

# Investor Presentation

PORTLAND GENERAL ELECTRIC  
DECEMBER 18, 2020



**An Oregon kind of energy.**

# Cautionary statement

## **Information Current as of December 18, 2020**

Except as expressly noted, the information in this presentation is current as of December 18, 2020 – the date on which PGE filed its Form 8-K– 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 Company's full-year earnings guidance (including expectations regarding annual retail deliveries, average hydro conditions, wind generation, normal thermal plant operations, operating and maintenance expense and depreciation and amortization expense) 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, without limitation: the impact of the recommendations of the Special Committee on the Company and its operations; the time and expense incurred in implementing the recommendations of the Special Committee; any reputational damage to the Company relating to the matters underlying the Special Committee's review; 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; general economic and financial market conditions; 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; cyber security breaches of the Company's customer information system or operating systems, which may affect customer bills or other aspects of our operations; and widespread health emergencies or outbreaks of infectious diseases such as the novel coronavirus disease (COVID-19), 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. 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 release, 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 the Company files 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.





# The Company



# PGE at a glance

## Quick facts

- Vertically integrated electric utility encompassing generation, transmission and distribution
- 900,000 retail customers within a service area of 2 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: \$7.4 billion<sup>(1)</sup>

## 3,300+ MWs of Generation



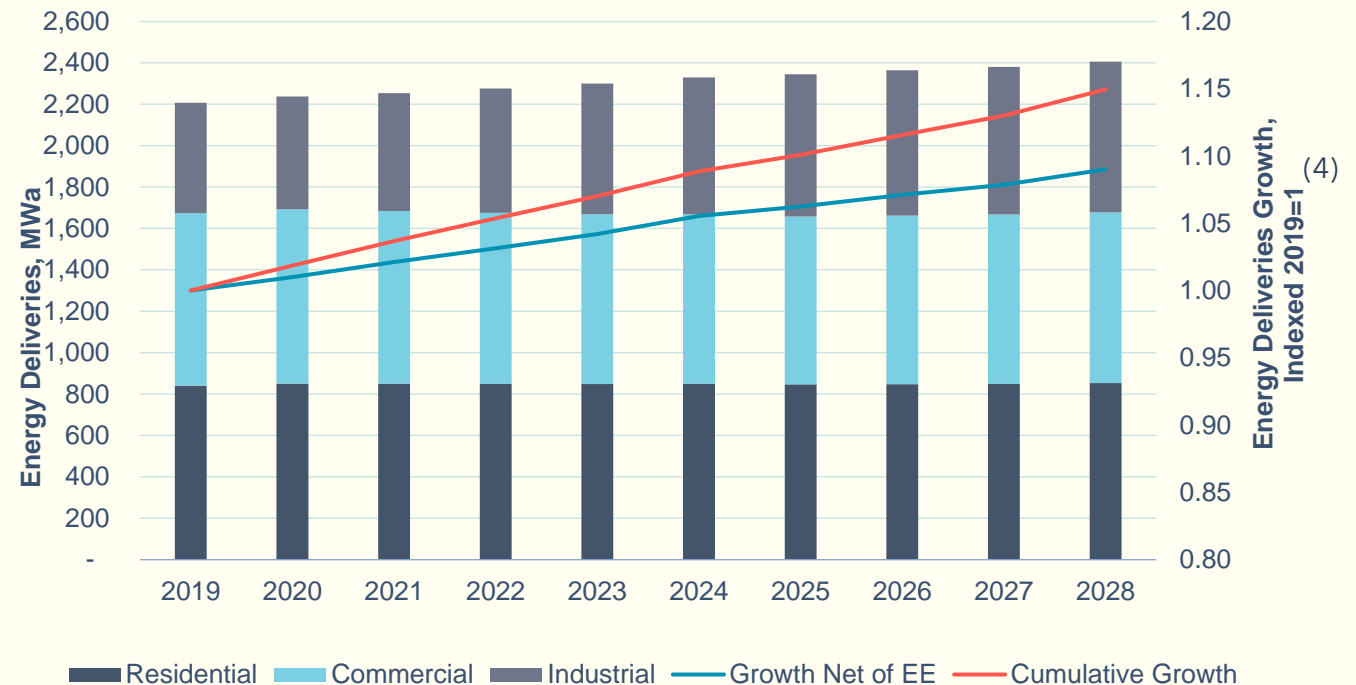
(1) As of 9/30/2020

(2) The Company ceased coal-fired operation at its Boardman generating plant on October 15, 2020



# 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 2024



# 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



# Business updates





# Oregon wildfires

Safety is PGE's number one concern. Throughout the recent wildfire events in Oregon PGE responded proactively by shutting down at-risk transmission lines and worked with first responders and state agencies to ensure the safety of our customers and the people of Oregon

Our safety actions included a Public Safety Power Shutoff in the Mt. Hood corridor and eight different de-energizations for high-risk fire areas

PGE is not aware of any evidence that PGE equipment caused any of the wildfire events

## **Wildfires in PGE's Service Territory**

- On September 7, windstorms accelerated the spread of wildfires throughout Oregon
- Three of Oregon's named wildfires impacted PGE's service territory:
  - The Riverside fire began within PGE's service territory
  - The Beachie Creek and Lionshead fires began outside PGE's service territory
- PGE is in the process of assessing the damage to our system as a result of the wildfires
- Damage to PGE's system as a result of these fires has not materially impacted our ability to serve customers and is not expected to have a material impact on our results of operations



# Oregon wildfires – Regulatory impacts

PGE has been in contact with the OPUC throughout the wildfire events in our state and has partnered with state agencies to coordinate safety and maintain transparent communication about the impact to our customers.

## **Legal Liability Framework**

- PGE is not aware of any evidence the Company's equipment contributed in any of the wildfire events
- PGE is not aware of any Oregon case allowing inverse condemnation claim to proceed against a private utility
- The liability standard for utilities in Oregon is not a strict liability standard, but would involve a consideration of prudent utility practices

## **Wildfire Mitigation and Planning Efforts**

- In recent years PGE renewed focus on wildfire mitigation efforts, which includes:
  - Establishing a public safety power shutoff protocol, which was applied for the first time in September
  - Increasing focus on vegetation management and wildfire risk reduction, including annual inspection cycles, prescriptive trimming and enhanced vegetation control techniques
  - Improving the wildfire risk model to identify high-risk areas in the system



# Oregon wildfires – Financial impacts

The financial impacts of the wildfire events primarily relate to costs for system restoration, which will include O&M and capital components.

## **Financial impact and regulatory recovery**

- We believe O&M impacts of wildfire restoration will not impact full-year guidance of \$1.40 to \$1.60 per diluted share and expect to be in the upper half of this range<sup>(1)</sup>
- Capital restoration is not anticipated to have a material impact on our capital plans or liquidity needs
- On October 20, 2020 the OPUC approved the Company's application to defer costs associated with damage restoration for a 12-month period beginning September 10, 2020 (Order 20-389)
  - As of September 30, 2020, PGE has deferred \$10 million in costs related to wildfire response. PGE continues to assess the damage to its infrastructure and expects regulatory recovery of prudently incurred restoration costs

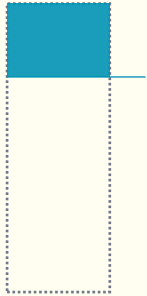
(1) Earnings guidance provided as of October 30, 2020



# Key strengths

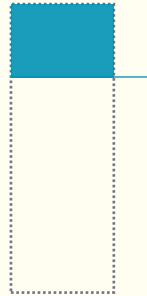


# Focus on customers



**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

**#1**

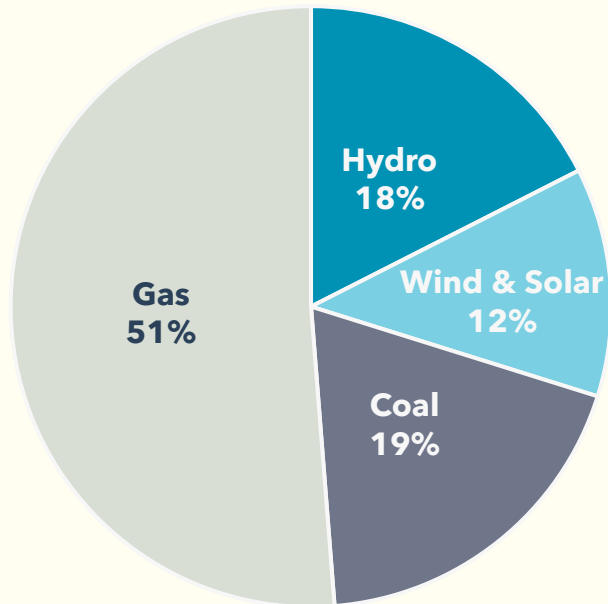
**No.1 renewable  
energy  
program in the  
nation by  
enrollment for  
last 11 years**

National Renewables  
Energy Laboratory



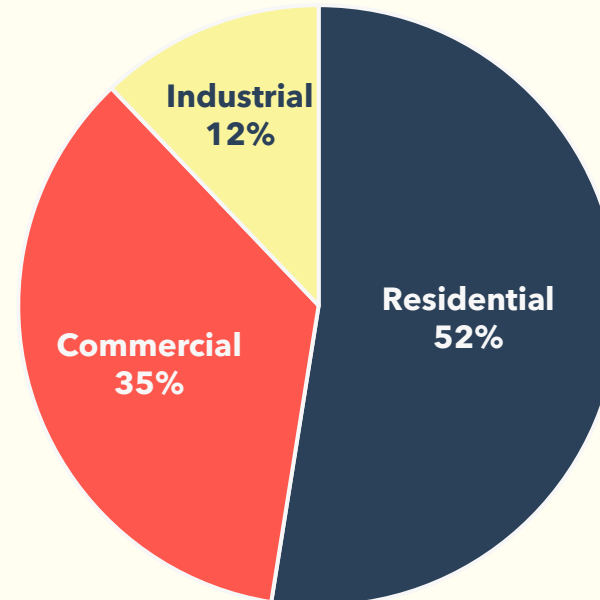
# Diverse generation and customer base

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



Total = 2,132 MWa

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

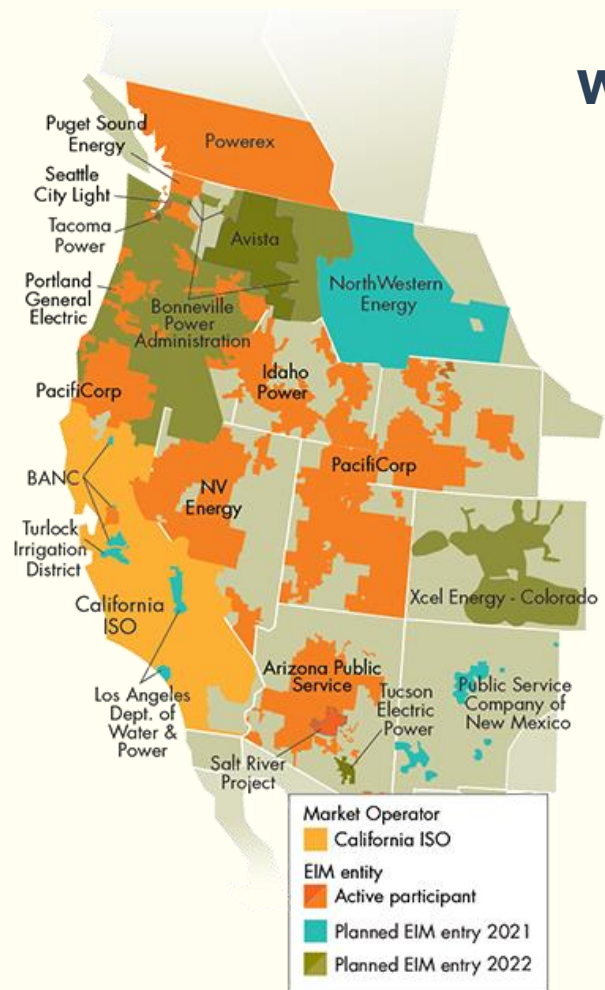


Total retail revenues = \$1.9B

(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

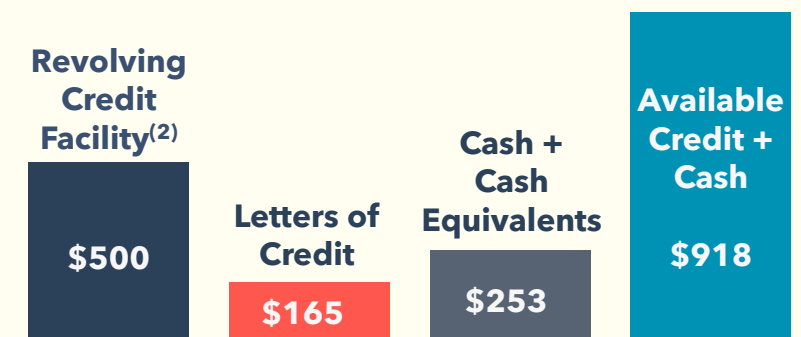
- Highly dependable generation fleet with eight-year average availability of 92%<sup>(1)</sup>
- Strong power supply portfolio management and western EIM integration to enhance reliability and optimize resources
- Transitioning away from coal-fired generation
- Investment plans to provide safer and more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

(1) 2012 through 2019

# Strong liquidity position for growth

## Available liquidity<sup>(1)</sup>

(Dollars in millions)



## Financial resources

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

Financings	Q1 2020	Q2 2020	Q3 2020	Q4 2020
Long-Term Debt Securities		Issued \$200 million		Issued \$230 million
Pollution Control Revenue Bonds	Issued \$21 million			
364-day Term Loan		Funded \$150 million		

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

(1) All values as of 9/30/2020 (unaudited)

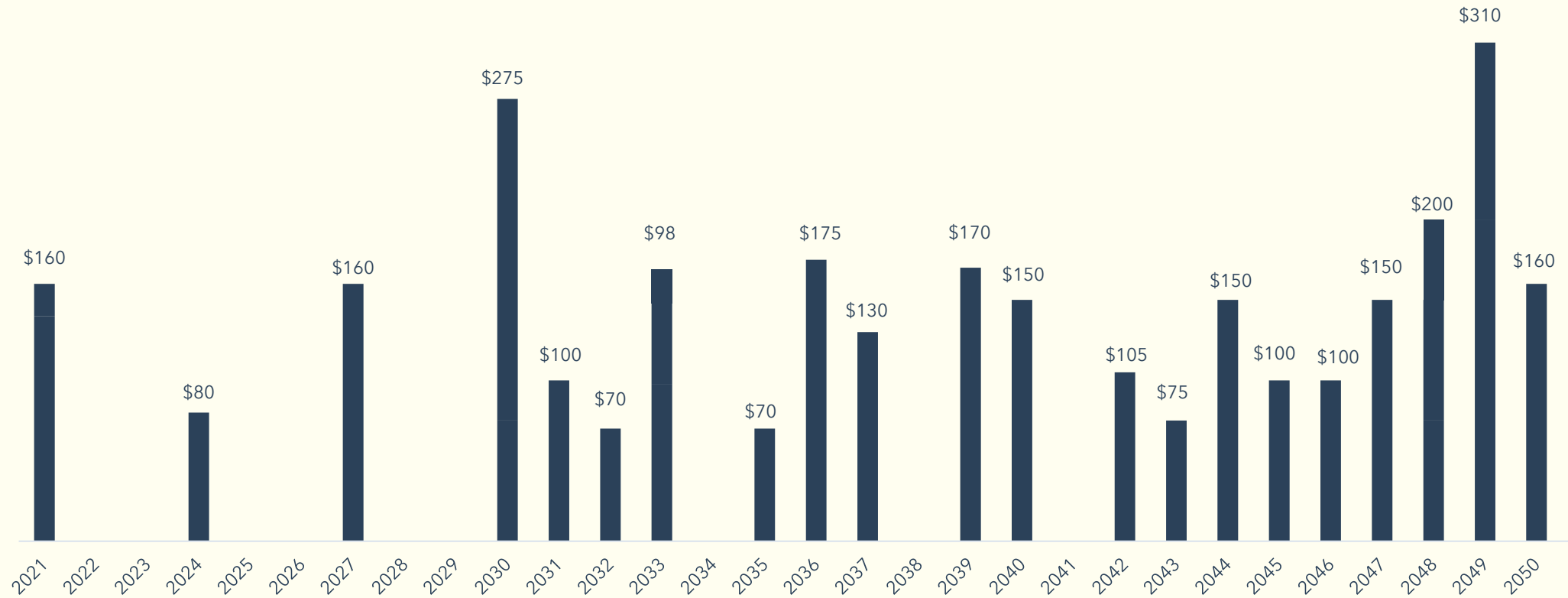
(2) Contains a \$100 million accordion feature





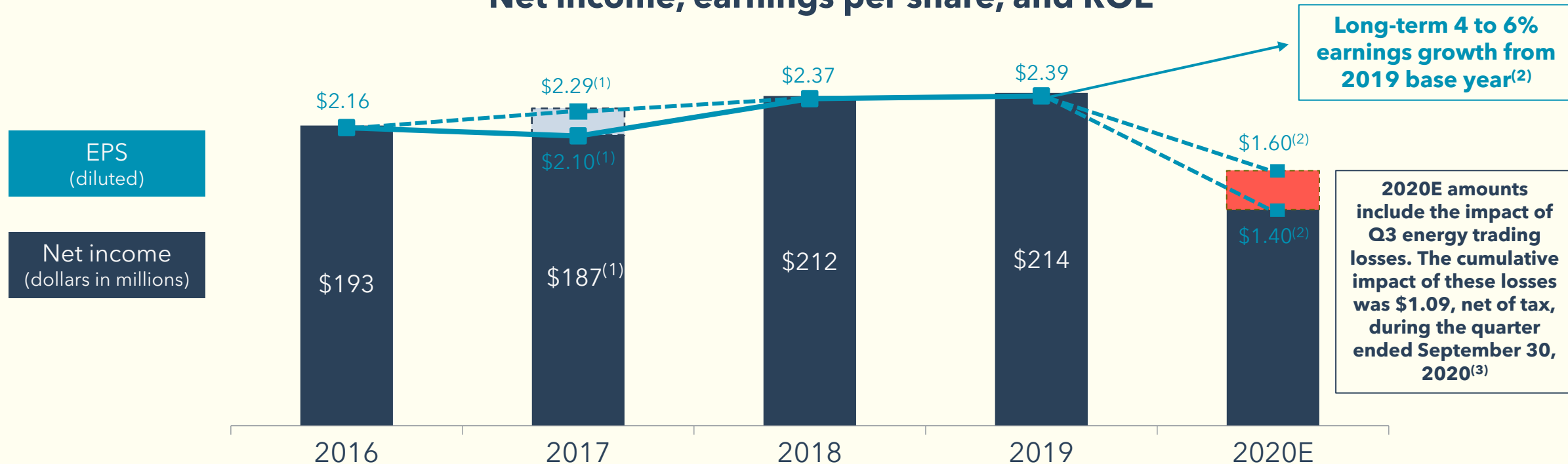
# Long-term debt maturity schedule

Manageable debt maturities  
Dollars in millions



# Long-term financial performance

## Net income, earnings per share, and ROE

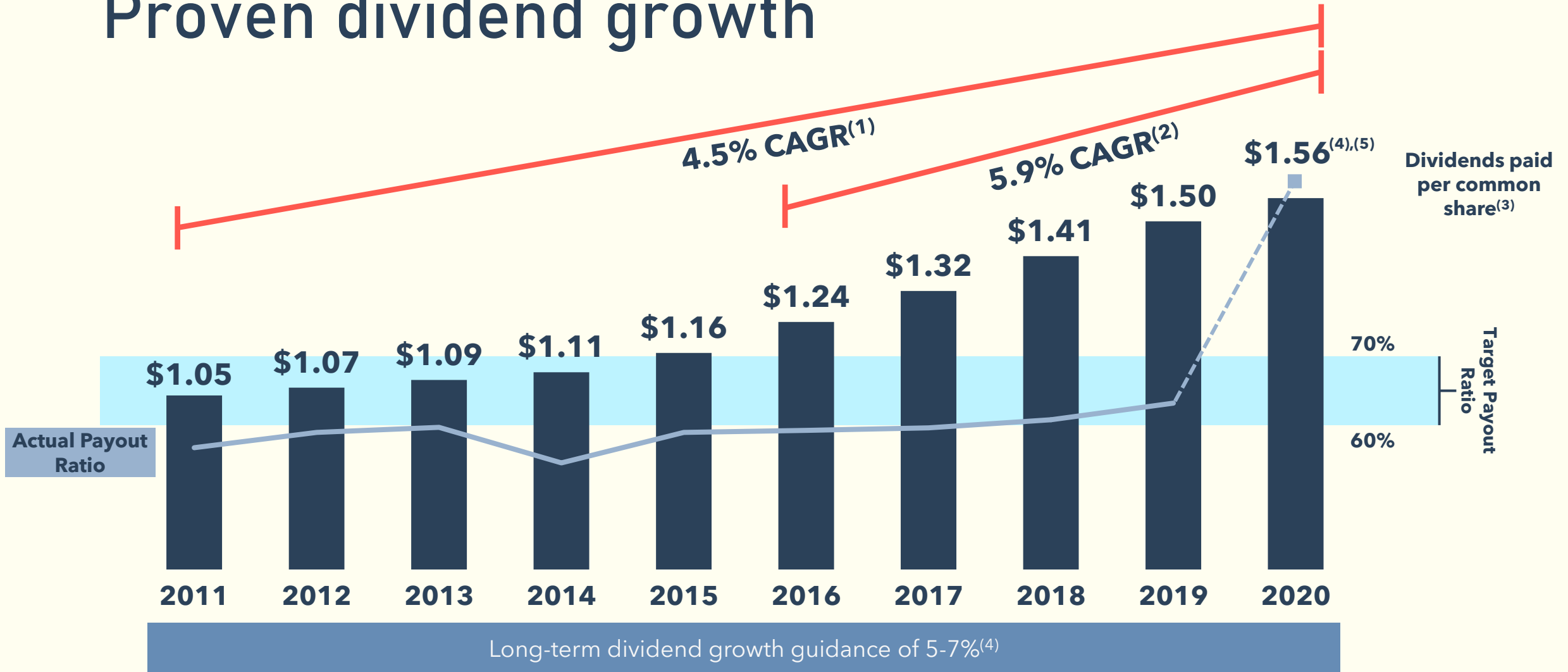


	2016	2017 <sup>(1)</sup>	2018	2019	2020 <sup>(2)</sup>
Accounting ROE	8.4%	7.9%	8.6%	8.4%	4.9% - 5.6%
Allowed ROE	9.6%	9.6%	9.5%	9.5%	9.5%

- (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 October 30, 2020
- (3) Tax effects are determined based on the Company's forecasted annual effective tax rate applied to year-to-date ordinary income or loss



# Proven dividend growth



(1) Compound Annual Growth Rate from 2011 through 2020

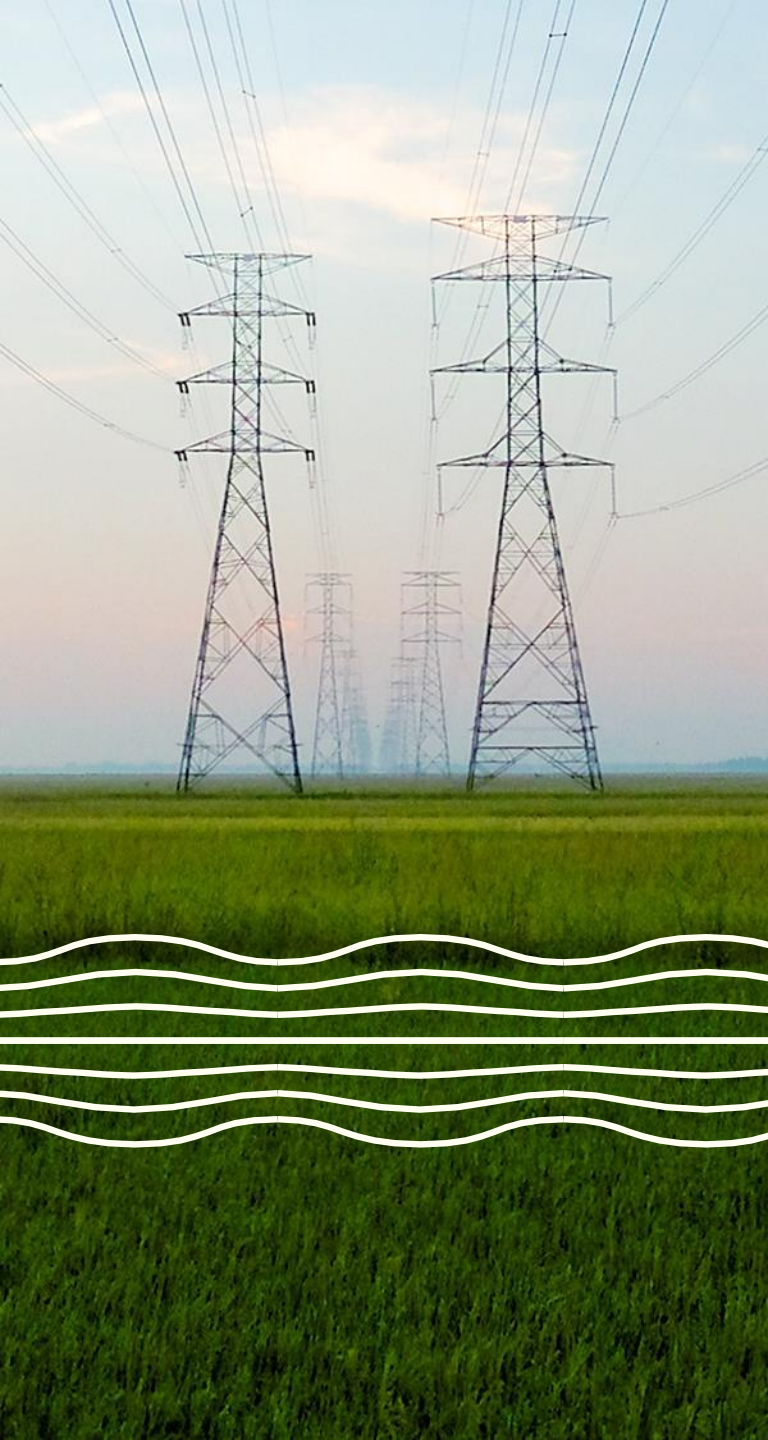
(2) Compound Annual Growth Rate from 2016 through 2020

(3) Represents annual dividends paid per common share

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

(5) 2020 dividend payout is forecast to be 104% based on a \$1.50 EPS at the midpoint of the guidance range. Earnings guidance provided as of October 30, 2020





# Looking forward



# Investing in the future

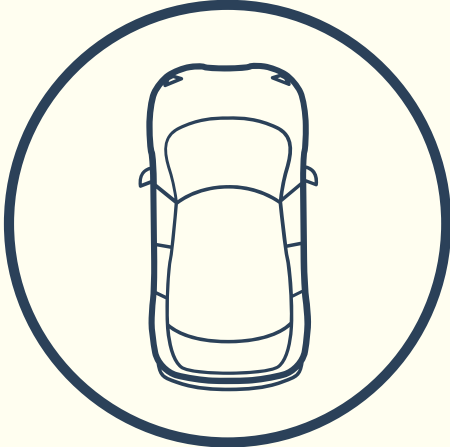


## Decarbonize

80% goal

Wheatridge Renewable Energy Facility

Green Tariff

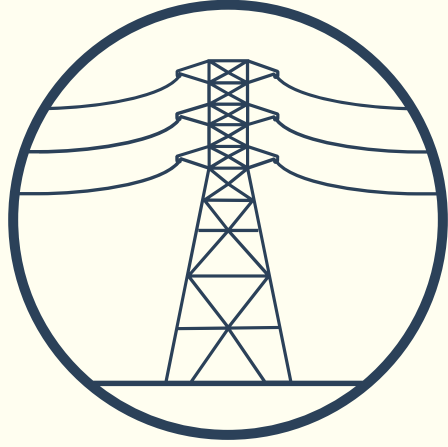


## Electrify

Smart Grid Test Beds

Accelerating transportation electrification

EV transit partnerships



## Perform

System upgrades

Demand response

Meeting growth

Access to capacity



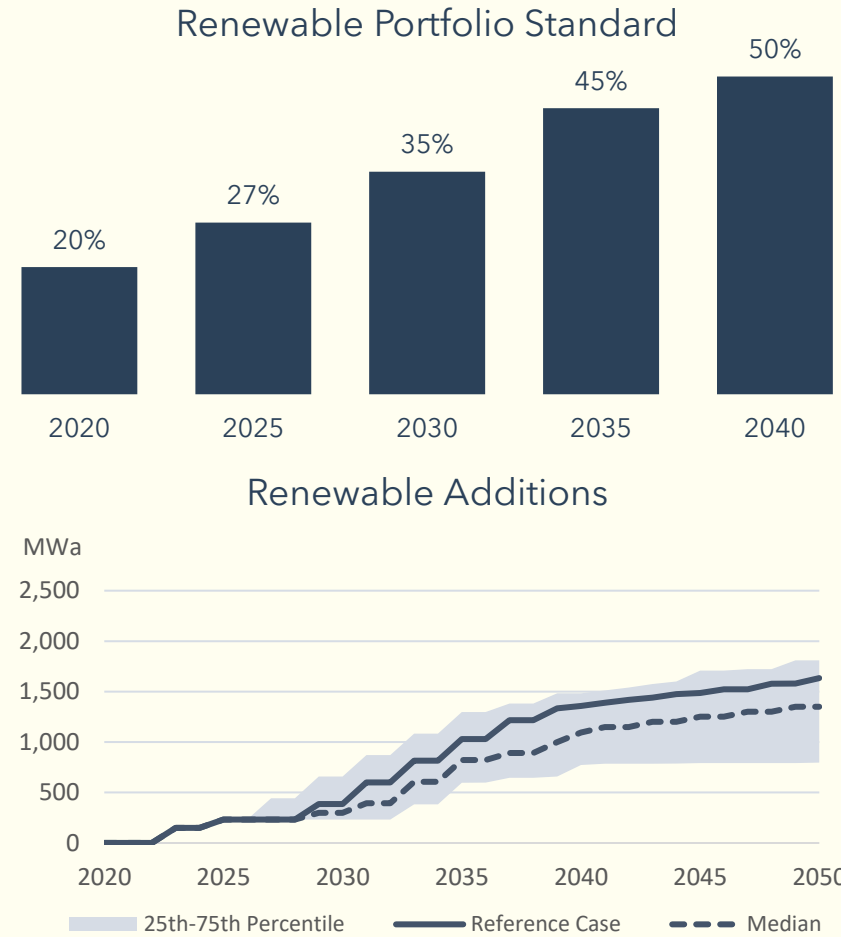
# Clean and reliable energy future

## Key elements

- Transition PGE customers off coal-fired generation by 2030
- Production tax credits included in annual power cost filings
- 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



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



## 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, targeting 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

## Improving security, resiliency, and reliability for our customers

- 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





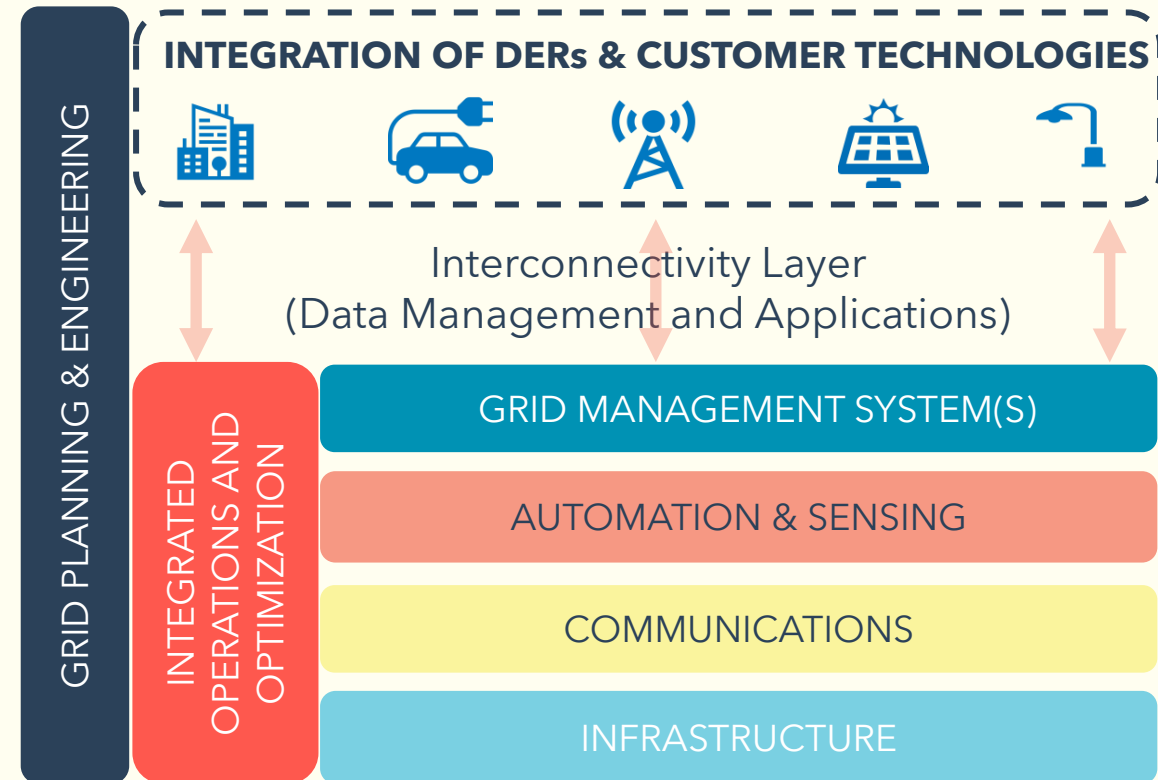
# Building a smarter, more resilient grid

## INITIATIVES

- 1 Core Utility Assets
- 2 Field Area Network
- 3 Distribution Automation
- 4 Management systems for feeders and substations, distributed energy resources, customer technologies and energy storage systems
- 5 Integrated Operations Center
- 6 Distributed Resource Planning

Grid Modernization

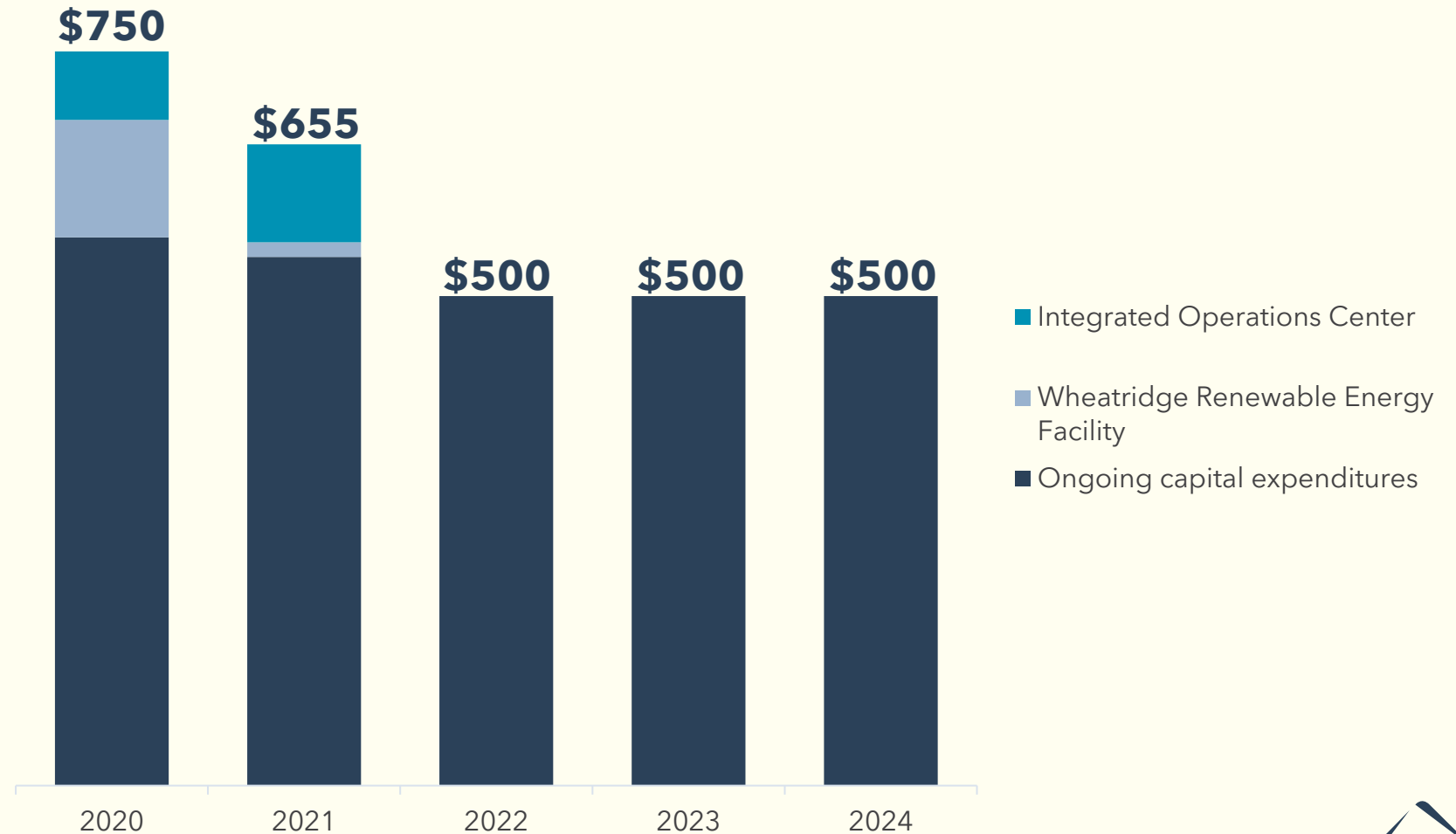
## FRAMEWORK



# Capital planning<sup>(1)</sup>

## Outlook

- Increased capital spending by \$100 million between 2020 and 2021
- Updating and replacing aging generation, transmission and distribution equipment
- Building a smarter, more resilient grid



(1) Capital expenditures exclude allowance for funds used under construction. Dollar values in millions.

# Environmental, Social and Governance (ESG)

## Environmental

### **Decarbonize**

Aiming to achieve companywide net zero greenhouse gas emissions by 2040

### **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**

PGE employees and retirees volunteered 32,900 hours

### **Employees**

Leadership development programs for women and People of Color employees interested in management, eight Business Resource Groups, pre-apprentice training and outreach and tuition reimbursement

## Governance

### **Experienced**

Wide range of skills, backgrounds and leadership positions

### **Diverse**

50% of Directors are diverse based on gender/race, 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

An aerial photograph of a river winding through a dense, green forest. The river is the central focus, with sunlight reflecting off its surface. The surrounding trees are lush and green, creating a vibrant natural setting.

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# Portland General Electric

## APPENDICES



# 2016 Integrated Resource Plan

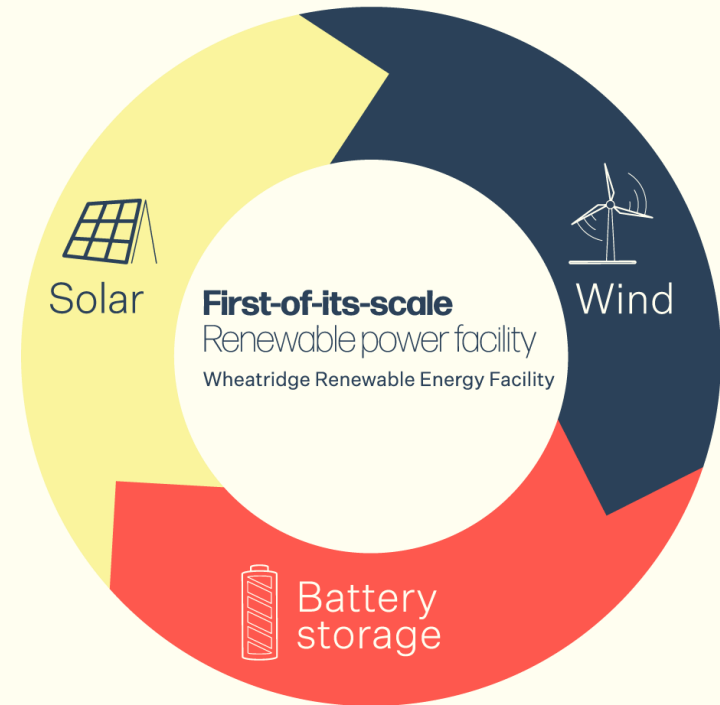
A flexible, balanced plan that reflects our commitment to a low-carbon future and achieves the Oregon Clean Electricity Plan

## 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



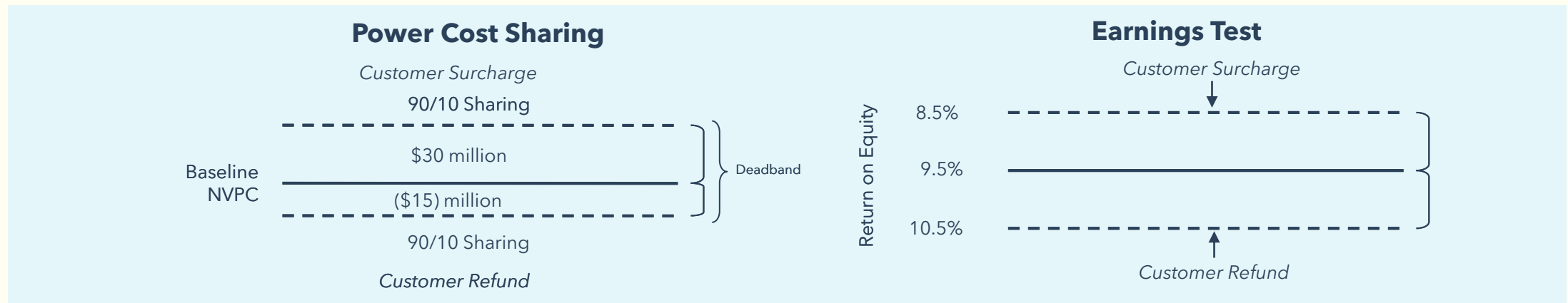
(1) PGE will own 100 megawatts of the wind project. Subsidiaries of NextEra Energy Resources will own the balance of the project and sell its output to PGE under 30-year power purchase agreements

# 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

Collections under the decoupling mechanism are subject to an annual limitation of 2% of the applicable tariff schedule

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 16% 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

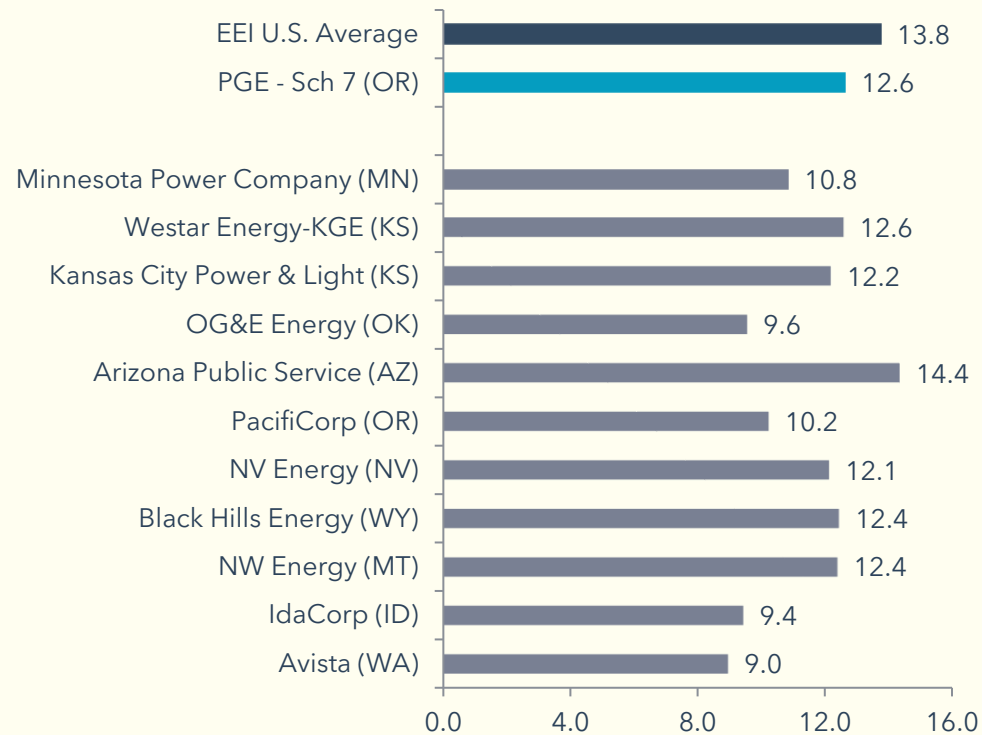


# Average retail price comparison

## Residential and Commercial - Winter 2020

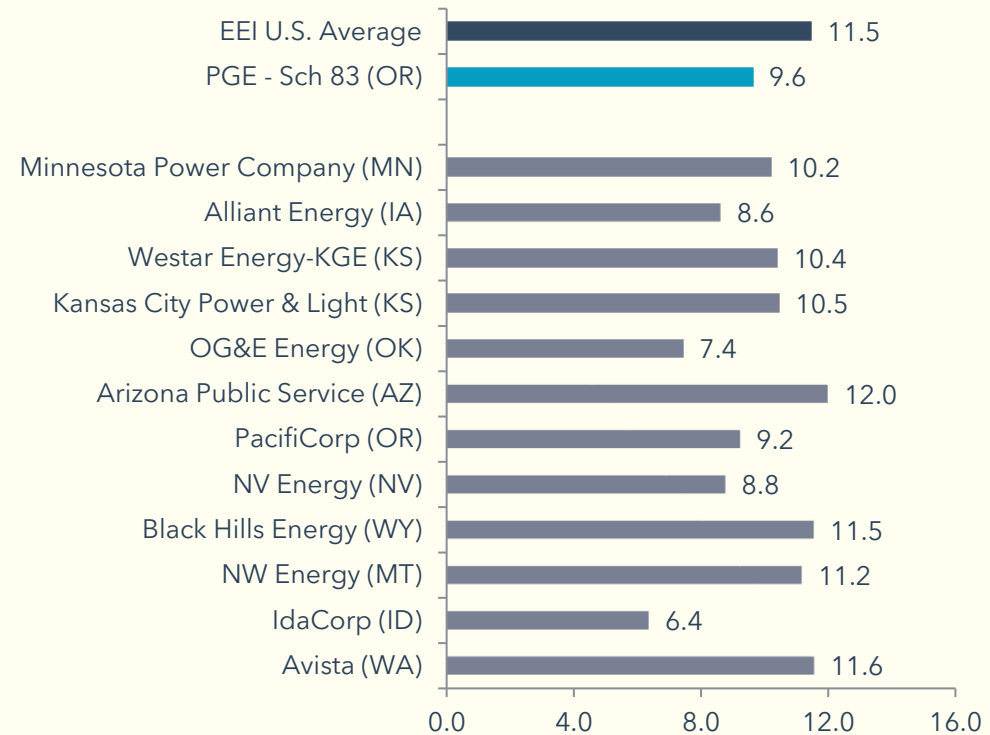
### Residential Electric Service Prices:

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 Jan. 1, 2020

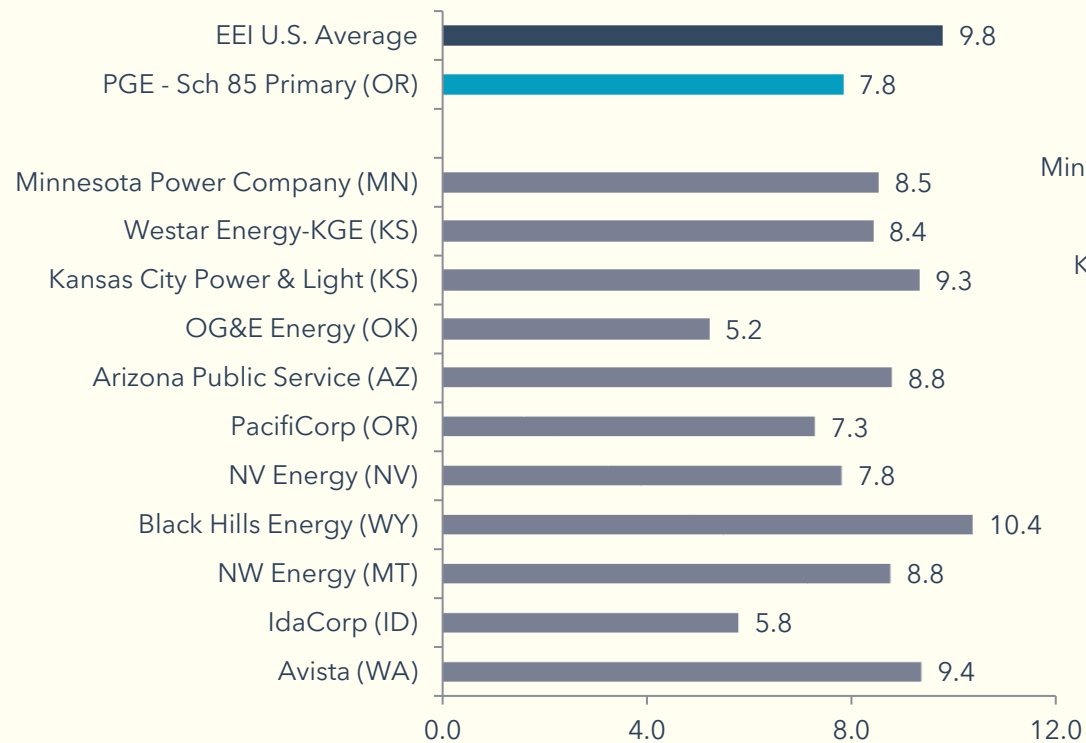


# Average retail price comparison

## Small and Large Industrial – Winter 2020

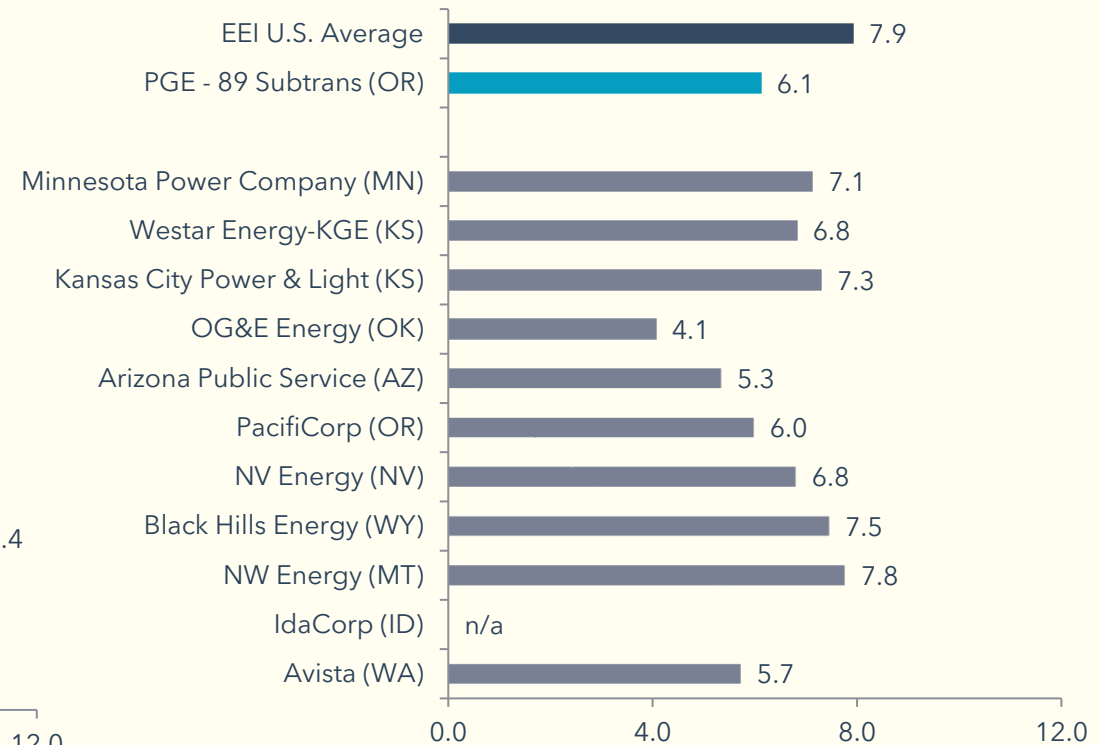
### Industrial Electric Service Prices

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
- EI U.S. Average is based on Investor-owned utilities only
- Source: EI Typical Bills and Average Rates Report for Prices in effect Jan. 1, 2020

