# CEO Energy-Power Conference Barclays Capital

September 6 - 8, 2011





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### **Cautionary Statement**

#### Information Current as of August 5, 2011

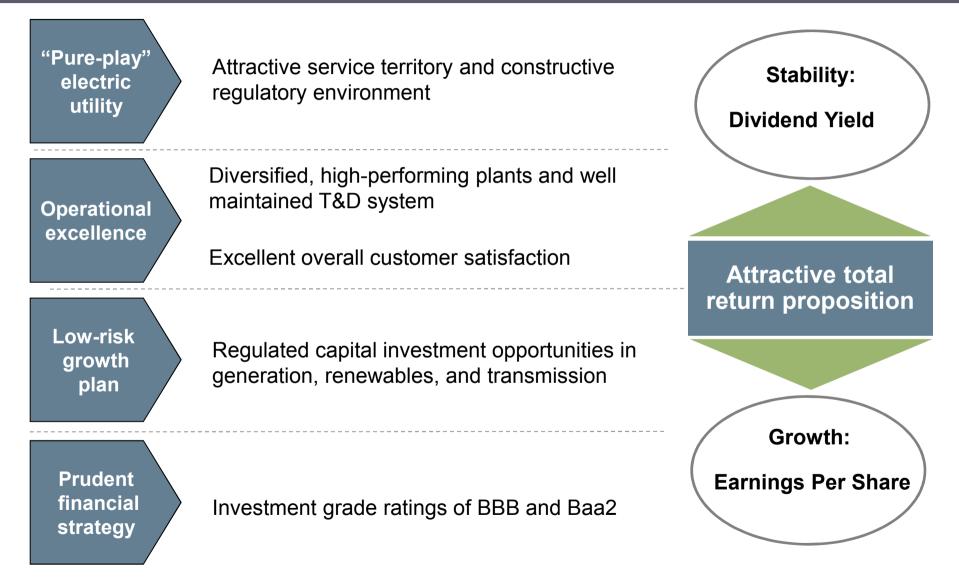
Except as expressly noted, the information in this presentation is current as of August 5, 2011 — the date on which PGE filed its Quarterly Report on Form 10-Q for the quarterly period ending June 30, 2011 — and should not be relied upon as being current as of any subsequent date. PGE undertakes no duty to update the presentation, except as may be required by law.

#### **Forward-Looking Statements**

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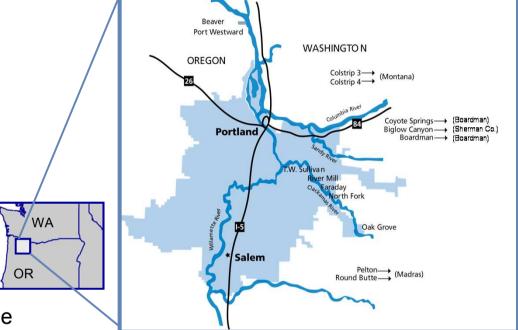
Forward-looking statements include statements regarding earnings guidance; statements regarding future load, hydro conditions and operating and maintenance costs; statements regarding the future impact of Senate Bill 408; statements regarding future capital expenditures; statements regarding future financings and PGE's access to capital and cost of capital: statements regarding PGE's future liquidity and anticipated collateral roll-off: statements regarding the cost, completion and benefits of capital projects: statements regarding future generation and transmission projects, including those set forth in the Company's Integrated Resource Plan; statements concerning future operation of the Company's Boardman coal plant; as well as other statements containing words such as "anticipates," "believes," "intends," "estimates," "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 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 market 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; unforeseen problems or delays in completing capital projects, resulting in the failure to complete such projects on schedule or within budget; 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 statements, except as required by law. 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.

### **Portland General Investment Highlights**



### **Attractive Regulated Business Profile**

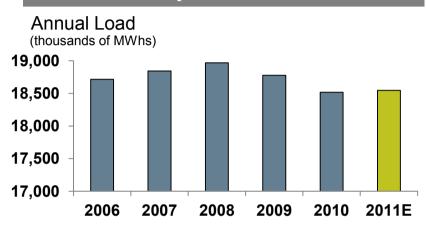
- Vertically integrated electric utility
  - Single state jurisdiction
  - 100% regulated business
  - No holding company structure
- Attractive, compact service territory with 824,526 retail customers<sup>(1)</sup>
- Opportunities for investment in core utility assets
- Diversified and growing customer base
- Core business strategy

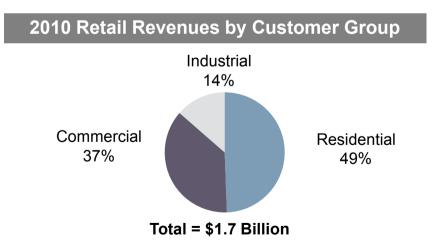




### **Attractive Service Territory**

#### Weather Adjusted Annual Load <sup>(1)</sup>





#### **Forecasted Load Growth**

- 2011 loads are forecast to increase approximately 1% compared to 2010 loads<sup>(2)</sup>
- Long-term annual load growth forecast of 1.9% through 2030<sup>(3)</sup>

#### Key Drivers:

- Economy continues to improve
  - Intel building D1X project
  - Construction employment growing 6.8% annualized compared to 0.2% for the US.
  - Growth in high-tech manufacturing
  - Continued in-migration

- 1) Adjusted for weather and certain industrial customers; June 2011 forecast with history through June 2011.
- 2) Adjusted for weather and excludes certain large paper production customers: based on June 2011 forecast.
- 3) Per the November 2009 IRP (which has not been updated): PGE's forecasted 1.9% long-term annual load growth does not reflect new
- 5 Energy Trust of Oregon (ETO) forecasted energy efficiency (EE) activities to the extent that they exceed historical levels embedded into the load forecast. Including all ETO forecasted EE activities, PGE's forecasted long-term annual load growth is 1.7%.

### **Operational Excellence**

#### **Operational Efficiency**

- Ongoing capital investments in technology to improve service and reduce costs
- Coyote Springs CCGT Upgrade
- Boardman Coal Plant Emissions Controls: Phase I
- Smart Meter Program
- Smart Grid Demonstration Project

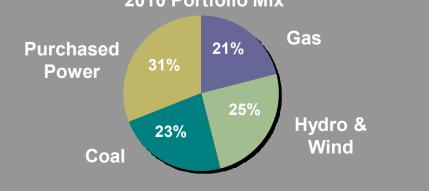
#### **High Customer Satisfaction**

- TQS Key Customer Survey for Q2 2011 ranked PGE in top decile for overall satisfaction for large industrial customers
- J.D. Power for 2011 ranked PGE in the top decile for overall satisfaction for residential and general business customers
  - U.S. Department of Energy's Utility Green Power Program of the Year Award

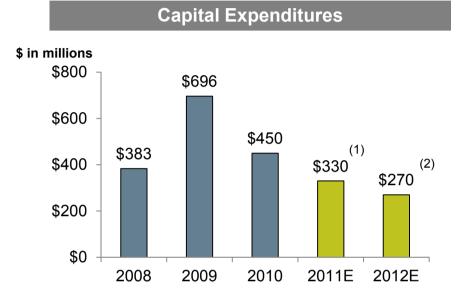
#### **Diversified, High-Quality System**

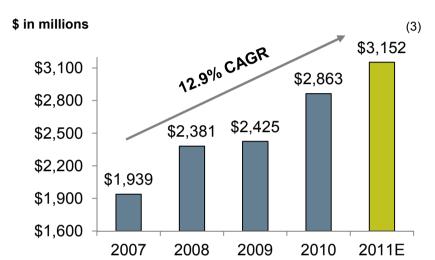
PGE

 PGE's generating plants were at 95% availability for 2010
 2010 Portfolio Mix



### **Business Growth**





Rate Base (Average)

- 2011 and 2012 base capital expenditures are expected to be fully funded by cash from operations
- Significant new capital investments are expected to be funded through cash from operations and issuances of debt and equity, with a targeted capital structure of 50/50.
- Attractive regulated growth opportunities through capital investment focused on renewable resources and core utility assets.

2) 2012 base capital; however, pending approval of certain projects, excluding the RFP generation projects, PGE will likely spend approximately \$300 million

3) Represents the average rate base in PGE's 2011 General Rate Case

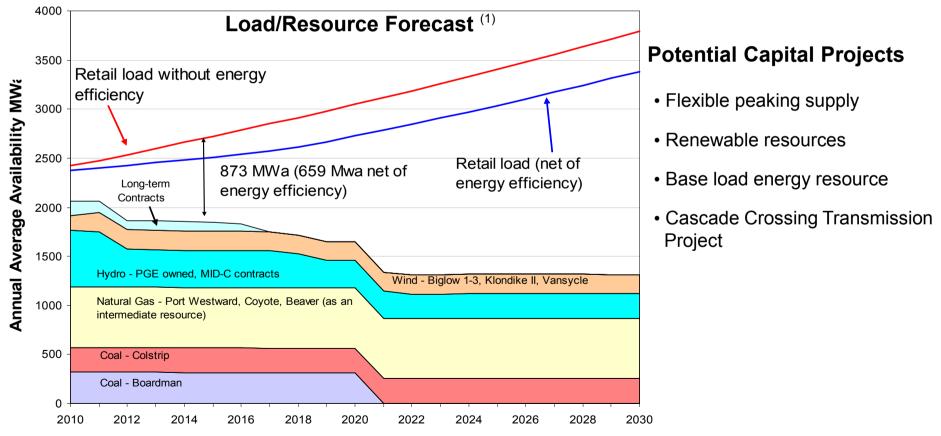
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<sup>1)</sup> Includes capital spending associated with Cascade Crossing and \$4 million of preliminary engineering, but does not include any of the RFP generation projects outlined in PGE's IRP Action Plan

### **Business Growth**

#### Load Growth

- PGE's long-term retail load is expected to grow consistently while certain long-term power purchase contracts expire increasing the current open market purchase position.
- In 2015 PGE projects an energy and capacity shortfall of 873 MWa and 1,724 MW, respectively.



### **Business Growth: RFPs**

 PGE plans to conduct three "Request For Proposals" (RFPs) and expects to bid into each RFP with its own self-build option

#### **New Capacity Resource**

- Up to 200 MW year-round flexible and peaking natural gas fired facility
  - Approximate capital cost: \$1,100 1,400/kw
- Two purchased power agreements
  - Approximately 200 MW of bi-seasonal (winter and summer peaking supply)
  - Approximately 150 MW of winter-only peaking supply
- RFP to be issued: Fall 2011
- Resources available in 2013 2015

#### New Renewable Resource

- 120 MWa of renewable energy<sup>(1)</sup>
- Wind/Solar/Biomass/Other
- Approximate capital cost: \$2,200 4,100/kw
- RFP to be issued: late 2011 early 2012
- Plan to bring online to assist in meeting Oregon's Renewable Energy Standard of 15% by 2015

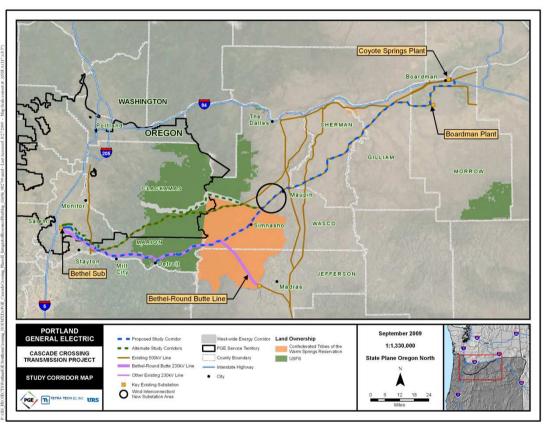
#### **New Energy Resource**

- 300 500 MW natural gas facility
- Approximate capital cost: \$1,300 1,400/kw
- RFP to be issued: late 2011 early 2012
- Resource available: 2015 2017

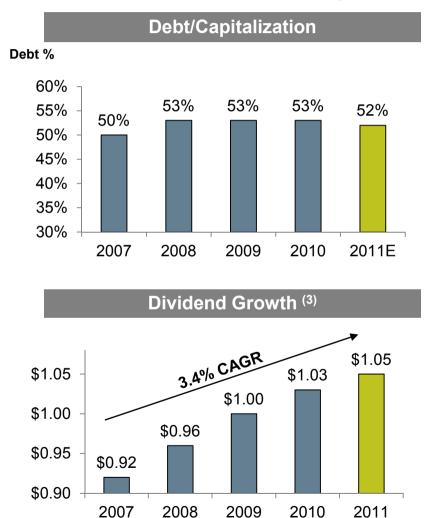
### **Business Growth: Cascade Crossing**

#### **Cascade Crossing Transmission Project**

- 500 kV double circuit, approximately 200 miles
- Connect Boardman, Coyote Springs, potential new base load and renewable energy resources into the southern part of PGE's operating area
- Provide transmission access for development of new potential wind resources
- Reduce transmission congestion
- Identified by the federal government as a Renewable Energy Rapid Responsible Project
- Approximate capital investment ranges from \$800 million to \$1 billion (2011 \$s)
- Estimated in-service date: late 2016 2017



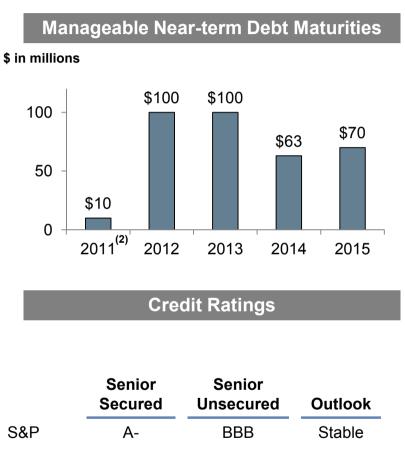
### **Prudent Financial Strategy**



#### 2011 Earnings Guidance: \$1.90 - \$2.05 per share (1)

Moody's

A3



Baa2

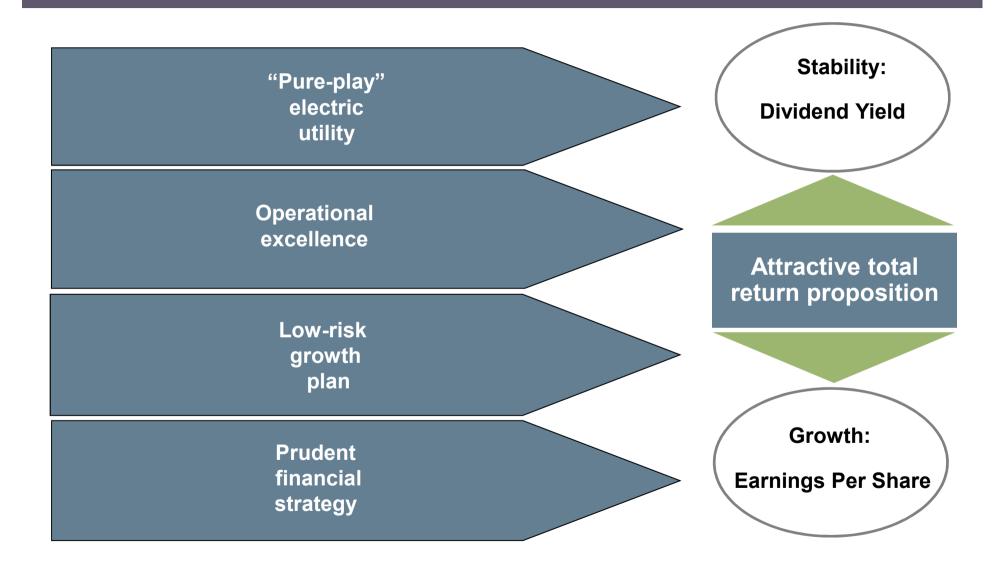
Stable

1) Earnings guidance as disclosed by the company on August 5, 2011 11

2) January 2011, PGE redeemed and retired \$10 million Port of St. Helens pollution control revenue bonds.

3) Dividends paid per share; includes dividend of \$0.265 declared in August 2011 for payment in October 2011

### **Portland General Investment Highlights**



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### **Business Growth: Biglow Canyon**

#### **Biglow Canyon Wind Farm**

- Columbia Gorge, eastern Oregon
- 450 MW total installed capacity
- Total cost approximately \$1 billion
- Completion of Biglow Canyon Phase III brings PGE's ability to supply 10% - 11% of its 2011 retail load with Oregon RES qualified resources



	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

### **Business Growth: 2011 General Rate Case**

- General rate case filed in February 2010 based on a 2011 test year
- December 2010, OPUC issued a final order in PGE's 2011 General Rate Case

**Final Order** - \$65 million **Revenue Increase** Net Revenue Increase <sup>(1)</sup> - 3.9% effective January 1, 2011 - \$3.152 billion 2011 Average Rate Base **ROE & Capital Structure** - 10.0% ROE and 50/50 capital structure Power Cost Adj. Mech. Deadband narrowed and fixed at \$30 million above and \$15 million below NVPC baseline 90/10 sharing outside of deadbands - Earnings test continued - Tariff provides recovery of Boardman's net Boardman Auto. Adj. Clause book value over shorter life - Continue with current mechanism through Decoupling end of 2013

Initially requested a rate increase of 7.4% which was comprised of a 9.4% increase related to Investment and O&M costs offset by a 2% reduction related to decreased power costs. The stipulated rate increase of 3.9% is comprised of a 6.3% increase related to Investment and O&M costs partially offset by a 2.4% reduction related to decreased power costs.

### **Business Growth: Integrated Resource Plan**

#### Integrated Resource Planning Process

- Under OPUC guidelines, PGE is required to file an Integrated Resource Plan (IRP) 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
- The goal is to obtain OPUC acknowledgement of the IRP. Acknowledgement is not approval for ratemaking 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

- November 2010 PGE received acknowledgement of IRP originally filed in November 2009
- OPUC directed PGE to file its next IRP no later than November 2012 and to:
  - Include an updated cost benefit analysis of Cascade Crossing
  - Provide information regarding the ability of customers to respond to high demand periods by curtailing use
  - Consider potential savings from operating distribution system in lower portion of acceptable voltage ranges
  - Address cost and impacts of integrating variable wind generation into PGE's system
  - Evaluate alternatives to physical compliance with RES requirements, such as the use of Renewable Energy Credits

### **Business Growth: Emissions Controls**

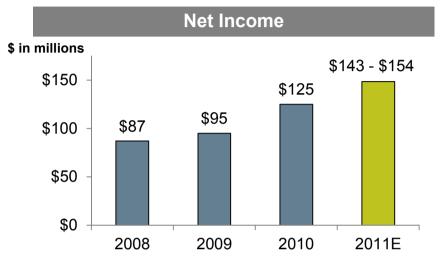
#### **Emissions Controls at the Boardman Coal Plant**

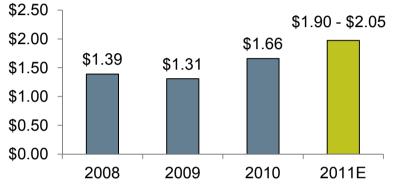
- December 2010 Oregon Environmental Quality Commission (OEQC) approved revised Best Available Retrofit Technology (BART) rules.
- June 2011, EPA approved revised rules, which were published in the Federal Register in July 2011
- Under the revised rules, PGE would:
  - Use lower sulfur coal to fire the 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 SO2/MMBtu limit using DSI by July 2014
      - PGE would meet a 0.3 lb SO2/MMBtu limit using DSI by July 1, 2018
  - Cease coal-fired operations no later than December 31, 2020
- As of June 30, 2011 capital spending on Boardman controls totaled \$17 million
  - Installed low NOx burners and over-fire air ducts
  - Started the installation of mercury controls <sup>(1)</sup>
- Total costs of proposed Boardman emissions controls is approximately \$60 million (2)

2) Represents 100% of costs, excluding AFDC

<sup>1)</sup> Mercury controls expected to be completed the third quarter of 2011 at a total estimated cost of \$7 million

### **Recent Financial Results**





Earnings per Share (diluted)

#### Key Items (\$ earnings per diluted share)

#### 2008

- Trojan Refund Order Provision (-\$0.32)
- Non-qualified benefit
   plan assets (-\$0.19)
- Beaver oil sale (+\$0.10)
- Senate Bill 408 (-\$0.10) •

#### 2009

- Boardman Deferral (-\$0.15)
- Selective Water Withdrawal (-\$0.05)
- Non-qualified benefit plan assets (+\$0.07)
- Senate Bill 408 (-\$0.11)

#### 2010

- Non-qualified benefit plan assets (+\$0.04)
- Senate Bill 408 (+\$0.04)
- Strong power supply operations partially offset by milder weather and continued effects of a weak economy

#### 2011

August 5, 2011, reaffirmed 2011 earnings guidance of \$1.90 to \$2.05 per diluted share.

## 2011 Financing

#### Target Capital Structure 50% Debt, 50% Equity

#### 2011 Financing Activity

 January 2011, redeemed and retired \$10 million Port of St. Helens pollution control revenue bonds

#### **Future Financing**

#### **Debt & Equity Issuance**

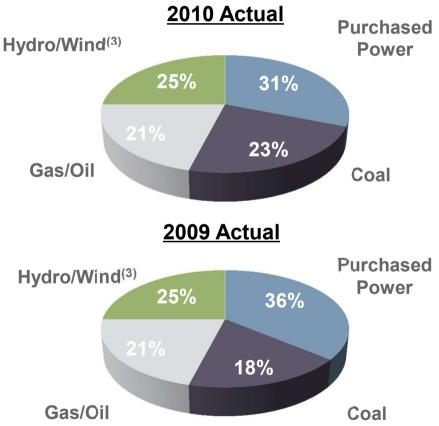
- For 2011 and 2012, the company expects to meet base capital requirements with cash from ongoing operations, with no issuances of long-term debt or equity expected
- The timing of future debt and equity issuances will depend on a number of factors, such as, capital requirements related to the outcomes of the IRP RFPs, cash flow, and market conditions

### **Resource Mix**

#### Resource Capacity (at 12/31/10) <sup>(1)</sup>

Power Sources as % of Total System Load

	Capacity	% of Total Capacity
Hydro		
Deschutes River Projects Clackamas/Willamette	298 MW	6.2%
River Projects	191	3.9
Hydro Contracts	657	13.6
-	1,146	23.7
Natural Gas/Oil		
Beaver Units 1-8	516 MW	10.6%
Coyote Springs	231	4.8
Port Westward	<u>410</u>	8.5
	1,157	23.9
Coal		
Boardman	374 MW	7.7%
Colstrip	<u>_296</u>	<u>6.1</u>
	670	13.8
Wind <sup>(2)</sup>		0.00/
Wind Contracts	44 MW	0.9%
Biglow Canyon Phase I, II, & II	1 <u>59</u> 203	<u>3.3</u> 4.2
	203	4.2
Net Purchased Power	4 004 1414	04 40/
Short-/Long-term	1,664 MW	34.4%
Total	4,840 MW	100.0%



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

3) Includes PGE owned and purchased hydro and wind resources.

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## **Constructive Regulatory Environment**

#### Oregon Public Utility Commission

 Governor-appointed Commission with staggered four-year terms (John Savage 3/2013, Susan Ackerman 3/2012, Open <sup>(1)</sup>)

#### 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 Update Tariff
- Power Cost Adjustment Mechanism: contains 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



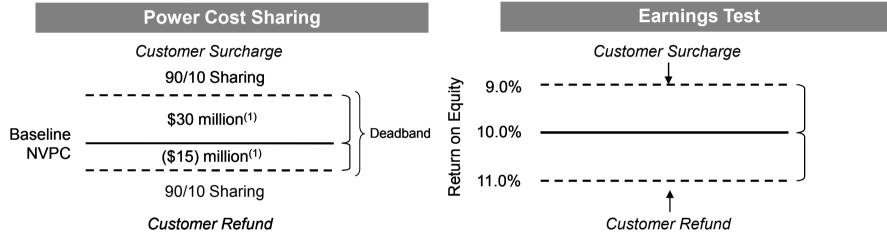
 Ray Baum, Chairman of the OPUC since March 2010, resigned effective January 16, 2011 to accept a position as a senior policy advisor to the chairman of the House Subcommittee on Communications & Technology in DC; no successor or chair has been named.

### **Recovery of Power Costs**

#### **Annual Power Cost Update Tariff**

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

#### 2011 Power Cost Adjustment Mechanism (PCAM)



- PGE absorbs 100% of the costs/benefits within the deadband, and amounts above or below the deadband are shared 90% with customers and 10% with PGE
- · An annual earnings test is applied as part of the PCAM
  - 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%
- YTD Q2 2011: PGE's net variable power costs were \$29 million below the baseline
- 23 1) Per OPUC's 2011 General Rate Case Order, deadband ranges are fixed and no longer represent 75 150 basis points of ROE.

### **Decoupling Mechanism**

- The decoupling mechanism is intended to allow recovery of reduced revenues 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 (≤ 30 kW) and a Lost Revenue Recovery mechanism (LRR), 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 projected 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 projected 2011 base revenues
- OPUC order in PGE's 2011 General Rate Case, authorized the continuation of the decoupling mechanism through December 31, 2013
- YTD Q2 2011, the PGE recorded an estimated customer refund of approximately \$1 million as weather adjusted use per customer was more than levels included in the 2011 General Rate Case.

(in millions)	Q1	Q2	Q3	Q4	2011 YTD
Sales Normalization Adjustment	\$0.4	(\$0.6)			(\$0.2)
ROE Adjustment	-				\$0.0
Loss Revenue Adjustment	\$0.1	(\$0.6)			(\$0.5)
Total adjustment	\$0.5	(\$1.2)	\$0.0	\$0.0	(\$0.7)

## **Decoupling Mechanism**

#### Simplified Decoupling Example

#### **Assumptions:**

- Residential customer
- Monthly Kwh usage: 1,000
- Cost per Kwh: \$0.10
- Weather adjusted decrease in monthly usage: 10%
- PGE cost structure: 50% power costs and 50% all other costs

#### Analysis:

Base monthly bill:	1,000 x \$0.10 = \$100
Revised monthly bill due to energy efficiency and/or conservation:	900 x \$0.10 = \$ 90
Reduction in revenue from customer	= \$ 10

#### PGE cost structure of lost revenue:

- \$5 in power costs
- \$5 in all other costs (fixed costs)

#### Financial impact on PGE:

- Power costs: Approximately \$0 earnings impact on PGE, assuming power sold on the market at PGE average cost in prices
- All other costs: Approximately \$0 earnings impact due to \$5 booked as a regulatory asset for future recovery from customers through the decoupling mechanism

### **Renewable Energy Standards**

#### **Additional Renewable Resources**

• Integrated Resource Plan addresses 120 MWa of wind or other renewable resources necessary to meet requirements of Oregon's Renewable Energy Standard by 2015

#### **Renewable Energy Standard**

Renewable resources can be tracked into rates, 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 rates and are then recovered through an amortization methodology

<u>Year</u>	Renewable Target
2011	5%
2015	15%
2020	20%
2025	25%

• With the completion of Biglow Canyon Wind Farm, PGE has the ability to supply 10% - 11% of its 2011 retail load with Renewable Energy Standard qualified resources.

### **Capacity Action Plan**

#### 2009 Integrated Resource Plan – Capacity

Capacity Action Plan in MW <sup>(1) (2)</sup>			
	Winter 2015		
Thermal Resource Actions			
Combined Cycle Combustion Turbine	441		
Combined Heat & Power Boardman Lease Contract	2		
Boardman Lease Contract	-		
Renewable & EE Resource Actions			
Existing Contract Renewals	167		
RPS Compliance Biomass	18		
Geothermal	-		
Solar PV	_		
<b>To Hedge Load Variability</b> Short and Mid-term Market Purchases	100		
Capacity Only Variability			
Flexible Peaking Supply	200		
Customer-Based Solutions (Capacity Only) Dispatchable Standby Generation	67		
Demand Response	60		
Seasonally Targeted Resources	045		
ETO Capacity Savings Target	315 202		
Bi-seasonal Capacity Winter-only Capacity	202 152		
	152		
Total Incremental Resources	1,724		

1) Data from Integrated Resource Plan Addendum filed in April 2010, which assumes normal hydro.

2) Based on winter peak. Summer peak capacity action plan is 1,468 MW for 2015.

### **Energy Action Plan**

### 2009 Integrated Resource Plan – Energy

Energy Action Plan in MWa <sup>(1)</sup>			
	2015		
Thermal Resource Actions			
Combined Cycle Combustion Turbine	406		
Combined Heat & Power	2		
Boardman Lease Contract	-		
Renewable & EE Resource Actions			
ETO Energy Savings Trust	214		
Existing Contract Renewals	66		
RPS Compliance	122		
Biomass	-		
Geothermal	-		
Solar PV	-		
To Hedge Load Variability			
Short and Mid-term Market Purchases	100		
Subtotal <sup>(2)</sup>	909		
(Surplus) / deficit met by market	(36)		
Total Resource Actions	873		

1) Data from Integrated Resource Plan Addendum filed in April 2010, which assumes normal hydro. Chart does not include

updated renewables requirement decrease from 122 MWa to 120 Mwa.

2) Total does not foot due to rounding.

### **Smart Grid**

#### **Smart Meters**

- Provides two-way communications with residential and commercial customers
- Vendor: Sensus Metering Systems
- Technology: FlexNet radio frequency technology
- Completed installation of 825,000 meters as of December 31, 2010
- Cost: \$142 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

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