

# **PugetEnergy**



# Puget Energy Team Introduction

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### Information Current as of March 2, 2017

Except as expressly noted, the information in this presentation is current as of March 2, 2017– the date on which PE filed its Annual Report on Form 10-K for the year ended 2016– and should not be relied upon as being current as of any subsequent date. PE 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" with 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 5-year Plan and related future capital expenditures; 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," and similar expressions. Investors are cautioned that any such forward-looking statements are subject to risks and uncertainties, including – but not limited to – the costs of compliance with regulatory and environmental laws, changes in capital market conditions, reduction in demand, low wholesale prices, operational risks, hydro and wind conditions, disruption in fuel supply, and unscheduled power outages, which may result in unanticipated operating, maintenance, and repair costs.

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 Form 10-K and the Company's reports on Forms 8-K and 10-Q filed with the United States Securities and Exchange Commission.





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# 1. Clear Direction

- Mission: Safe, Dependable and Efficient
- Strategy: Integrated Strategic Plan

# 2. Vibrant Local Economy

- Puget Sound is a major commercial and population center in the Pacific Northwest
- A center of high population growth, mostly as a result of economic stability and diversity of job opportunities
- Dec 2016 King County unemployment rate (not seasonally adjusted) 3.4% vs 4.5% for the U.S.

## 3. Weather Patterns & Load Growth

- Recovery from 2007-2008 economic downturn, load and customer growth patterns significantly different from the past due to energy efficiency
- Latest published load forecast can be found in 2015 IRP, filed with WUTC on Nov 30, 2015
   2015 IRP Link: http://pse.com/aboutpse/EnergySupply/Pages/Resource-Planning.aspx
- In 2015 IRP, PSE's 20-year average growth rate projections are:

Electric Load: 0.8%; Electric Customer Count: 1.5%

Gas Load: 1.2%; Gas Customer Count: 1.9%



# 4. Regulatory Environment

- 2013 Global Rate Settlement
  - Expedited Rate Filing ("ERF"): one-time rate adjustment to establish baseline for decoupling
  - Decoupling: allowed revenue recovery on T&D assets based on number of customers served
  - Rate Plan: annual rate increase of 3% on electric & 2.2% on gas delivery revenue (Jan 1, 2014-17)
  - 3-year stay out period, next general rate case filing postponed to January 2017
- 2015 favorable ROE remand order upheld 9.8% ROE
- 2015 PCA settlement: update PCA sharing band & include fixed production costs in decoupling
- GRC filed in Jan 2017, details in "Regulatory Update" section

# **5. Low Commodity Price Risk**

- Power Cost Adjustment ("PCA") substantially protects PSE from power price volatility
- Purchased Gas Adjustment ("PGA") facilitates PSE's timely recovery of gas supply costs
- Other Trackers & Riders





# 6. Consistent and Improving Financial and Credit Metric Performance

- From 2007-2016, Puget Energy experienced compounded annual EBITDA growth of 5.0%
- PSE markedly narrowed the gap between Authorized ROE and Actual Return on AMA Regulatory Equity
  - 2010: Authorized 10.1%; Actual 4.1%; Gap 6.0%
  - 2016: Authorized 9.8%; Actual 8.9%; Gap 0.9%
- Fitch ratings to be added in 2017

# 7. Growth from Strategic Investment

- Tacoma Liquefied Natural Gas project
- Strategic capital projects focused on customers, core operations, and system reliability
- Capex details in "Capex Plan" section





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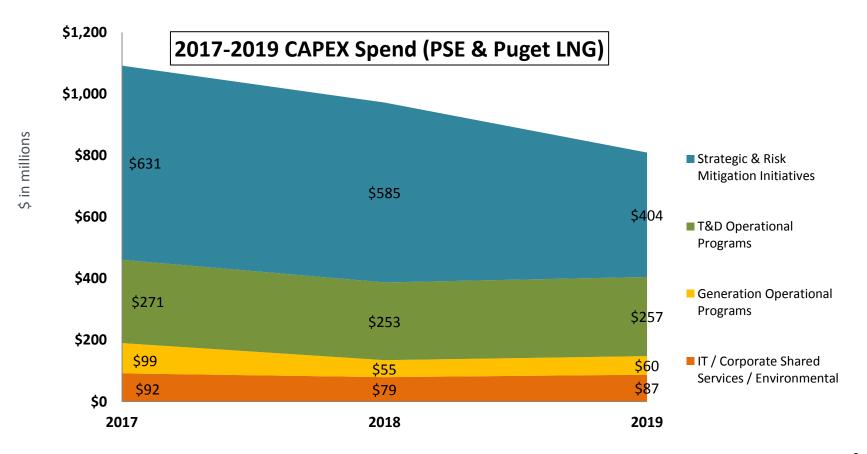
# Capex is focused on customers, core operations, and system reliability

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(\$ in millions)	2017	2018	2019	2017 - 2019
2016 Plan CAPEX Spend (PSE & Puget LNG)	\$816	\$665	\$626	\$2,107
Plus: Net Incremental Spending	<u>\$276</u>	<u>\$307</u>	<u>\$183</u>	<u>\$766</u>
2017 Plan CAPEX Spend (PSE & Puget LNG)	\$1,092	\$972	\$809	\$2,873



# 48% of the requested capex funds our core operations

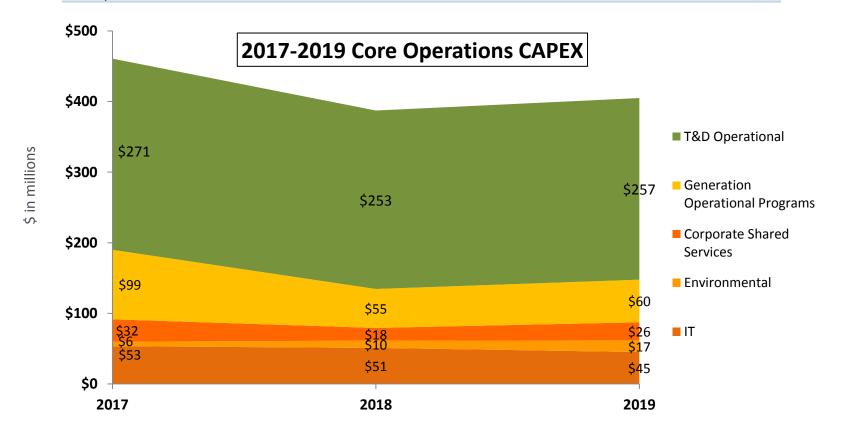
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(\$ in millions)	2017	2018	2019	2017 - 2019
T&D Operational Programs	\$271	\$253	\$257	\$781
Generation Operational Programs	\$99	\$55	\$60	\$214
Corporate Shared Services	\$32	\$18	\$26	\$75
Environmental	\$6	\$10	\$17	\$33
IT	<u>\$53</u>	<u>\$51</u>	<u>\$45</u>	<u>\$150</u>
Core Operations CAPEX	\$461	\$388	\$405	\$1,253



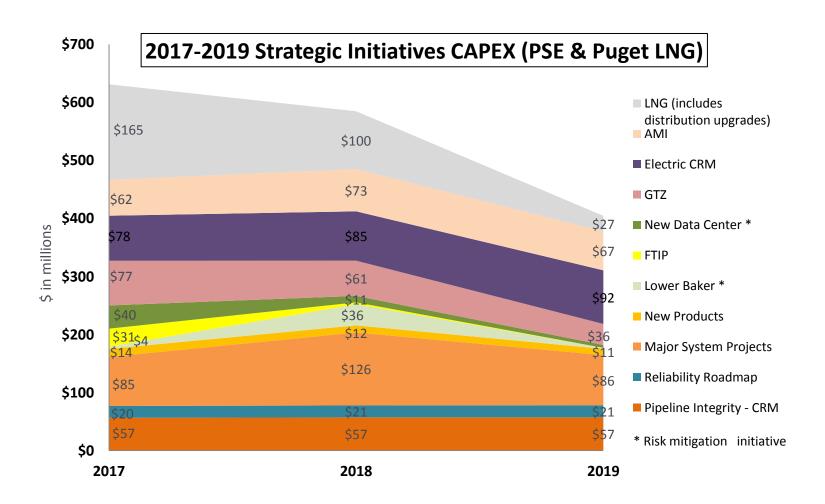
# New Capex plan funds our strategic agenda and risk mitigation in attives

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(\$ in millions)	2017	2018	2019	2017 - 2019
Strategic and Risk Mitigation Initiatives (PSE & Puget LNG)	\$631	\$585	\$404	\$1,620



# Capex spend is in line with peers

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	(A)	(B)	(C)	(D)
	Puget Capex vs Peer Median		Proxy Peer Grou	ıp (excl. PSE)
1	Implied Capex (based on Proxy Peer Group Median)	\$ 1,004	Minimum	16%
2	PSE 2017 Capex	\$ 1,092	Median	43%
3			Average	44%
4			Maximum	78%

	Proxy Peer Group (including Puget)	Book reciation & nortization	Сарех	Book Depr. & Amort. as a Percentage of Capex
5	Vectren	\$ 94	\$ 120	78%
6	Portland General Electric	\$ 344	\$ 595	58%
7	Great Plains Energy	\$ 369	\$ 683	54%
8	Pinnacle West Capital	\$ 568	\$ 1,078	53%
9	Wisconsin Energy	\$ 442	\$ 871	51%
10	Eversource Energy (Northeast Utilities)	\$ 622	\$ 1,436	43%
11	Avista	\$ 165	\$ 381	43%
12	Alliant Energy	\$ 394	\$ 940	42%
13	Puget (2017 Plan)	\$ 435	\$ 1,092	40%
14	NiSource	\$ 270	\$ 749	36%
15	Integrys Energy Group*	\$ 115	\$ 326	35%
16	SCANA	\$ 340	\$ 1,009	34%
17	Pepco Holdings*	\$ 321	\$ 1,139	28%
18	MDU Resources Group	\$ 56	\$ 350	16%

Note: Source: SNL: FY2015 unless otherwise noted

<sup>\*</sup> FY2014 used as FY2015 represented abnormal level of Depreciation & Amortization and/or Capex

# Major Strategic Capital Englishers

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### Tacoma Liquefied Natural Gas Project

- ✓ WUTC order approving regulatory structure in Nov 2016: 43% regulated at PSE; 57% unregulated at Puget LNG
- ✓ Unregulated capacity: 50% TOTE & 50% open

## **Risk Mitigation**

#### New Data Center

✓ Mitigate seismic risk & disaster recovery risk

### Lower Baker Dam

- ✓ Grouting & crest improvement to reduce leakage rate & foundation erosion
- ✓ Address FERC compliance requirements

# Improve Customer Experience

#### Get-to-Zero

✓ Enable customers with self-service options & reduce customer calls

#### Automated Meter Infrastructure

- ✓ Current meter reading technology is becoming obsolete, replace by 2023
- ✓ Improve operational capabilities

### Electric Reliability Program (Electric CRM)

- ✓ Replace old cables & worst performing circuits
- √ Improve reliability & reduce outage

### Energize Eastside

✓ Upgrade 18 miles of existing electric transmission lines to serve homes/business

# Tacoma Liquefied Natural Gass will 170 (G")

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- LNG Project serves two purposes
  - 43% regulated at PSE: natural gas peaking facility to meet peak demand
  - 57% unregulated at Puget LNG (subsidiary under PE): transportation fuel for TOTE and other maritime end-users
- WUTC order on October 31, 2016 approving regulatory structure
- Construction started in Q4 2016, completion expected in late 2019
- Quarterly update can be found on the new investor relations website:

http://pugetenergy.com/pages/IngUpdate.html



Tacoma LNG Facility in Tacoma, Washington





# Why we are doing this project

- PSE's ability to recover IT systems in the event of a disaster is a risk to the company
- Two primary risk factors:

### **Data Center Facilities**

- Single point of failure
- 2 outages
- Seismic risk
- Leased office space
- Investment need to keep operational

## **Disaster Recovery**

- 134 IT applications categorized as critical
- 27 critical IT applications have disaster recovery gaps
  - \$13M to remediate





# **Project details**

- To mitigate risks we are investing in two new Data Centers facilities
- Mitigates both risks and improves capabilities to recover in the event of a disaster

### **Modular Data Centers**

- High Availability
  - ✓ Always on
- Geographic diversity (seismic)
  - ✓ Eastern/Western WA state
- Facility resiliency
  - √ Eliminate single point of failure

## **Disaster Recovery**

- End-to-end recovery validation
  - ✓ All critical IT applications always on
- Business impact analysis
  - √ Validate critical IT applications
- Update disaster recovery plans for all 759 IT applications

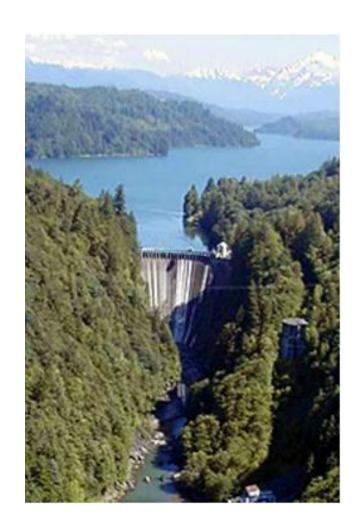
# Lower Baker Dam Background





- Lower Baker Dam is 90 years old built in 1925
- 285-foot-high concrete structure and regulates the 7-mile long Lake Shannon reservoir
- 115 megawatts of power-generating capacity





# Lower Baker Dam Risk Mitigation Project Ower Stew

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# Objectives

- ✓ Reduces leakage rate
- Mitigates foundation erosion (rock abutments)
- ✓ Reduces risk of uncontrolled release of reservoir water
- ✓ Addresses FERC compliance requirements
- ✓ Addresses aging infrastructure

# Program Consists of Two Interrelated Projects

Lower Baker Dam Grouting Project

Addresses abutment leakage and foundation erosion

Lower Baker Dam Crest Improvements Project

- Raises the left and right abutments and directs flood waters over the center of the dam
- Addresses required infrastructure upgrade and modernization
- Improve flood passage and reduce spillway blockage by debris







# **Current State:**

# 4 million customer calls each year:

- 2 million are cleared through our Interactive Voice Response Unit
- 2 million calls are handled by a live agent

5% call reduction achieved in 2016 (96,000 calls saved)

### **Transformation**

### **Identify Root Causes**

Top 5 (SUPER 5) Reasons Customers Call:

- ■Explain My Bill 33%
- Service Event 33%
- ■Pay My Bill 10%
- •Financial Assistance 9%
- Service Interruption 11%

### **Fix the Problem**

Guiding Principles:

- •Know our customers and anticipate their needs
- Provide easy self-service
- Provide proactive information through preferred channels
- •Follow-through on commitments
- Provide accurate and consistent information

# **Future State:**

Get-to-Zero will dramatically transform the way we operate so we can improve the customer and employee experience.

Our goal is that PSE will become so good at what we do that our customers won't have a reason to call.







# **Project Overview**

## Billing, Payment & Credit

- Email notification to customers that bill is due within 5 days
- Internal behavioral scoring & risk segmentation dunning tool
- ✓ Bill enhancements

## **Data Quality**

Deliver customer analytics to provide better visibility as to why customers call



### **Customer Interface**

- Automated Start/Stop/Transfer
- ✓ Automated Start/Stop/Transfer
- Voice Response (IVR)

## Integrated Work Management

Develop long term strategic plan to inform the overall GTZ program plan

# Automated Meter Infrastructure (MIN)

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PSE's Automated Meter Reading ("AMR") platform was installed between 1998-2001 and was designed for a 15-year life. PSE needs to replace existing technology with newer technology ("AMI") over the next 5-10 years to address the following:

### **Maintenance**

~300,000 gas modules are projected to have expiring batteries in 2016-2020, based on a 10-year battery life. Conversion to AMI minimizes AMR battery and other maintenance costs

### **Obsolescence**

Industry is moving to AMI. Equipment and support providers for PSE's AMR platform are limited

### **Performance**

AMR is nearing end-of-life and has increasing reliability issues with the communication network and meter modules which may result in billing impact to customers

## **Billing Performance**

To efficiently meet requirements of a billing performance standard that took effect on March 25, 2016, PSE will need to be able to remotely disconnect meters when customer "move-outs" occur in order to avoid unauthorized energy usage

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# The transition from AMR to AMI will lay the foundation for improved operational and customer capabilities

#### Remote disconnect and reconnect

Scheduled disconnects and near-instantaneous reconnection upon payment

Helps address collection payments, start/stop service, and disconnect calls - GTZ call ranks #1, 2, and 7

### **Prepayment**

Enables budget and energy management for multiple customer types. Provides options for traditional deposits and prior obligation

Helps address collection payment calls - GTZ call rank #1



### **Billing exception reduction**

Reduces estimated and retroactive bills Helps address billing calls - GTZ call rank #3.





## Advanced outage reporting and functionality

Real time accurate outage notification and status reporting

Helps address outage calls - GTZ call rank #5





#### Improved operational capabilities

- Increase energy conservation through conservation voltage reduction
- Facilitate the integration of distributed generation
- Increase reliability through distribution automation
- Enable remote diagnosis of power quality problems
- Reduce energy theft and meter tampering safety concerns through energy diversion notifications

# Electric Reliability Program (Electric CRM)

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# Why we are doing this project

Electric Reliability Program is designed to improve reliability to customers served from PSE's worst performing circuits and underground distribution cable through implementation of location-specific projects that reduce the number and length of power outages. An Electric Cost Recovery Mechanism will align regulatory strategy with this reliability priority.

## Project Details

The mechanism will be modeled after the gas CRM and consists of two parts:

- Reliability Program Plan, and
- Cost Recovery Mechanism ("CRM")

# Electric Reliability Program Details

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# Reliability Program Plan

The plan will consist of a portfolio of specific projects that will deliver the greatest reliability benefits for the dollar to customers served from worst performing circuits/assets

### **Cable Replacement**

- Target the replacement of 1970s vintage high-molecular-weight underground distribution cable
- ✓ There are 2300 miles of cable in the target population and approximately 120-180 miles will be replaced each year
- ✓ Replacement is prioritized based on failure trend of the cable

### **Worst Performing Circuits**

- ✓ Improvement targets circuits that are in the 3<sup>rd</sup> and 4<sup>th</sup> quartile of IEEE benchmark for multiple years
- ✓ Annual work will improve performance on 20-30 circuits per year
- √ Improvement is prioritized based on number and length of outage



## Cost Recovery Mechanism

CRM process would recover the return on the prior year's plan investment and recover depreciation expense through annual rate increases







- Build a new electric substation and upgrade approximately 18 miles of existing transmission lines from Redmond to Renton
- Combined with continued electric conservation, Energize Eastside will keep the lights on for homes and businesses in our Eastside communities for years to come
- The project is in environmental review stage. Construction is expected to begin in late 2017 with project completion expected in 2018









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### **General Rate Case Filed in Jan 2017**

- Current rate plan worked without decoupling & K-factor PSE would have needed to file up to two general rate cases within the last five years
  - ✓ Allowed better opportunity to earn authorized rate of return
  - ✓ Avoided back to back rate cases
- Jan 2017 General Rate Case Overview:

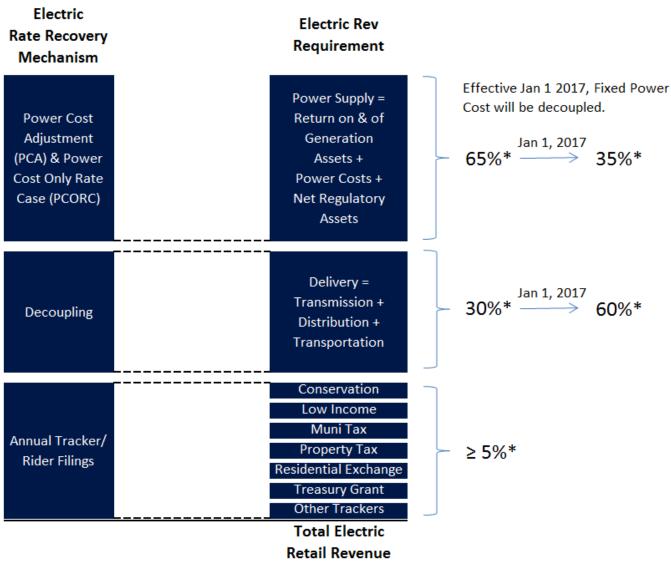
Rate Base	Electric Gas	\$5,098 million \$1,761 million
Customer Rate Change	<u>Electric</u> <u>Gas</u>	Proposed Net Increase of \$87M (4.1%) Proposed Net Decrease of -\$22M (-2.4%)
Key Issues	<ul><li>✓ Colstr</li><li>✓ Rate F</li><li>Recov</li><li>Filing</li><li>✓ Rate construction</li></ul>	of capital: 9.8% ROE; 48.5% Equity Ratio ip 1&2 2022 retirement Recovery Mechanisms: Electric Cost very Mechanism (ECRM), Expedited Rate (ERF) of Return sharing mechanism based on actual mance

# Current Electric Rate Recovery Mechanisms at SE

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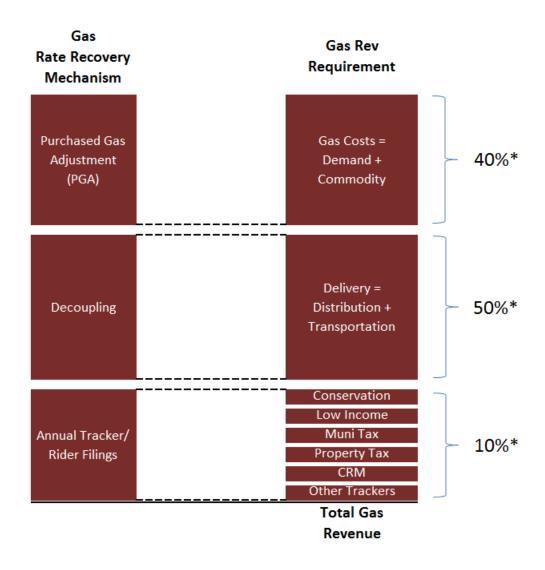
<sup>\*</sup> Numbers are based on 2017 GRC Test Year Financials as of Sep 30, 2016 and are rounded to the nearest 5%.

# Current Gas Rate Recovery Mechanisms at SE

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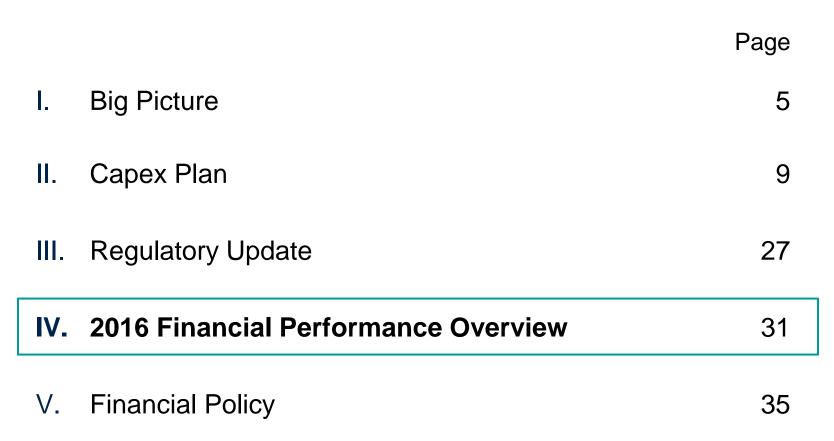




<sup>\*</sup> Numbers are based on 2017 GRC Test Year Financials as of Sep 30, 2016 and are rounded to the nearest 5%.











## 2016: Year in Review

- Weather
  - Q1: El Nino conditions, March storm
  - Q4
    - Nov was warmest on record in WA state
    - Cold Dec
- GRC filing pushed out from 2016 to 2017
- May Hybrid Repurchase Tender Offer
- July Sierra Club settlement: Colstrip 1&2 shutdown by July 1, 2022
- LNG construction delayed by 1 year due to regulatory proceedings

# 2016 Year End Snapshot

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\$ in '000

### **Operating Results**

#### <u>Line</u>

- 1 EBITDA
- 2 O&M
- 3 PSE Capex
- 4 Puget LNG Capex

	12 Months Ended December 31,					
% change	<u>2015</u>	<u>2016</u>				
2.7%	\$1,222,157	\$1,255,315				
7.1%	\$530,720	\$568,492				
15.9%	\$587,225	\$680,849				
	\$0	\$25,595				

### Return on AMA Regulatory Equity

5 Return on AMA Equity

	cember 31,	12 Months Ended De
change	<u>2015</u>	<u>2016</u>
0.6%	8.3%	8.9%

### Average Number of Customers

- 6 Electric
- 7 Gas
- 8 Electric + Gas

12 Months Ended D		
<u>2016</u>	<u>2015</u>	% change
1,119,719	1,103,635	1.5%
807,586	795,013	<u>1.6%</u>
1,927,305	1,898,648	1.5%

### Decoupling Revenue Accrued

- 9 Electric
- 10 Gas
- 11 Electric + Gas

12 Months Ended De		
<u>2016</u>	<u>2015</u>	\$ change
\$29,968	\$13,630	\$16,338
\$ <u>52,115</u>	\$51,981	\$ <u>134</u>
\$82,083	\$65,611	\$16,472

Decoupling revenue resulted in an additional \$82M of revenue for the year ended 2016 due to lower volumetric sales from warmer weather and conservation.

# Historical Financial Performance

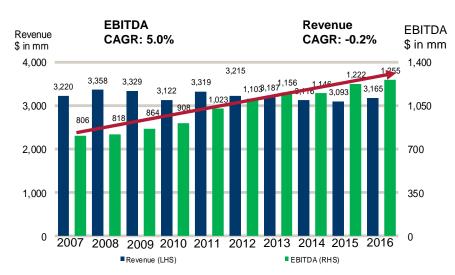
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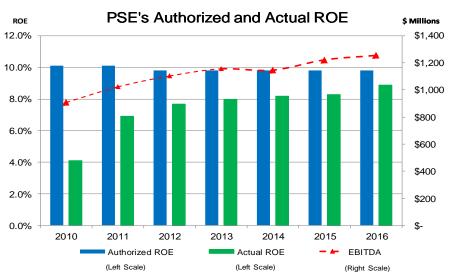
### EBITDA

- Between 2007 and 2016, Puget Energy experienced compound annual EBITDA growth of 5.0%, despite flat revenue growth largely due to operating efficiencies & lower commodity prices



# Return on Regulatory Equity

- Prior to implementing the 'global settlement' regulatory mechanisms in July 2013, the utility rate-making process resulted in regulatory lag
- PSE narrowed the gap between Authorized and Actual ROE from 6.0% in 2010, to 0.9% in 2016









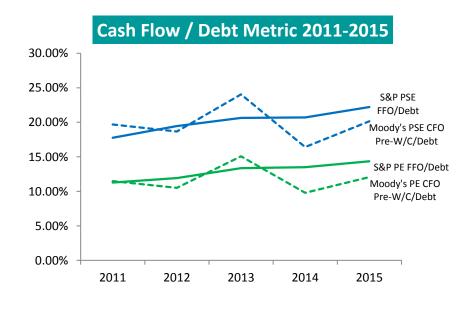
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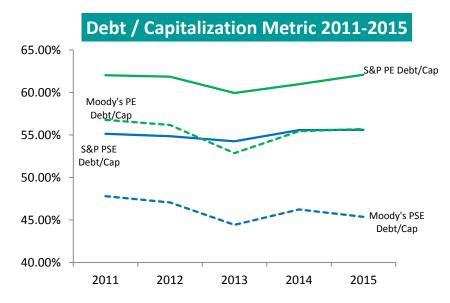




# **Credit Ratings**

- On December 3, 2013, Standard & Poor's raised its corporate rating on PE to 'BBB-' from 'BB+' and affirmed PSE 'BBB' corporate rating
- On January 30, 2014, Moody's raised its corporate rating on PSE to 'Baa1' from 'Baa2' and PE to 'Baa3' from 'Ba1'
- Both Standard & Poor's and Moody's affirmed the 'stable' outlook for PSE & PE
- Fitch ratings to be added in 2017



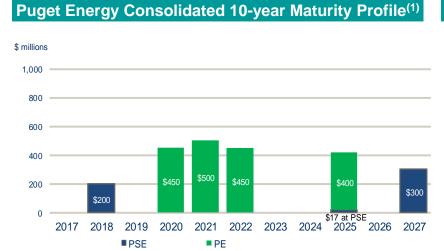


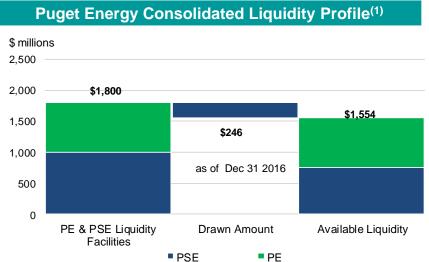




# Liquidity

Strong liquidity position, manageable debt profile & access to capital





<sup>(1)</sup> Puget Energy Annual Report on Form 10-K, filed for 2016.

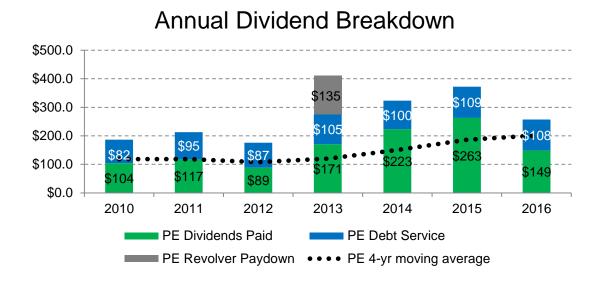




#### Dividend Policy Considerations

- Maintain equity ratio to authorized capital structure, currently proposed 48.5% equity ratio in 2017 GRC
- Comply with dividend restrictions and covenants
- Extraordinary items
  - Treasury Grants (2013&2014)
  - JPUD (2013& 2014)
  - Bonus Depreciation
- Dividends from PSE to PE include interest on \$1.8B in debt at PE (i.e. Holdco)

#### **Annual Dividend Breakdown**









# Preliminary timeline for upcoming investor events in 2017 & 2018

Sep 2017: 2017 Q2 earnings call

- Nov 2017: EEI

- Mar-Apr 2018 East Coast Trip: 2017 Year-End Results

- Sep 2018: 2018 Q2 earnings call

- Nov 2018: EEI

More information can be found on the new investor relations page at:

http://pugetenergy.com/pages/InvestorRelations.html

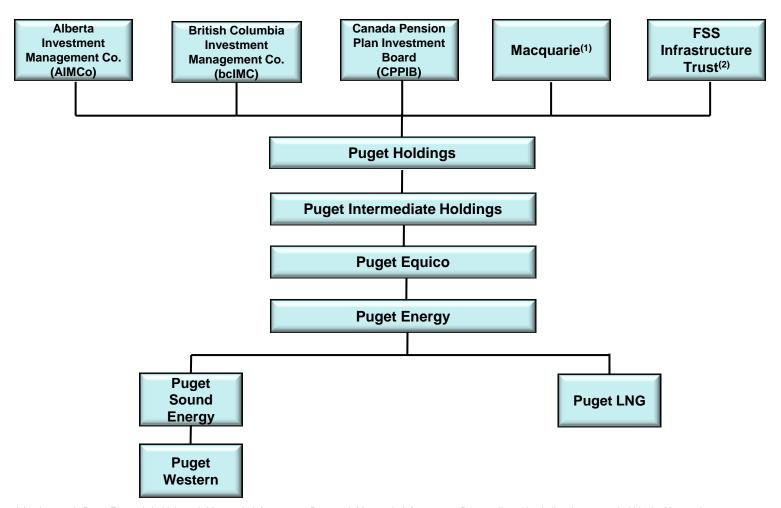




## Appendix







Interest in Puget Energy is held through Macquarie Infrastructure Partners I, Macquarie Infrastructure Partners II. entities indirectly managed within the Macquarie Infrastructure and Real Assets division of Macquarie Group Limited.

### Seasoned Equity Consolitum

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Through their support of the Company's ongoing mission and strategy, Puget Energy's owners are committed to the long term success and financial viability of the business.



## Macquarie Infrastructure and Real Assets<sup>(1)</sup> 41.8% of Capital Contribution

- \$103.4 billion of assets under management across 25 countries
- Leading global alternative asset manager specializing in infrastructure funds, other real asset funds and customized accounts



## First State Super Infrastructure Trust<sup>(2)</sup> 3.7% of Capital Contribution

- \$46 billion of assets under management, more than 775,000 members
- Australia's largest non-profit superannuation fund



### Canada Pension Plan Investment Board 31.6% of Capital Contribution

- \$465 billion of assets under management
- Invests on behalf of the Canada Pension Plan and is the largest single-purpose pension fund in Canada





## British Columbia Investment Management 15.8% of Capital Contribution

- Approximately \$102.8 billion of assets under administration
- Oversees funds for clients that include public sector pension plans, the Province of British Columbia, publicly administered trust funds and public bodies

## Alberta Investment Management Corporation 7.1% of Capital Contribution

- Investment portfolio of approximately \$70 billion
- Manages capital for 28 pension, endowment and government funds in the Province of Alberta
- (1) Interest in Puget Energy is held through Macquarie Infrastructure Partners I, Macquarie Infrastructure Partners II, entities indirectly managed within the Macquarie Infrastructure and Real Assets division of Macquarie Group Limited.
- (2) FSS Infrastructure Trust, formerly a part of the Macquarie Group Limited. FSS ownership stake carries no voting interest.





## The Story: How our Objectives fulfill our mission



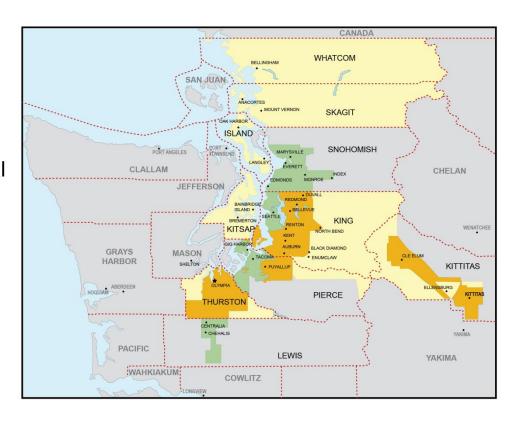
Safe. Dependable. Efficient.

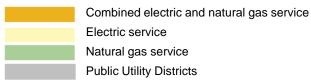
§ Financial	Which will increase our Financial Strength
Customer	We can be our <b>Customers' Energy Partner of Choice</b>
Processes & Tools	And we achieve <b>Operational Excellence</b>
γ <b>ή</b> γ People	And we are a <b>Great Place to Work</b>
Safety	lf Nobody Gets Hurt Today





- Washington state's oldest local energy company
- 100% regulated, engaged in business of electric generation, transmission, distribution and natural gas distribution
- 6,000 square mile service area in Puget Sound region of Western Washington (1)
  - 1.1 million electric customers<sup>(1)</sup>
  - 814,593 gas customers<sup>(1)</sup>



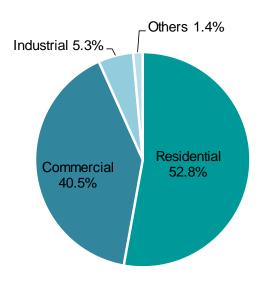






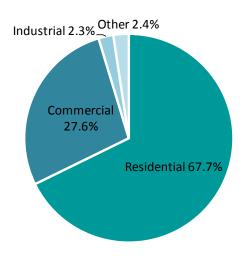
- PSE primarily serves residential and commercial customers with limited industrial exposure
  - 2016 Electric Retail Revenue by customer class<sup>(1)</sup>

$$Total = $2.2B$$



 2016 Gas Retail Revenue by customer class<sup>(1)</sup>

$$Total = $855M$$







## Latest Integrated Resource Plan filed on Nov 30, 2015. Next IRP to be filed in 2017

#### **Electric**

PSE has effectively met its resource needs until 2021

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capacity Need/(Surplus) (in MW)	(160)	(28)	(43)	(44)	(71)	275	316	358	400

#### <u>Gas</u>

PSE has effectively met its resource needs until 2016-17

The capacity need presented in PSE's 2015 IRP shows an increasing resource shortfall over time:

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Deficit/(Surplus) (MDth/day)	25	52	73	87	103	119	135	151

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1.6%

8.0%

1.2%

13.7%

1.5%

12.1%

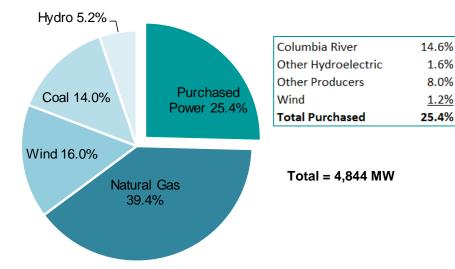
0.6%

25.0% 52.9%

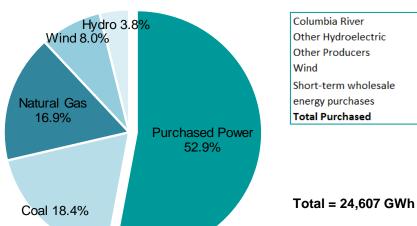
#### PSE owns and manages a diverse power generation portfolio

- PSE is committed to providing safe and reliable electric service to customers in its territory while being a steward of clean energy.
- Puget has a diverse portfolio of resources to meet customer needs:
  - Natural Gas
  - Wind
  - Hydroelectric
  - Coal (low % relative to other utilities)
  - Purchased Power Agreements
- As a national leader in wind power, PSE has 773 MW of wind resources. and has met its Renewable Portfolio Standard mandates through 2021.

#### 2016 Peak Power Resource Capacity (MW)



#### 2016 Energy Production Sources (GWh)



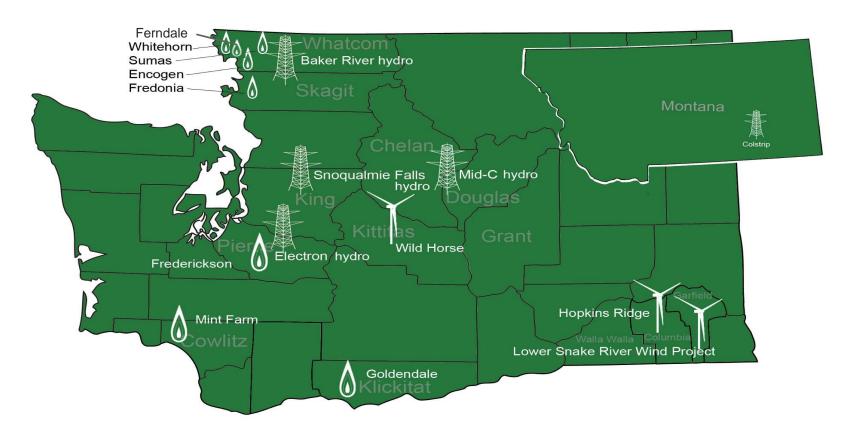
### PSE's Generation Resource Footprint







#### PSE's generating resources cover 16 Washington counties and 2 states



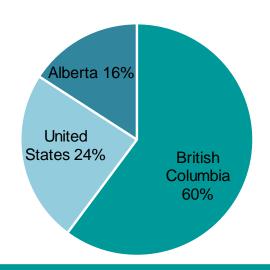




## PSE has a diverse portfolio of gas resources including direct-connect pipelines, storage, and peak supply

- PSE holds firm transportation capacity on pipelines owned by Northwest Pipeline, Gas Transmission Northwest, Nova Gas Transmission, Foothills Pipe Lines, and Westcoast Energy.
  - Firm direct connect pipeline capacity provides reliable gas supplies during peak times
  - Upstream pipeline capacity for direct access to gas production areas
  - Provides firm access to several natural gas supply basins which enables PSE to achieve savings from price spreads
- Storage facilities in Washington and Utah provide supply reliability and reduce portfolio costs through off-peak injection for peak winter heating season withdrawal.

#### 2016 Peak Purchased Gas Supply Diversity



#### 2016 Peak Firm Natural Gas Supply (Dth/day)

Purchased Natural Gas Supply	482,300
Purchased Storage Capacity	112,500
Owned Storage Capacity	351,200
Peak Firm Natural Gas Supply	946,000
Other Commitments and Third Parties	(5,700)
Net Peak Firm Natural Gas Supply	940,300

## Pacific North West Gas Supply

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PSE is perfectly situated near two plentiful natural gas-producing regions: the Western Canadian Sedimentary Basin (WCSB) and the US Rockies.

This close proximity benefits both PSE gas customers and power customers due to the increasing demand for natural gas to generate electricity.

Puget co-owns and operates the Northwest's largest natural gas storage reservoir, Jackson Prairie.

In addition to Jackson Prairie, PSE stores up to 12.9 billion cubic feet of natural gas in Questar's Clay Basin storage facility in Utah.

