

# Investor Presentation

Portland General Electric  
May 2020



# Cautionary statements

## Information Current as of April 24, 2020

Except as expressly noted, the information in this presentation is current as of April 24, 2020 — the date on which PGE filed its Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 — and should not be relied upon as being current as of any subsequent date. PGE undertakes no duty to update this presentation, except as may be required by law.

## Forward-Looking Statements

Statements in this presentation that relate to future plans, objectives, expectations, performance, events and the like may constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include statements regarding the impact of the recent global coronavirus (“COVID-19”) pandemic; statements regarding earnings guidance; statements regarding future load, hydro conditions and operating and maintenance costs; statements concerning implementation of the company’s integrated resource plan; statements concerning future compliance with regulations limiting emissions from generation facilities and the costs to achieve such compliance; as well as other statements containing words such as “anticipates,” “believes,” “intends,” “estimates,” “promises,” “expects,” “should,” “conditioned upon,” and similar expressions. Investors are cautioned that any such forward-looking statements are subject to risks and uncertainties, including, but not limited to, the impact of COVID-19 on the company’s workforce, operations, and the operations and decisions of company’s customers; adverse changes in general economic conditions, including those resulting from COVID-19, such as increased unemployment; reductions in demand for electricity; the sale of excess energy during periods of low demand or low wholesale market prices; operational risks relating to the company’s generation facilities, including hydro conditions, wind conditions, disruption of fuel supply, and unscheduled plant outages, which may result in unanticipated operating, maintenance and repair costs, as well as replacement power costs; failure to complete capital projects on schedule or within budget, or the abandonment of capital projects, which could result in the company’s inability to recover project costs; the costs of compliance with environmental laws and regulations, including those that govern emissions from thermal power plants; changes in weather, hydroelectric and energy markets conditions, which could affect the availability and cost of purchased power and fuel; changes in capital market conditions, which could affect the availability and cost of capital and result in delay or cancellation of capital projects; the outcome of various legal and regulatory proceedings; severe weather conditions, wildfires, and other natural phenomena and natural disasters that could result in operational disruptions, unanticipated restoration costs, or liability for third party property damage; and cyber security breaches of the company’s customer information system or operating systems, which may affect customer bills or other aspects of our operations, which may affect our financial position, results of operations and cash flows. As a result, actual results may differ materially from those projected in the forward-looking statements. The degree to which COVID-19 may adversely affect the company’s results and operations, including our ability to achieve our earnings guidance, will depend on numerous evolving factors and future developments, which are highly uncertain, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact (including travel bans and restrictions, quarantines, shelter-in-place orders and shutdowns), and how quickly and to what extent normal economic and operating conditions can resume. As a result, the impact on the company’s financial and operating results cannot be reasonably estimated with specificity at this time, but the impact could be material. All forward-looking statements included in this presentation are based on information available to the company on the date hereof and such statements speak only as of the date hereof. The company expressly disclaims any current intention to update publicly any forward-looking statement after the distribution of this presentation, whether as a result of new information, future events, changes in assumptions or otherwise. Prospective investors should also review the risks, assumptions and uncertainties listed in the company’s most recent annual report on Form 10-K and in other documents that we file with the United States Securities and Exchange Commission, including management’s discussion and analysis of financial condition and results of operations and the risks described therein from time to time. To the extent that COVID-19 adversely affects our financial position, results of operations or cash flows, it may also have the effect of heightening many of the risk factors described in our Form 10-K.

# The company



# PGE at a glance

## Quick facts

- Vertically integrated electric utility encompassing generation, transmission and distribution
- 899,000 retail customers within a service area of 1.9 million residents
- 46 percent of Oregon's population lives within PGE service area, encompassing 51 incorporated cities entirely within the State of Oregon
- 75 percent of Oregon's commercial and industrial activity occurs in PGE service area

## Financial snapshot

- 2019 revenue: \$2.1 billion
- 2019 diluted earnings per share: \$2.39
- Net utility plant assets: \$7.2 billion<sup>(1)</sup>

## 3,800+ MWs of Generation



(1) As of 3/31/2020

(2) Wind component expected to be operational by December 2020



# COVID-19 update

## Supporting our customers

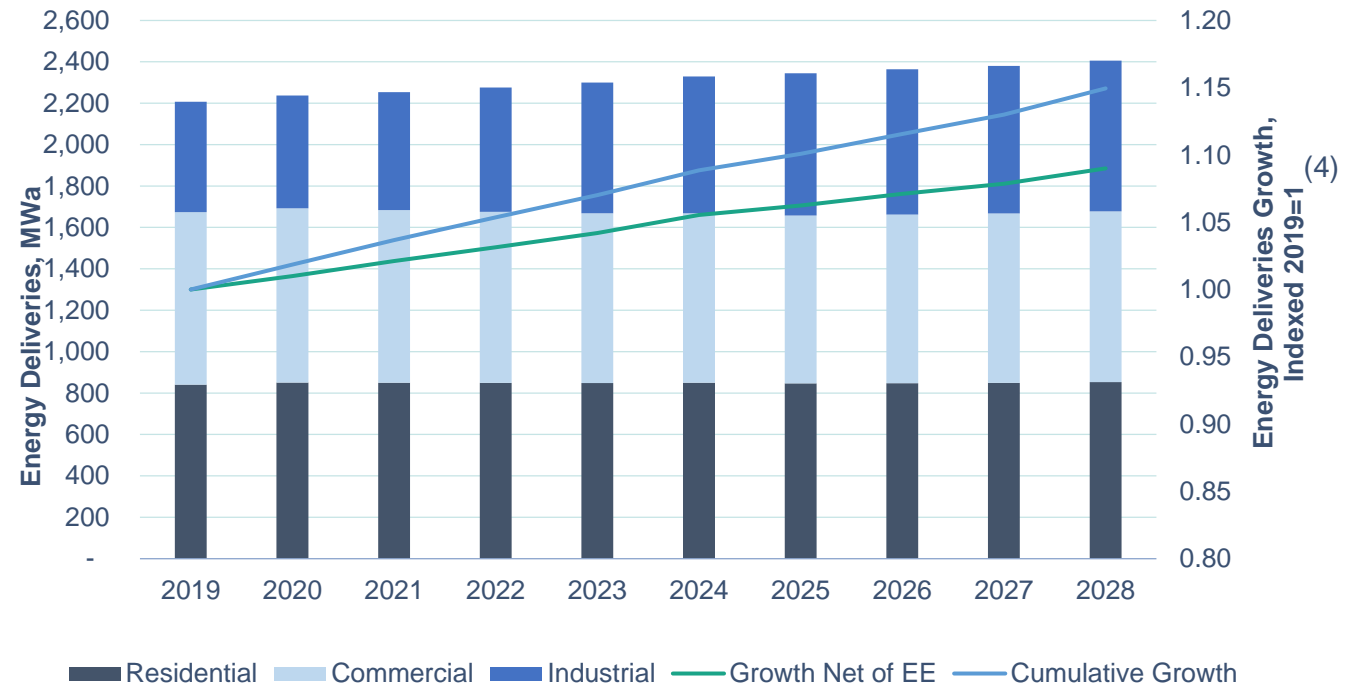
- Oregon's governor issued stay-at-home order on March 23
- Manufacturing and construction allowed to continue statewide
- Halted disconnects and late fees
- Working closely with most impacted customers

## PGE operational impacts to date

- Continued industrial load growth driven by high tech
- On a weather adjusted basis, residential load increased, commercial load decreased
- No significant supply chain impacts
- Deferral filed to recover excess costs (UM 2064)

# Attractive, growing service area

- Near-term economic uncertainty driven by COVID-19 pandemic
- While annual rates of growth may fluctuate, we continue to project long term load growth of 1%<sup>(1)</sup>
- Oregon’s annual GDP growth averaged 2.9% over the past two decades<sup>(2)</sup>
- Oregon ranked 10th nationally in the rate of net in-migration for 2019<sup>(3)</sup>
- Forecasted long-term industrial sector growth driven by high tech and data centers



(1) Forecasted growth until 2028  
 (2) U.S. Bureau of Economic Analysis  
 (3) State of Oregon Employment Department  
 (4) Sector load growth shown is net of energy efficiency



# Constructive regulatory environment

## Regulatory construct

- Forward test year
- Integrated Resource Planning (IRP)
- Renewable Portfolio Standard (RPS)
- Proven track record of achieving reasonable Commission-approved settlements

## Regulatory mechanisms

- Net variable power cost recovery
  - Annual Power Cost Update Tariff (AUT)
  - Power Cost Adjustment Mechanism (PCAM)
- Decoupling through 2022
- Renewable Adjustment Clause (RAC)

## Regulatory body

- Public Utility Commission of Oregon
- Governor-appointed three member commission serving four-year terms

	Term expiration
Megan Decker [D] (Chair)	March 2021
Mark Thompson [R]	Nov 2023
Letha Tawney [D]	May 2020

# 2019 general rate case



- Approved price increase: 0.5%
- Return on equity (ROE): 9.5%
- Cost of long-term debt: 5.1%
- Capital structure: 50% debt, 50% equity
- Rate base: \$4.75 billion
  
- Energy storage projects associated with renewables can be included in future RAC filings for cost recovery pursuant to a showing of prudence and an appropriate nexus of the storage facility with renewables
- Customer prices can be set using the trended weather method in the load forecast
- Decoupling was expanded to include additional existing customers with demands of up to 200 kW and was extended through 2022



# Key strengths

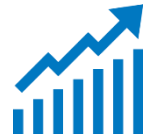


# Focus on customers



**Top quartile  
system  
reliability**

Edison Electric  
Institute



**Top quartile  
customer  
satisfaction  
among large  
electric and  
electric & gas  
utilities**

J.D. Power Electric Utility  
Syndicated Studies



**Trusted business  
partner &  
environmental  
champion**

Cogent Syndicated Utility Trusted  
Brand & Customer Engagement™  
Studies

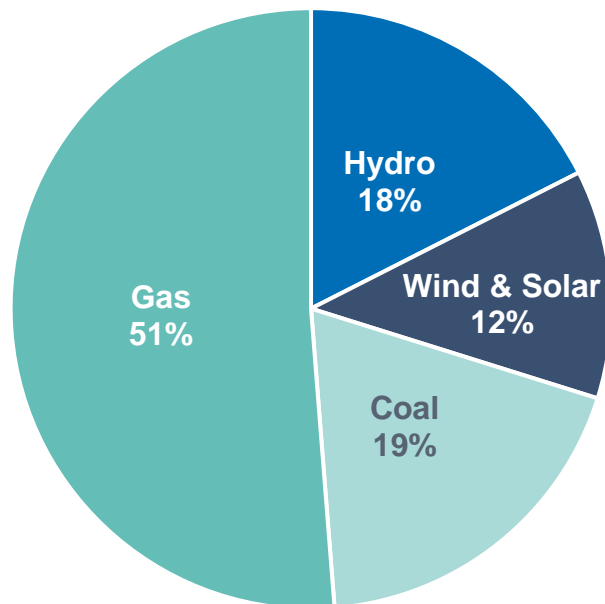


**No.1 renewable  
energy program  
in the nation by  
enrollment for  
last decade**

National Renewables  
Energy Laboratory

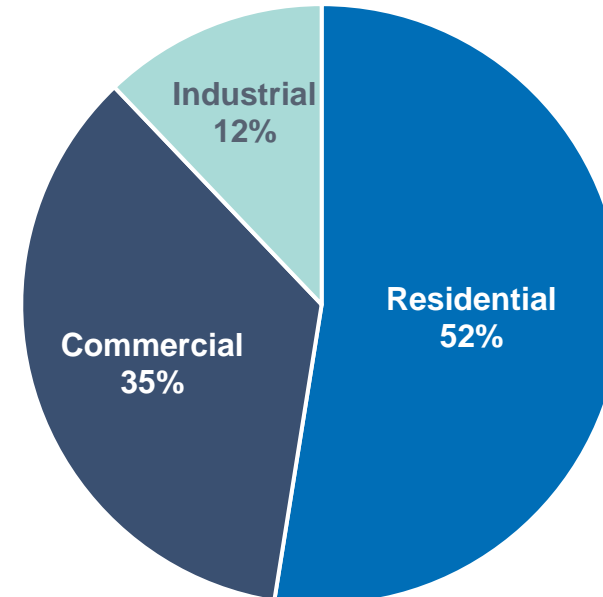
# Diverse generation and customer base

Power sources as a percent of retail load  
2020 AUT<sup>(1)</sup>



Total = 2,132 MWa

Retail revenues by customer class  
2019<sup>(2)</sup>

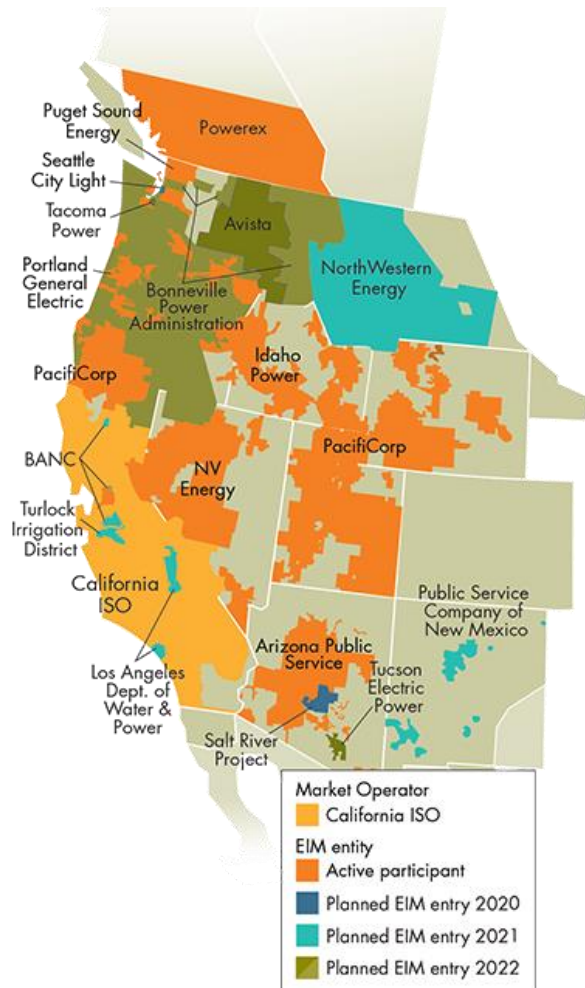


Total retail revenues = \$1.9B

(1) Hydro, wind and solar include PGE-owned and contracted resources

(2) Other revenues contributed 1% of total retail revenues in 2019

# High-quality utility operations



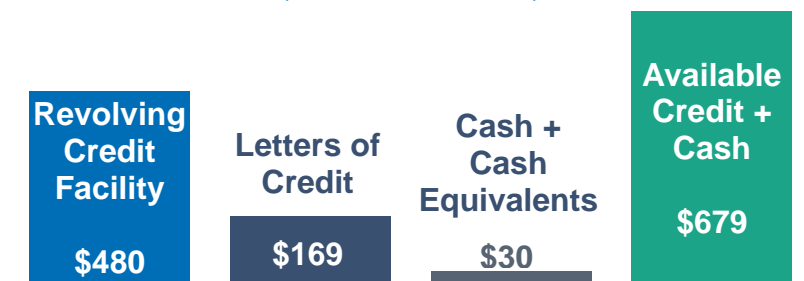
## Western Energy Imbalance Market

- Highly-dependable generation fleet with eight-year average availability of 92%<sup>(1)</sup>
- Strong power supply portfolio management and western EIM integration to enhance reliability and optimize resources
- Transitioning away from coal-fired generation
- Investment plans to provide safer and more reliable service to our customers
- Smart grid opportunities to incorporate more renewables, decarbonize, power the transportation network and integrate demand side resources

# Strong liquidity position for growth

## Available revolving credit facilities<sup>(1)</sup>

(dollars in millions)



Financings	Q1 2020	Q2 2020	Q3 2020	Q4 2020
Long-Term Debt Securities		Priced \$200 million	Issuing up to \$135 million	Issuing up to \$180 million
Pollution Control Revenue Bonds	Issued \$21 million			
364-day Term Loan		Funded \$150 million		

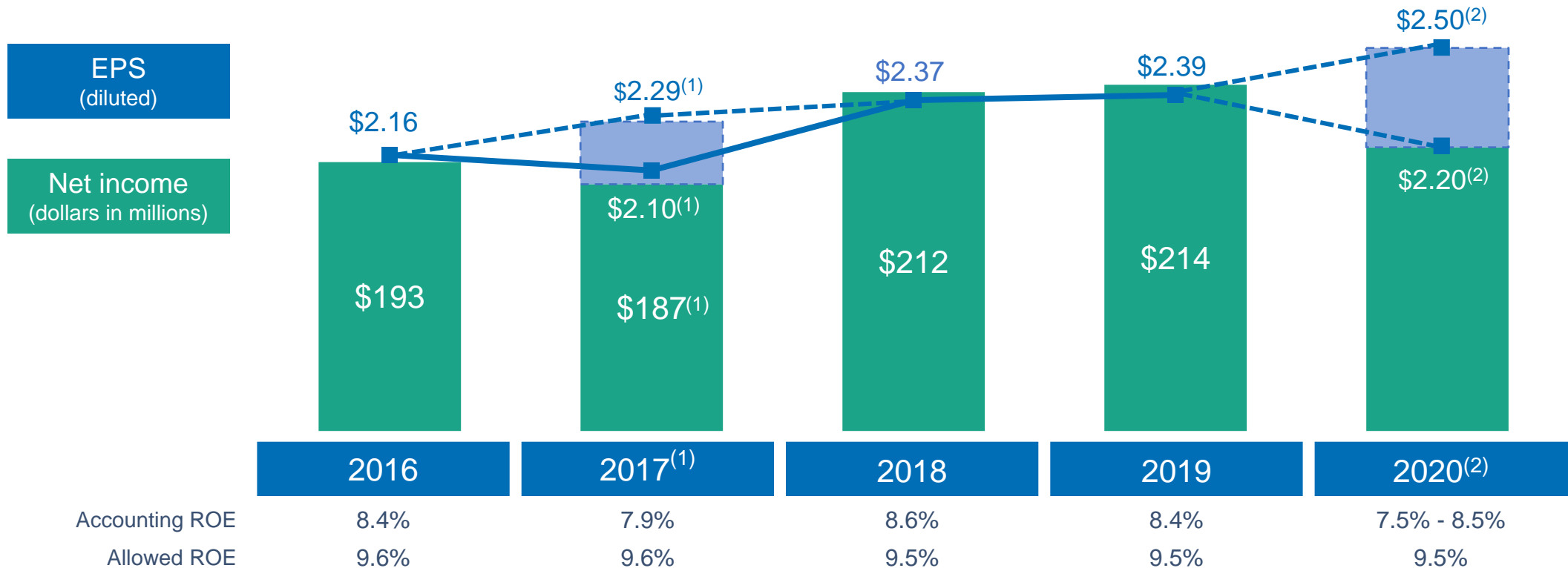
## Financial resources

- Investment grade credit ratings
- Manageable debt maturities
- Target capital structure of 50% debt and 50% equity

	S&P	Moody's
Senior Secured	A	A1
Senior Unsecured	BBB+	A3
Outlook	Positive	Stable

# Solid financial performance

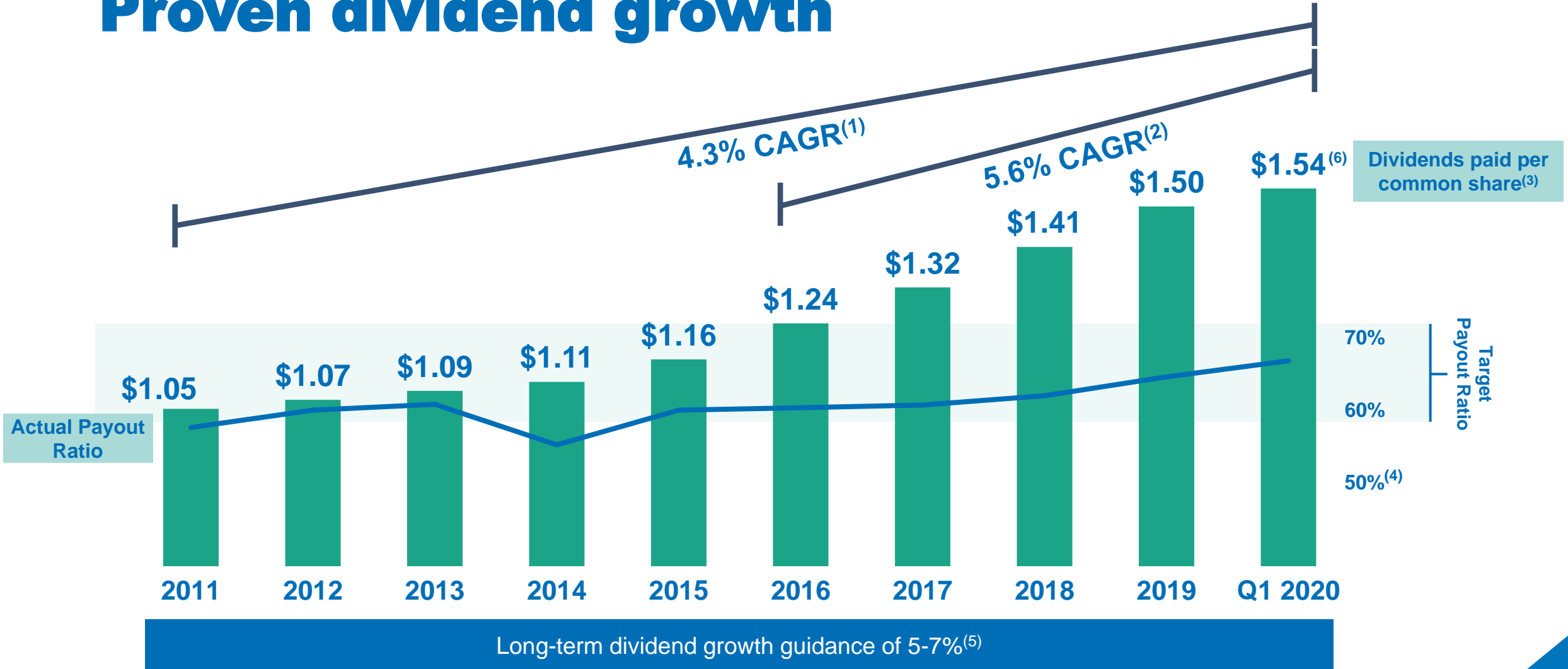
## Net income, earnings per share, and ROE



(1) In 2017 net income based on generally accepted accounting principles (GAAP) was \$187 million, or \$2.10 per diluted share. After adjusting for the impacts of the Tax Cuts and Jobs Act (TCJA), non-GAAP net income was \$204 million, or \$2.29 per diluted share. Management believes that excluding the effects of the TCJA (\$0.19) provides a more meaningful representation of the company's comparative earnings. The Company has adjusted this amount to maintain comparability between periods.

(2) Estimates and projections are based on assumptions and there can be no assurance regarding the amount of future earnings. Earnings guidance provided as of April 24, 2020.

# Proven dividend growth



(1) Compound Annual Growth Rate from 2011 through 2020

(2) Compound Annual Growth Rate from 2016 through 2020

(3) Represents annual dividends paid per common share

(4) Targeted dividend payout ratio prior to 2018 was 50%-70%

(5) Estimates and projections are based on assumptions and there can be no assurance regarding the amount of future dividends

(6) In light of economic uncertainty associated with the COVID-19 pandemic, PGE held its dividend flat in the first quarter of 2020. The dividend will continue to be reevaluated on a quarterly basis to determine whether 2020 dividends will be consistent with the long-term dividend growth target.

# Looking Forward





# Investing in the future



## Decarbonize

80% goal

Wheatridge Renewable  
Energy Facility

Green Tariff



## Electrify

Smart Grid Test Beds

Accelerating transportation  
electrification

EV transit partnerships



## Reliability

System upgrades

Demand response

Meeting growth

Access to capacity



# Clean and reliable energy future

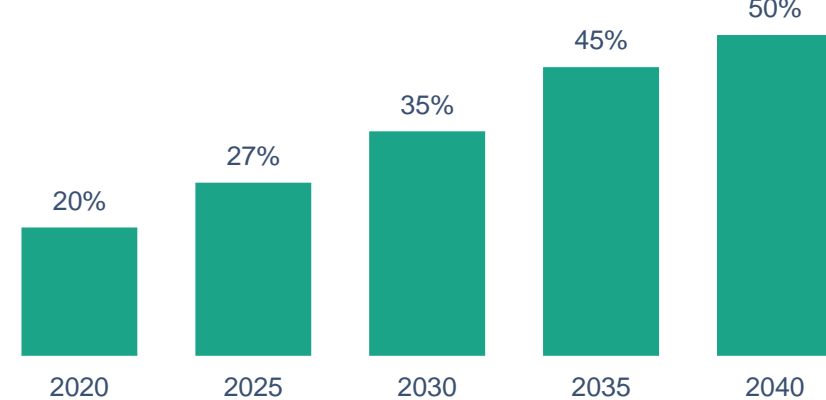
## Key elements

- Transition PGE customers off coal-fired generation by 2030
- Production tax credits included in annual power cost filings since 2017
- Pursue transportation electrification

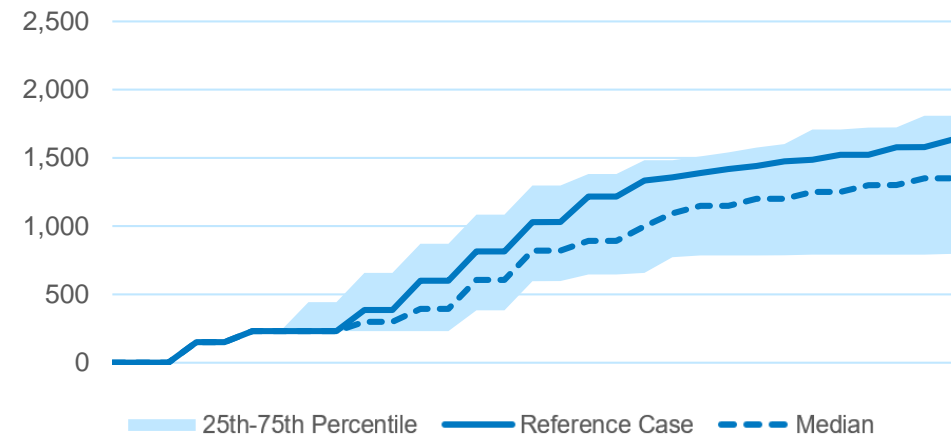
## Long-term strategy

- Layered approach balances near-term and long-term risks and benefits for customers
- Incremental renewable actions reduce near-term carbon emissions and puts PGE on track to meet Oregon's carbon reduction goal

Renewable Portfolio Standard



Renewable Additions



Note: Solid line represents renewable additions over time under 2019 Integrated Resource Plan (IRP) reference case conditions. The dashed line represents the median of renewable resource additions across all futures presented in the 2019 IRP and the shaded area reflects the 25<sup>th</sup> – 75<sup>th</sup> percentile of renewable resource additions across futures.

# 2019 Integrated Resource Plan

## Q1 2020

Acknowledgement received in public meeting on March 16



## 2020

Discussing capacity contract terms with regional operators of existing resources



## 2024

Targeting online dates in 2024 for new capacity and renewable resources

## Action Plan

- The plan reflects our focus on meeting customer needs and addressing stakeholder feedback.

## Customer Resource Actions

- Increased energy efficiency, demand response, storage and dispatchable standby generation

## Renewable Resource Actions

- A renewable RFP of up to 150 MWa, estimated online in 2024

## Capacity Resource Actions

- A multi-stage procurement process for up to 700 MW of capacity contribution by 2025
- Pursue cost-competitive agreements for existing capacity in the region
- Conduct an RFP for remaining capacity needs

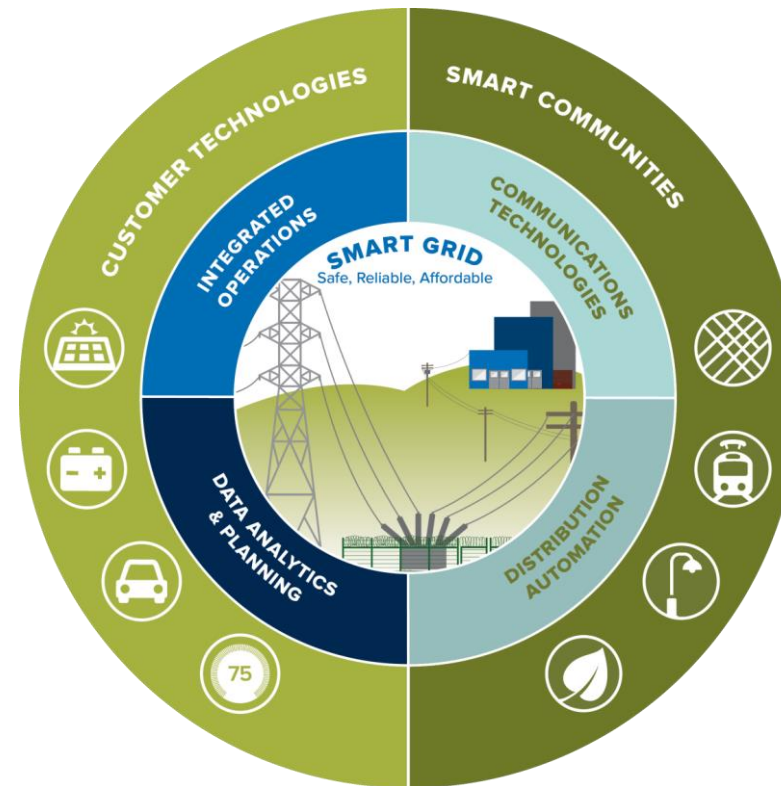
# Integrated Operations Center

- A new 24/7 center for key operations:
- Advances our integrated grid strategy
- Significantly improves seismic resilience, cyber and physical security
- Improves monitoring, control and optimization of distributed assets and our distribution system



# Building a smarter, more resilient grid

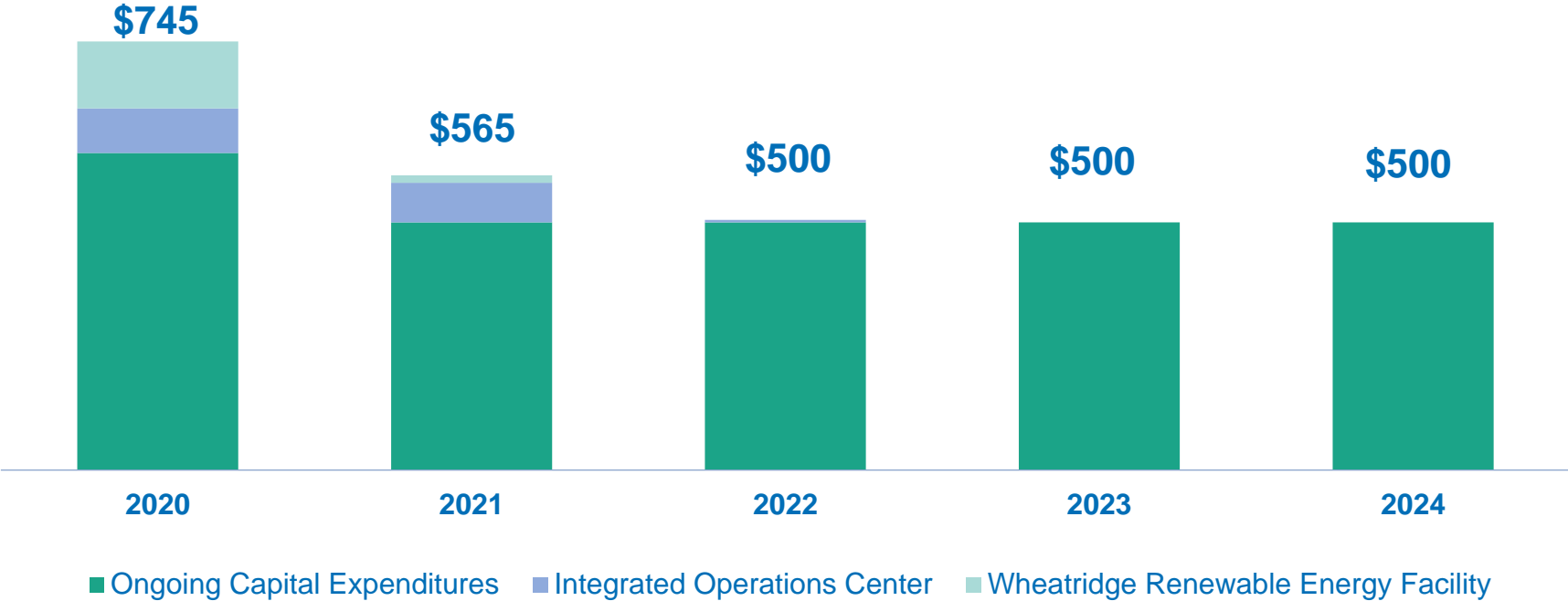
- New communication systems
- Distributed automation systems
- Data analytics
- Integrate customers' energy resources
- Utility-scale battery storage



# Forecasted capital expenditures

## Outlook

- Updating and replacing aging generation, transmission and distribution equipment
- Building a smarter, more resilient grid



Note: Capital expenditures for 2020 through 2024 exclude allowance for funds used under construction. Dollar values in millions.

# Environmental, Social and Governance (ESG)

## Environmental

### Decarbonize

More than 80% reduction in GHG emissions by 2050 (using a 2010 baseline)

### Electrify

Smart grid test beds, accelerating transportation electrification, EV transit partnerships

### Reliability

System upgrades, demand response and access to capacity

## Social

### Customers

Ensuring universal access at affordable prices

### Community

Volunteered 32,900 hours, by PGE, employees and retirees

### Employees

Pre-Apprentice training and Lineman rodeo, tuition reimbursement and employee training programs

## Governance

### Experienced

Wide range of skills, backgrounds and leadership positions

### Diverse

50% of Directors contributing gender/racial diversity, including female CEO

### Independent

CEO is the only non-independent board member, independent board committees

Additional information (can be found through [investors.portlandgeneral.com/esg](https://investors.portlandgeneral.com/esg)):

- [PGE Sustainability Report Key Metrics](#)
- [PGE ESG Presentation](#)

# PGE investor relations team

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# Portland General Electric Appendices



# 2016 Integrated Resource Plan

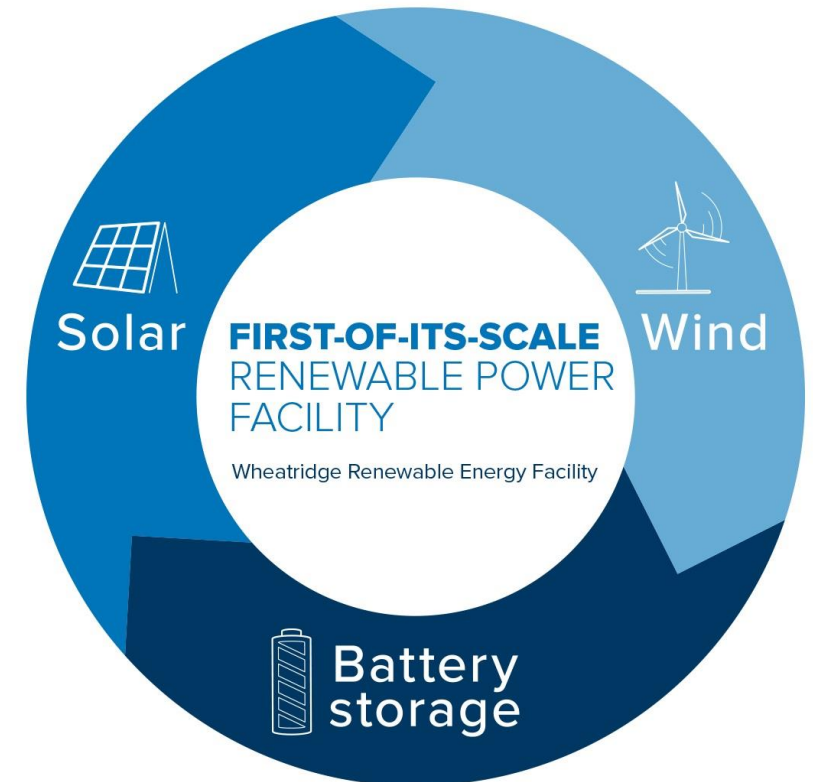
A flexible, balanced plan that reflects our commitment to a low-carbon future and achieves the Oregon Clean Electricity Plan

## Renewables

- Procured renewables (100 MWa) to help ensure Oregon Clean Electricity Plan
  - Wheatridge Renewable Energy Facility:
    - Split ownership and PPA<sup>(1)</sup>
    - Resource capacity:
      - Wind 300 MW online in 2020
      - Solar 50 MW online in 2021
      - Battery 30 MW online in 2021

## Capacity need

- Executed contracts for 300 MWs through RFP procurement process:
  - 200 MW of annual capacity with five-year terms beginning 2021
  - 100 MW of seasonal peak capacity during summer and winter periods with a five-year term beginning 2019

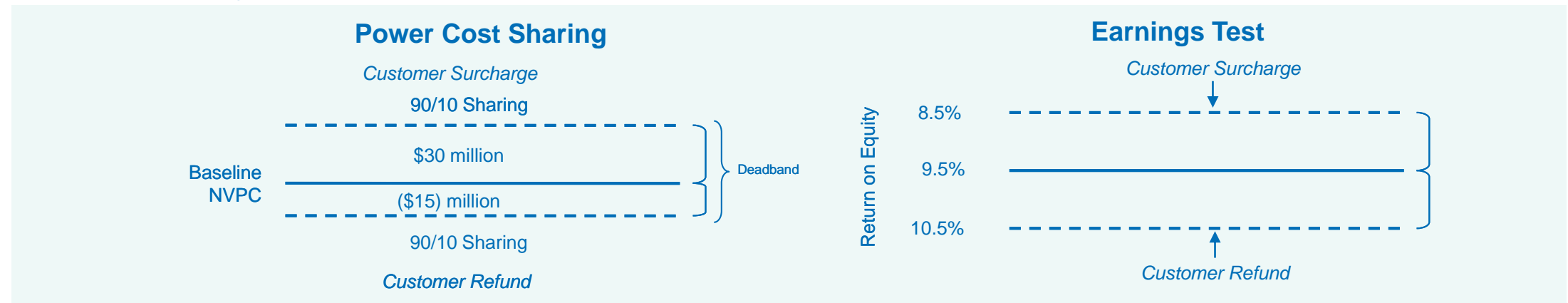


# Recovery of power costs

## Annual power cost update tariff

- Annual reset of prices based on forecast of net variable power costs (NVPC) for the coming year
- Subject to OPUC prudence review and approval, new prices go into effect on or around January 1 of the following year

## Power Cost Adjustment Mechanism (PCAM)



- PGE absorbs 100% of the costs/benefits within the deadband, and amounts outside the deadband are shared 90% with customers and 10% with PGE
- An annual earnings test is applied using the regulated ROE as a threshold
- Customer surcharge occurs if PGE's actual regulated ROE is below 8.5%; ROE will not exceed 8.5% with surcharge
- Customer refund occurs if PGE's actual regulated return is above 10.5%; regulated return will not decrease below 10.5% with refund

# Renewable portfolio standard

## Additional renewable resources

- As of 2018, PGE had the following qualifying renewable resources:

Type of Resource	% of Retail Load
Wind	9.9%
Low-Impact Hydro	2.5%
Solar & Other	<1%

## Renewable Portfolio Standard:

2011	2015	2020	2025	2030	2035	2040
5%	15%	20%	27%	35%	45%	50%

- Renewable Portfolio Standard qualifying resources and Renewable Energy Certificates (RECs) supplied approximately 10% of PGE's retail load in 2012, 2013, and 2014, and approximately 15% of retail load in 2015, 2016, 2017 and 2018

## Renewable Adjustment Clause

- Renewable resource can be tracked into prices, through an automatic adjustment clause, without a general rate case. Using Schedule 122, prices go into effect on the resource's in-service date and are updated annually. Upon Commission approval of the subsequent general rate case the renewable resource is included in base prices and Schedule 122 goes back to zero

# Decoupling Mechanism

The decoupling mechanism is intended to allow recovery of margin lost due to a reduction in sales of electricity resulting from customers' energy efficiency and conservation efforts

This includes a Sales Normalization Adjustment (SNA) mechanism for residential and nonresidential customers ( $\leq 200$  kW) and a Lost Revenue Recovery Adjustment (LRRRA), for large nonresidential customers (up to 1 MWa).

- The SNA is based on the difference between actual usage per customer and that projected in PGE's 2019 general rate case. The SNA mechanism applies to approximately 76% of 2019 customer revenues
- The LRRRA is based on the difference between actual energy-efficiency savings (as reported by the ETO) and those incorporated in the applicable load forecast. The LRRRA mechanism applies to approximately 13% of 2019 customer revenues

## Recent Decoupling Results

(dollars in millions)

	2015	2016	2017	2018	2019
Sales Normalization Adjustment	\$(8.8)	\$1.9	\$11.6	\$(1.3)	\$14.4
Lost Revenue Recovery Adjustment	\$(0.5)	\$(0.8)	\$(0.4)	\$(1.1)	\$(0.1)
<b>Total adjustment</b>	<b>\$(9.3)</b>	<b>\$1.1</b>	<b>\$11.2</b>	<b>\$(2.4)</b>	<b>\$14.3</b>

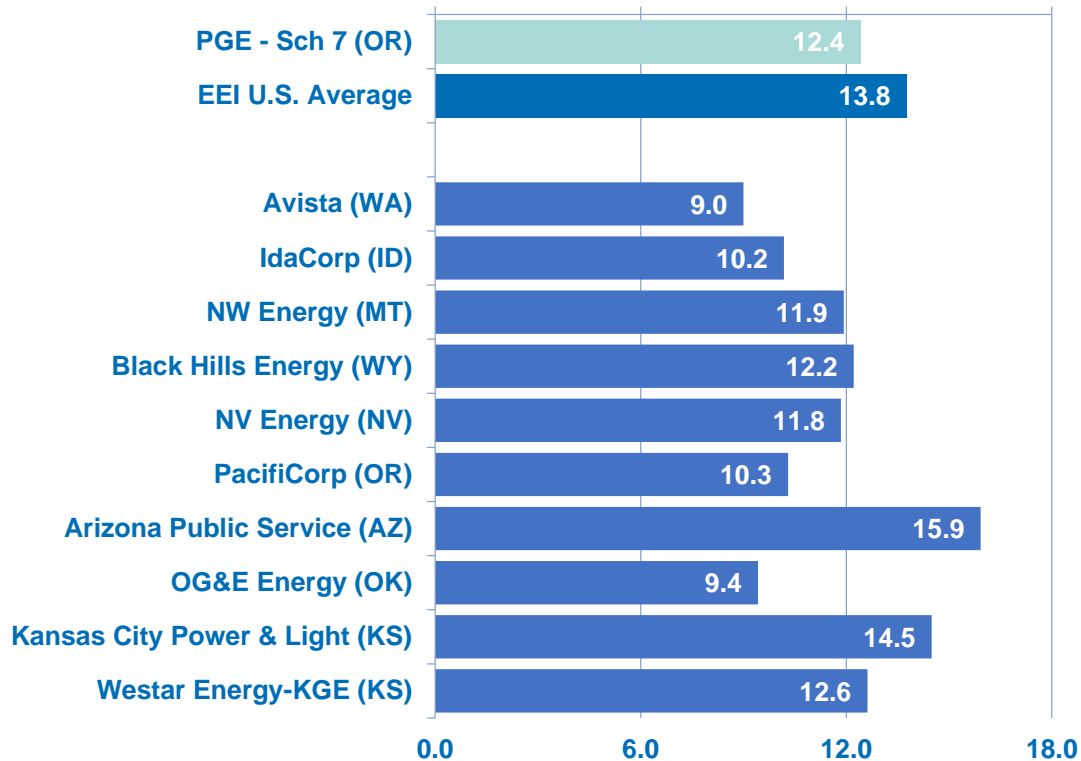
Note: refund = (negative) / collection = positive

# Average retail price comparison

## Residential and Commercial - Summer 2019

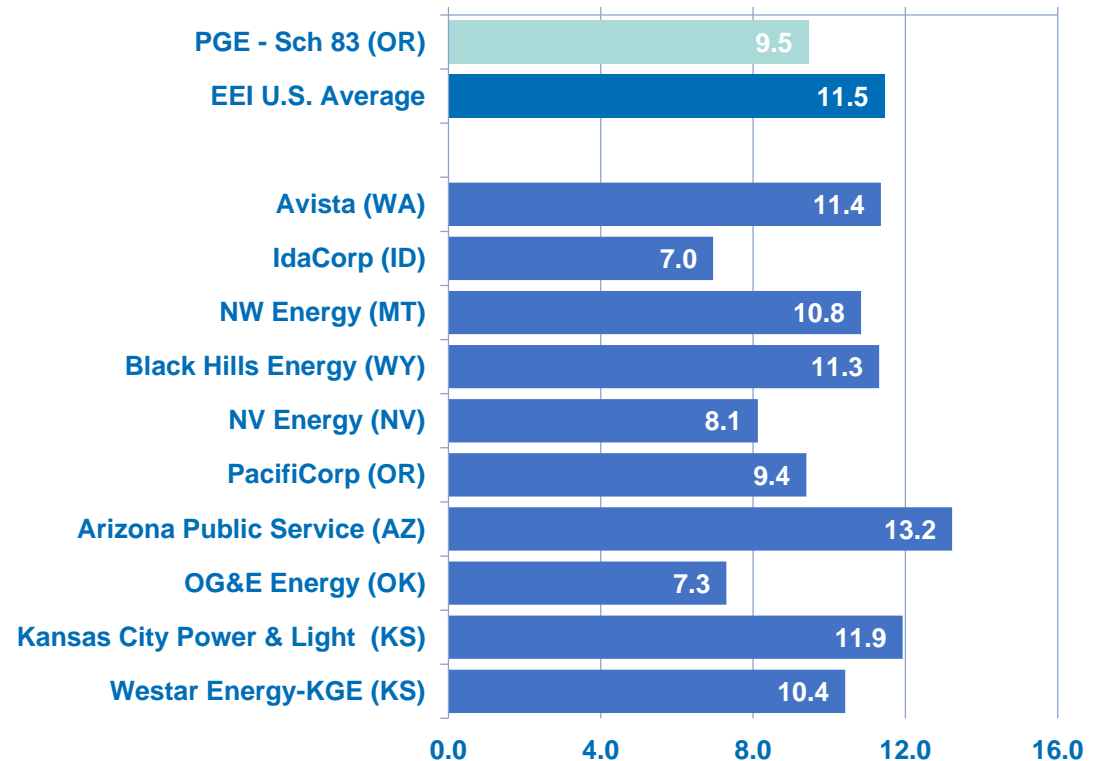
### Residential Electric Service Prices:

1,000 kWh monthly consumption  
(Prices in cents per kWh)



### Commercial Electric Service Prices:

40 kW demand and 14,000 kWh monthly consumption  
(Prices in cents per kWh)



Notes:

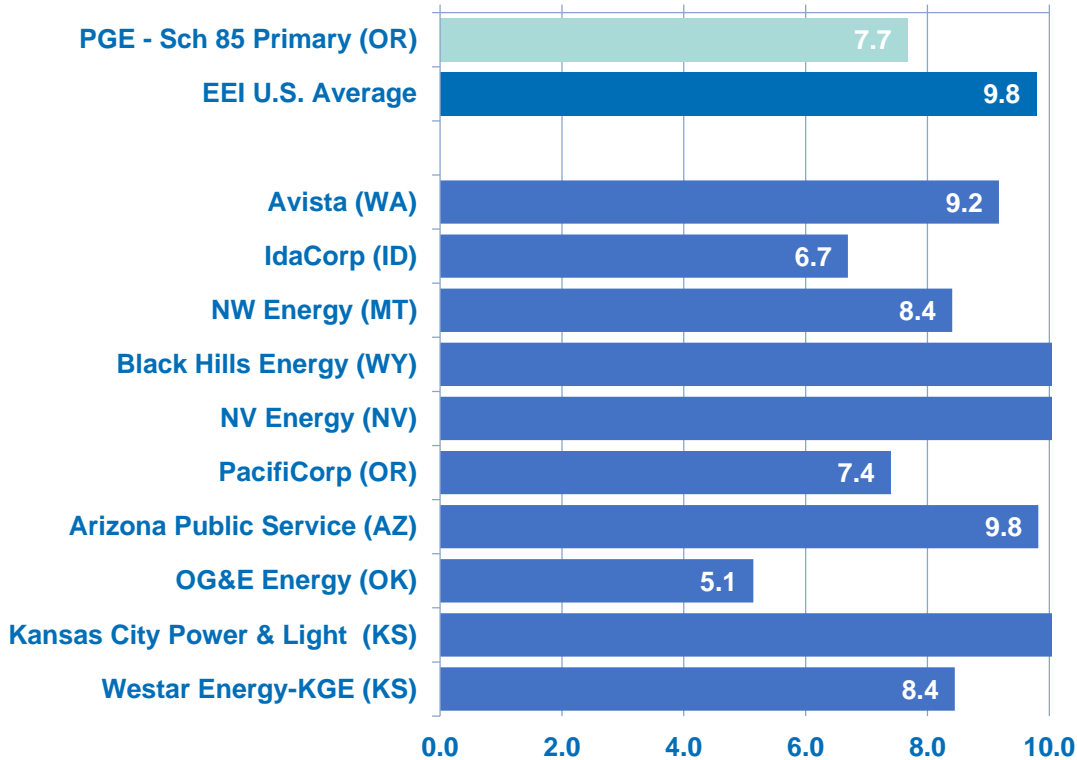
- This average is based on Investor-owned utilities only
- EEI U.S. Average is based on Investor-owned utilities only
- Source: EEI Typical Bills and Average Rates Report for Prices in effect Jul. 1, 2019

# Average retail price comparison

## Small and Large Industrial - Summer 2019

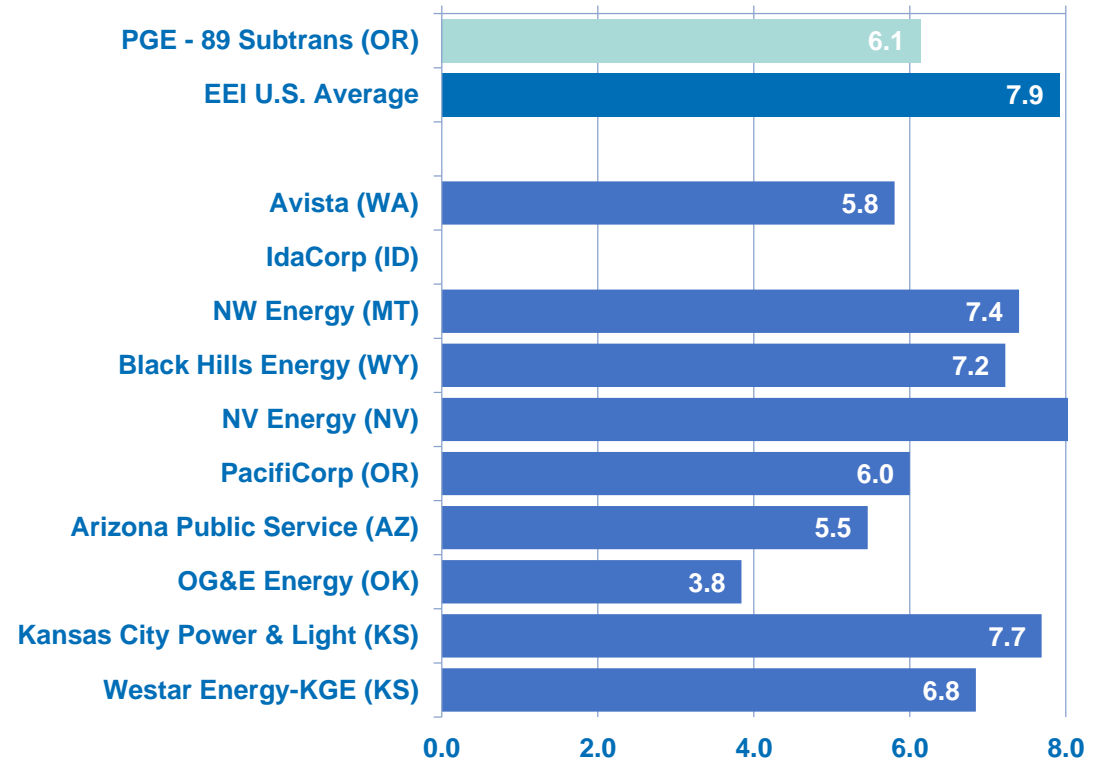
### Industrial Electric Service Prices

1,000 kW peak demand and 400,000 kWh monthly consumption  
(Prices in cents per kWh)



### Large Industrial Electric Service Prices

50,000 kW peak demand and 32,500,000 kWh monthly consumption  
(Prices in cents per kWh)



Notes:

- This average is based on Investor-owned utilities only
- EEI U.S. Average is based on Investor-owned utilities only
- Source: EEI Typical Bills and Average Rates Report for Prices in effect Jul. 1, 2019