





47<sup>th</sup> Annual EEI Financial Conference November 11-14, 2012



# Cautionary Statement



#### **Information Current as of November 8, 2012**

Except as expressly noted, the information in this presentation is current as of November 8, 2012 — the date on which PGE filed its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2012 — 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 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 earnings guidance, statements regarding future load, hydro conditions and operating and maintenance costs; statements concerning implementation of the Company's Integrated Resource Plan and related future capital expenditures, statements concerning future compliance with regulations limiting emissions from generation facilities and the costs to achieve such compliance; statements regarding the outcome of any legal or regulatory proceeding; 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 the reductions in demand for electricity and the sale of excess energy during periods of 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; 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; failure to complete projects on schedule and within budget, or the abandonment of capital projects, which could result in the Company's inability to recover project costs; 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 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 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-O 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





#### PGE INVESTMENT THESIS

# Strong Platform. Positioned for Sustained Growth.



The Company

The Strengths

The Growth







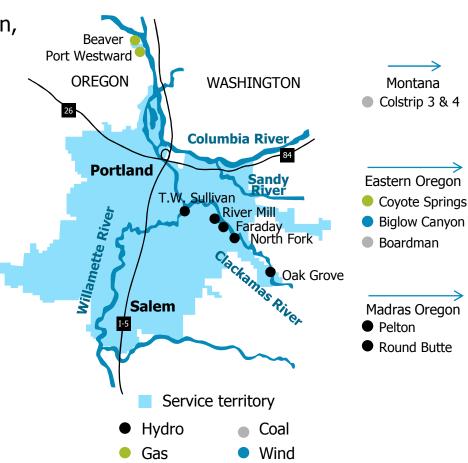
# PGE At A Glance



 Vertically integrated – generation, transmission and distribution

Market cap >\$2B

- Service area in northwest Oregon
  - includes Portland and Salem
  - 829,000 customers<sup>(1)</sup>
  - 50% of Oregonians depend on PGE for electricity
  - 75% of Oregon's commercial and industrial activity



# Attractive, Growing Service Territory



#### **Demographic Growth**

#### **Continued in-migration**

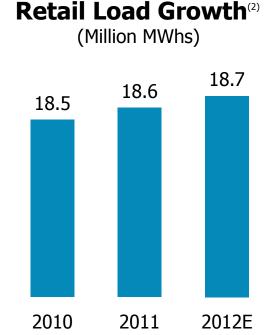
 Population growth of 1-1.2% annually through 2020<sup>(1)</sup>



#### **Industrial Growth**

#### **Economy continues to improve**

- Growth in high-tech & manufacturing
  - Intel's D1X facility
  - Data centers
  - Parts and other manufacturing
- Construction employment growing compared to a decline for the US



 Long term forecast >1% annually through 2030

- 1) Population growth based on data from The Oregon Office of Economic Analysis (OEA)
- 2) Adjusted for weather and certain industrial customers; 2012E assumes .5% load growth over 2011 levels

# History of Successful Execution of Capital Projects



#### **Recent Capital Projects**

- Biglow Canyon Wind Farm (2007-2010)
  - Three phase build-out; \$960 million
- Smart Meters (2008-2010)
  - 825,000 meters installed; \$145 million
- Selective Water Withdrawal (2009)
  - Innovative fish migration facility; \$85 million<sup>(2)</sup>
- Port Westward Gas Plant (2007)
  - 410 MW CCGT; \$280 million



<sup>1) 2011</sup> rate base amount represents the average rate base included in PGE's 2011 General Rate Case

<sup>2)</sup> Represents PGE's 67% share of the facility

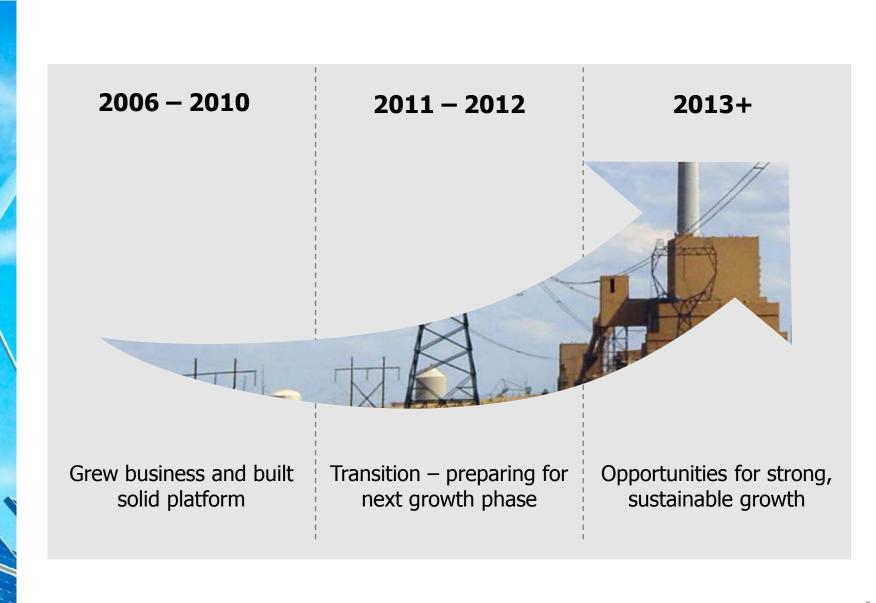
# Regulatory Environment



- Oregon Public Utility Commission
  - Governor-appointed Commission with staggered four-year terms
- 10.0% allowed return on equity
- 50% debt and 50% equity capital structure
- Forward Test Year
- Net Variable Power Cost Recovery
  - Annual Power Cost Update Tariff (AUT)
  - Power Cost Adjustment Mechanism (PCAM)
- Decoupling
- Renewable Adjustment Clause (RAC)
- Renewable Energy Standard
- Integrated Resource Plan (IRP)

# Ready for the Next Growth Phase





#### PGE INVESTMENT THESIS

# Strong Platform. Positioned for Sustained Growth.





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The Growth







# Key Strengths





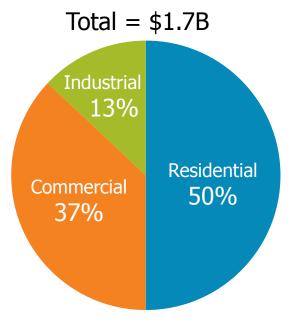
- Diversified customer base and generation portfolio
- 2 High quality utility operations
- 3 High customer satisfaction rate
- 4 Solid financial performance
- Strong balance sheet and financial resources

# 1. Diversified Customer Base and Generation Portfolio



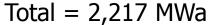


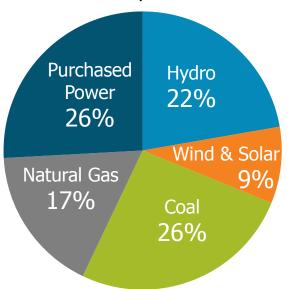
#### Retail Revenues by Customer (2011)



#### Power Sources as a Percent of Retail Load

Per the 2012 AUT<sup>(1)</sup>





# 2. High Quality Utility Operations





- Highly dependable generation portfolio with 93% availability in 2011
- Strong power supply operations to stabilize and optimize power costs
- Progressive approach to reduce coal generation – Boardman 2020 Plan
- Ongoing T&D investment to ensure high reliability and customer satisfaction
- Continued investment in technology to improve service and reduce costs



# 3. High Customer Satisfaction





No. 1

Investor-owned utility in the nation for residential customer satisfaction



JD Power & Associates

**No. 2** 

In the West for general business satisfaction



JD Power & Associates

No. 2

Nationally among large key customers for satisfaction



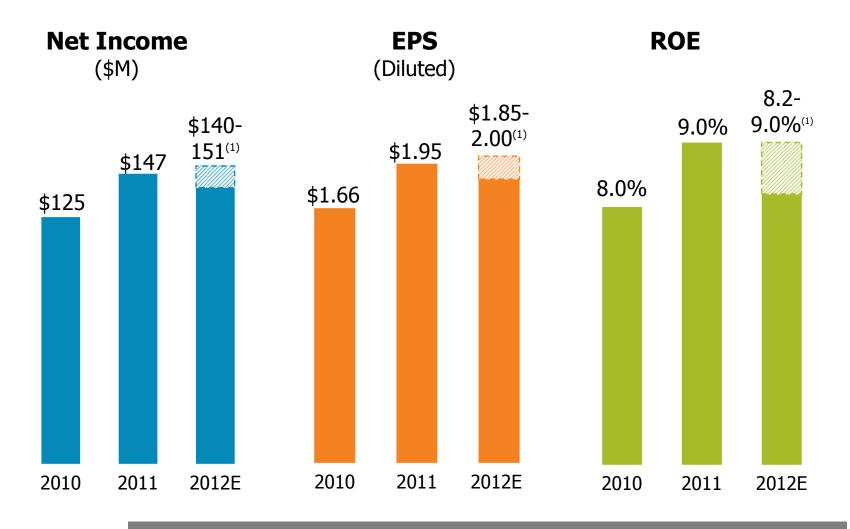
TQS Research, Inc.

All customer satisfaction and reliability measures consistently top quartile

# 4. Solid Earnings







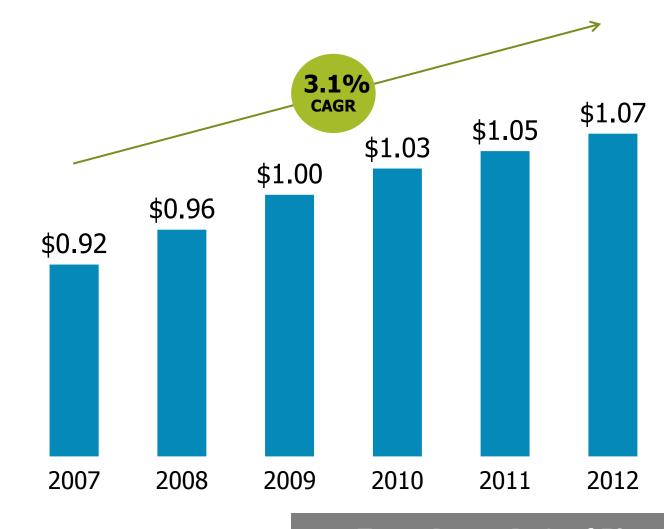
Reduced gap between actual ROE and allowed ROE of 10%

1) Based on guidance range, as most recently reaffirmed on November 8, 2012

# 4. Dividend Growth







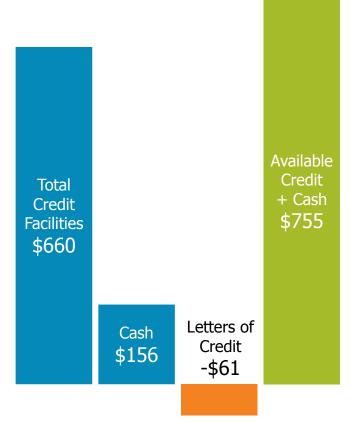
Target Payout Ratio of 50 to 70%

# 5. Strong Balance Sheet and Financial Resources





# Revolving Credit Facilities (1) (in millions)



#### **Financial Resources**

- Investment grade ratings of BBB and Baa2
- Manageable debt maturities
  - weighted average15.5 years
- Target capital structure of 50% debt, 50% equity
- 2012 capital expenditures of \$330M, funded from operations

#### PGE INVESTMENT THESIS

# Strong Platform. Positioned for Sustained Growth.





The Company

The Strengths

The Growth







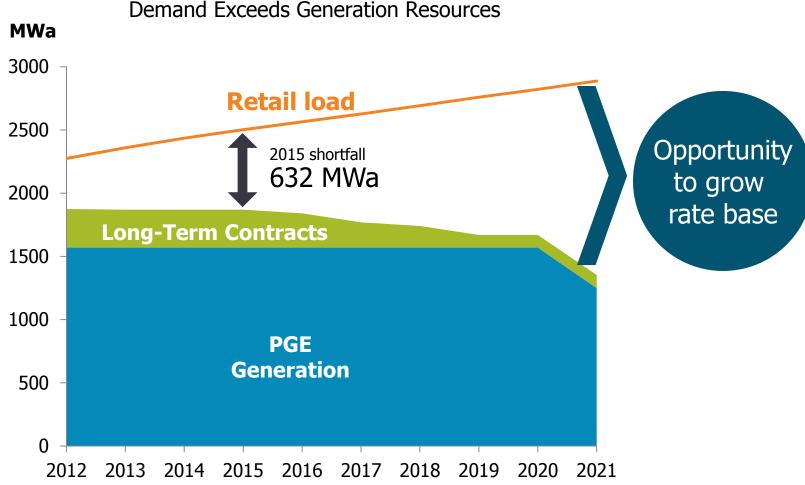
# **Future Generation Need**





#### **Load-Resource Forecast**<sup>(1)</sup> - **Energy**

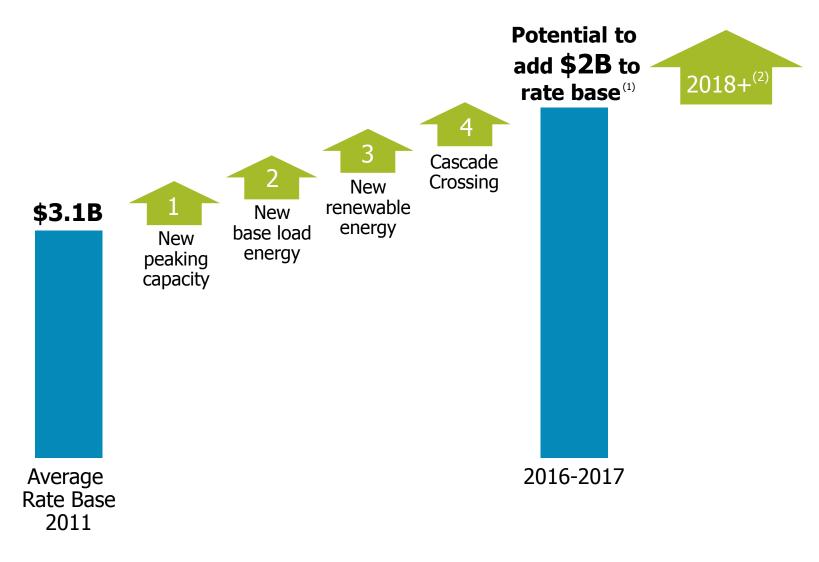
**Demand Exceeds Generation Resources** 



# Potential Opportunities for Rate Base Growth







- 1) Rate base growth dependent on outcome of RFP processes
- Puture rate base growth opportunities, as will be determined by PGE's next integrated resource plan, which will be filed in November 2013

# 1. New Peaking Capacity Resource





#### Requirement

- 200 MW year-round flexible resource
- 200 MW bi-seasonal (winter and summer) peaker
- 150 MW winter-only peaker

#### **Acceptable Bid Types**(1)

- Build-own-transfer project on a greenfield site
- Asset purchase agreement of an existing facility
- PGE's benchmark bid Port Westward 2
- Construction bid on PGE's benchmark site (project will be owned and operated by PGE)
- Purchased Power Agreement (PPA) with an existing or new-build project

#### Initial Results(2)

- 32 bids total for capacity and base load energy, representing 15 different generating projects
- Combined output of proposed bids for flexible capacity resources: 1651 MW
- Combined output of proposed bids for seasonal peaking resources: 1627 MW

#### **Timeline**

November 2012	December 2012	Q4 2012-Q1 2013	Q1 2013	Q1-Q2 2013	2013
Identify initial short list	Identify final short list	Begin negotiations with bidders on final short list	Independent Evaluator issues final closing report to OPUC	Final resource selection	Earliest in-service date for new construction

- 1) These types may or may not reflect the actual bids that PGE received.
- 2) Results released in PGE Press Release dated September 10, 2012



# 2. New Base Load Energy Resource





#### Requirement

300-500 MW base load energy resource

#### **Acceptable Bid Types**(1)

- Build-own-transfer project on a greenfield site
- Asset purchase agreement of an existing facility
- PGE's benchmark bid Carty 1
- Construction bid on PGE's benchmark site (project will be owned and operated by PGE)
- Purchased Power Agreement (PPA) with an existing or new-build project

#### Initial Results(2)

- 32 bids total for capacity and base load energy, representing 15 different generating projects
- Combined output of proposed bids for base load resources: 5826 MW



November 2012	December 2012	Q4 2012-Q1 2013	Q1 2013	Q1-Q2 2013	2014
Identify initial short list	Identify final short list	Begin negotiations with bidders on final short list	Independent Evaluator issues final closing report to OPUC	Final resource selection	Earliest in-service date for new construction

- 1) These types may or may not reflect the actual bids that PGE received.
- 2) Results released in PGE Press Release dated September 10, 2012



# 3. New Renewable Energy Resource





#### Requirement

100 MWa resource<sup>(1)</sup>

#### **Specifications**

- To meet Oregon's Renewable Energy Standard of 15% by 2015
  - wind, solar, biomass or other
- PGE has submitted a benchmark bid
- Bidders can submit a PPA, build own transfer or asset purchase agreement of an existing facility





#### **Timeline**

October 2012	November 2012	Q1 2013	Q1 2013	Q1-Q2 2013	2015
Renewable RPF issued to market; PGE benchmark submitted	All third-party bids due	Identify initial and then final short list of projects	Independent Evaluator issues final closing report to OPUC	Final resource selection	Earliest in-service date for new construction

# 4. Cascade Crossing Transmission Project





#### Requirement

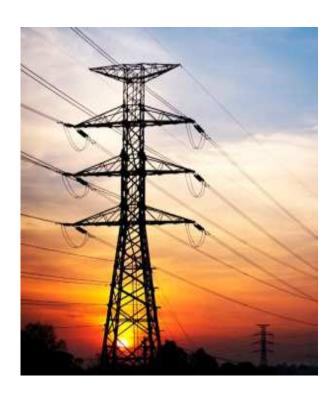
500 kV line, approximately 215 miles

#### **Specifications**

- Path from Eastern Oregon to Salem, south of Portland
- Connect Boardman, Coyote Springs, and potential new projects to service territory
- Provide transmission access for potential new wind resources
- Improve regional grid reliability
- Capital investment of \$800M to \$1B

#### **Next Steps**

- Ongoing negotiations with:
  - BPA on collaboratively improving the regional transmission system
  - PacifiCorp on their participation in the project
  - Confederated Tribes of the Warm Spring on easements
- Expect to receive necessary permits in 2014
- In service no earlier than 2017



# Potential Capital Projects Timeline





(in millions)	2012	2013	2014	2015	2016	2017
Capacity Resource		\$250-\$350				
Energy Resource		\$550-\$700				
Renewable Resource		\$700-\$850				
Cascade Crossing		\$800-\$1,000			0	
Base Capital Spending <sup>(1)</sup>	\$328	\$350	\$325	\$300	\$250	\$375

- Capacity, energy and renewable forecast assumes self-build benchmark projects are selected; actual timing and costs are contingent on outcome of PGE's competitive RFP processes
- Cascade Crossing project is in early stages; progress contingent on successful agreement with BPA and acquiring all necessary approvals, permits and easements
- 1) Includes ongoing capital expenditures, hydro relicensing, Boardman emissions controls and \$28 million for Cascade Crossing in 2012
- 2) Amounts exclude AFUDC debt and equity

# Portland General Electric Value Proposition





Strong balance sheet

Solid growth in customer demand

High quality utility operations

Potential rate base growth of \$2B

Strong
Platform
positioned for
Sustained
Growth

# PGE Investor Relations Team





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# Portland General Electric Appendices



# Appendices



- 1. Financials
- 2. Resource planning
- 3. Regulatory environment
- 4. Business initiatives details







# YTD 2012 Financial Results



	Net Ir	icome	Earnings	per Share
(in millions)	2011	2012	2011	2012
Q1	\$69	\$49	\$0.92	\$0.65
Q2	\$22	\$26	\$0.29	\$0.34
Q3	\$27	\$38	\$0.36	\$0.50
YTD	\$118	\$113	\$1.57	\$1.49

# YTD Q3 Retail Revenues (in millions) \$1,259 \$1,278 \$406 Q3 \$422 \$390 Q2 \$394 \$463 Q1 \$462 2011 2012

# Weather Adjusted Load Growth 2012 over 2011<sup>(1)</sup>

Q3 2012	-0.4%
YTD Q3 2012	0.5%
Full Year 2012 Forecast	0.5%

<sup>(1)</sup> Excludes certain industrial customers that have little impact on margin

### Resource Mix



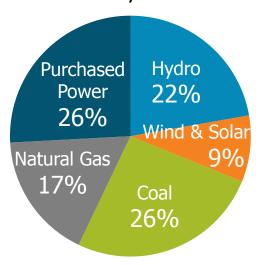
#### Resource Capacity (at 12/31/11)<sup>(1)</sup>

	Capacity	% of Total Capacity
Hydro		
Deschutes River Projects	298 MW	7.1%
Clackamas/Willamette River Projects	191	4.6
Hydro Contracts	<u>485</u>	<u>11.6</u>
	974	23.3
Natural Gas/Oil		
Beaver Units 1-8	516 MW	12.4%
Coyote Springs	246	5.9
Port Westward	<u>410</u>	<u>9.8</u>
	1,172	28.1
Coal		
Boardman	374 MW	9.0%
Colstrip	<u>296</u>	<u>7.1</u>
	670	16.1
Wind <sup>(2)</sup>		
Wind Contracts	44 MWa	1.1%
Biglow Canyon	<u>159</u>	<u>3.8</u>
	203	4.9
Purchased Power	1,149	27.6%
Total	4,168 MW	100.0%

# **Power Sources as a Percent of Retail Load**

Per the 2012 AUT

Total = 2,217 MWa



- ) 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) Wind generation from contracts and Biglow Canyon is expressed in average megawatts; Biglow's capacity reflects the weighted average capacity factor for all three phases of the project

# Business Growth: Integrated Resource Plan



#### **Integrated Resource Planning Process**

- Under OPUC guidelines, PGE is required to file an Integrated Resource Plan within two years of acknowledgment of the previous plan
- The IRP requires that the primary goal must be the selection of a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and its customers
- OPUC acknowledgement of the IRP is standard. Acknowledgement is not approval for rate-making purposes, but the Commission has stated that it will give "considerable weight" to utility actions that are consistent with the acknowledged IRP

#### **2009 Integrated Resource Plan**

- In November 2010, PGE received acknowledgement of the IRP originally filed in November 2009
- PGE filed a 2011 Integrated Resource Plan Update on November 23, 2011
  - Includes an update to the 2009 Action Plan implementation activities
  - Examines new projections for future customer demand and the resulting portfolio balance
  - Addresses anticipated differences in timing for the acquisition of new resources identified in the 2009 Action Plan
  - Includes discussions on Demand Response, the Renewable Energy Standard, Boardman, Cascade Crossing and Wind Integration
  - Since PGE is not proposing changes to the IRP Action Plan, acknowledgement by the OPUC of the 2011 IRP Update is not necessary

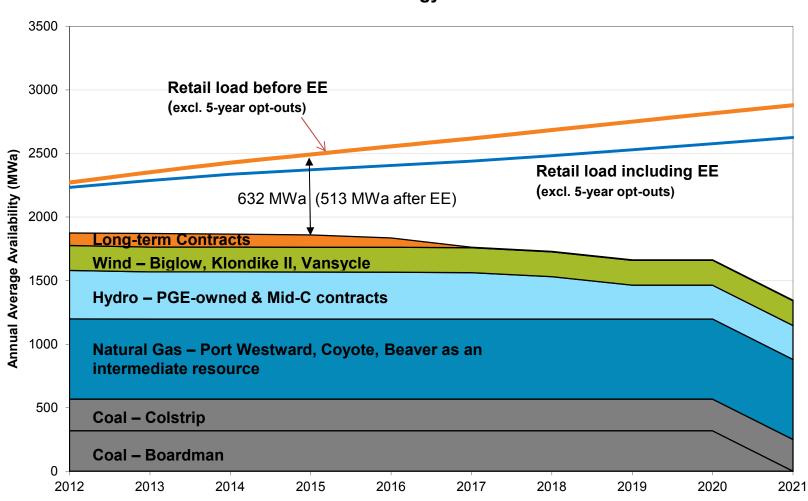
#### **Next Integrated Resource Plan**

The OPUC approved PGE's plan to file an IRP update in November 2012 and a new IRP in November 2013

# Energy Load-Resource Balance







# **Energy Action Plan**

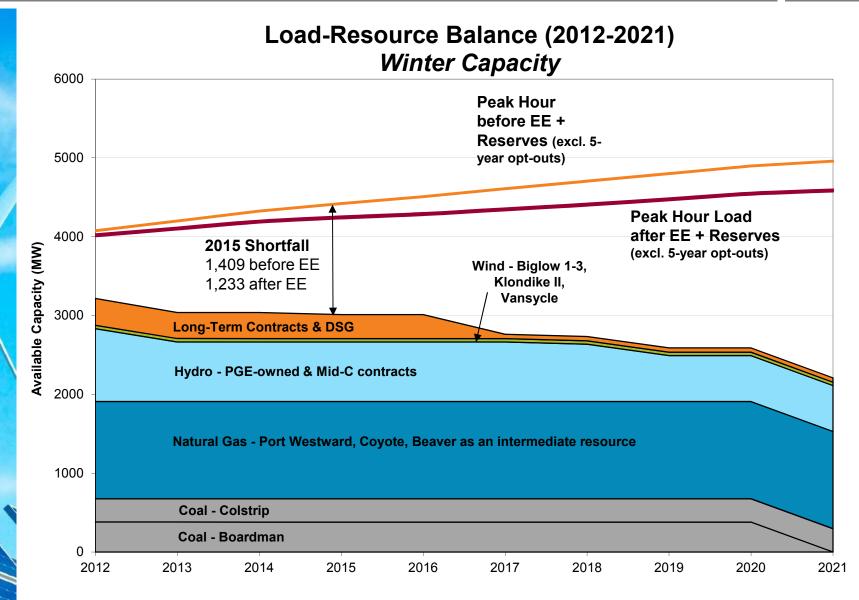


Annual Energy Action Plan for 2015	Annual MWa
PGE Load With EE Savings	2,620
Remove 5-year Opt-Outs	-128
Existing PGE & Contract Resources	-1,860
PGE Resource Target	632
Resource Actions	
Thermal:	
CCCT	406
Combined Heat & Power	2
Renewable:	
ETO Energy Savings	119
Existing Contract Renewal	-
2015 RPS Compliance	101
To Hedge Load Variability(1):	
Short and Mid-Term Market Purchases	100
Total Incremental Resources	728
Energy (Deficit)/Surplus	96
<b>Total Resource Actions</b>	632

<sup>1)</sup> Up to 100 MWa; actual purchases will depend on balancing needs; total might not foot due to rounding

# Capacity Load-Resource Balance





# Capacity Action Plan





Capacity Action Plan for 2	015 MW
PGE Load with EE Savings	4,150
Remove 5-year Opt-Outs	-144
Operating Reserves <sup>(1)</sup>	183
Contingency Reserves <sup>(2)</sup>	232
Existing PGE & Contract Resources	-3,012
PGE Resource Target	1,409
Resource Actions Thermal:	
CCCT	441
Combined Heat & Power	2
Renewable:	_
Existing Contract Renewal	-
2015 RPS Compliance	15
To Hedge Load Variability:	
Short and Mid-Term Market Purchases	100
	-
Capacity Only Resources:	
Flexible Peaking Supply	200
Customer-Based Solutions (Capacity Only):	
DSG (2010-2013)	67
Demand Response	70
Seasonally Targeted Resources:	
ETO Capacity Savings	176
Bi-Seasonal Capacity	202
Winter-Only Capacity	152 
<b>Total Incremental Resources</b>	1,409

- 1) Approx. 6% of generation; excludes reserves for action plan acquisitions
- 2) 6% of PGE net system load excluding 5-year opt-outs. Total might not foot due to rounding

# Regulatory Environment: Additional Detail



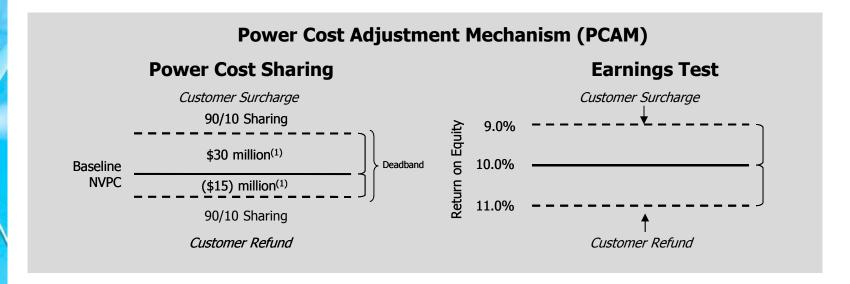
- Oregon Public Utility Commission
  - Governor-appointed Commission with staggered four-year terms
     (John Savage 3/2013, Stephen Bloom 12/2015, Susan Ackerman (chair) 3/2016)
- Return on Equity & Capital Structure
  - 10.0% allowed return on equity
  - 50% debt and 50% equity capital structure
- Forward Test Year
- Net Variable Power Cost Recovery
  - Annual Power Cost Update Tariff
  - Power Cost Adjustment Mechanism: employs fixed deadbands and earnings test
- Decoupling
  - Per 2011 General Rate Case order, mechanism to continue through the end of 2013
- Renewable Energy Standard
  - Standard requires PGE to serve 25% of its retail load from renewable sources by 2025
- Renewable Adjustment Clause (RAC)
  - PGE can recover costs of renewable resources through a separate tracking mechanism
- Integrated Resource Plan
  - OPUC "Acknowledgement" is standard
  - 2009 IRP: Long-term analysis outlining 20-year resource strategy
  - 2011 IRP Update: Filed November 23, 2011

# 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 prudency review and approval, new prices go into effect on or around January 1 of the following year



- 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 as part of the PCAM, 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 9.0%; customer refund occurs to the extent it results in PGE's actual regulated ROE being no less than 11.0%

# Renewable Energy Standard



#### **Additional Renewable Resources**

Integrated Resource Plan addresses procurement of wind or other renewable resources to meet requirements of Oregon's Renewable Energy Standard by 2015. Such need is now approximately 100 MWa (or 300 MW wind nameplate capacity)

Year	Renewable Target
2011	5%
2015	15%
2020	20%
2025	25%

In 2011, Renewable Energy Standard qualifying renewables supplied approximately 10% of PGE's retail load. In addition, PGE has several solar projects in place or in progress, for a total of approximately 8 MW

#### 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 on-line date or April 1st in order to be included in rates the following January 1st. Costs are deferred from the on-line 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

Includes a Sales Normalization Adjustment mechanism (SNA) for residential and small non-residential customers ( $\leq$  30 kW) and a Lost Revenue Recovery Adjustment (LRRA), for large non-residential 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 2011 general rate case. The SNA mechanism applies to approximately 58% of 2011 base revenues
- The LRR is based on the difference between actual energy-efficiency savings (as reported by the ETO) and those incorporated in the applicable load forecast. The LRR mechanism applies to approximately 29% of 2011 base revenues

OPUC order in PGE's 2011 General Rate Case, authorized the continuation of the decoupling mechanism through December 31, 2013

#### **Recent Decoupling Results**

(in millions)	Q1	Q2	Q3	Q4	YTD 2012
Sales Normalization Adjustment	(\$1.3)	(\$0.4)	\$2.2		\$0.5
Lost Revenue Recovery Adjustment	\$0.0	\$0.0	\$0.0		\$0.0
Total adjustment	(\$1.3)	\$0.8	\$2.2		\$1.7

(in millions)	Q1	Q2	Q3	Q4	2011
Sales Normalization Adjustment	\$0.4	(\$0.6)	\$1.0	(\$1.4)	(\$0.6)
Lost Revenue Recovery Adjustment	\$0.1	(\$0.6)	(\$0.2)	(\$0.2)	(\$0.9)
Total adjustment	\$0.5	(\$1.2)	\$0.8	(\$1.6)	(\$1.5)

Note: refund/surcharge = (negative)/positive

# Cost Efficiency Initiatives



- Company-wide benchmarking to identify best practices
- Investments to leverage technology
  - Financial system and supply chain replacement project
  - Timekeeping System
  - Enterprise Asset Management
- Process Improvements & Work Redesign
- Savings will offset cost inflation over the long term



# Smart Meter Project



#### **Smart Meters**

- Provide two-way communications with residential and commercial customers
- Vendor: Sensus
- Technology: FlexNet radio frequency technology
- Completed installation of 825,000 meters as of December 31, 2010
- Capital costs: \$145 million
- OPUC approved limited term tariff: June 1, 2008 through December 31, 2010 that recovered the remaining investment in old meters. The 2011 General Rate Case includes project costs, net of savings in customer prices effective January 1, 2011

#### **Distribution System**

- Pursuing direct load control programs
- Optimizing distribution system through advanced technology



# **Boardman 2020 Emissions Controls**



#### **Emissions Controls at the Boardman Plant**

- In December 2010, the Oregon Environmental Quality Commission (OEQC) approved revised Best Available Retrofit Technology (BART) rules
- In June 2011, EPA approved revised rules, which were published in the Federal Register in July 2011
- To comply with the revised rules, PGE plans to:
  - Use lower sulfur coal to fire the plant's boiler
  - Install low NOx burners and modified over-fired air ducts
  - Install dry sorbent injection systems (DSI) to address SO<sub>2</sub> and mercury
    - Contingent upon successful pilot testing:
      - PGE would meet a 0.4 lb SO<sub>2</sub>/MMBtu limit using DSI by July 2014
      - PGE would meet a 0.3 lb SO<sub>2</sub>/MMBtu limit using DSI by July 2018
  - Cease coal-fired operations no later than December 31, 2020
- PGE Share of 2011 capital spending on Boardman controls was approximately \$17 million
  - Installed low NOx burners and over-fire air ducts
  - Mercury controls installed and performance testing is complete
- Remaining PGE capital cost estimated at \$22 million in 2011 and 2012
- In December 2011, EPA released its final utility MACT rule; based on our preliminary full-scale testing results, Boardman should be able to meet MACT requirements once currently planned controls are in place



# Biglow Canyon Wind Farm



- Columbia Gorge, eastern Oregon
- 450 MW total nameplate capacity
- Total cost approximately \$1B



	Phase I	Phase II	Phase III
Nameplate Capacity	125 MW, 76 turbines	150 MW, 65 turbines	175 MW, 76 turbines
MW per unit	1.65 Megawatts	2.3 Megawatts	2.3 Megawatts
Cost (w/AFDC)	\$255 million	\$321 million	\$385 million
Online date	December 2007	August 2009	August 2010
Vendor	Vestas	Siemens	Siemens