



Bonneville  
POWER ADMINISTRATION



# QUARTERLY BUSINESS REVIEW

April 30, 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"><li>• Environment, Fish and Wildlife updates</li></ul>	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

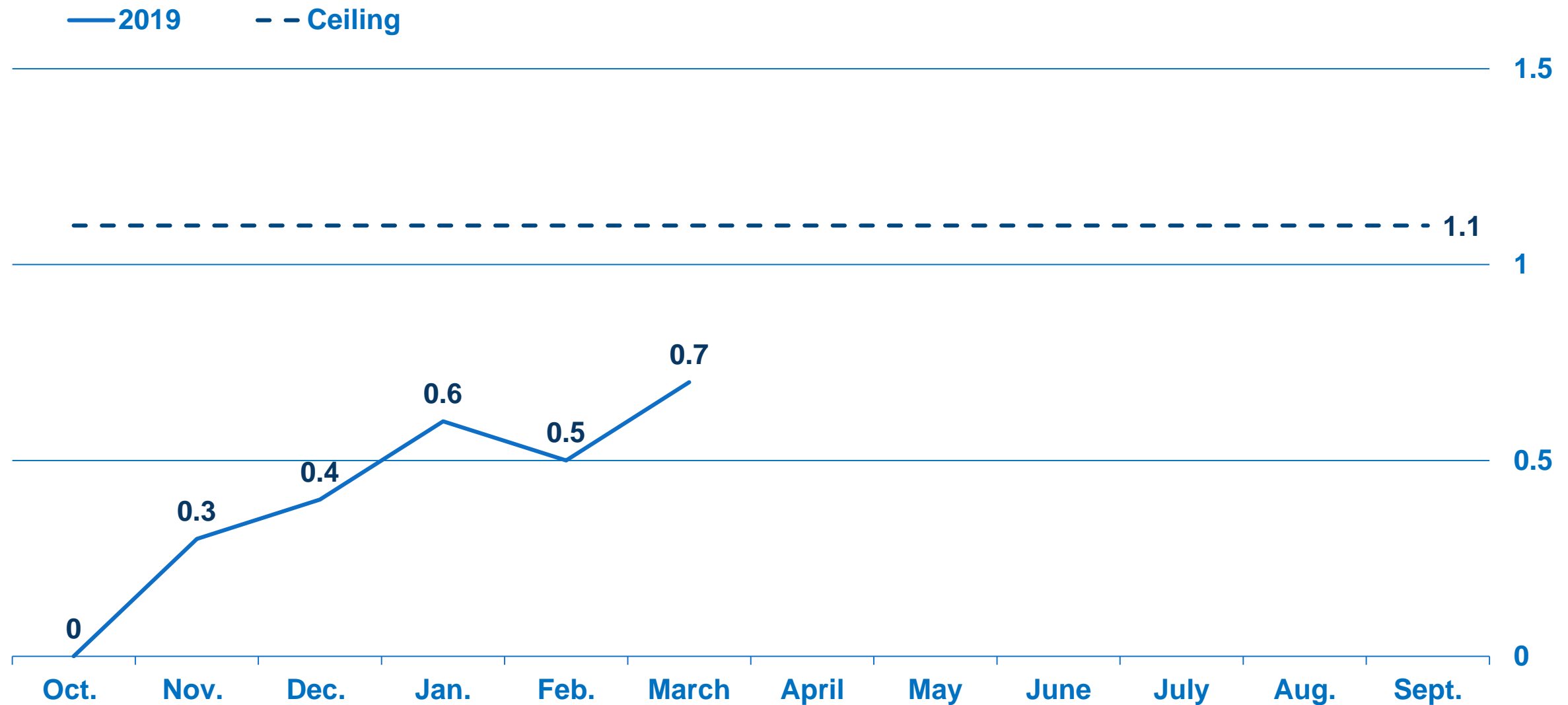
Elliot Mainzer, ADMINISTRATOR AND CHIEF EXECUTIVE OFFICER

# SAFETY



## Incident frequency rate

Number of injuries and illnesses per 200,000 hours worked



# FLEXIBLE SPILL AGREEMENT

- Tests an innovative approach to fish survival while managing costs of hydro generation.
- In place while we complete the CRSO process.
- Resulted in increased coordination and collaboration between federal, state and tribal parties.

# FLEXIBLE SPILL

- Implementation has been relatively smooth.
- Coordination with the U.S. Army Corps of Engineers is positive.
  - Implementation of flexible spill at the project level has been very timely.
- Under the current streamflow and system conditions, flexible spill provides more of a day average energy benefit than a capacity benefit.
- Final details of 2020 flexible spill operations will be finalized with spill agreement parties no later than September 2019.

# SPILL SURCHARGE

- The spill surcharge adjusts power rates to recover the non-Slice portion of the cost associated with increased spill and resulting lost generation relative to the spill assumptions used when setting rates.
- The FY 2019 spill surcharge assumes the flexible spill operations.



# SPILL SURCHARGE

- The average 80-water year cost of additional spill for FY 2019 is lower than it was in FY 2018.
- BPA is proposing no spill surcharge. The cost will be offset through Fish and Wildlife cost reductions.
- Comment period closes May 2; final decision issued May 16.



# POWER SERVICES

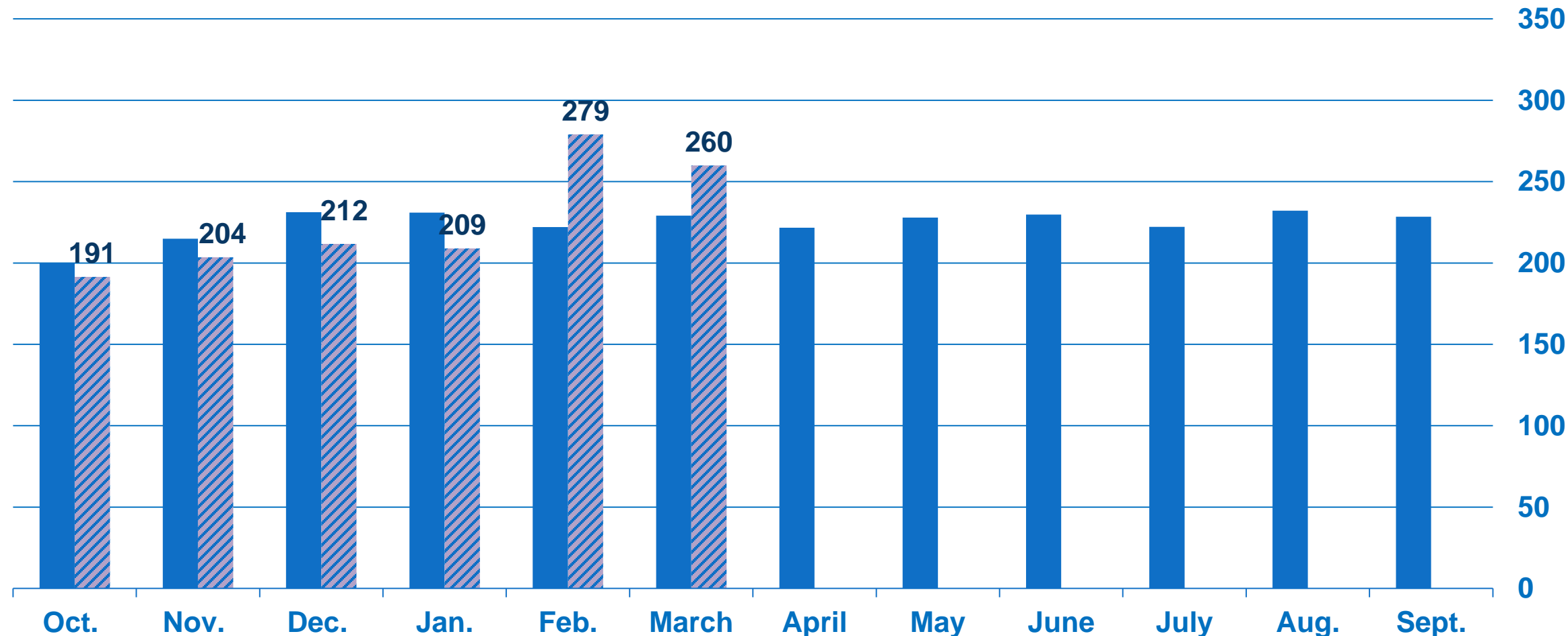
Joel Cook, SENIOR VICE PRESIDENT OF POWER SERVICES

# POWER SERVICES EXPENSE

## Power Services total expense

Total expenses in millions of dollars

■ BP-18 Rate Case ■ Actuals



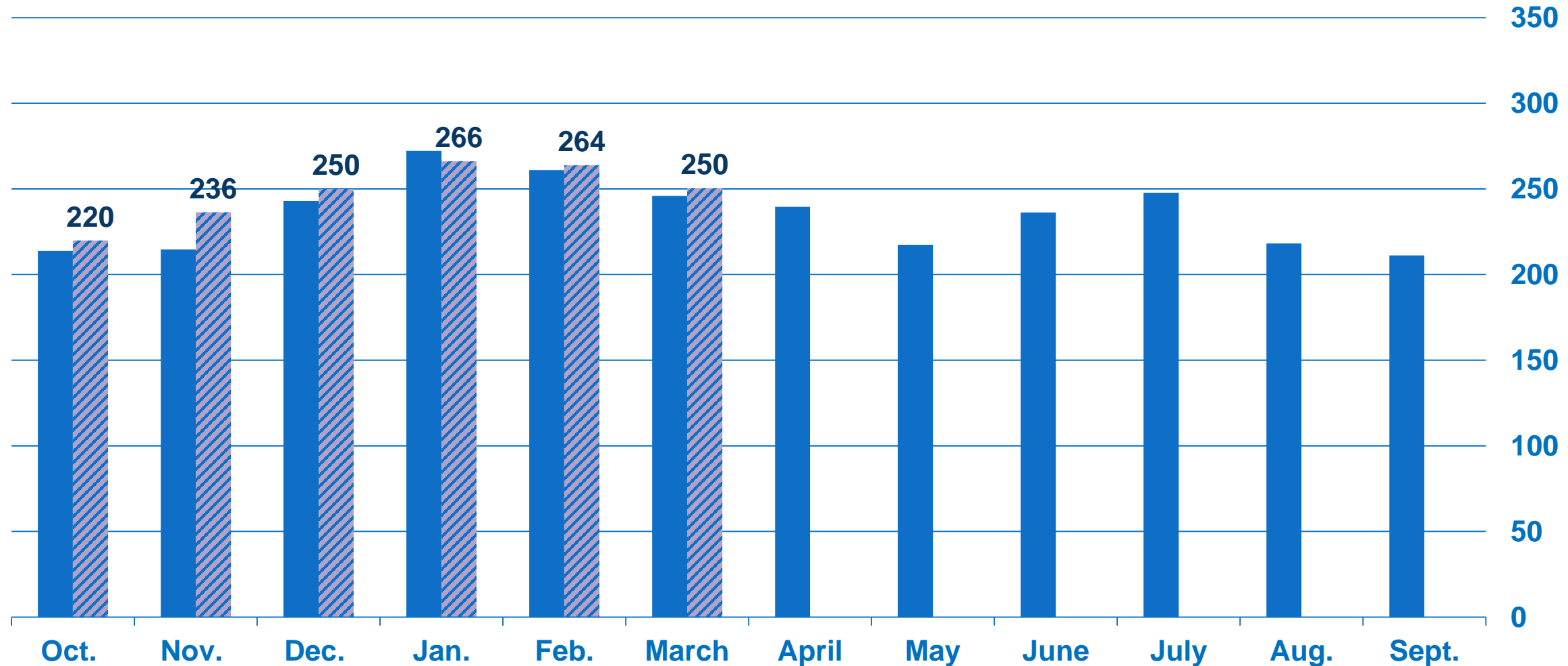
Total expense (in millions of dollars)			
	BP-18 Rate Case	Q2 actuals/forecast	Variance
Year-to-date	1,321	1,354	33
FY 2019	2,690	2,608	(82)

# 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	Q2 actuals/forecast	Variance
Year-to-date	1,450	1,487	37
FY 2019	2,821	2,805	(16)



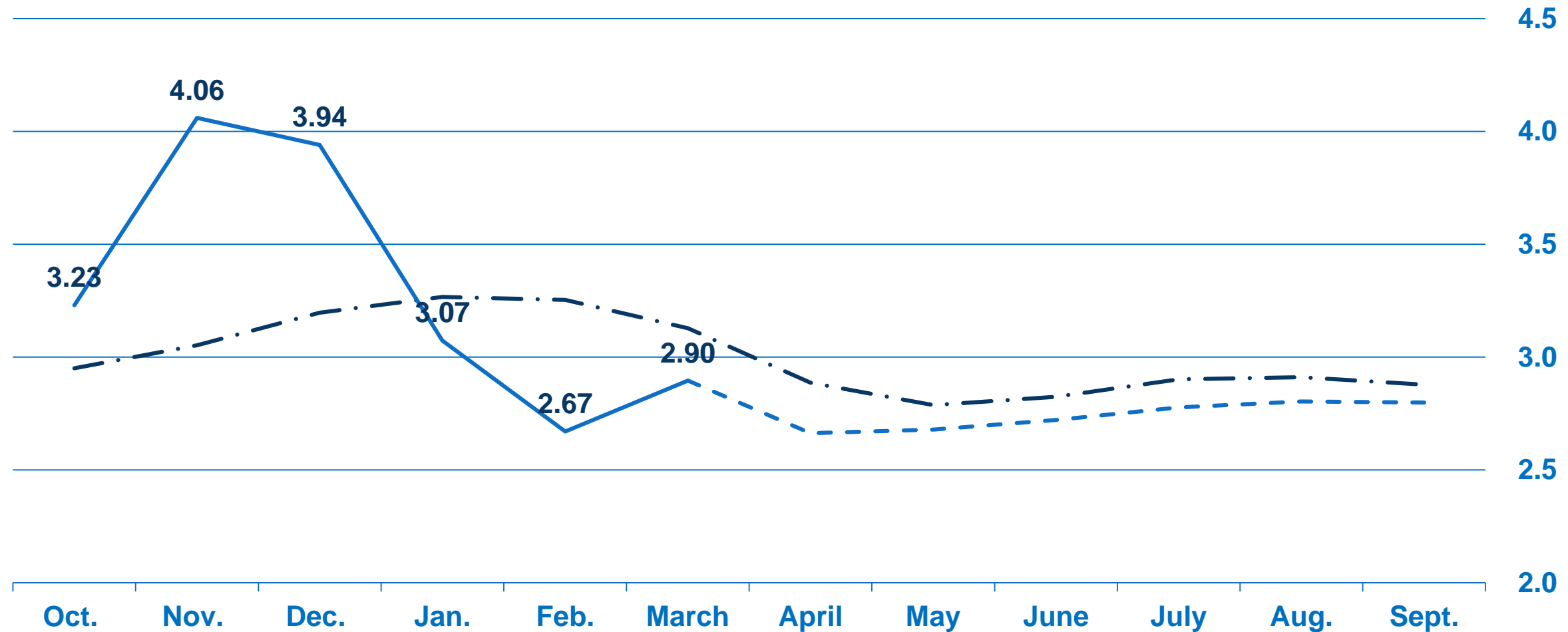
# HENRY HUB PRICES

## Henry Hub prices

In dollars per one million British thermal units

BP-18 forecast: \$3.00  
FY 2019 average: \$3.03

— BP-18 Rate Case — Actuals (S&P Global Platts) - - NYMEX 15-Day Avg (4/12/19)



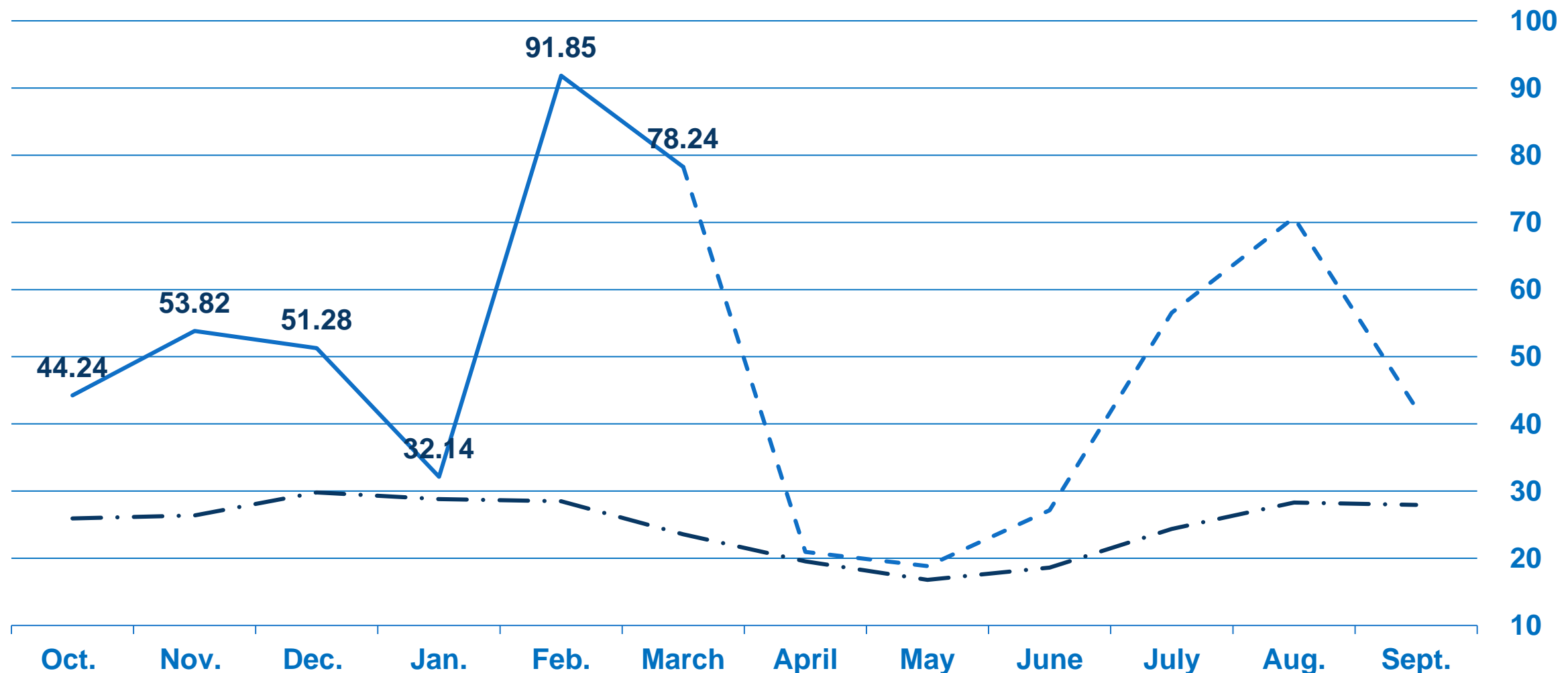
# MID-C PRICES

## Mid-C heavy load hour prices

In dollars per megawatt hour

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

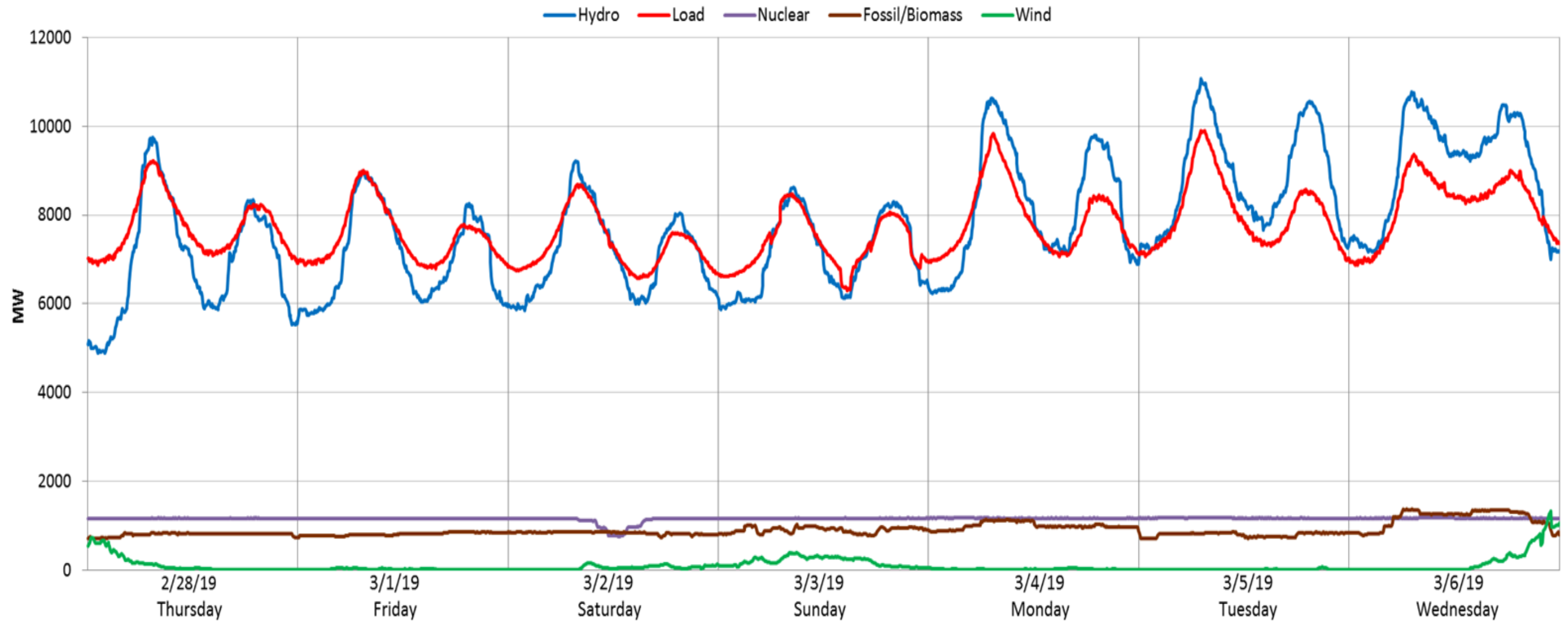
BP-18 forecast: \$24.87  
FY 2019 average: \$49.01



\*Flat Mid-C prices were used erroneously for the BP-18 Rate Case forecast at Q1. This has been corrected in Q2 to use heavy load hour prices. The flat prices averaged about \$2 a MWh less than the corrected HLH prices.

# BPA BALANCING AUTHORITY LOAD AND RESOURCES

Feb. 28 – March 6, 2019



\*Load and Resources are for BPA-BAA

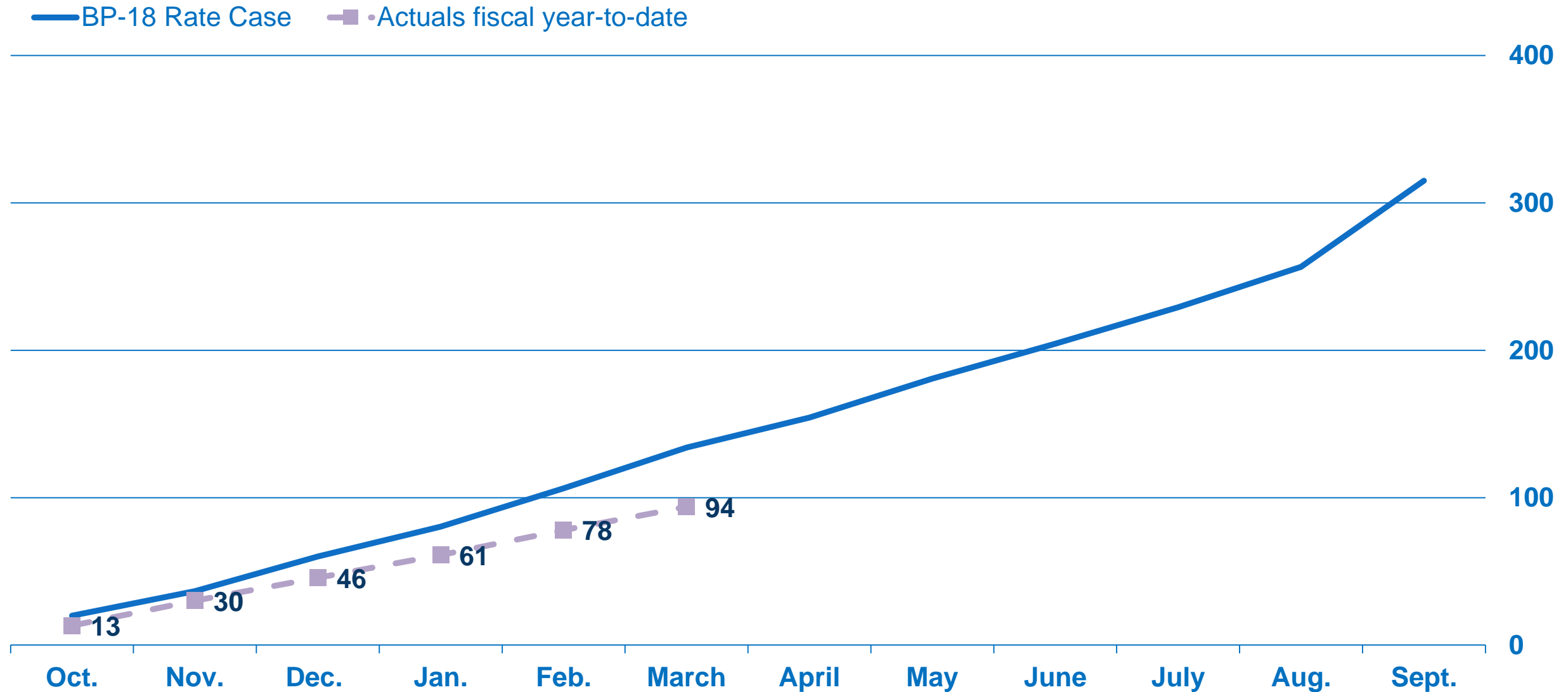


# POWER CAPITAL EXPENDITURE



## Capital expenditure for fiscal year 2019

In millions of dollars



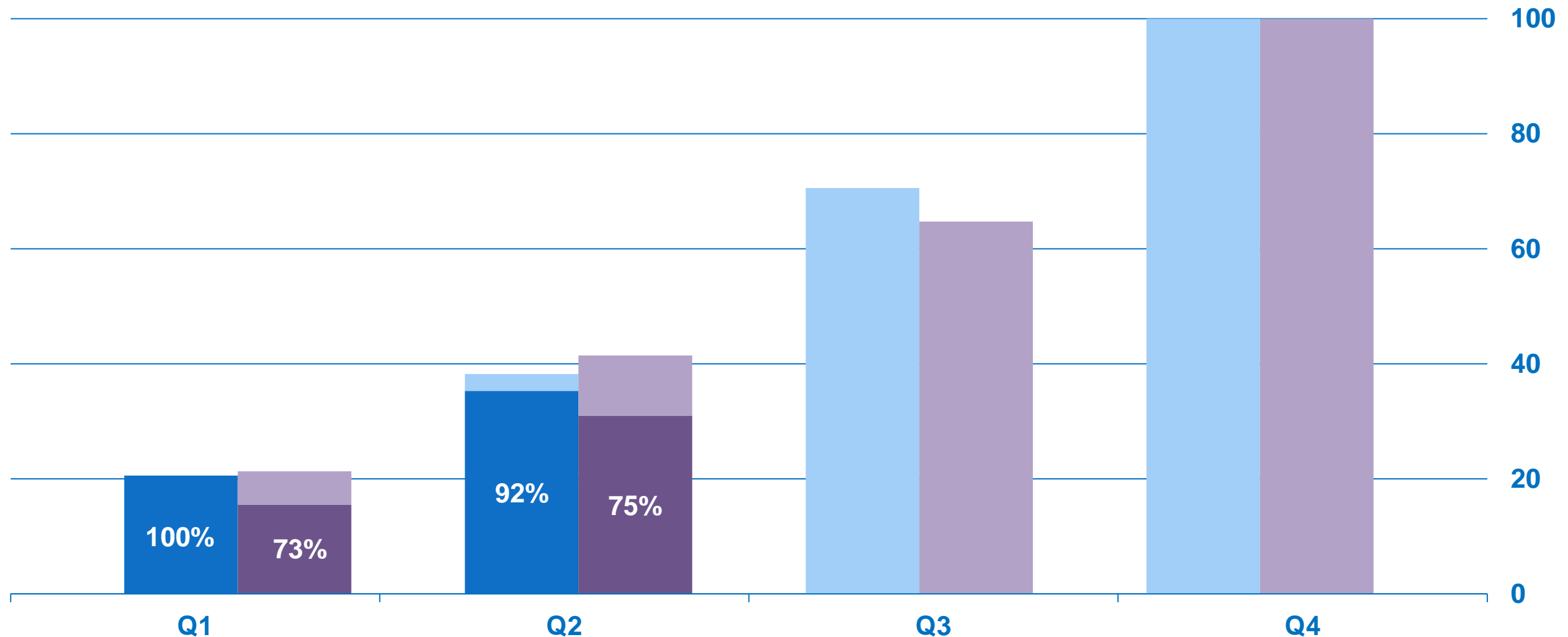
# POWER CAPITAL WORK PLAN COMPLETE



## Percent of capital work plan completed

The percentage of assets completed compared to budget spent

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



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

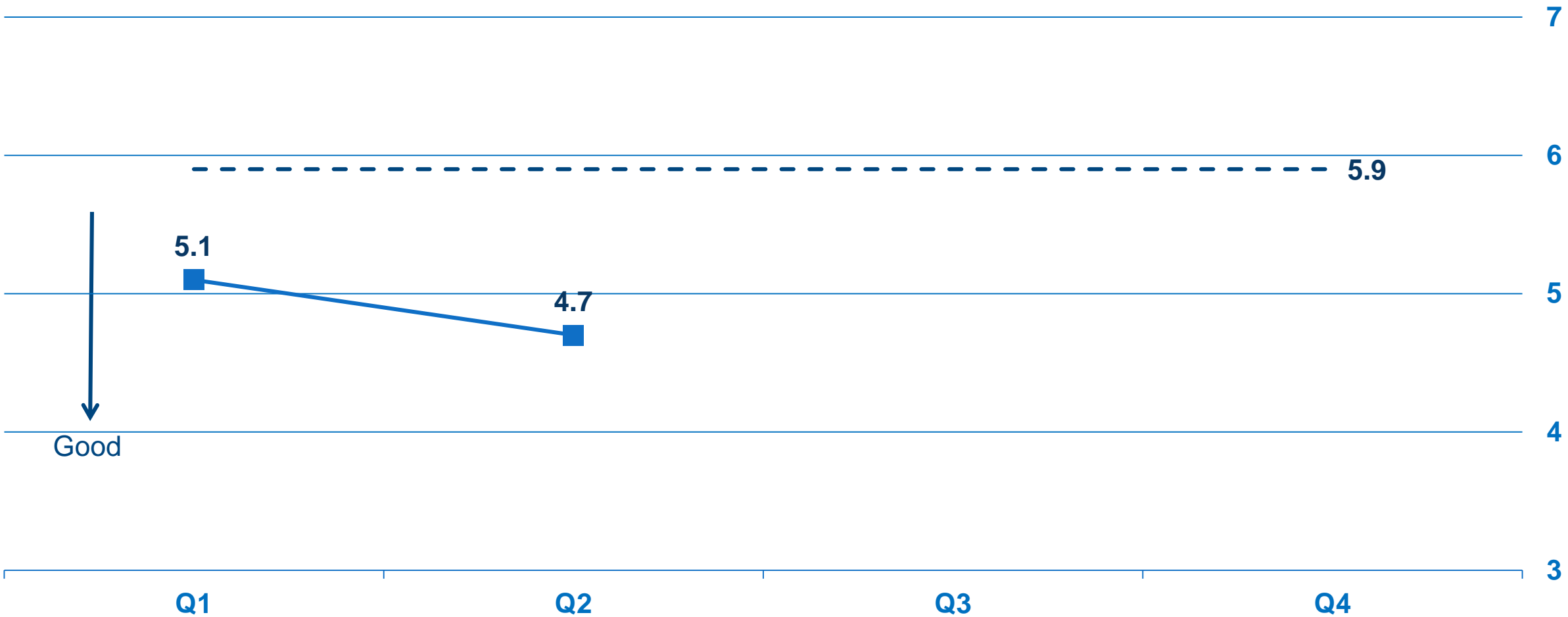
# FEDERAL HYDROPOWER RELIABILITY



## Federal hydropower forced outage factor

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

■ FY 2019    - - Target



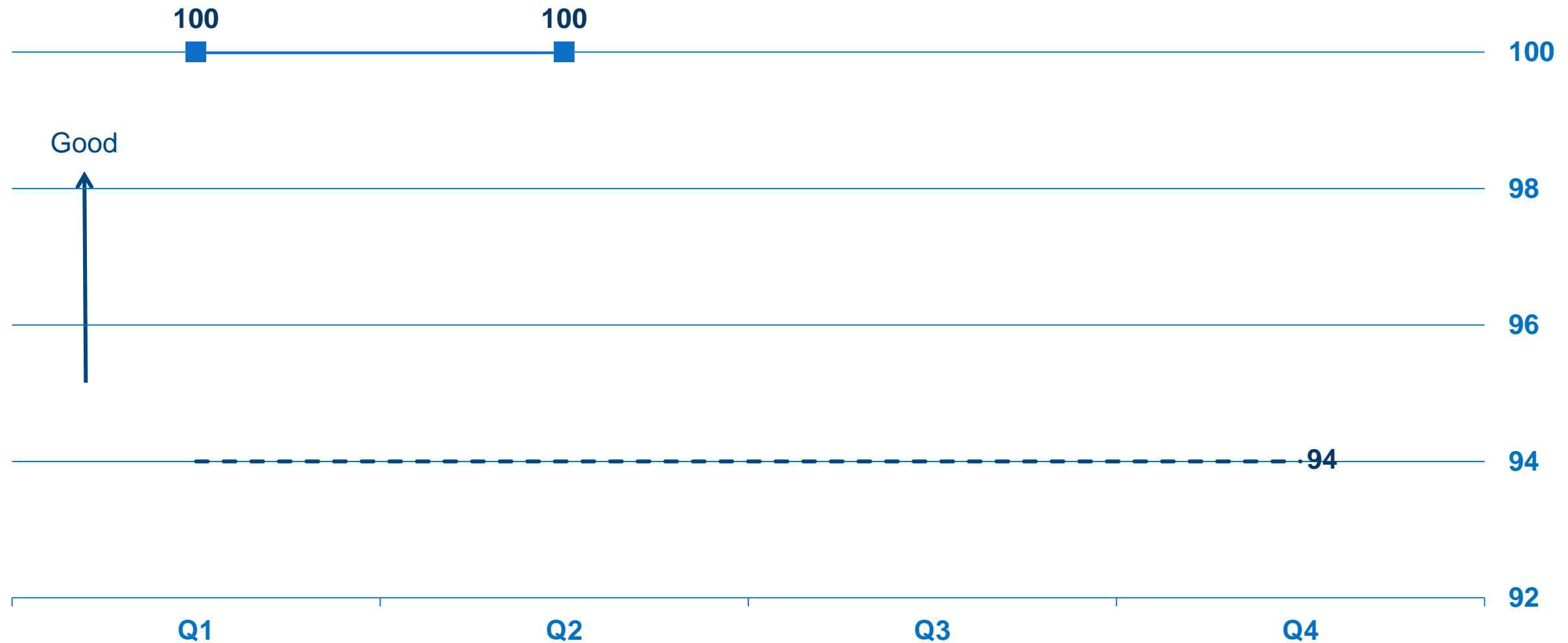
# COLUMBIA GENERATING STATION RELIABILITY



## 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

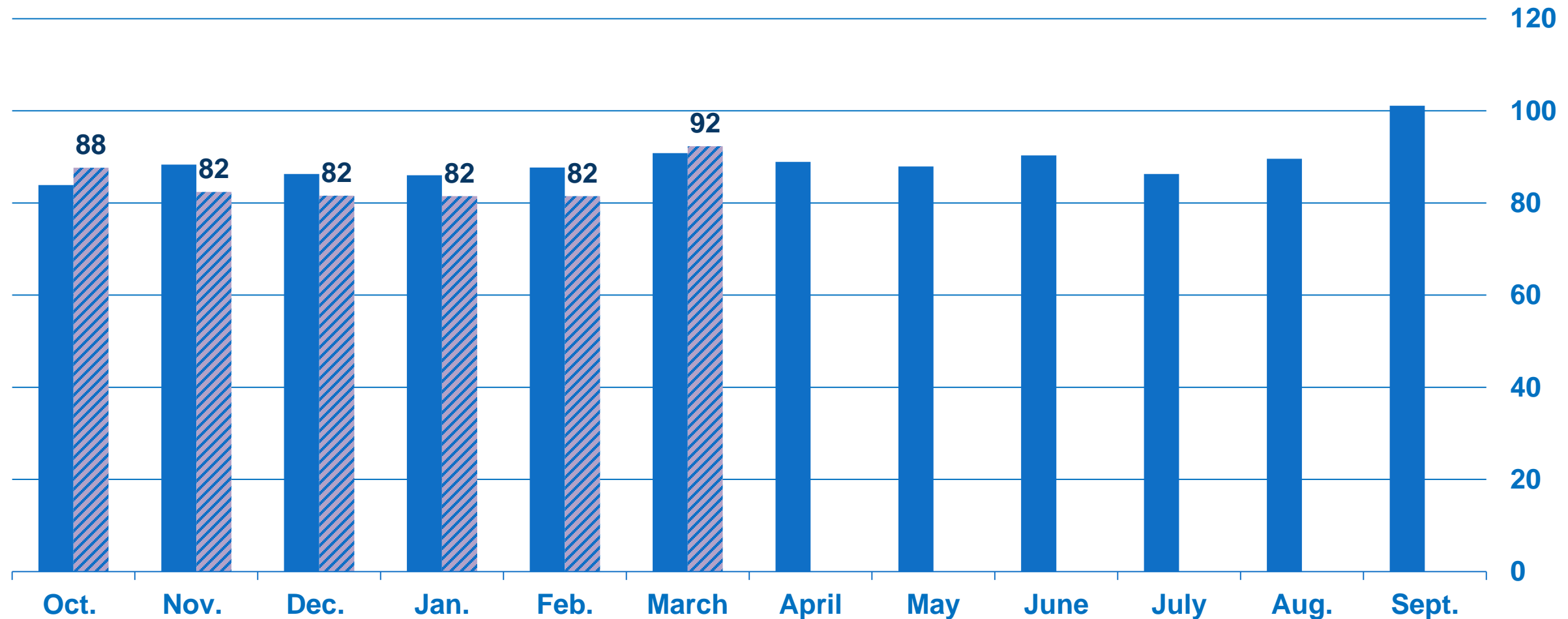
# TRANSMISSION SERVICES EXPENSE

## 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	Q2 actuals/forecast	Variance
Year-to-date	523	507	(16)
FY 2019	1,067	1,066	(2)



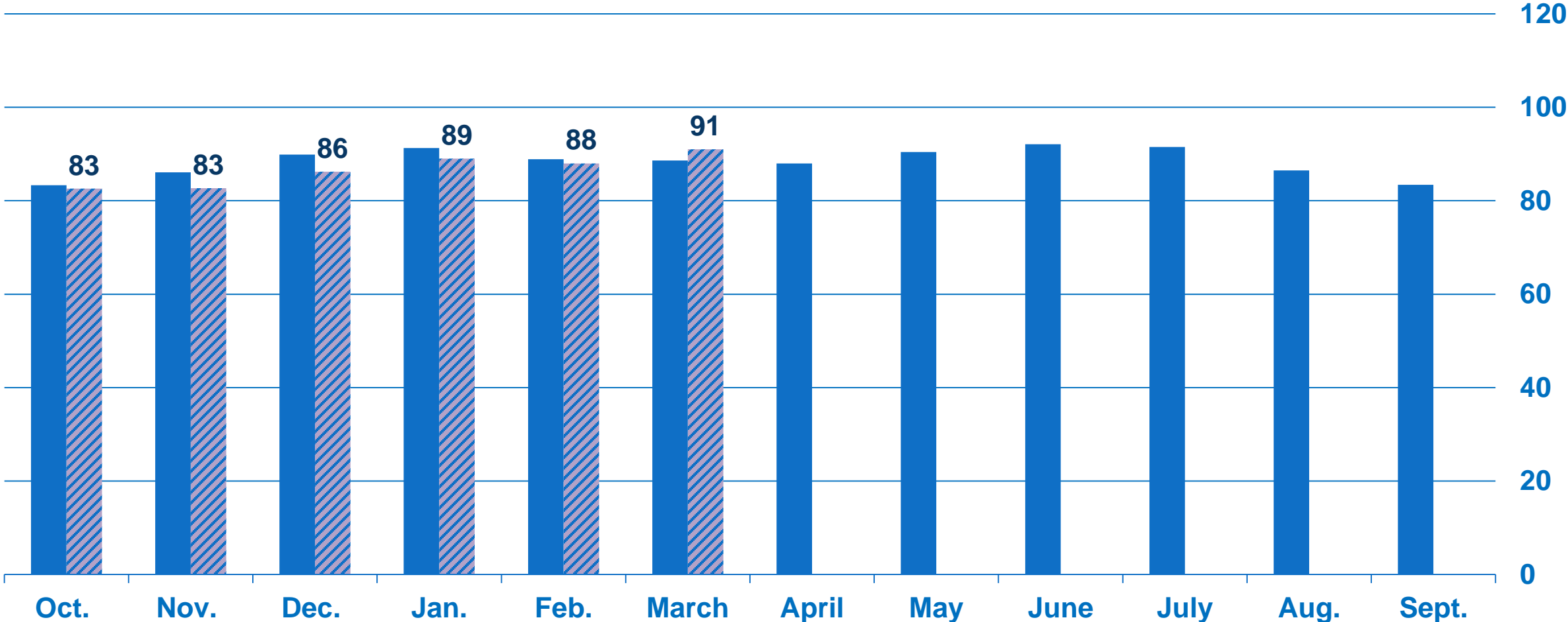
# TRANSMISSION SERVICES REVENUES

## 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	Q2 actuals/forecast	Variance
Year-to-date	528	519	(9)
FY 2019	1,060	1,058	(2)



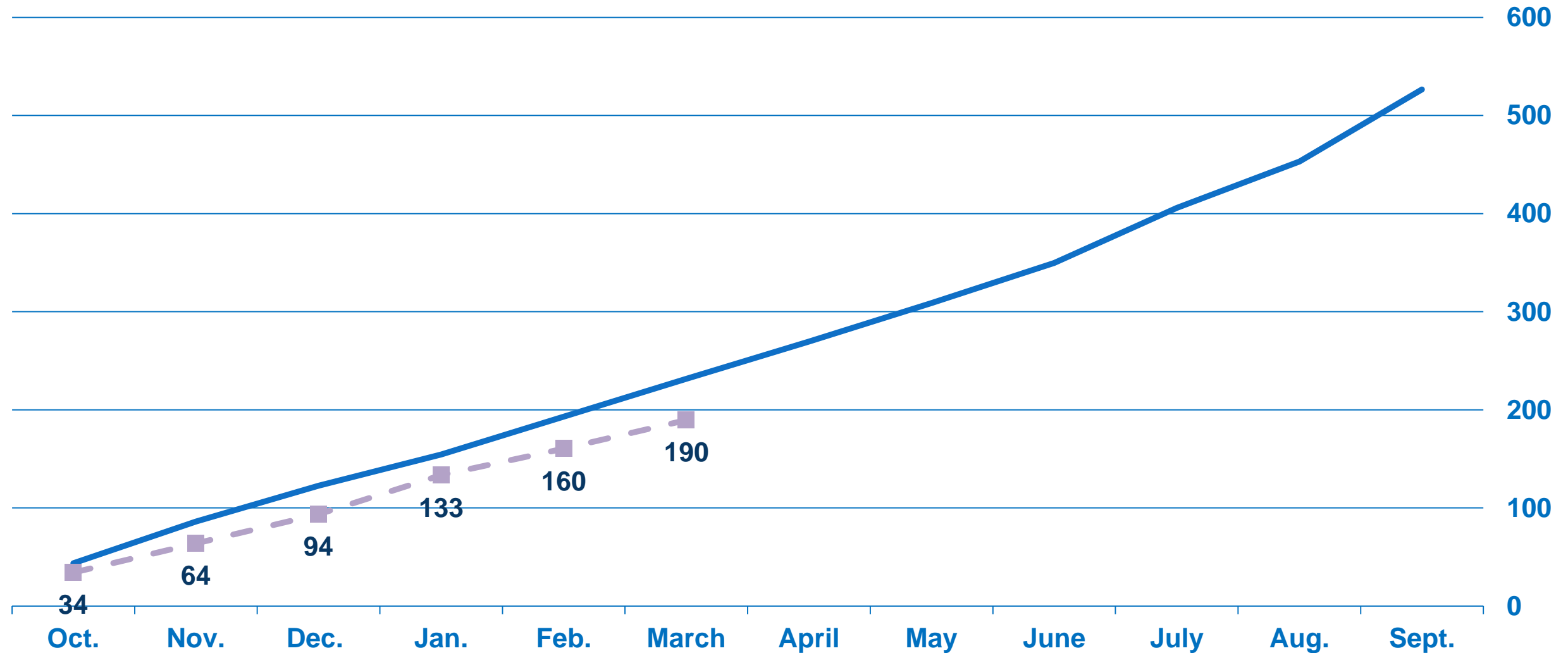
# TRANSMISSION CAPITAL EXPENDITURE



## Capital expenditure for fiscal year 2019

In millions of dollars

— BP-18 Rate Case    ■ Actuals fiscal year-to-date





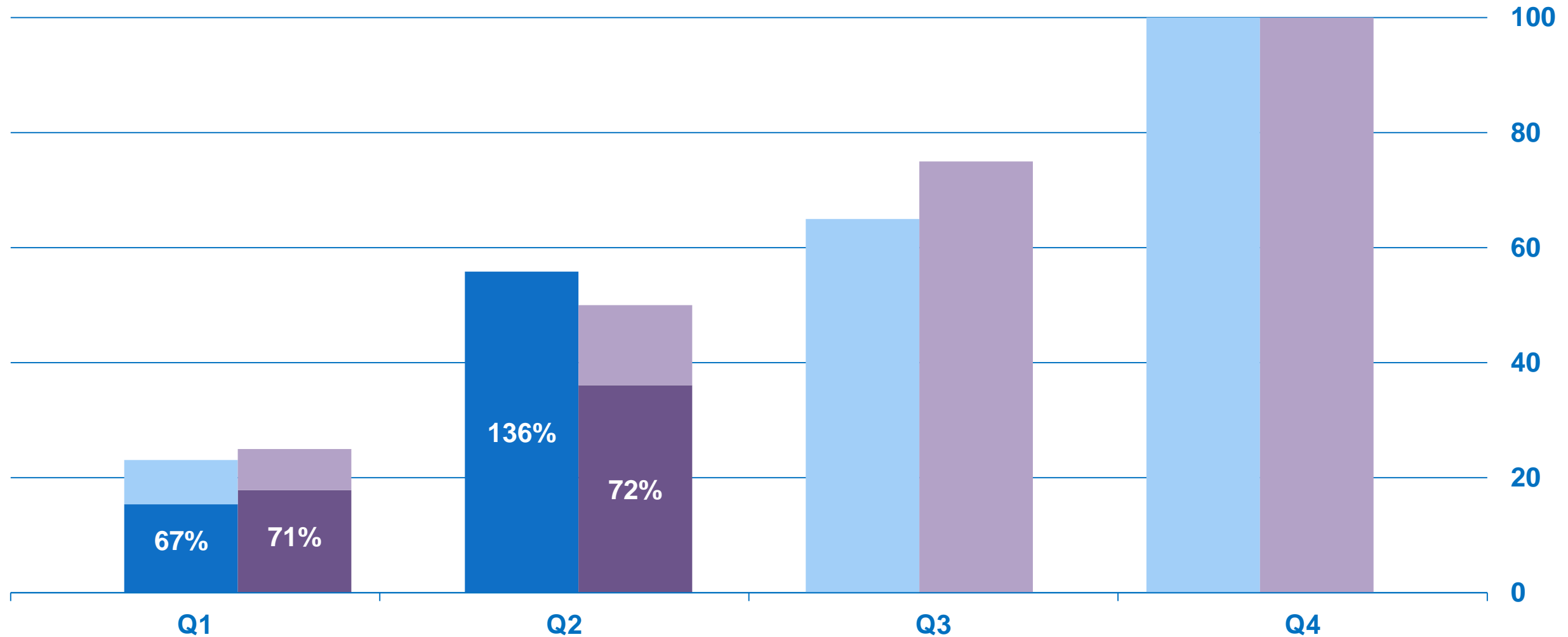
# TRANSMISSION CAPITAL PLAN COMPLETE



## Percent of capital work plan completed

The percentage of assets completed compared to budget spent

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

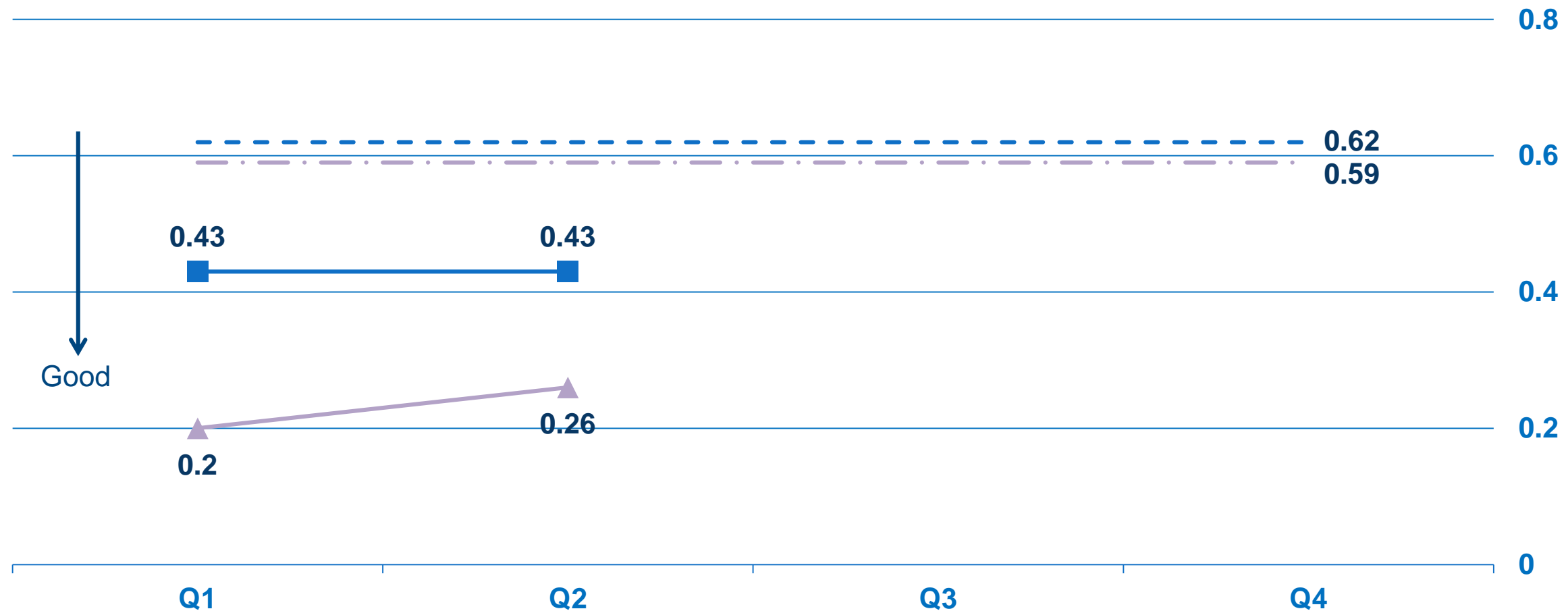




## System average interruption frequency index

Tracks frequency of unplanned outages

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

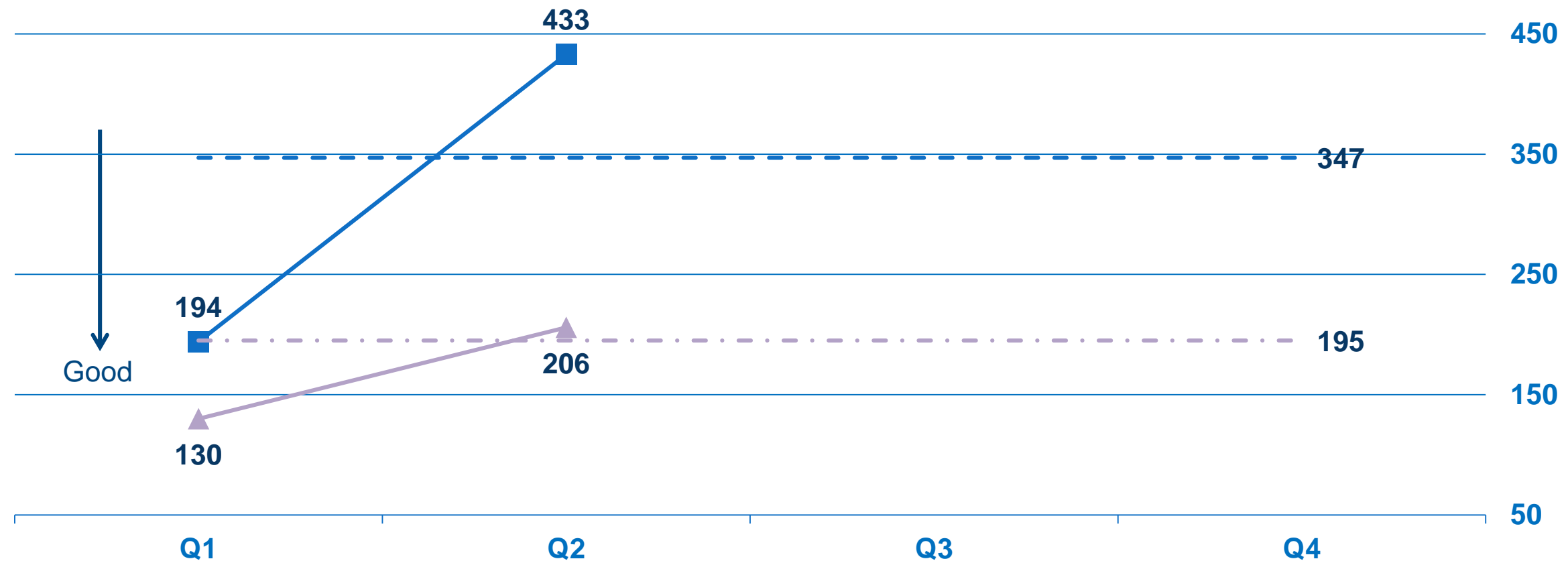




## System average interruption duration index

Tracks duration of unplanned outages

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



# ENGAGE WITH TRANSMISSION

- Winter storm.
- Reliability coordinator services.
- TC-20 Record of Decision signed March 1.



# FINANCE

Michelle Manary, CHIEF FINANCIAL OFFICER

# BUSINESS LINE FINANCIAL HIGHLIGHTS

**\$76 million**  
more than expected  
**POWER EXPENSES\***

**\$2 million**  
less than expected  
**TRANSMISSION EXPENSES**

**\$16 million**  
less than expected  
**POWER REVENUES**

**\$2 million**  
less than expected  
**TRANSMISSION REVENUES**

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

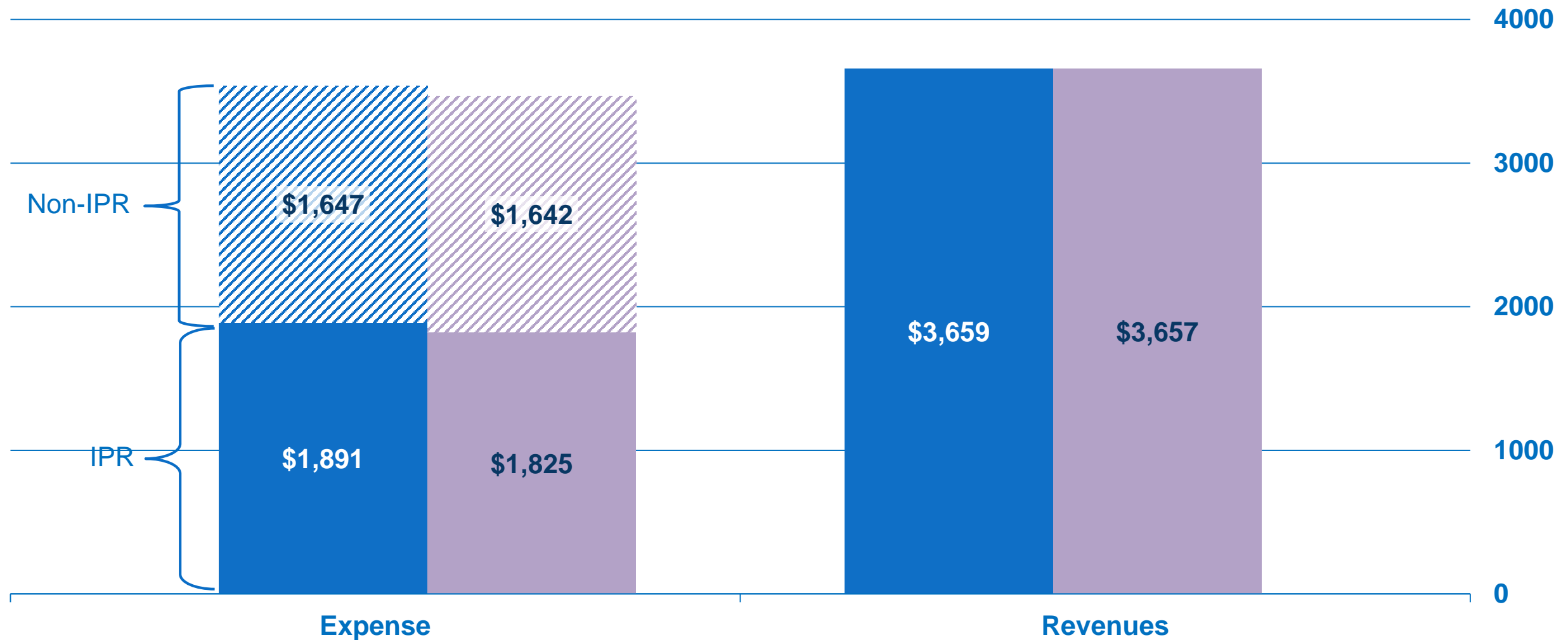
# AGENCY FINANCIAL HEALTH



## Federal Columbia River Power System

Total expense and revenues in millions of dollars

■ BP-18 Rate Case ■ Q2 EOY Forecast



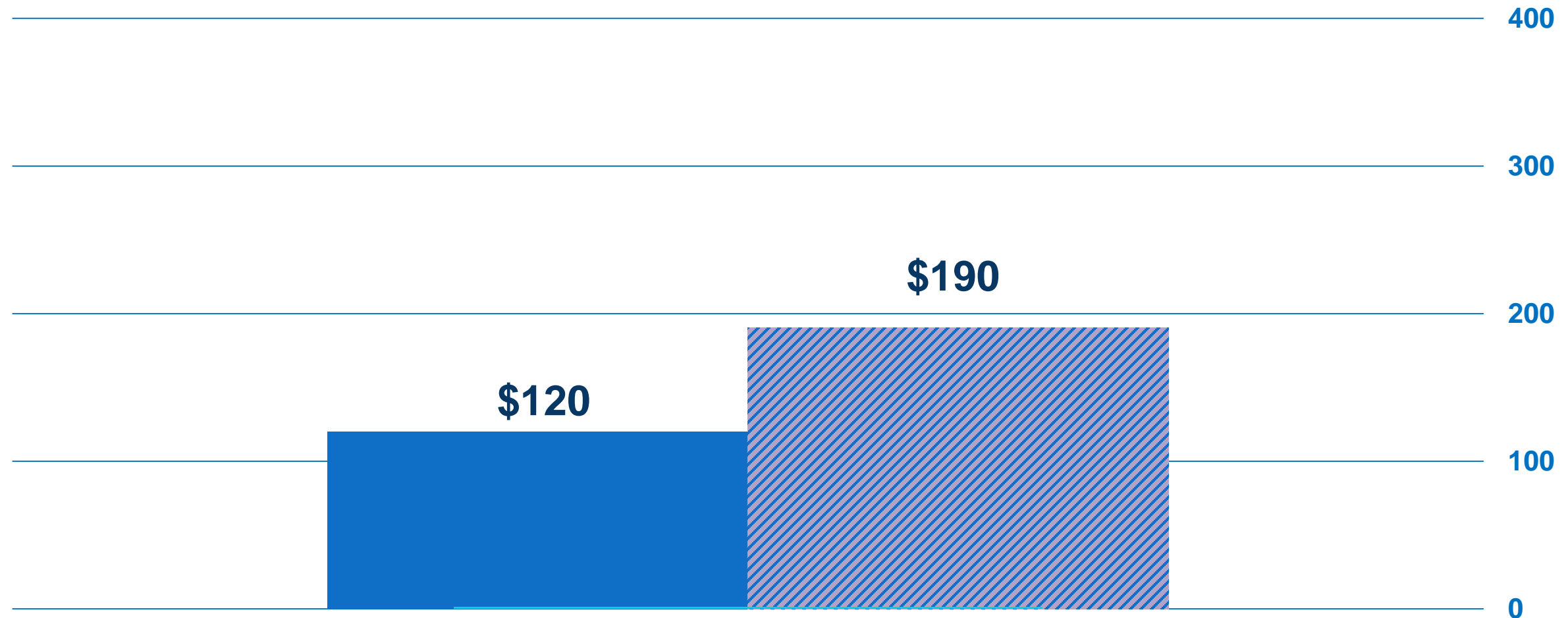
# AGENCY NET REVENUES



## FCRPS net revenues

In millions of dollars

■ BP-18 Rate Case ■ Q2 EOY Forecast



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

BP-18 Rate Case	Q2 EOY Forecast	Variance
274	190	(84)



# FINANCIAL RESERVES

- Financial reserves review:
  - Continuing to review all ten modules of the business unit split model.
  - Baker Tilly has started external review of work.
- Updated reserves available for risk and not for risk split.
  - More information available at May 3 finance workshop.

# DAYS CASH ON HAND



	BP-18 Rate Case			FY 2019 EOY forecast		
	Power	Trans.	Agency	Power	Trans.	Agency
Total reserves	<b>140</b>	<b>409</b>	<b>548</b>	<b>414</b>	<b>322</b>	<b>737</b>
<i>Reserves not for risk</i>	79	40	119	127	115	242
<i>Reserves available for risk</i>	61	369	430	288	207	495
<b>Days cash on hand</b>	<b>12</b>	<b>220</b>	<b>62</b>	<b>58</b>	<b>122</b>	<b>74</b>

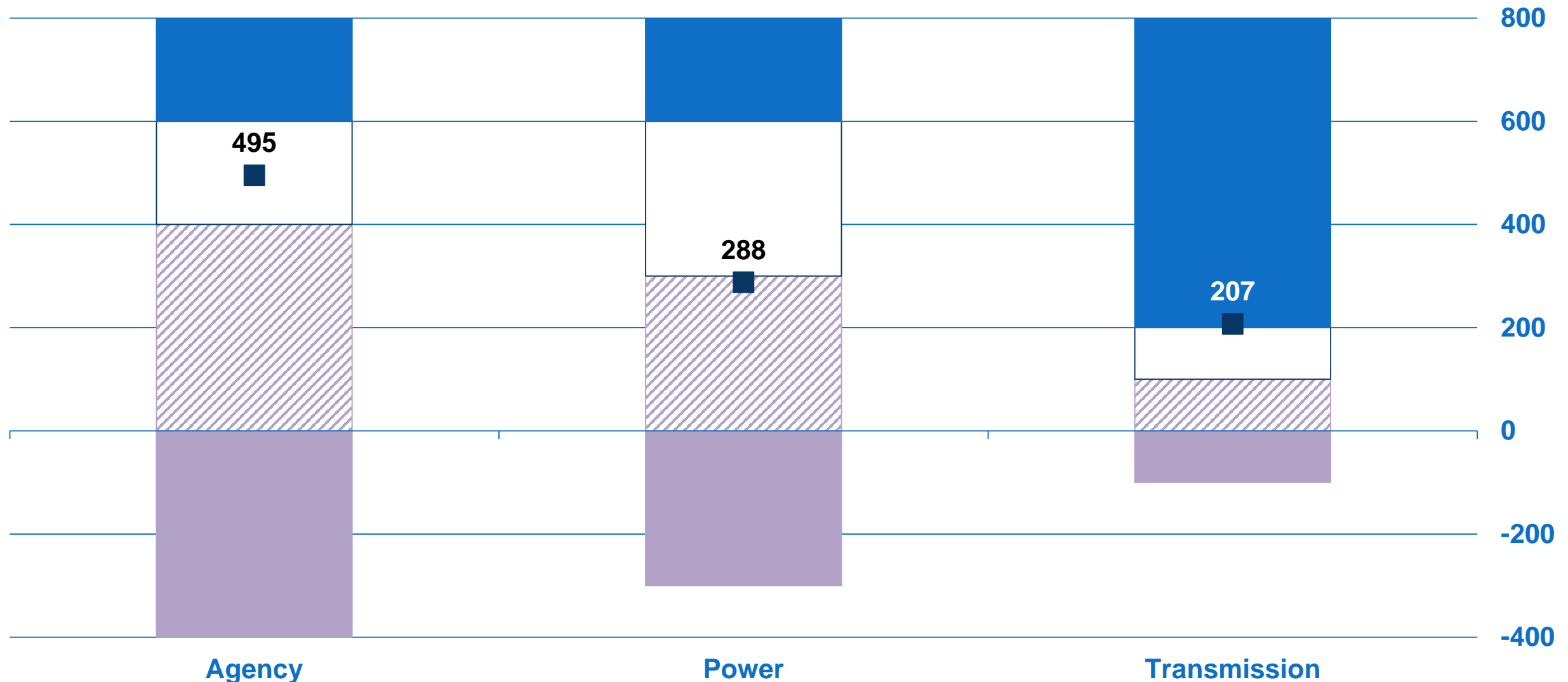
*\*Reserves in millions of dollars*

# FINANCIAL RESERVES THRESHOLDS

## Financial Reserves Policy thresholds and reserves for risk

In millions of dollars

■ Cost recovery adjustment clause ■ Surcharge □ No action ■ Reserves distribution clause



- No modelling scenarios resulted in a Power RDC or CRAC or Transmission CRAC. The probability of a Transmission RDC is 2 percent. The probability of a Power FRP surcharge of some amount is 61 percent.

# COLUMBIA DECOMMISSIONING STUDY

- New site-specific decommissioning study completed.
- Study will inform decommissioning trust funding decisions and accounting for BPA and Energy Northwest.
- Rate impact:
  - None for BP-20.
  - Further engagement planned ahead of the BP-22 Rate Case.
- More information available on May 3.

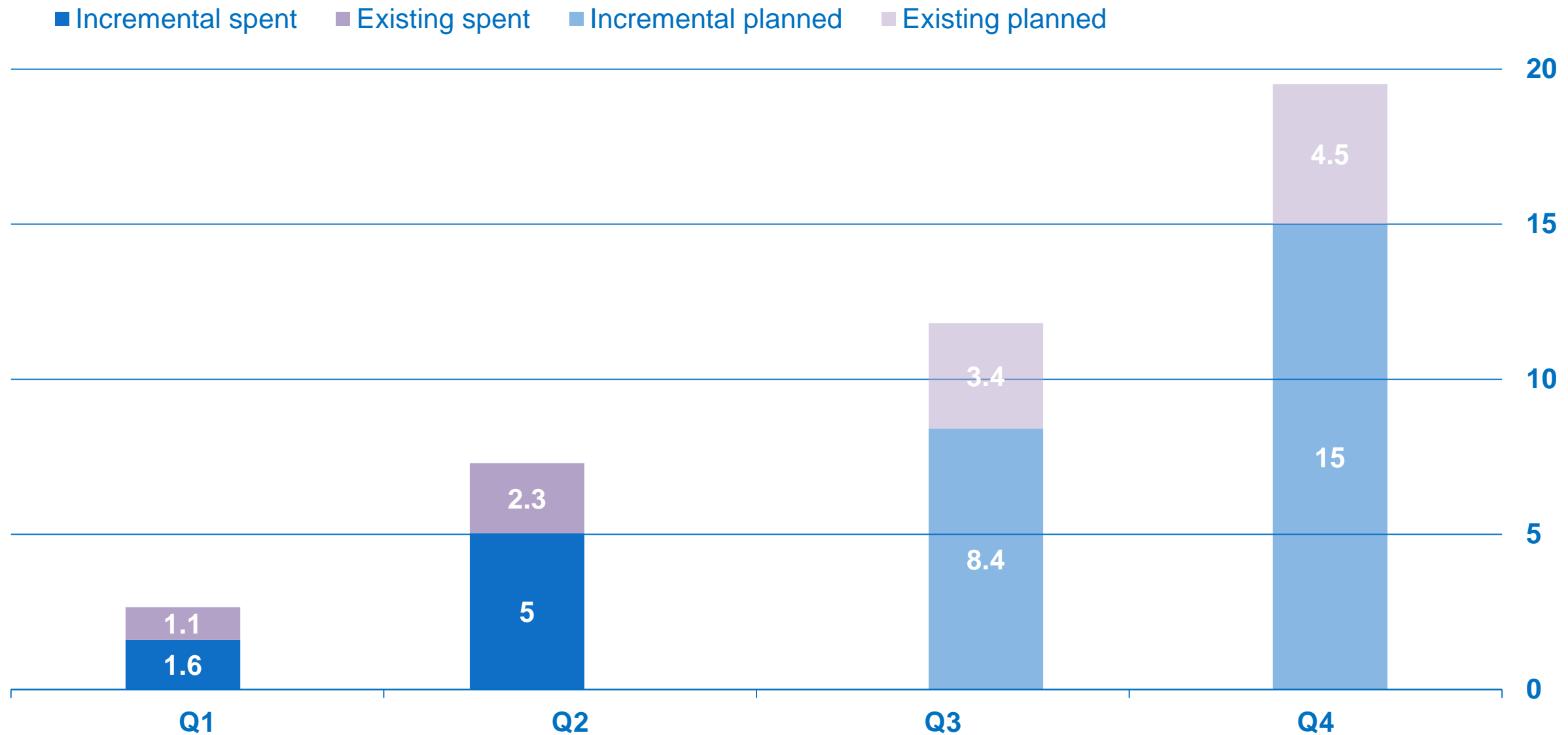


# GRID MODERNIZATION

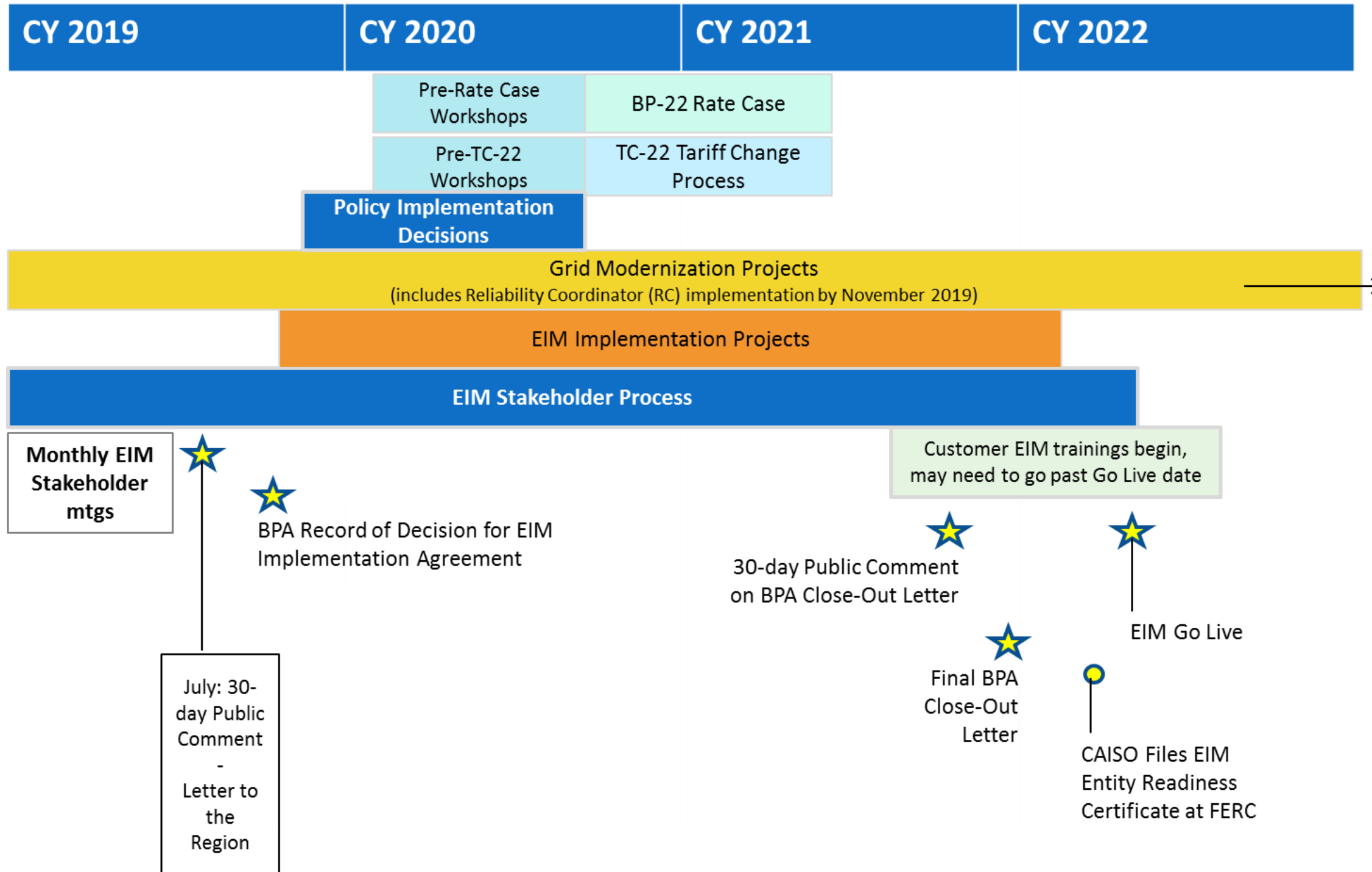
Nita Zimmerman, DEPUTY EXECUTIVE VICE PRESIDENT OF BUSINESS TRANSFORMATION OFFICE

# SPENDING YEAR-TO-DATE

## Grid Modernization Key Strategic Initiative spending In millions of dollars



# ENERGY IMBALANCE MARKET TIMELINE





# PUBLIC ENGAGEMENT

Scott Simms, DIRECTOR OF COMMUNICATIONS



# PUBLIC MEETINGS

- May 2: End-of-lease line reintegration projects.
- May 3: Finance workshop.
- May 15: Energy imbalance market stakeholder meeting.
- June 13: TC-20 implementation update.

# COMMENT PERIODS

- May 2: FY 2019 spill surcharge.



# QUESTION AND ANSWER

# THANK YOU

The next QBR is scheduled for  
**July 30, 2019.**

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

Email [Communications@bpa.gov](mailto:Communications@bpa.gov). Answers will be posted to  
[www.bpa.gov/goto/QBR](http://www.bpa.gov/goto/QBR).

**The strategic plan is available at  
[www.bpa.gov/StrategicPlan](http://www.bpa.gov/StrategicPlan).**

# FINANCIAL DISCLOSURE

This information was made publicly available on April 29, 2019, and contains information not sourced directly from BPA financial statements.