

Investor Presentation

Portland General Electric
EEI Financial Conference
November 2017



Cautionary Statement

Information Current as of October 27, 2017

Except as expressly noted, the information in this presentation is current as of October 27, 2017 — the date on which PGE filed its Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 — and should not be relied upon as being current as of any subsequent date. PGE undertakes no duty to update the presentation, except as may be required by law.

Forward-Looking Statements

Statements in this news release 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 earnings guidance; statements regarding the expected capital costs for the Carty Generating Station and the recovery of those costs; 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 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; and general economic and financial market conditions. As a result, actual results may differ materially from those projected in the forward-looking statements. All forward-looking statements included in this news release are based on information available to the company on the date hereof and such statements speak only as of the date hereof. The company assumes no obligation to update any such forward-looking statement. Prospective investors should also review the risks and uncertainties listed in the company’s most recent annual report on form 10-K and the company’s reports on forms 8-K and 10-Q filed 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.

PGE Value Drivers

Clear focus: 100%
regulated utility

Attractive service
area

Investing in a
reliable and clean
energy future

Focus on
operational
effectiveness and
efficiency

Deliver exceptional
customer
experiences

Building a smarter
more resilient grid

The Company

**Strong
Platform for
Stakeholder
Value**



PGE at a Glance

Quick Facts:

- Vertically integrated energy company encompassing generation, transmission and distribution
- ~873,000 customers⁽¹⁾
- Serve 46 percent of Oregonians, 51 incorporated cities
- Service area covers majority of Oregon's commercial and industrial activity

Financial Snapshot⁽²⁾:

- Revenue: \$1.9 billion
- Earnings per share: \$2.16
- Net utility plant assets: \$6.4 billion



1) As of 9/30/2017

2) As of 12/31/2016

Strategic Direction

OUR MISSION

We provide safe, reliable and cleaner energy solutions to power our customers' lives every day.

OUR VALUES

Champion relentless safety

Serve customers boldly

Embrace diversity and inclusion

Listen and lead the way

Be a great neighbor

Act with integrity by living our Guiding Behaviors

OUR STRATEGY

Deliver exceptional customer experiences

Invest in a reliable and clean energy future

Build a smarter, more resilient grid

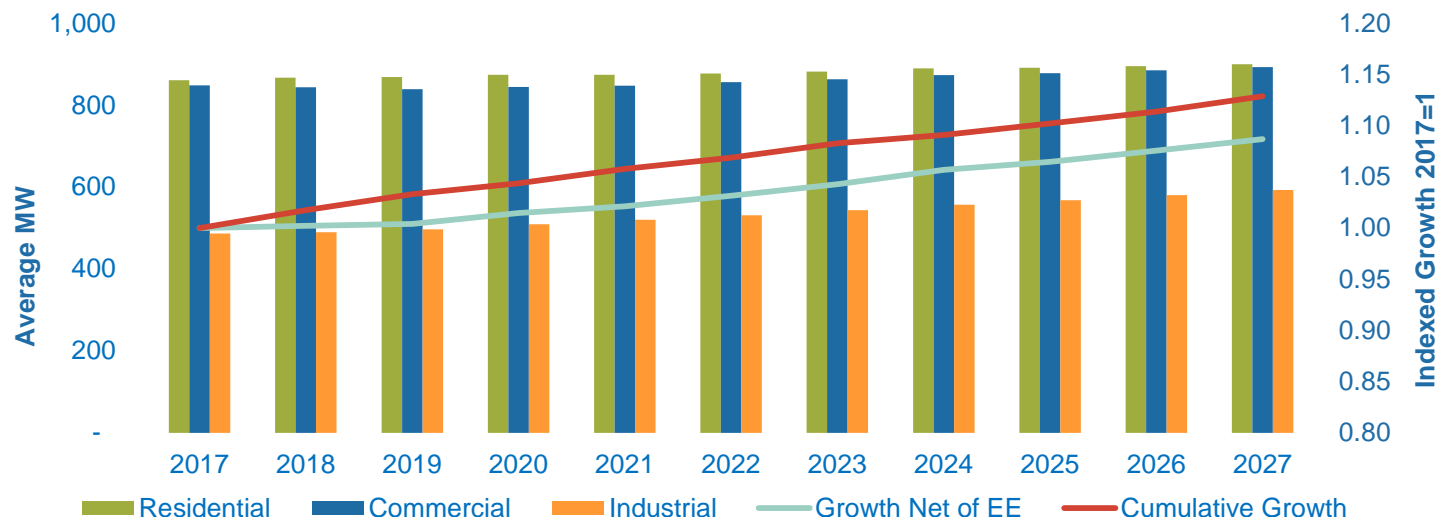
Pursue excellence in our work

OUR VISION

To be our customers'
most-trusted energy partner.

Attractive, Growing Service Area

Long-Term Load Growth⁽¹⁾



Residential

- 1% average annual customer growth
- Above-average population growth due to in-migration

Commercial

- Employment growth drives increasing demand
- Weather response driven by cooling needs

Industrial

- Fastest growth rate of all three customer classes
- 5-year growth trajectory driven by high-tech expansion and new data centers

1) Sector load growth shown is net of Energy Efficiency

Constructive Regulatory Environment

Regulatory Construct

- Oregon Public Utility Commission
- 9.6% allowed return on equity
- 50% debt and 50% equity capital structure
- Forward test year
- Integrated Resource Planning (IRP)
- Renewable Portfolio Standard (RPS)
- Proven track record of achieving reasonable settlements

Governor-appointed three member commission serving 4 year term

Term Expiration

Lisa Hardie [D] (Chair)

May 2020

Megan Decker [D]

Mar 2021

Stephen Bloom [R]

Nov 2019

Regulatory Mechanisms

- Net variable power cost recovery
 - Annual Power Cost Update Tariff (AUT)
 - Power Cost Adjustment Mechanism (PCAM)
- Decoupling through 2019
- Renewable Adjustment Clause (RAC)



2018 General Rate Case

Proposed settlement reached – Final order to be issued December 2017

- Filed Feb. 28, 2017
- 2018 forward test year
- Expect Commission order in Dec. 2017
- New customer prices will be effective Jan. 1, 2018
- Return on equity: 9.5%
- Rate base: \$4.5 billion
- Capital structure: 50% debt, 50% equity
- Cost of capital: 7.46%
- Annual revenue requirement increase: ~\$20 million
- Estimated overall increase in customer prices: ~1.2%



Key Strengths

**Strong
Platform for
Stakeholder
Value**



PGE Key Strengths and Value Proposition

**Strong platform
executing
sustained long-
term growth**

Focus on customers

Diverse generation and customer base

High-quality utility operations

Solid financial performance

Investing in a reliable and clean energy future

Building a smarter more resilient grid

Focus on customers



Top Quartile System Reliability

Edison Electric Institute



Top Quartile Customer Satisfaction

TQS Research, Inc. and Market Strategies International



Most Trusted Brand & No. 1 for Dedication to the Environment

Market Strategies International



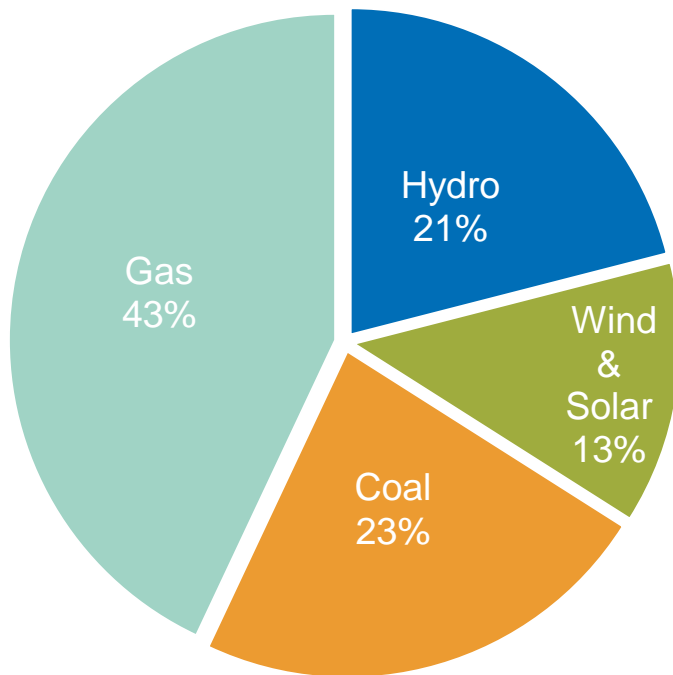
Top Ranked Renewable Energy Program

National Renewables Energy Laboratory

Diverse Generation & Customer Base

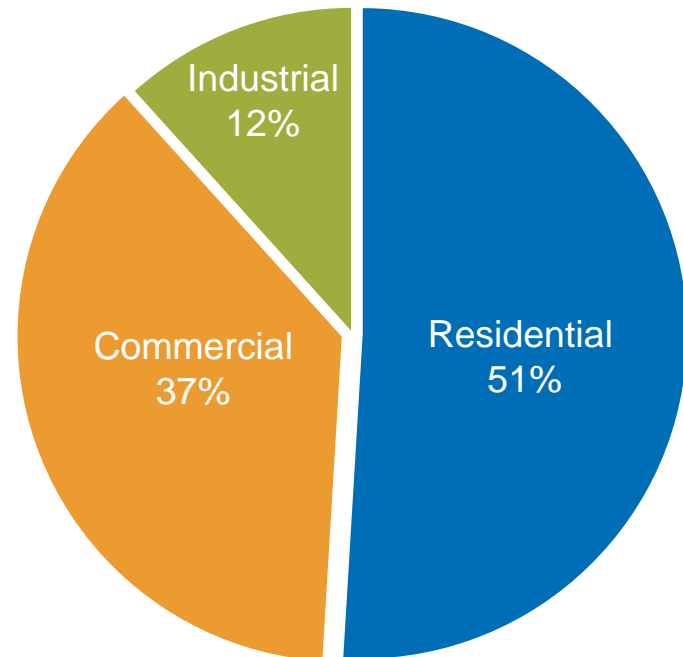
**Power Sources as a
Percent of Retail Load**
(2017 AUT)⁽¹⁾

Total = 2,103 MWa



**Retail Revenues
by Customer Class**
(2016)

Total = \$1.8B



1) Hydro and wind/solar include PGE owned and contracted resources; purchased power includes long-term contracts

High-Quality Utility Operations

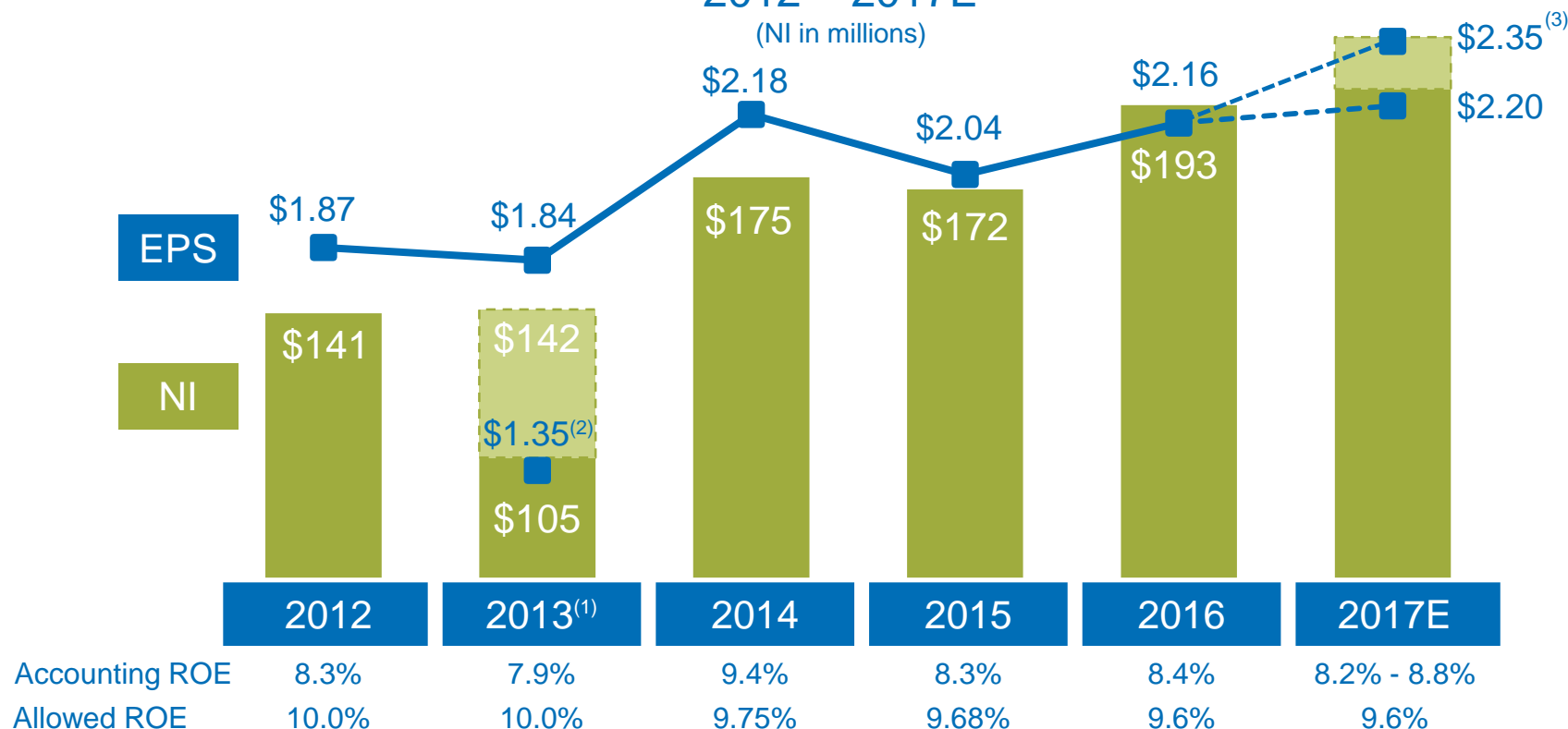
- Highly dependable generation fleet with five-year average availability of 92 percent⁽¹⁾
- Strong power supply portfolio management to maintain reliability and optimize resources
- Progressive approach to reduce coal generation – Boardman 2020 Plan and Colstrip 2035 Plan
- Expected investments to provide a safer and more reliable service to our customers as well as new customer information system and technology
- Exploring smart grid opportunities to incorporate more renewables, decarbonize, power the transportation network of the future and identify new cost-effective demand side resources



1) Represents 2012 through 2016

Solid Financial Performance

Net Income, Earnings per Share, and ROE
2012 – 2017E
(NI in millions)

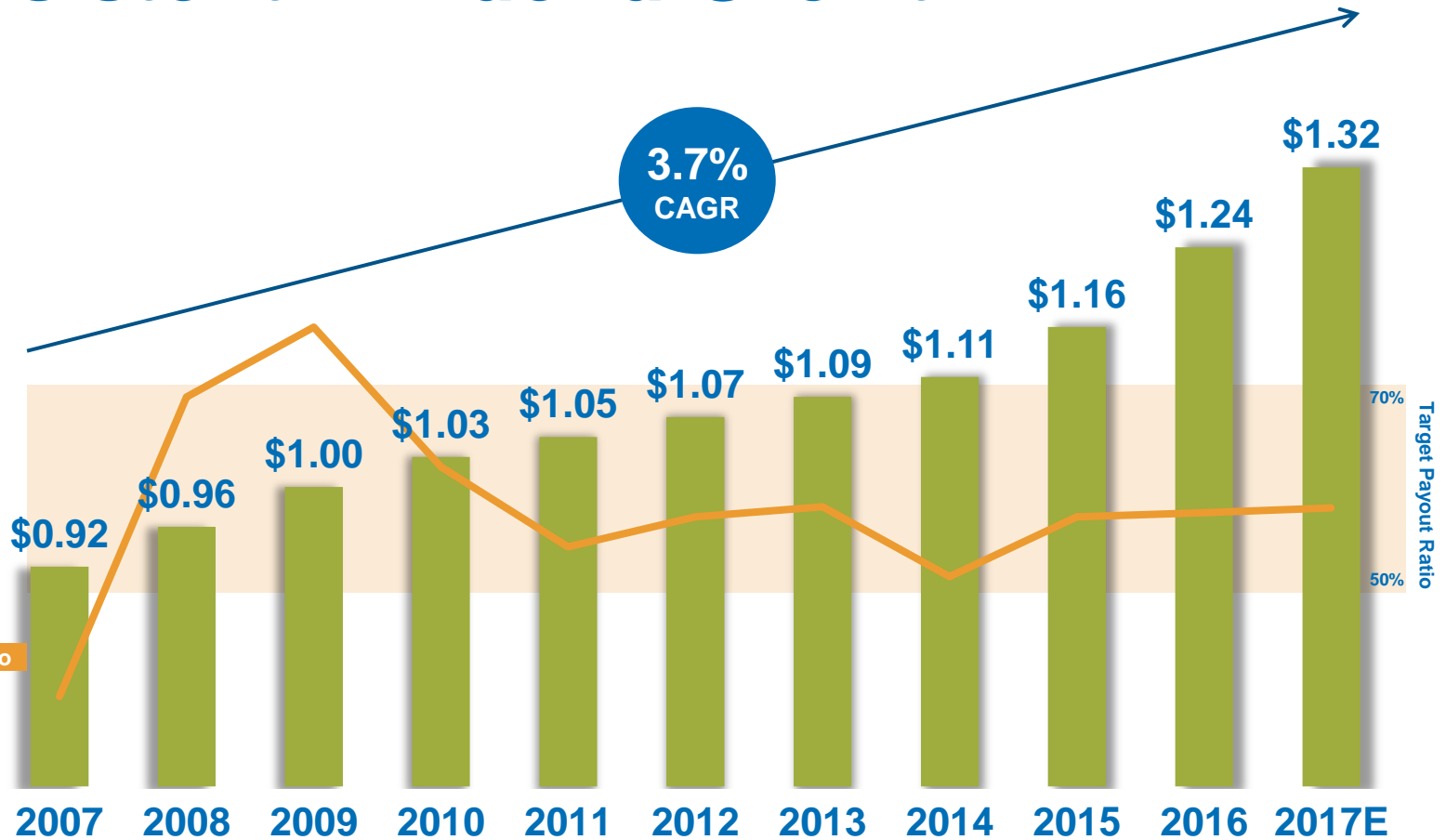


1) 2013 displays full-year non-GAAP adjusted operating earnings, which excludes the negative impact of the Cascade Crossing expense (\$0.42 EPS) and the customer billing refund (\$0.07 EPS)

2) GAAP earnings for year-end 2013 were \$105 million or \$1.35 per diluted share

3) 2017 full year EPS guidance \$2.20-\$2.35

Consistent Dividend Growth



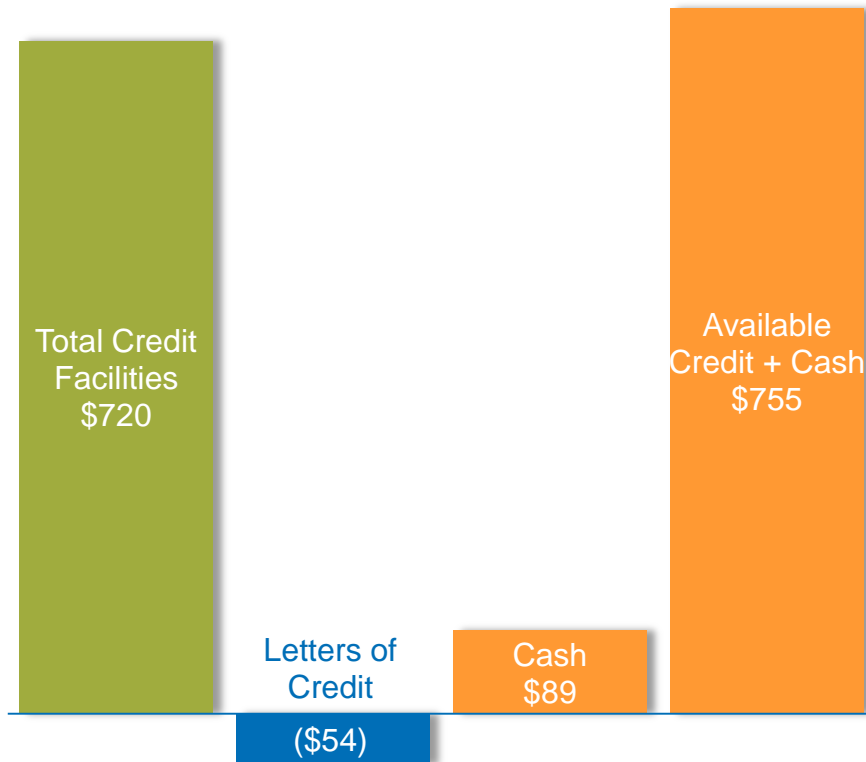
Future dividend increases expected to be in the 5-7% range⁽¹⁾

Note: Represents annual dividends paid

1) Based on the company achieving earnings and cash flow estimates and other factors influencing dividends and subject to approval of the Board of Directors

Strong Liquidity Position for Growth

Revolving Credit Facilities⁽¹⁾ (in millions)



Financial Resources

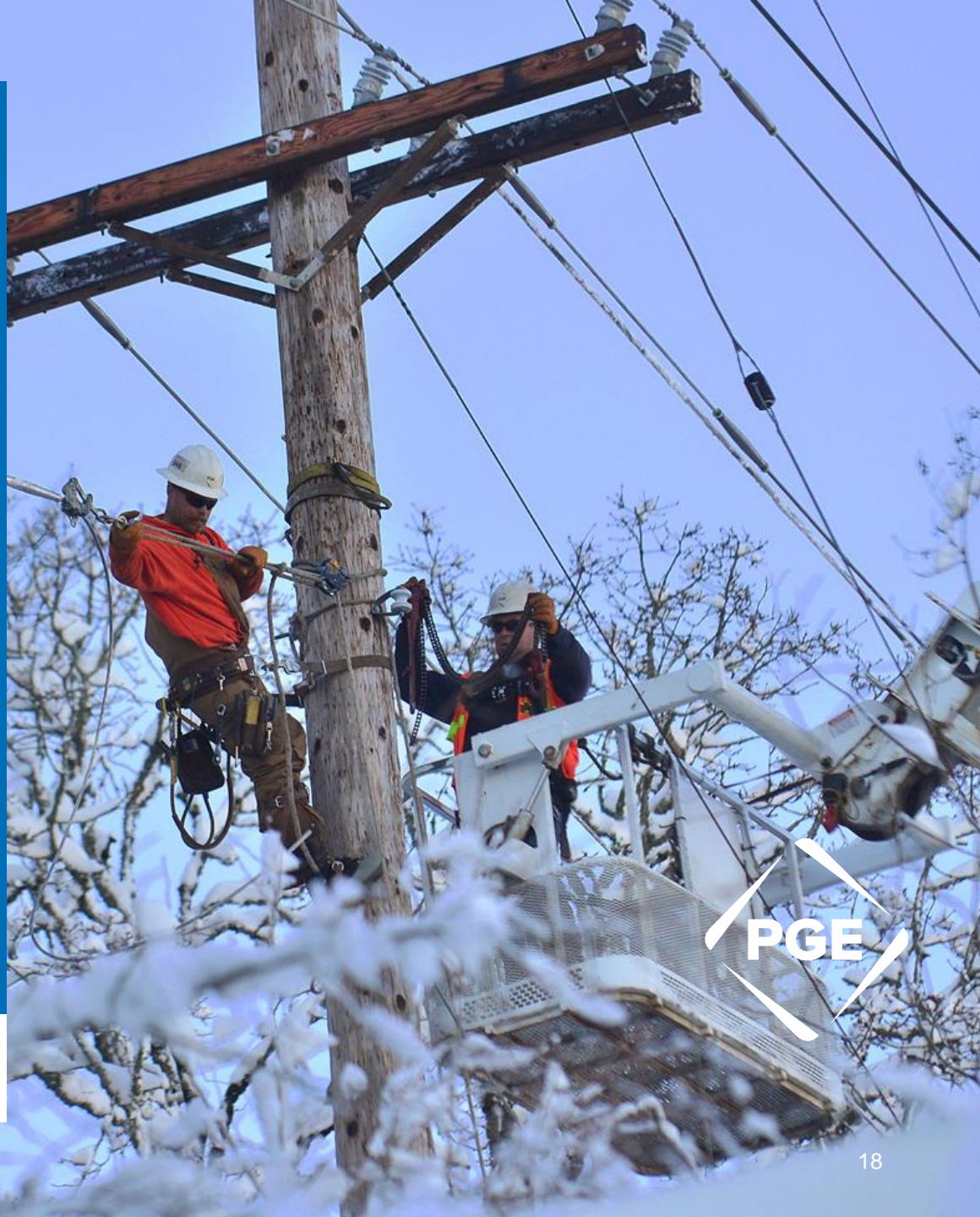
- Investment grade credit ratings
- Manageable debt maturities
- Target capital structure of 50% debt and 50% equity

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

1) All values as of 09/30/2017

The Direction

Strong Platform for Stakeholder Value



2016 Integrated Resource Plan



- A flexible, balanced plan that reflects our commitment to a low-carbon future and in keeping with the Oregon Clean Electricity Plan
- Process includes continuing dialog with OPUC staff and stakeholders
- Productive bilateral negotiations continue for capacity need

Areas of Focus

- Procurement of renewables (100 MWa) to meet Oregon Clean Electricity Plan
- Acquire up to 350-450 MW of capacity to ensure reliability
- Energy efficiency (135 MWa) and demand-side actions (77 MW)

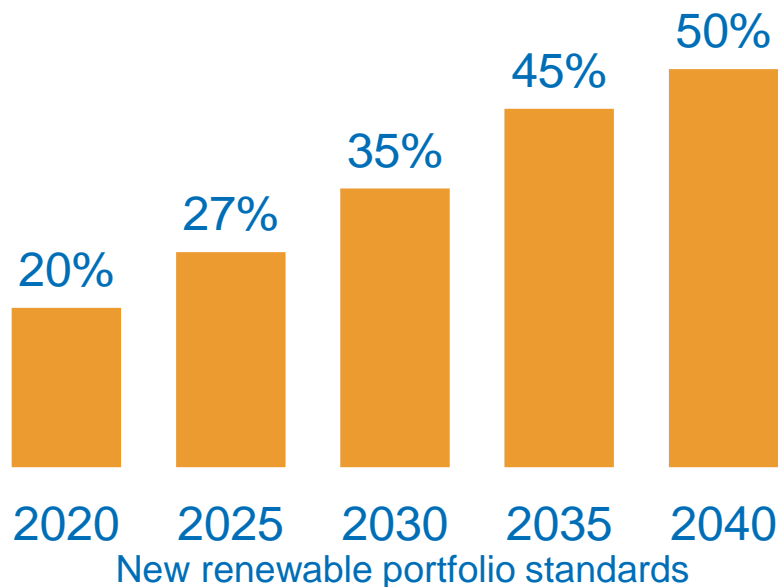
1) See docket UM 1892 on the OPUC website for details

Oregon Clean Electricity Plan

Senate Bill 1547

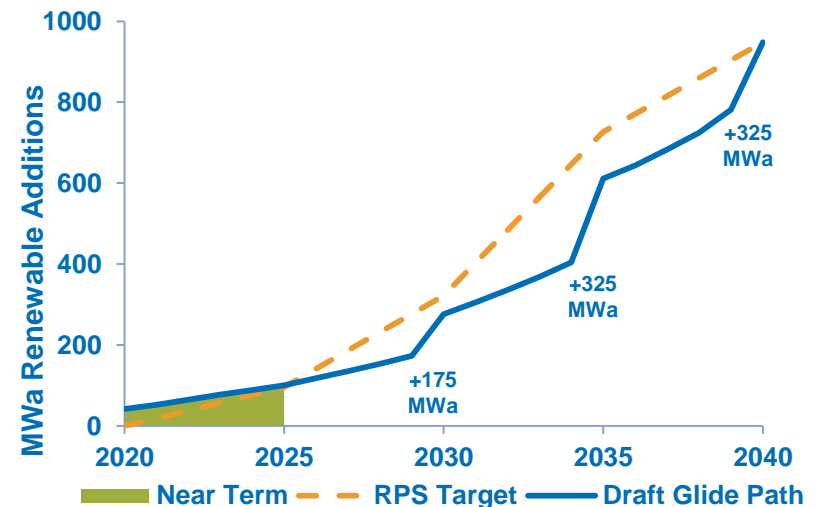
Key Elements of Plan

- Transitions Oregon off coal-fired generation by 2035
- Includes PTCs in annual power cost filing beginning in 2017
- Encourages transportation electrification



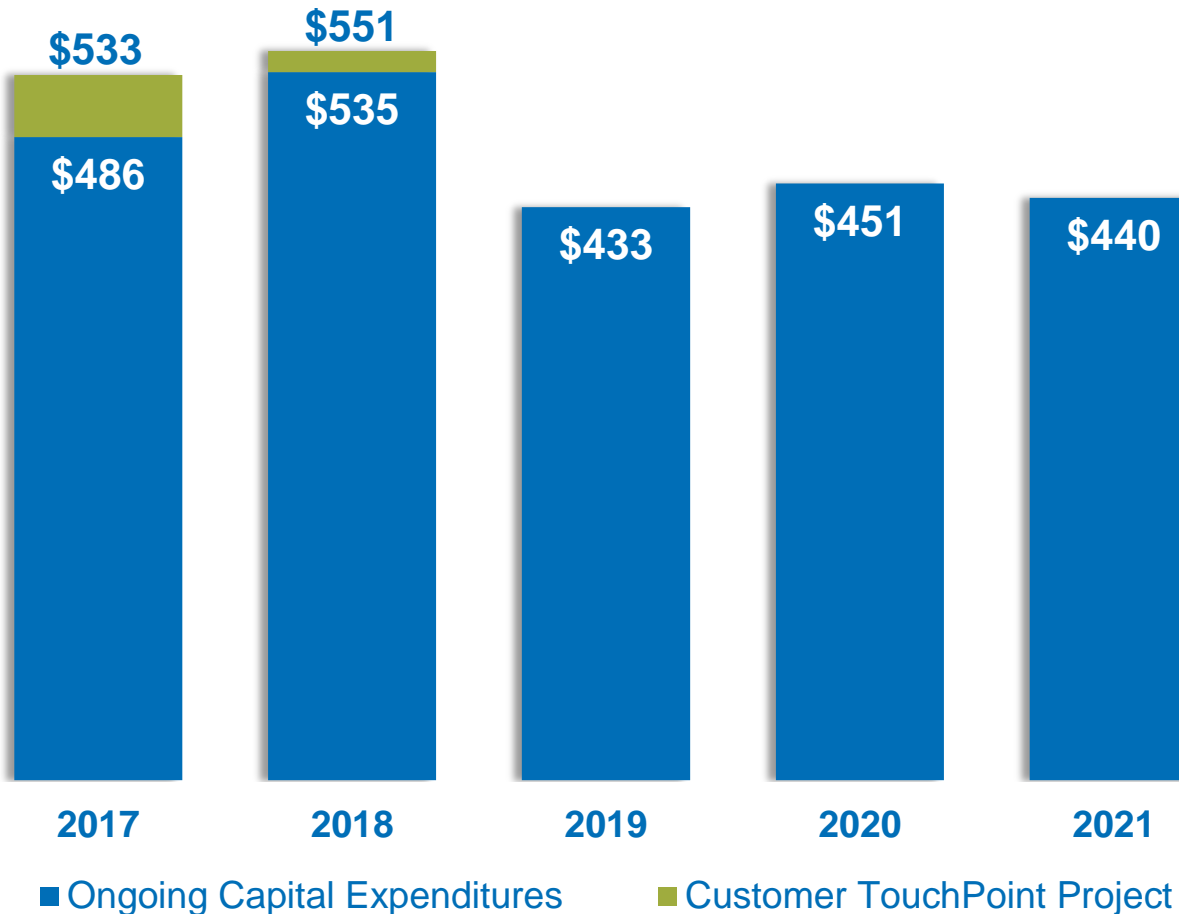
Long-Term Strategy

- Layered approach balances near-term and long-term risks and benefits for customers
- Incremental renewable actions by 2021 reduce near-term carbon emissions and put PGE on track to meet State's carbon reduction goal



Forecasted Capital Expenditures

in millions⁽¹⁾



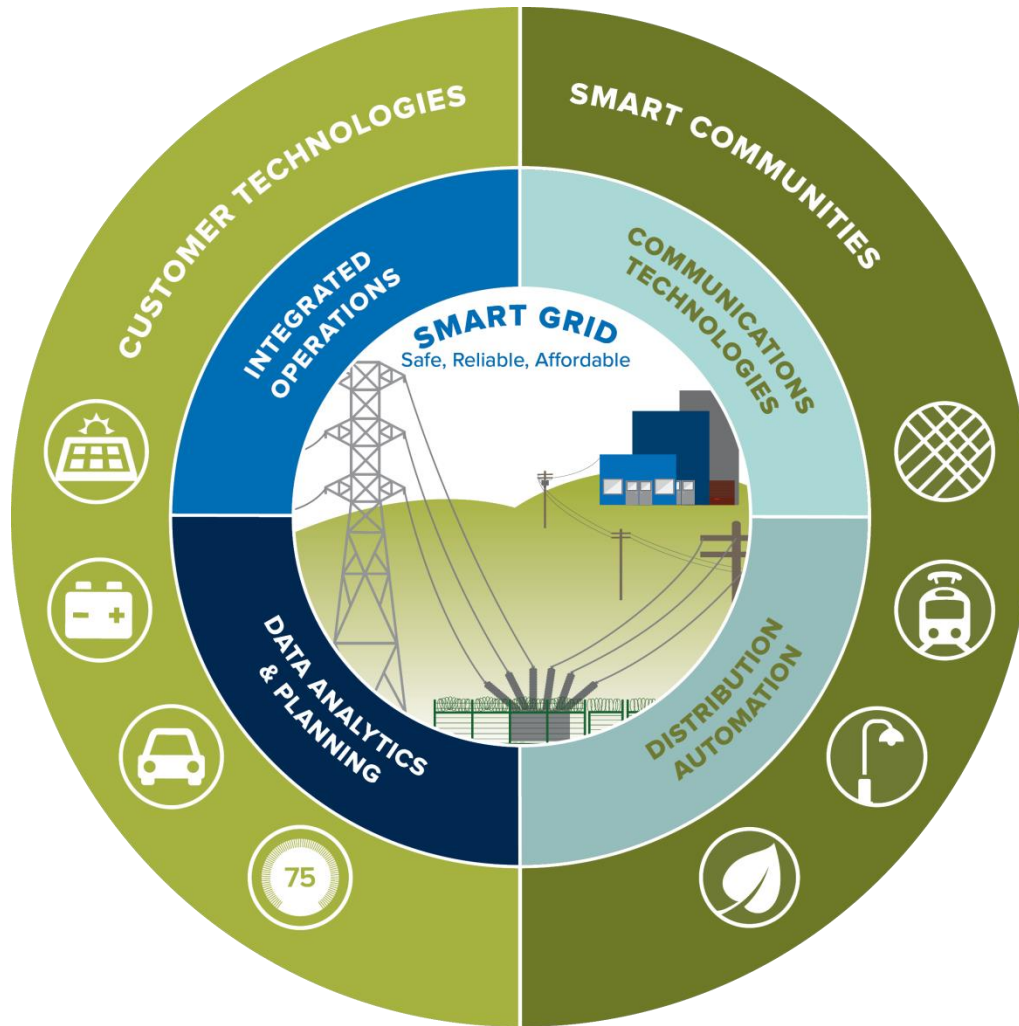
Outlook

Investing in a reliable and clean energy future:

- Substation reliability upgrades
- PCB Transformer testing & replacement
- Underground cable replacement
- Customer Information Systems and technology tools

1) Does not include any capital related to the 2016 IRP

Smart Grid Strategies



Building a smarter more resilient grid:

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

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Portland General Electric Appendices



Generation: Baseload Resource

Carty Generating Station: Placed in-service on July 29, 2016



Carty Generating Station, a 440 MW natural gas baseload plant near Boardman, OR

| | |
|---|-----------------------|
| Capital costs, including AFDC, approved in 2016 GRC: | \$514M |
| Total estimated cost, including AFDC, for completion: | \$640M ⁽¹⁾ |
| Carty plant in-service as of 09/30/2017: | \$637M |
| Estimated time frame to complete litigation: | 2-4 years |

1) Total estimated cost does not reflect any amounts that may be received from sureties under the performance bond, the original contractor, or contractor's parent company

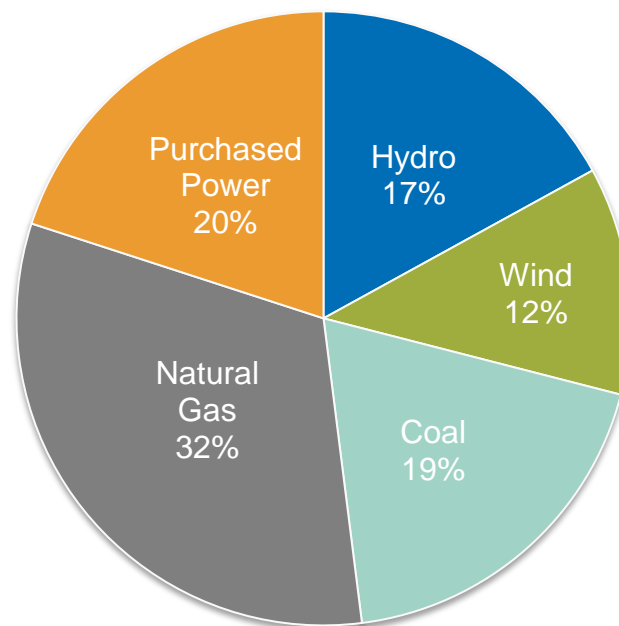
Diversified Resource Mix

Resource Capacity as of 12/31/2016

| | Capacity in MW | % of Total Capacity |
|--------------------------------------|-------------------|------------------------|
| Hydro⁽¹⁾ | | |
| Deschutes River Projects | 303 | 6% |
| Clackamas/Willamette River Projects | 192 | 4% |
| Hydro Contracts | 534 | 11% |
| | 1,029 | 22% |
| Natural Gas/Oil⁽¹⁾ | | |
| Beaver Units 1-8 | 508 | 11% |
| Coyote Springs | 243 | 5% |
| Port Westward Unit 1 | 395 | 8% |
| Port Westward Unit 2 | 225 | 5% |
| Carty | 434 | 9% |
| | 1,805 | 38% |
| Coal⁽¹⁾ | | |
| Boardman | 518 | 11% |
| Colstrip | 296 | 6% |
| | 814 | 17% |
| Wind | | |
| Biglow Canyon ⁽²⁾ | 450 | 10% |
| Tucannon River ⁽³⁾ | 267 | 6% |
| Wind and Solar Contracts | 52 | 1% |
| | 769 | 17% |
| Additional Purchased Power | 313 | 7% |
| Total | 4,730 | 100% |

Power Sources as a Percent of Retail Load (2016 Actuals)

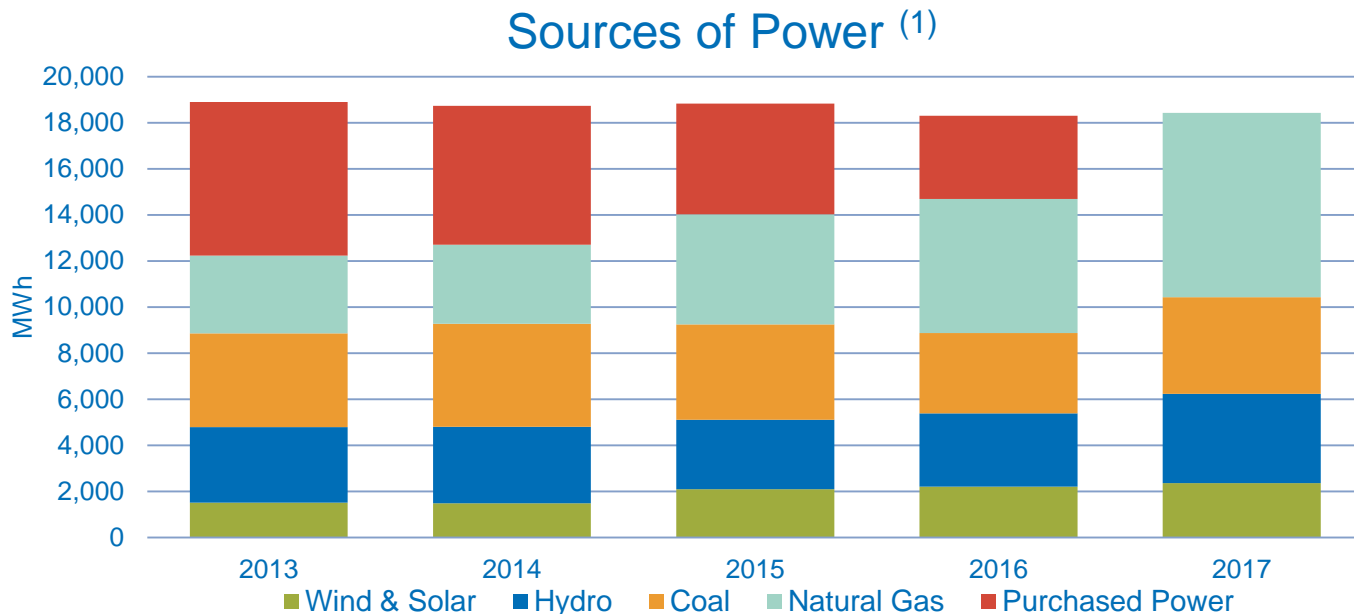
Total = 18,295,000 MWh



- 1) Capacity of a given plant represents the megawatts the plant is capable of generating under normal operating conditions, net of electricity used in the operation of the plant.
- 2) With respect to Biglow Canyon, capacity represents nameplate and differs from expected energy to be generated, which was a 23% capacity factor in 2016.
- 3) With respect to Tucannon River Wind Farm, capacity represents nameplate and differs from expected energy to be generated, which was a 28% capacity factor in 2016.

Changing Generation Portfolio

PGE's evolving generation portfolio now enables PGE to meet 100% of its customers' energy needs



Changes driven by:

- New generation: Port Westward Unit 2 (natural gas, Q4 2014), Tucannon River (wind, Q4 2014), and Carty (natural gas, July 2016)
- Next requirements under Oregon's RPS (requiring a portion of PGE's retail load to be serviced by renewable resources): 20% by 2020, 27% by 2025, 35% by 2030, 45% by 2035 and 50% by 2040

Note:., Hydro and wind/solar include PGE owned and contracted resources

1) Based on forecasts in PGE's Annual Update Tariff filing.

Generation Plant Operations

Track record of high availability

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-------------------------|------------|------------|------------|------------|------------|------------|
| PGE Thermal Plants | 90% | 92% | 84% | 89% | 89% | 92% |
| PGE Hydro Plants | 100% | 99% | 100% | 100% | 99% | 99% |
| PGE Wind Farm | 97% | 98% | 98% | 94% | 97% | 95% |
| PGE Wtd. Average | 93% | 94% | 89% | 92% | 93% | 93% |
| Colstrip Unit 3 & 4 | 84% | 93% | 66% | 83% | 93% | 85% |

Generation Reliability and Maintenance Excellence Program

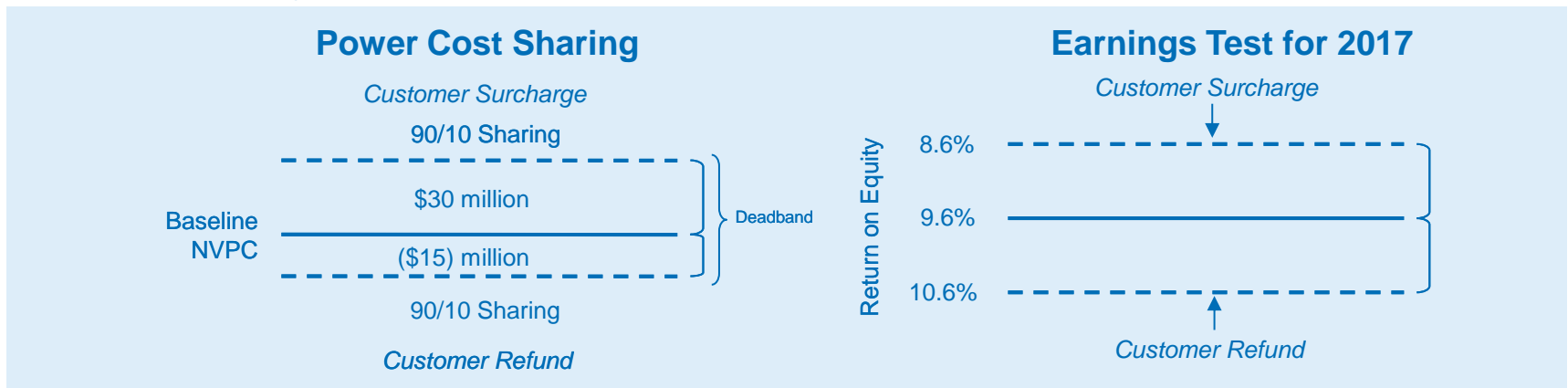
- Corporate strategy started in 2007 to increase availability of PGE's generation plants and increase predictability of plant dispatch costs for power operations
- Key Elements:
 - Reliability Centered Maintenance (RCM) modeling for PGE's generating plants and incorporation of models into PGE's maintenance management system (Maximo)
 - Root Cause Analysis (RCA) for unplanned generation outages, which expedites communication across PGE's fleet on both resolution and prevention actions
 - Internal training on technical skills, including inspection, welding and metallurgy – supporting both RCM and RCA efforts

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 to the extent it results in PGE's actual regulated ROE being no greater than 8.6%; customer refund occurs to the extent it results in PGE's actual regulated ROE being no less than 10.6%

Renewable Portfolio Standard

Additional Renewable Resources

- As of 2016, PGE had the following qualifying renewable resources:

| Type of Resource | % of Retail Load |
|------------------|------------------|
| Wind | 11.6% |
| Low Impact Hydro | 3% |
| Solar & Other | 0.3% |

Renewable Portfolio Standard:

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

- Renewable Portfolio Standard qualifying resources supplied approximately 10 percent of PGE's retail load in 2012, 2013, & 2014, and approximately 15 percent of retail load in 2015 and 2016.

Renewable Adjustment Clause (RAC)

- Renewable resources can be tracked into prices, through an automatic adjustment clause, without a general rate case. A filing must be made to the OPUC by the sooner of the online date or April 1 in order to be included in prices the following Jan. 1. Costs are deferred from the online date until inclusion in prices and are then recovered through an amortization methodology.

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 small nonresidential customers (≤ 30 kW) and a Lost Revenue Recovery Adjustment (LRRRA), for large nonresidential customers (between 31 kW and 1 MWa).

- The SNA is based on the difference between actual, weather-adjusted usage per customer and that projected in PGE's 2016 general rate case. The SNA mechanism applies to approximately 61% of 2016 base 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 27% of 2016 base revenues.

In PGE's 2016 rate case, PGE and parties stipulated to the extension of the decoupling mechanism for three years, through the end of 2019. In addition, the use-per-customer baseline was adjusted for new connects with lower energy usage.

Recent Decoupling Results

| (in millions) | 2014 | 2015 | 2016 |
|----------------------------------|----------------|----------------|--------------|
| Sales Normalization Adjustment | \$(6.6) | \$(8.8) | \$1.9 |
| Lost Revenue Recovery Adjustment | \$1.4 | \$(0.5) | \$(0.8) |
| Total adjustment | \$(5.2) | \$(9.3) | \$1.1 |

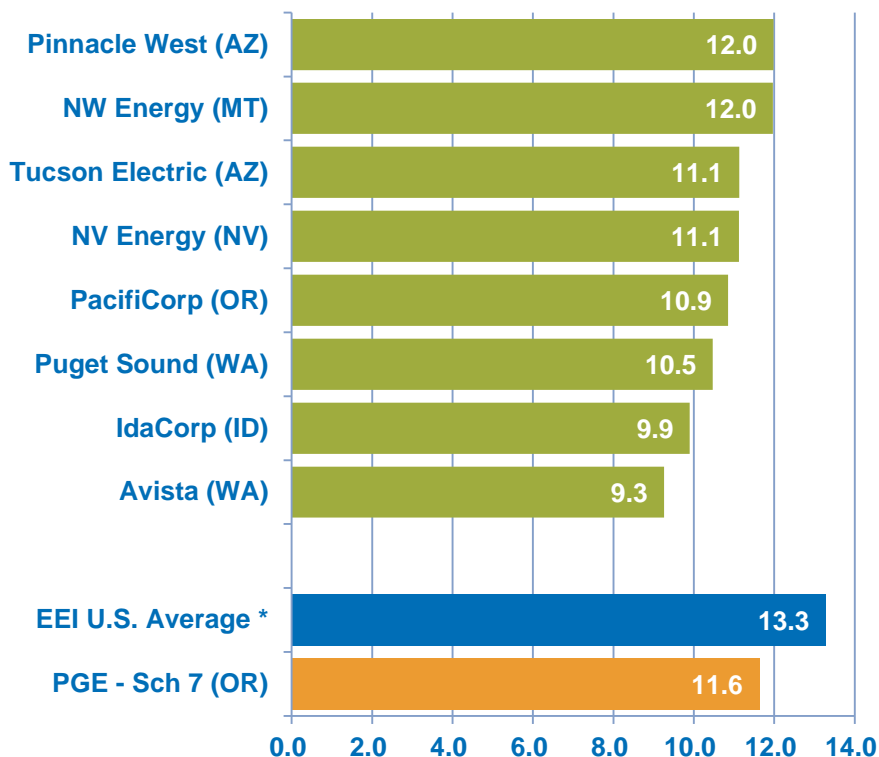
Note: refund = (negative) / collection = positive

Average Retail Price Comparison

Residential & Commercial – Winter 2017

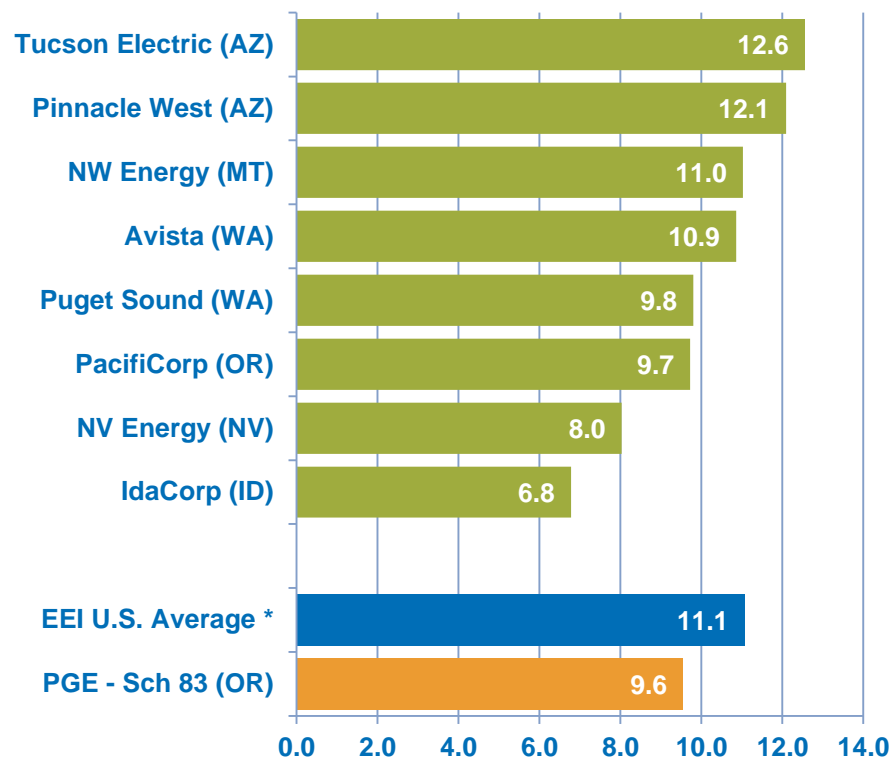
Residential Electric Service Prices:

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)



* This average is based on Investor-owned utilities only.

** Idaho Power does not report a price to EEI for large industrial customers at this usage and demand level.

Source: EEI Typical Bills and Average Rates Report for Prices in effect January 1, 2017.

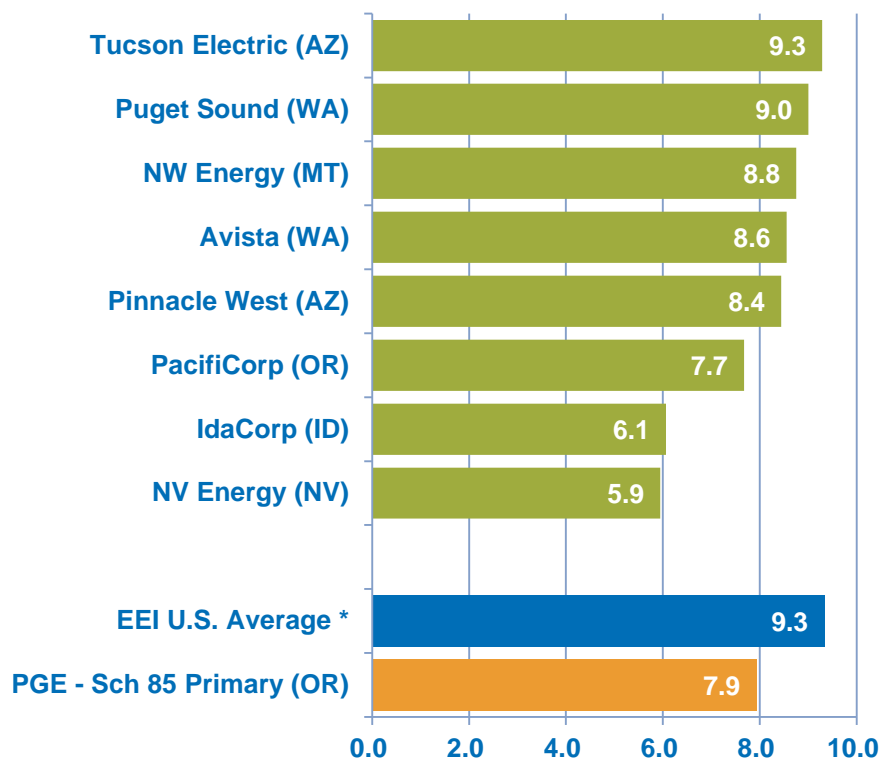
Note: EEI U.S. Average is based on Investor-owned utilities only.

Average Retail Price Comparison

Small & Large Industrial – Winter 2017

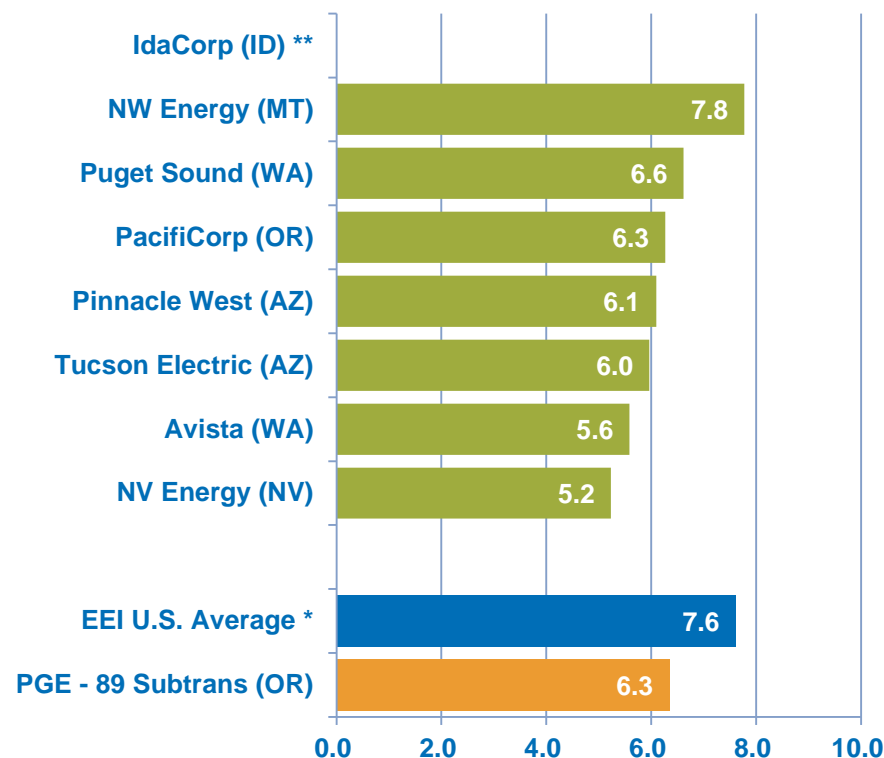
Industrial Electric Service Prices

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)



* This average is based on Investor-owned utilities only.

** Idaho Power does not report a price to EEI for large industrial customers at this usage and demand level.

Source: EEI Typical Bills and Average Rates Report for Prices in effect January 1, 2017.

Note: EEI U.S. Average is based on Investor-owned utilities only.