry Hub prices

In dollars per one million British thermal units

BP-18 forecast: \$3.00
FY 2019 average: \$2.13

— · BP-18 Rate Case — Actuals (S&P Global Platts) - - Jan. 8 NYMEX Average



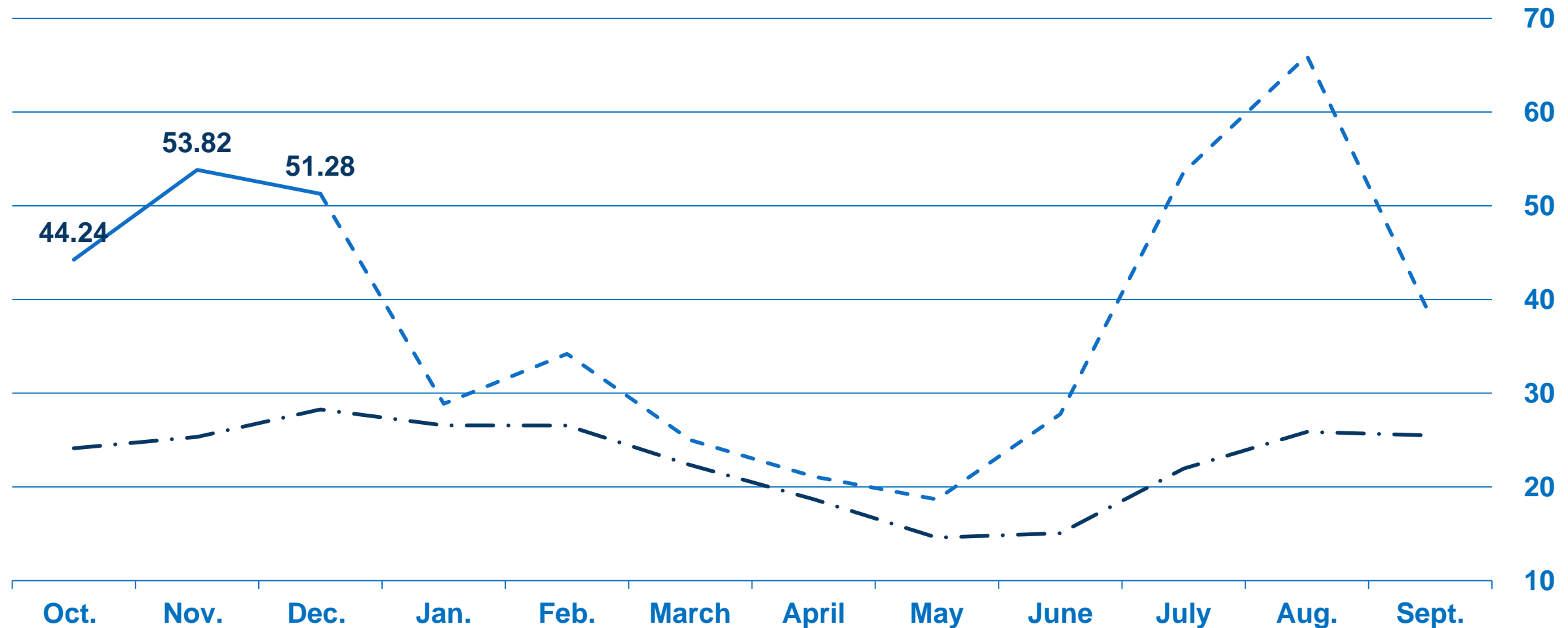
MID-C PRICES

Mid-C heavy load hour prices

In dollars per megawatt hour

— · BP-18 Rate Case — Actuals - - Forward market (ICE)

BP-18 forecast: \$22.90
FY 2019 average: \$39.50

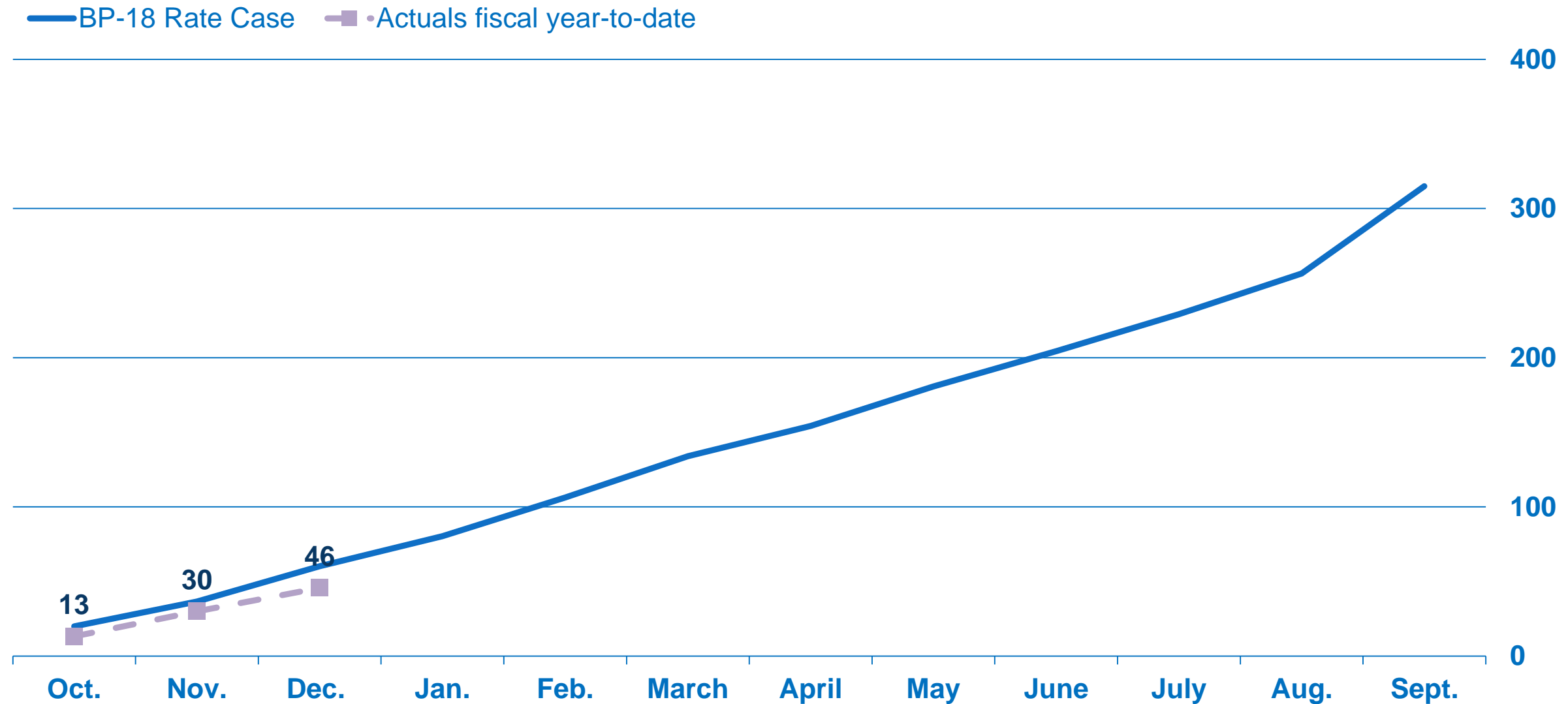


POWER CAPITAL EXPENDITURE



Capital expenditure for fiscal year 2019

In millions of dollars



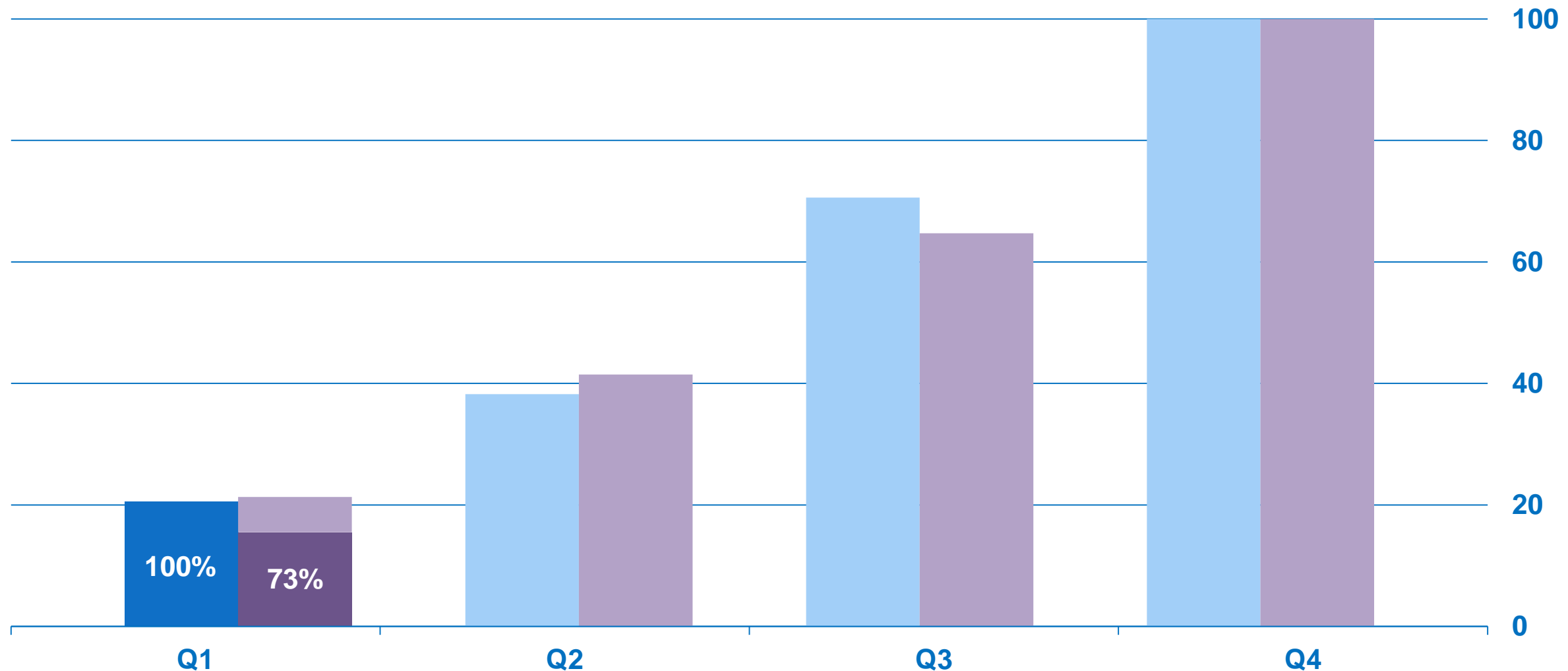
POWER CAPITAL WORKPLAN COMPLETE



Percent of capital work plan completed

The percentage of assets completed compared to budget spent

■ Completed assets ■ Budget spent ■ Planned assets ■ Planned budget



Note: Power's capital work plan completed includes only direct-funded federal hydropower capital projects and spending.

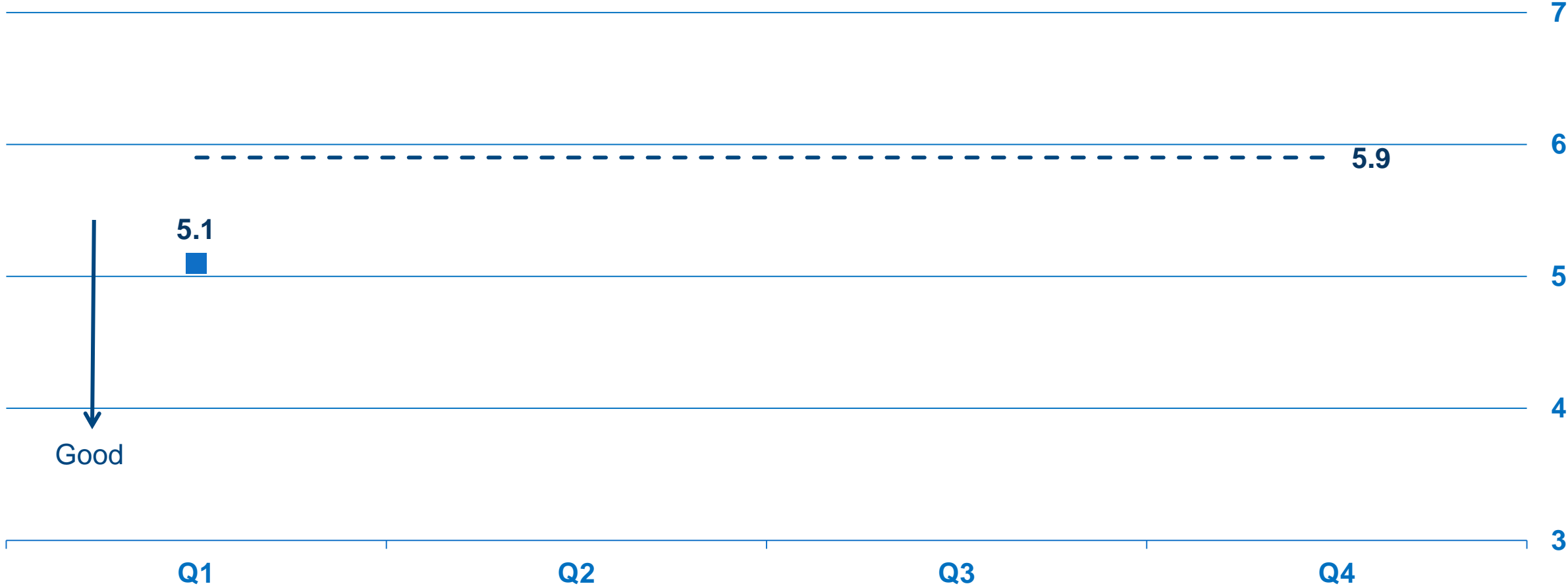
FEDERAL HYDROPOWER RELIABILITY



Federal hydropower forced outage factor

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

■ FY 2019 - - Target



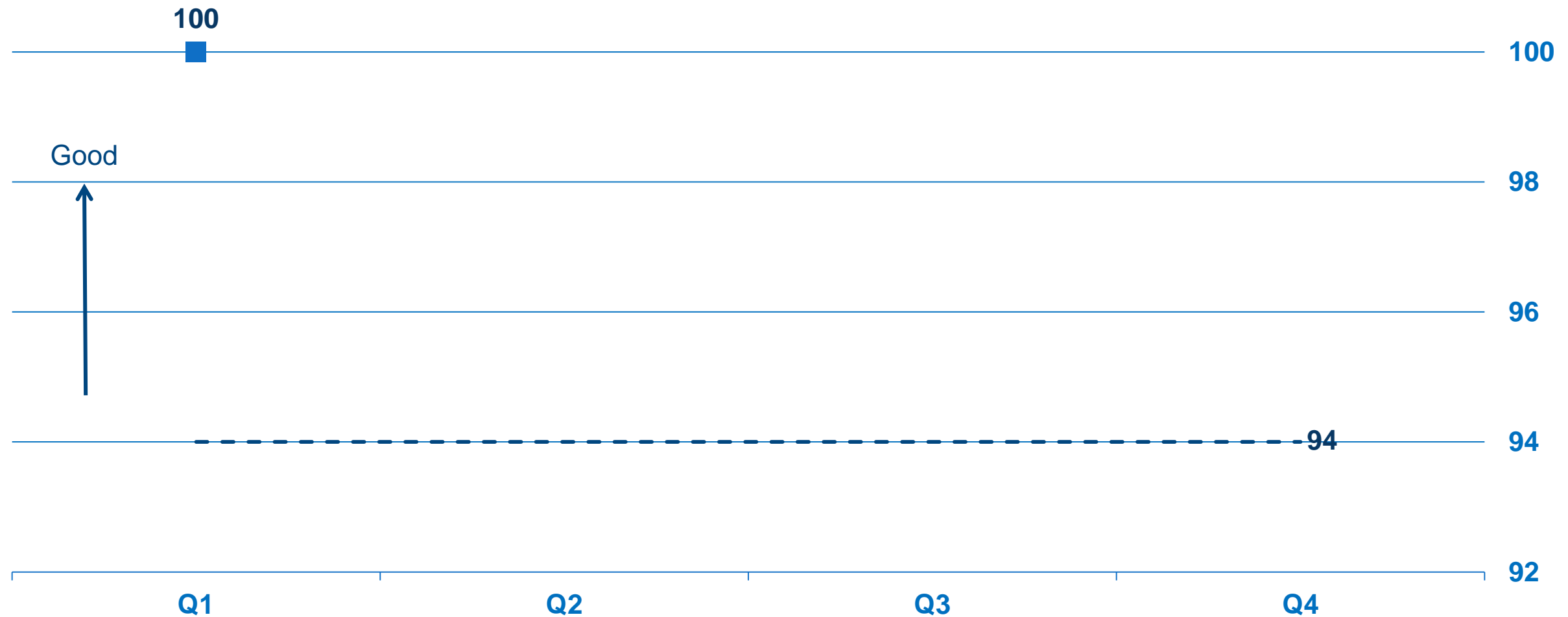
COLUMBIA GENERATING STATION RELIABILITY



Columbia Generating Station availability factor

Percentage of time Columbia is available to serve demand

■ FY 2019 - - Target





TRANSMISSION SERVICES

Richard Shaheen, SENIOR VICE PRESIDENT OF TRANSMISSION SERVICES

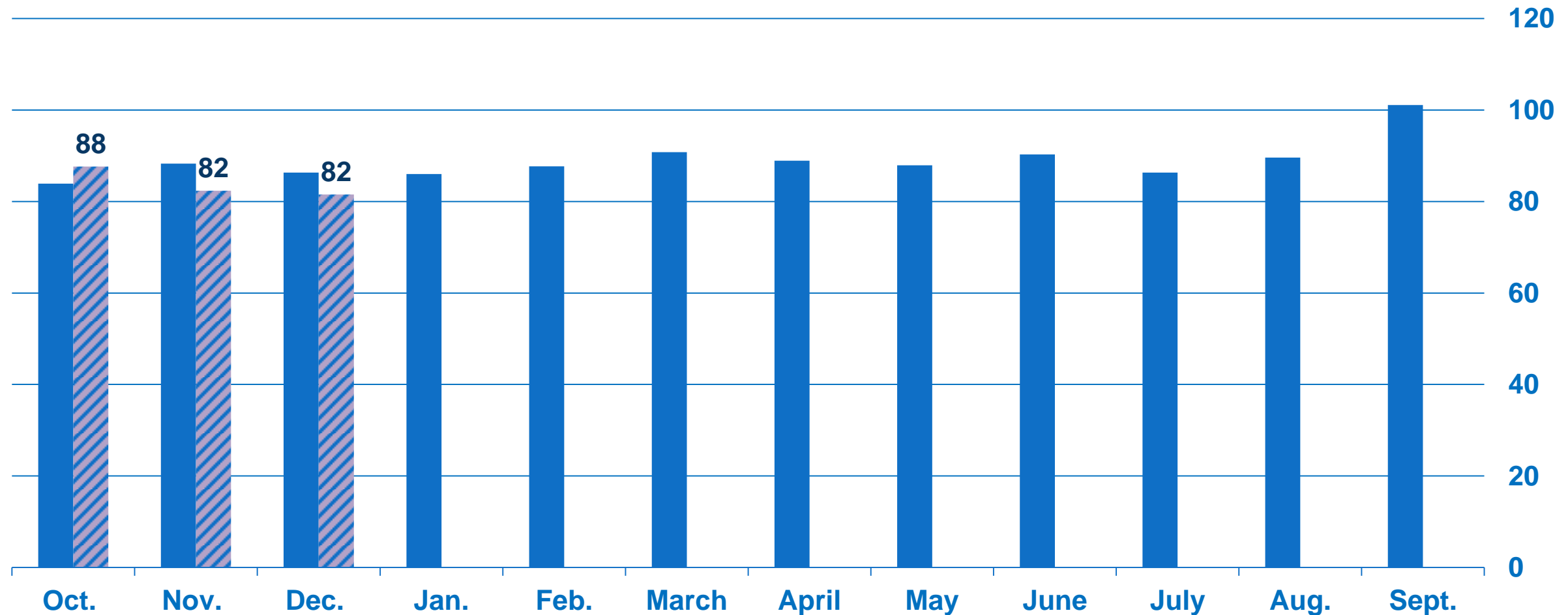
TRANSMISSION SERVICES EXPENSE

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	Q1 EOY forecast	Variance
Year-to-date	259	252	(7)
FY 2019	1,067	1,070	3



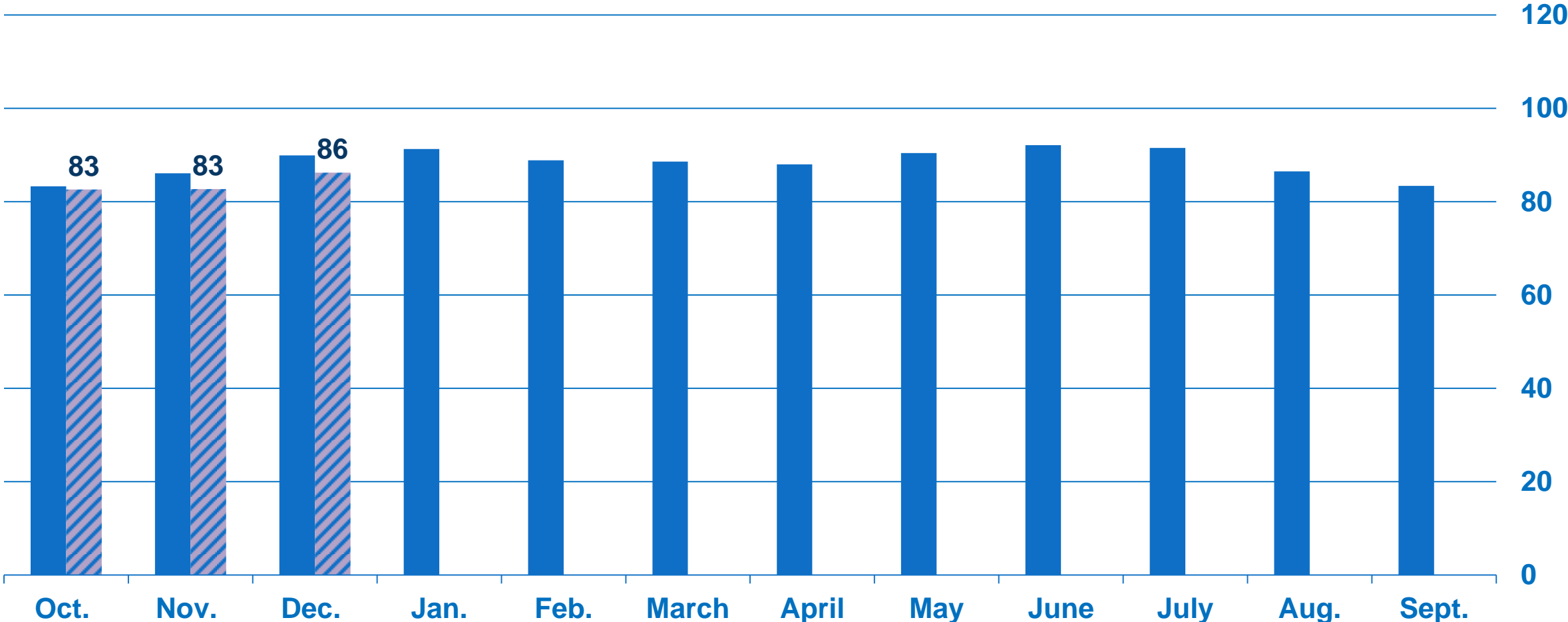
TRANSMISSION SERVICES REVENUES

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	Q1 EOY forecast	Variance
Year-to-date	259	252	(8)
FY 2019	1,060	1,055	(5)

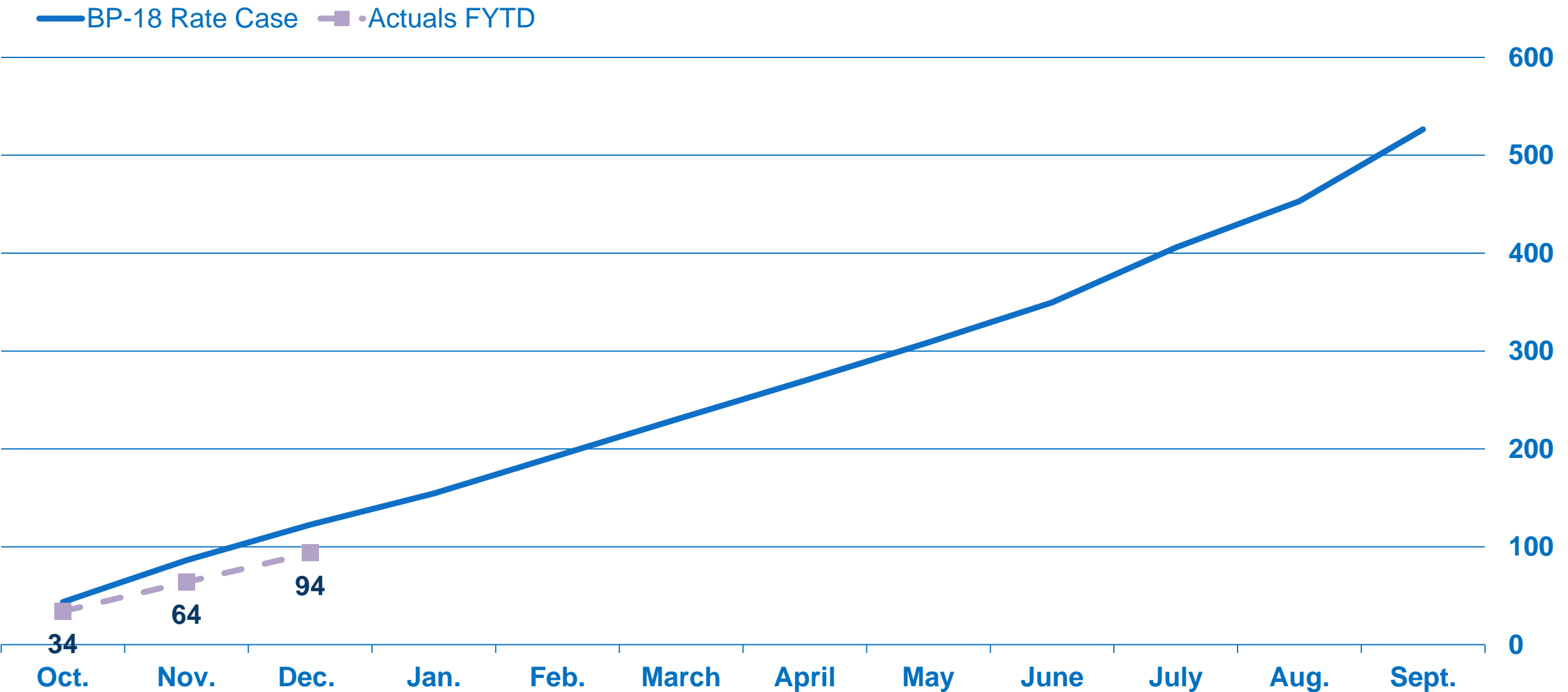


TRANSMISSION CAPITAL EXPENDITURE



Capital expenditure for fiscal year 2019

In millions of dollars



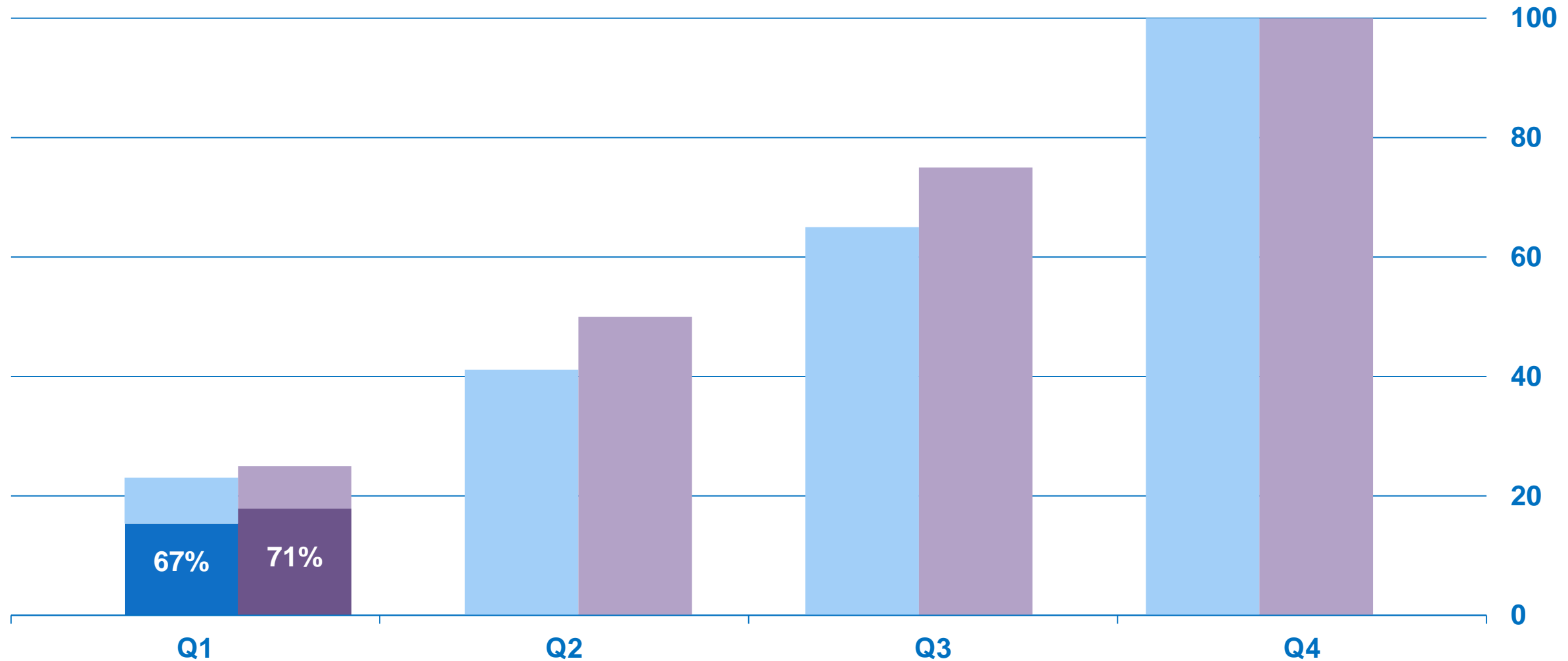
TRANSMISSION CAPITAL PLAN COMPLETE



Percent of capital work plan completed

The percentage of assets completed compared to budget spent

■ Completed assets ■ Budget spent ■ Planned assets ■ Planned budget

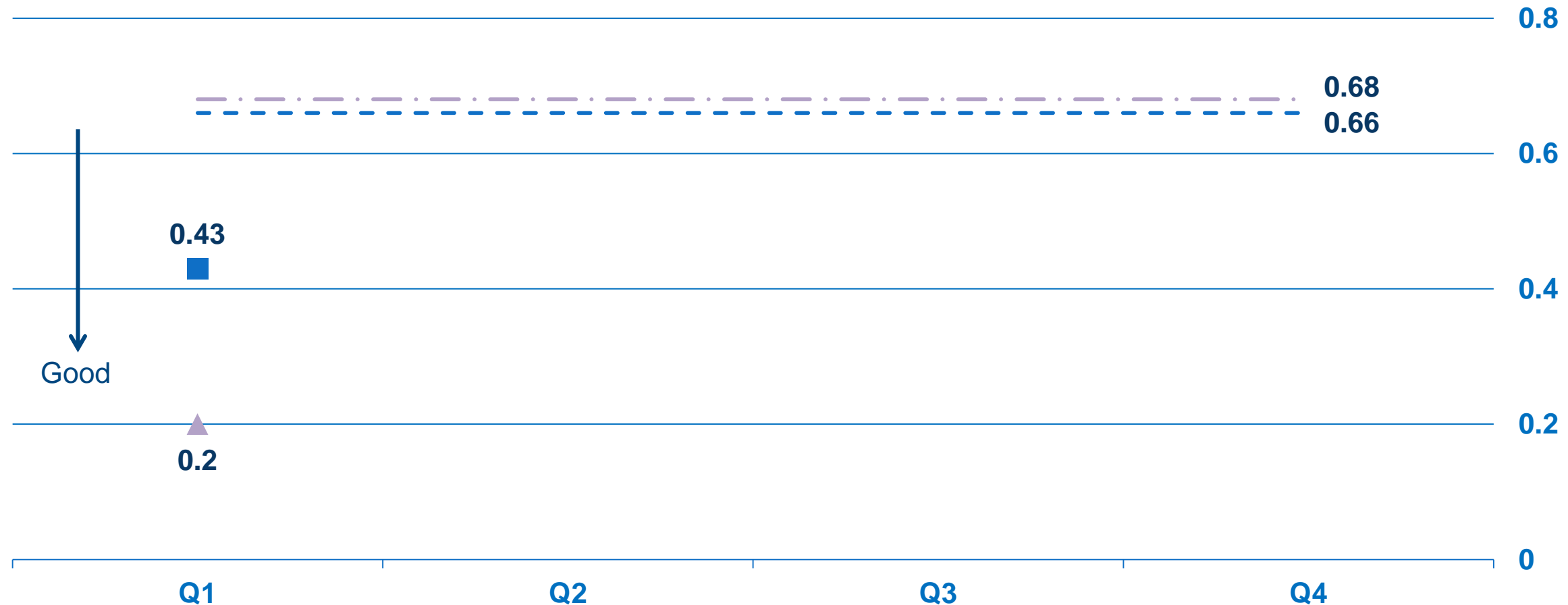




System average interruption frequency index

Tracks frequency of unplanned outages

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

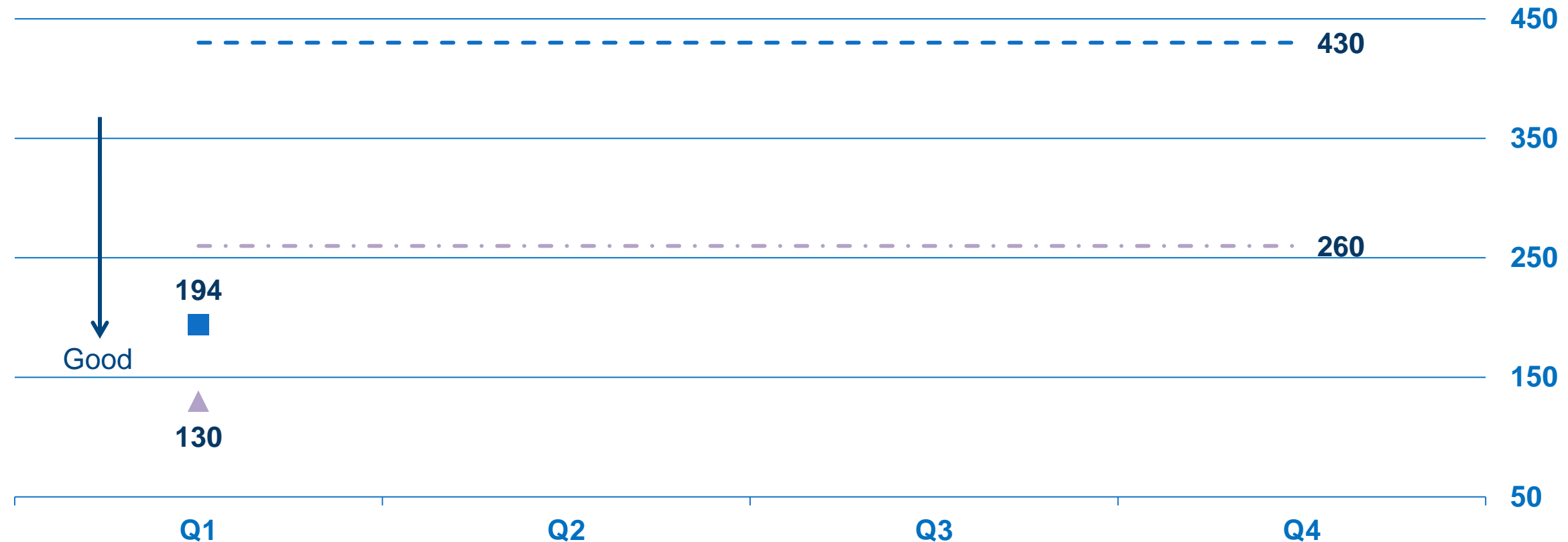




System average interruption duration index

Tracks duration of unplanned outages

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



ENGAGE WITH TRANSMISSION

- Reliability coordinator services.
- TC-20 proposed settlement and schedule discussions.
- Planning work:
 - Regional planning organization.
 - Criticality, health and risk assessments.



FINANCE

Michelle Manary, CHIEF FINANCIAL OFFICER

BUSINESS LINE FINANCIAL HIGHLIGHTS

\$45 million
less than expected
POWER EXPENSES*

\$3 million
more than expected
TRANSMISSION EXPENSES

\$24 million
more than expected
POWER REVENUES

\$5 million
less than expected
TRANSMISSION REVENUES

*Note: Power's expenses exclude the \$159 million expense reduction due to Regional Cooperation Debt refinancing

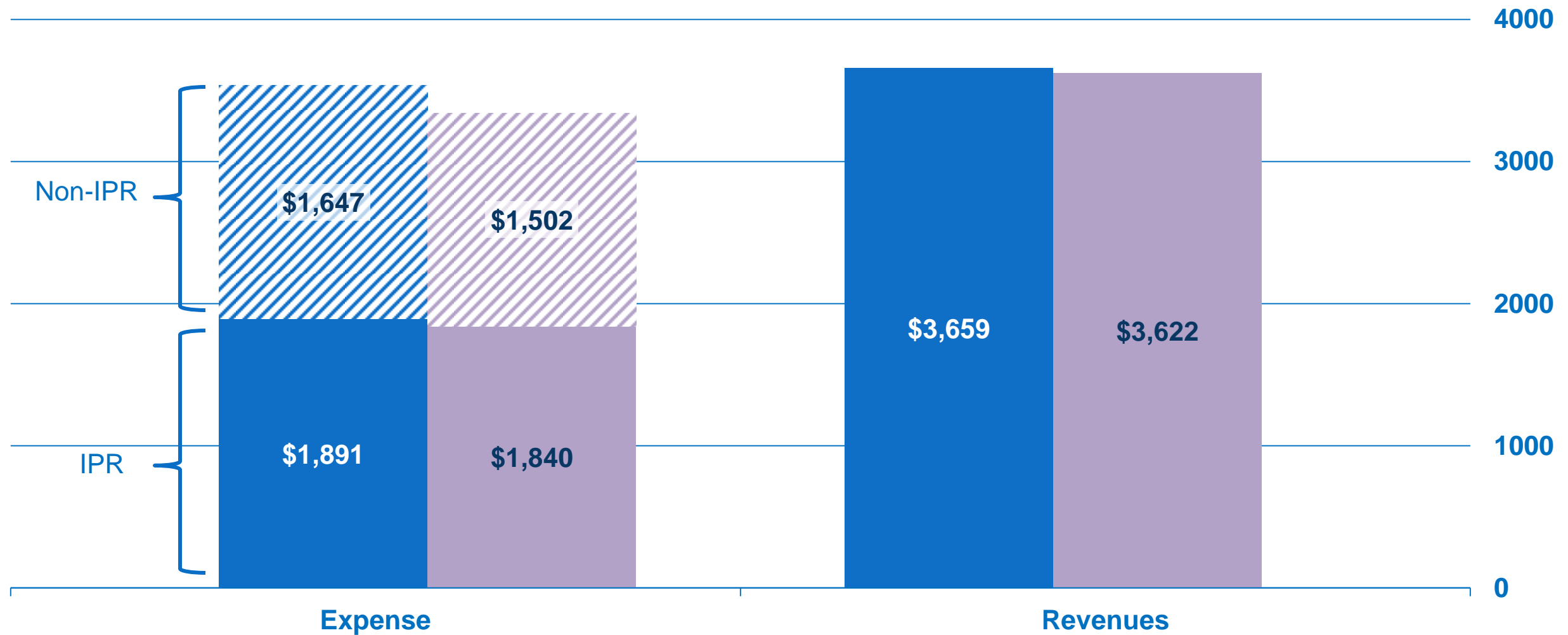
AGENCY FINANCIAL HEALTH



Federal Columbia River Power System

Total expense and revenue in millions of dollars

■ BP-18 Rate Case ■ Q1 EOY forecast



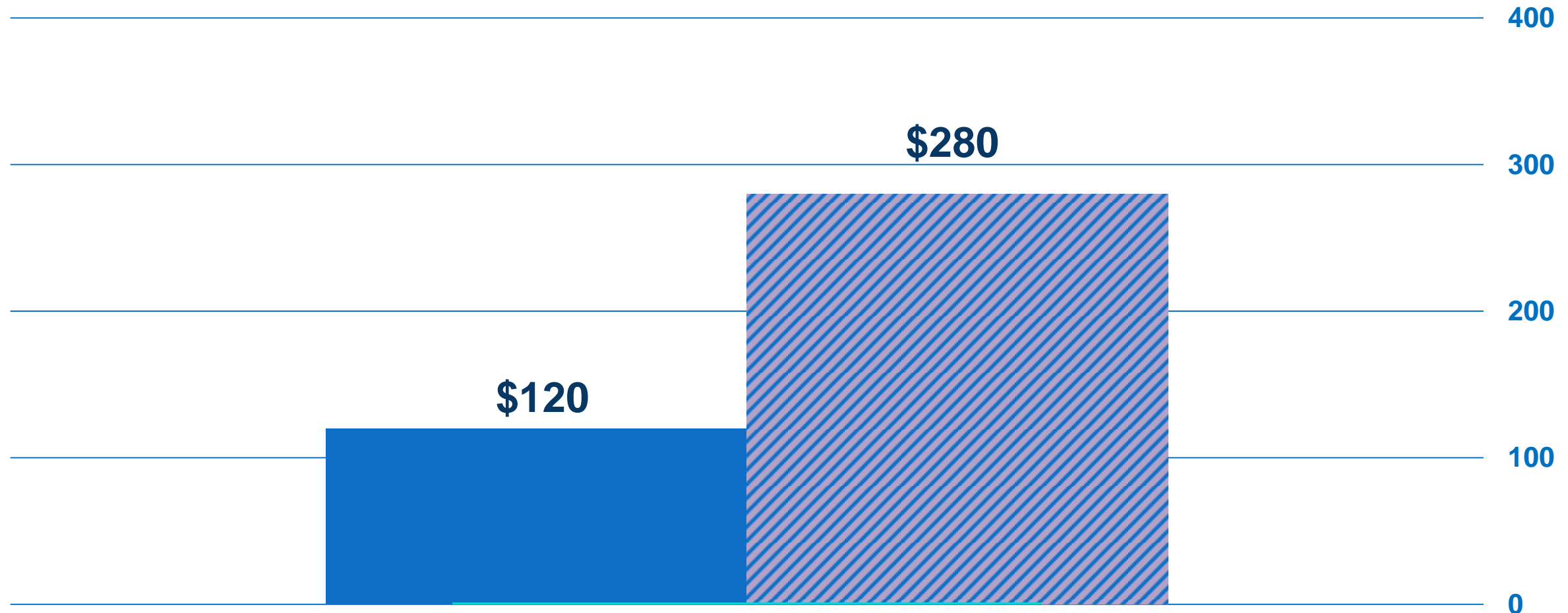
AGENCY NET REVENUES



FCRPS net revenues

In millions of dollars

■ BP-18 Rate Case ■ Q1 EOY forecast



Agency net revenues less Regional Cooperation
Debt transactions (in millions of dollars)

BP-18 Rate Case	Q1 EOY Forecast
274	280

RESERVES



- Coming in the second quarter.



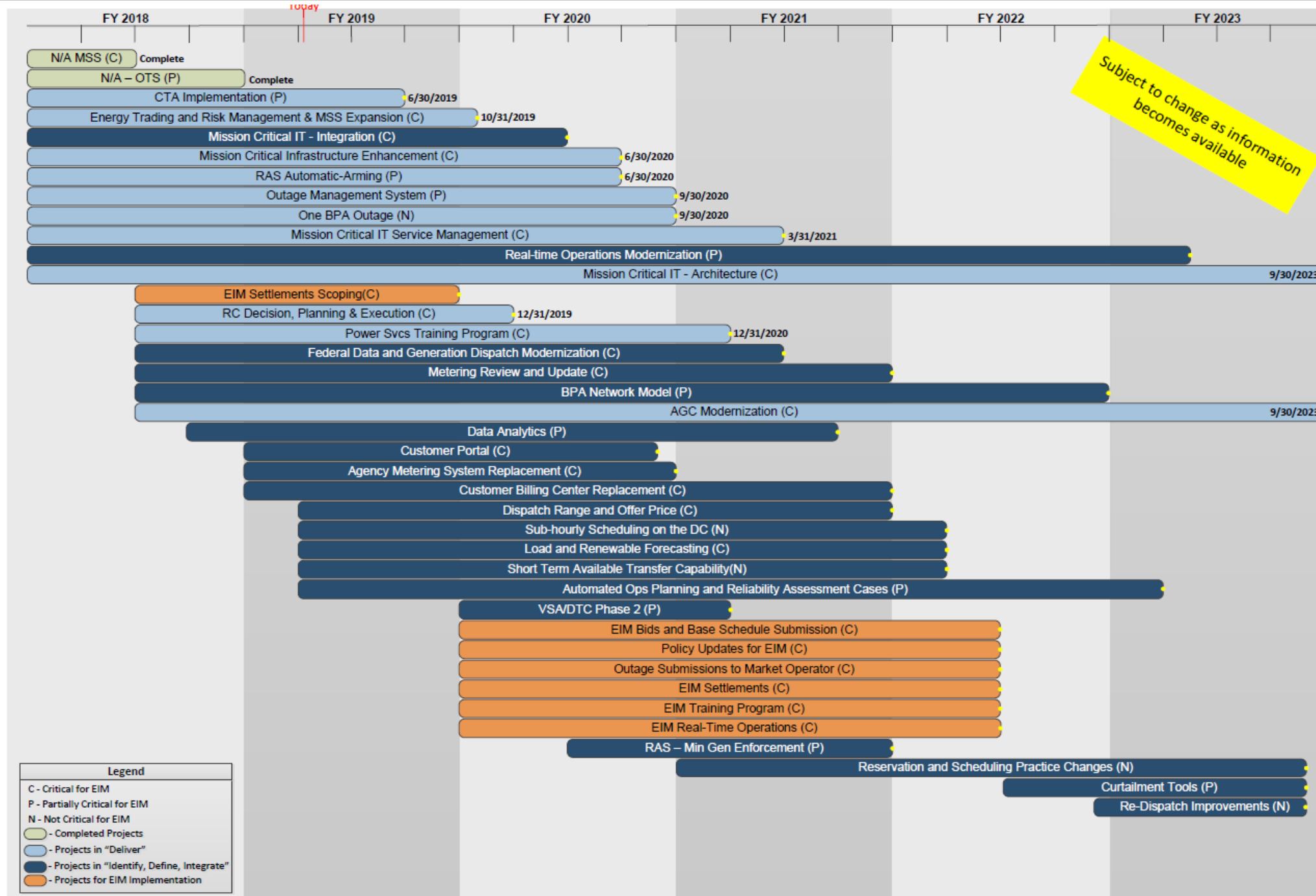
GRID MODERNIZATION

Nita Zimmerman, DEPUTY EXECUTIVE VICE PRESIDENT OF BUSINESS TRANSFORMATION OFFICE

OVERVIEW

- Grid modernization investments will support:
 - More reliable, flexible and efficient systems.
 - Reduce future costs.
 - Create new market opportunities.

ROADMAP



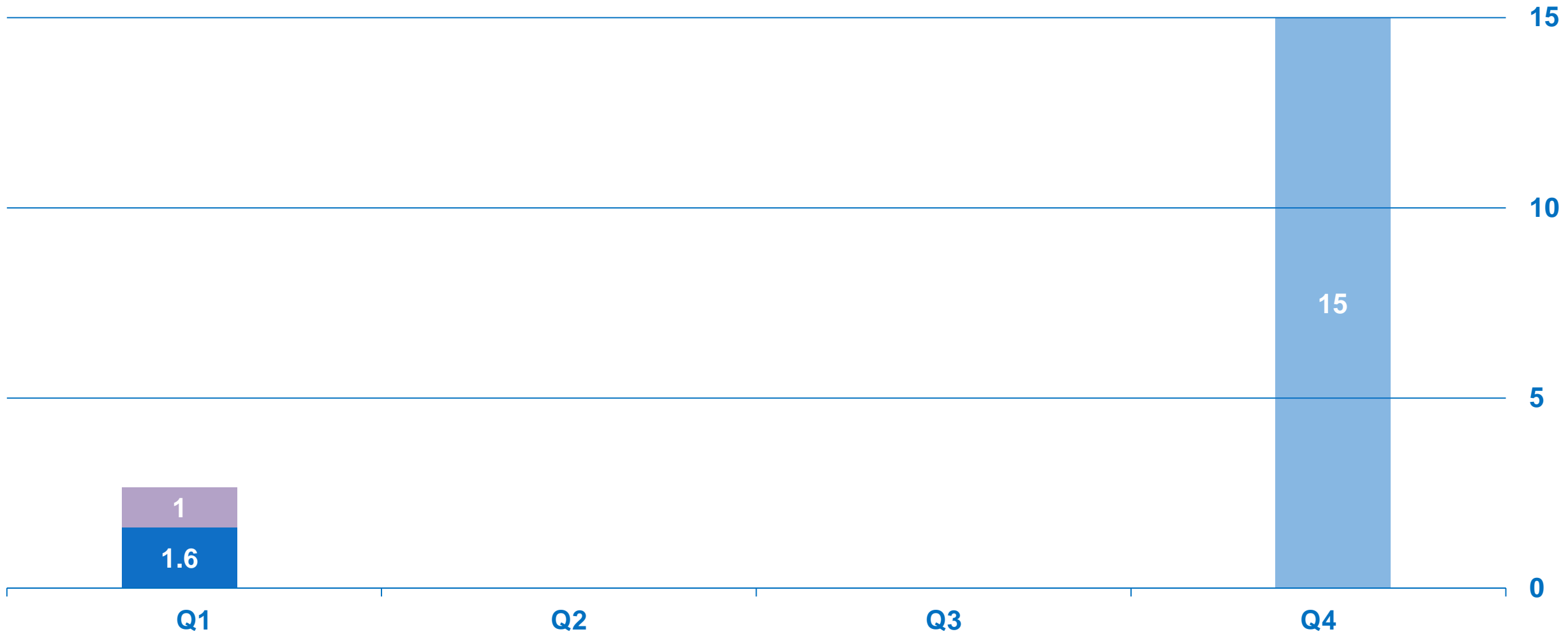
Subject to change as information becomes available

GRID MOD SPENDING

Grid Modernization Key Strategic Initiative spending

In millions of dollars

■ Incremental spent ■ Existing spent ■ Incremental planned ■ Existing planned



CONTINUOUS OUTAGE ANALYSIS

- Collaborative process across BPA to minimize negative impacts on power and transmission operations.
- Advanced planning reduces the number of outages and likelihood of rescheduling.
- Optimizes transmission capacity.



PUBLIC ENGAGEMENT

Scott Simms, DIRECTOR OF COMMUNICATIONS

PUBLIC MEETINGS

- Jan. 30: Distributed energy resources utility cross-share.
- Jan. 31: Proposed TC-20 settlement update.
- Jan. 31: Transmission long-term commercial update.
- Feb. 5: Regional planning organization efforts.

COMMENT PERIODS

- Feb. 20: Willow Creek Summit and Windy Devil Radio upgrade project.
- March 1: BP-20 Rate Case Initial Proposal.



QUESTION AND ANSWER

THANK YOU

The next QBR is scheduled for
April 30, 2019.

Didn't get your question answered?

Email Communications@bpa.gov. Answers will be posted to
www.bpa.gov/goto/QBR.

**The strategic plan is available at
www.bpa.gov/StrategicPlan.**

FINANCIAL DISCLOSURE

This information was made publicly available on Jan. 28, 2019, and contains information not sourced directly from BPA financial statements.