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ţ.	BENCH EXHIBITS			
BR-1	Public Counsel		A. Supporting Workpapers (WP-1 and WP-2) for Exhibits RCS-3 and RCS-4 B. Public Counsel's Proposed Adjustments; RCS-3 Supplemental and RCS-4r Supplemental C. Adjustment	
			Reconciliation to JAP- 44	
BR-2	PSE		A. Summary of FERC Account 928 for 2009 B. Supporting	
			Workpapers for Company Adjustments 13.12 and 11.12	
BR-3	Staff		Exhibits in Native Format:	
			BAE-2	
			BAE-3	
			BAE-4 (Attachment A)	
			BAE-5 (Attachment A)	
	PSE	WITNESSES		
	a, Manager, Major Projects,	PSE		
RB-1T	Roque Bamba		Prefiled Direct Testimony of Roque Bamba (15 pages)	
			(1/13/17)	
RB-2	Roque Bamba		Professional Qualifications of Roque Bamba	
RB-3	Roque Bamba		Photos of Geologic Conditions	

CROSS-EX	XAMINATION EXHIBITS	
Katherine J		Requirements and Regulatory Compliance, PSE
KJB-1T	Katherine J. Barnard	Prefiled Direct Testimony of Katherine J. Barnard (85 pages) (1/13/17)
KJB-2	Katherine J. Barnard	Professional Qualifications of Katherine J. Barnard
KJB-3	Katherine J. Barnard	Adj. 3.01: General Rate Increase
		Adj. 3.02: Pro Forma Cost of Capital Adj. 3.03: Conversion Factor
KJB-4	Katherine J. Barnard	Adj. 4.01, 4.02, 4.03, 4.04, 4.05, 4.06: Statement of Operating Income and Adjustments
KJB-5	Katherine J. Barnard	Periodic Allocated Results of Operations; Balance Sheet; Electric Rate Base; Combined Working Capital; Allocation Methods
KJB-6	Katherine J. Barnard	ELECTRIC Adj. 6.01: Revenues and Expenses Adj. 6.02: Temperature Normalization Adj. 6.03: Pass Through Revenue and Expense Adj. 6.04: Federal Income Tax Adj. 6.05: Tax Benefit of Pro Forma Interest Adj. 6.06: Depreciation Study Adj. 6.07: Normalize Injuries and Damages Adj. 6.08: Bad Debts Adj. 6.09: Incentive Pay Adj. 6.10: D&O Insurance Adj. 6.11: Interest on

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				Adj. 6.12: Rate Case
				Expenses
5.				Adj. 6.13: Deferred
				Gains/Losses on Property
-				Sales
				Adj. 6.14: Property and
				Liability Insurance
				Adj. 6.15: Pension Plan
				Adj. 6.16: Wage Increase
				Adj. 6.17: Investment Plan
				Adj. 6.18: Employee
	-	1	-	Insurance
				Adj. 6.19: Environmental
				Remediation
				Adj. 6.20: Payment
				Processing Costs
÷ .				Adj. 6.21: South King Service
				Center
				Adj. 6.22: Filing Fee and
				Excise Tax
KJB-7	Katherine J. Barnard			ELECTRIC
				Adj. 7.01: Power Costs
				Adj. 7.02: Montana Electric
				Energy Tax
				Adj. 7.03: Wild Horse Solar
				Adj. 7.04: Accounting
			) )	Standards Codification 815
				Adj. 7.05: Storm Damage
				Adj. 7.06: Regulatory Assets
	ž.			and Liabilities
				Adj. 7.07: Glacier Battery
				Storage
				Adj. 7.08: Energy Imbalance
				Market
				Adj. 7.09: Goldendale
				Capacity Upgrade
				Adj. 7.10: Mint Farm
				Capacity Upgrade
				Adj. 7.11: White River
				Adj. 7.12: Transfer of Hydro
				Treasury Grants in Rate base
				Adj. 7.13: Production
				Adjustment
KJB-8				
	Katherine J. Barnard	ı		Power Cost Baseline Rate

KJB-9	Katherine J. Barnard	Electric CRM Revenue
		Requirement Model
KJB-10T	Katherine J. Barnard	Prefiled Supplemental
		Testimony of Katherine J.
		Barnard (13 pages) (4/3/17)
KJB-11	Katherine J. Barnard	Adj. 11.01: Updated General
		Rate Increase
		Adj. 11.02: Updated Pro
		Forma Cost of Capital
		Adj. 11.03: Updated
		Conversion Factor
KJB-12	Katherine J. Barnard	Adj. 12.01, 12.02, 12.03, 12.04,
12015-12	ixaciici iiic o. Dariiai d	12.05, 12.06: Updated
		Statement of Operating
		Income and Adjustments
KJB-13	Katherine J. Barnard	ELECTRIC – UPDATED
KJD-13	Katherine J. Darnard	
		Adj. 13.01: Revenues and
		Expenses
		Adj. 13.02: Temperature Normalization
		The state of the s
		Adj. 13.03: Pass Through
		Revenue and Expense Adj. 13.04: Federal Income
		Tax
		Adj. 13.05: Tax Benefit of Pro
		Forma Interest
		Adj. 13.06: Depreciation
		Study
		Adj. 13.07: Normalize
		Injuries and Damages
		Adj. 13.08: Bad Debts
		Adj. 13.00: Bad Debts Adj. 13.09: Incentive Pay
		Adj. 13.10: D&O Insurance
		Adj. 13.11: Interest on
		Customer Deposits
		Adj. 13.12: Rate Case
		Expenses
		Adj. 13.13: Deferred
		Gains/Losses on Property
		Sales
		Adj. 13.14: Property and
		Liability Insurance
		Adj. 13.15: Pension Plan

il de la constant de			Adj. 13.16: Wage Increase Adj. 13.17: Investment Plan Adj. 13.18: Employee Insurance Adj. 13.19: Environmental Remediation Adj. 13.20: Payment Processing Costs Adj. 13.21: South King Service Center Adj. 13.22: Filing Fee and Excise Tax
KJB-14	Katherine J. Barnard		ELECTRIC – UPDATED Adj. 14.01: Power Costs Adj. 14.02: Montana Electric Energy Tax Adj. 14.03: Wild Horse Solar Adj. 14.04: Accounting Standards Codification 815 Adj. 14.05: Storm Damage Adj. 14.06: Regulatory Assets and Liabilities Adj. 14.07: Glacier Battery Storage Adj. 14.08: Energy Imbalance Market Adj. 14.09: Goldendale Capacity Upgrade Adj. 14.10: Mint Farm Capacity Upgrade Adj. 14.11: White River Adj. 14.12: Transfer of Hydro Treasury Grants in Rate base Adj. 14.13: Production Adjustment
KJB-15	Katherine J. Barnard		Updated Power Cost Baseline Rate
KJB-16	Katherine J. Barnard	ē	Revenue Deficiency Calculation; Power Cost Baseline Rate Without Microsoft
KJB-17T	Katherine J. Barnard		Prefiled Rebuttal Testimony of Katherine J. Barnard (105 pages) (8/9/17)

KJB-18	Katherine J. Barnard	Electric Base Rates General Rate Increase
KJB-19	Katherine J. Barnard	Summary of Electric Proforma and Restating Adjustments and their Impact on the Actual Results of Operations
KJB-20	Katherine J. Barnard	Individual Adjustments – Common Assigned to Electric
KJB-21	Katherine J. Barnard	Individual Adjustment – Electric Only
KJB-22	Katherine J. Barnard	Power Cost Adjustment Mechanism Exhibit A-1 Power Cost Rate
KJB-23	Katherine J. Barnard	Comparison of the Electric Revenue Deficiencies by Adjustment Currently Filed by the Company and Opposing Parties
KJB-24	Katherine J. Barnard	Excerpts from Staff's Response to PSE DR 27 – Impact on Staff's Electric Revenue Requirement for Various Corrections
KJB-25	Katherine J. Barnard	Staff's Response to PSE DR 17 – differences between PSE and Staff Related to Depreciation for Colstrip Units 3 and 4
KJB-26	Katherine J. Barnard	Electric Depreciation Study Adjustment KJB-20 with Colstrip Units 3 and 4 at Varying Probable Retirement Years
KJB-27	Katherine J. Barnard	Excerpts from Public Counsel's Response to PSE DR 12
KJB-28	Katherine J. Barnard	Demonstration of Alleged Errors in Public Counsel's Depreciation Study Adjustments
KJB-29C	Katherine J. Barnard	PSE's Response to ICNU DR 58

KJB-30	Katherine J. Barnard	PSE's Response to Staff DR 134
KJB-31	Katherine J. Barnard	Staff's Response to PSE DR 2
KJB-32	Katherine J. Barnard	Staff's Response to PSE DR 9
KJB-33	Katherine J. Barnard	Comparison of PSE's and Staff's 6 Year Average Normal Storm Proposals
KJB-34	Katherine J. Barnard	Work Paper filed by Staff Supporting Exhibit TES-2
KJB-35	Katherine J. Barnard	Impacts on Earnings Sharing for Staff's Proposal on Storm
KJB-36	Katherine J. Barnard	Staff's Response to Public Counsel DRs 2, 4, 6, and 7
KJB-37	Katherine J. Barnard	Extract from Attachment A to PSE's Response to Public Counsel DR 72 Showing Regulatory Lag Associated with the Electric Reliability Plan Absent an Electric Cost Recovery Mechanism
KJB-38	Katherine J. Barnard	Update to Electric Cost Recovery Mechanism Revenue Requirements
KJB-39	Katherine J. Barnard	ICNU's Response to PSE's Response to PSE DR 6
KJB-40	Katherine J. Barnard	Recalculation of Exhibit BGM-6 for a Correction to the Calculation of Carrying Charges
CROSS-EX	AMINATION EXHIBITS	
Chun K. Cl	hang, Regulatory Consultant in Pric	ing and Cost of Service, PSE
CKC-1T	Chun K. Chang	Prefiled Direct Testimony of Chun K. Chang (15 pages) (1/13/17)
CKC-2	Chun K. Chang	Professional Qualifications of Dr. Chun K. Chang
CKC-3T	Chun K. Chang	Prefiled Rebuttal Testimony of Chun K. Chang (22 pages) (8/9/17)

CKC-4	Chun K. Chang	PSE's Responses to Staff DRs 6, 9, 11, and 46
CKC-5	Chun K. Chang	PSE's Rate Schedule Model Specifications and Statistical Test Results
CROSS-EX	AMINATION EXHIBITS	
Daniel A D	oyle, Senior Vice President and Chi	ef Financial Officer of PSF
DAD-1T	Daniel A. Doyle	Prefiled Direct Testimony of
DAD-11	Daniel A. Doyle	Daniel A. Doyle
		(49 pages) (1/13/17)
DAD-2	Daniel A. Doyle	Professional Qualifications of Daniel A. Doyle
DAD-3	Daniel A. Doyle	Summary Decoupling and Rate Plan Analysis, 2013-2016
DAD-4	Daniel A. Doyle	Comparison of Earnings Sharing Level and Opportunity to Earn Authorized Return on Equity
DAD-5	Daniel A. Doyle	Summary of Rate Cases Decided Between 10/1/15 and 9/30/16
DAD-6	Daniel A. Doyle	Equity Ratio from Rate Cases Decided Between 10/1/15 and 9/30/16, Sorted by S&P Credit Rating
DAD-7T	Daniel A. Doyle	Prefiled Rebuttal Testimony of Daniel A. Doyle (64 pages) (8/9/17)
DAD-8	Daniel A. Doyle	Range of States with Decoupling Policies for Electric and Gas Industries
CROSS-EX	XAMINATION EXHIBITS	<b>经收益</b> 的 (1915) (1915) (1915)
William T		onment and Growth
WTE-1T	William T. Einstein	Prefiled Rebuttal Testimony
	TO ARREST A C ADMINISTRA	of William T. Einstein (10

		pages) (8/9/17)
WTE-2	William T. Einstein	Professional Qualifications of William T. Einstein
CROSS-EX	AMINATION EXHIBITS	
Susan E. Fr		E
SEF-1T	Susan E. Free	Prefiled Direct Testimony of Susan E. Free (34 pages) (1/13/17)
SEF-2	Susan E. Free	Professional Qualifications of Susan E. Free
SEF-3	Susan E. Free	General Rate Increase; Pro Forma Cost of Capital; Conversion Factor
SEF-4	Susan E. Free	Results of Operations; Statement of Operating Income and Adjustments
SEF-5	Susan E. Free	Periodic Allocated Results of Operations; Balance Sheet; Gas Rate Base; Combined Working Capital; Allocation Methods
SEF-6	Susan E. Free	GAS Adj. 6.01: Revenue and Expenses Adj. 6.02: Temperature Normalization Adj. 6.03: Pass Through Revenue and Expense Adj. 6.04: Federal Income Tax Adj. 6.05: Tax Benefit of Pro Forma Interest Adj. 6.06: Depreciation Study Adj. 6.07: Normalize Injuries and Damages Adj. 6.08: Bad Debts Adj. 6.09: Incentive Pay Adj. 6.10: D&O Insurance Adj. 6.11: Interest on Customer Deposits

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		Adj. 6.12: Rate Case
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		Adj. 6.13: Deferred
		Gains/Losses on Property
		Sales
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		Liability Insurance
		Adj. 6.15: Pension Plan
		Adj. 6.16: Wage Increase
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		Adj. 6.18: Employee
		Insurance
		Adj. 6.19: Environmental
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		Adj. 6.20: Payment
		Processing Costs
		Adj. 6.21: South King Service
		Center
		Adj. 6.22: Filing Fee and
		Excise Tax
SEF-7	Susan E. Free	Cost Recovery Mechanism
SEF-8T	Susan E. Free	Prefiled Supplemental
		Testimony of Susan E. Free
		(8 pages) (4/3/17)
SEF-9	Susan E. Free	Updated General Rate
		Increase; Pro Forma Cost of
		Capital; Conversion Factor
SEF-10	Susan E. Free	Updated Results of
SLI IV	Susui B. Tice	Operations; Statement of
		Operating Income and
		Adjustments
SEF-11	Susan E. Free	GAS – UPDATED
	NAME AND ALLES	Adj. 11.01: Revenue and
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		Adj. 11.02: Temperature
		Normalization
		Adj. 11.03: Pass Through
		Revenue and Expense
		Adj. 11.04: Federal Income
		Tax
		Adj. 11.05: Tax Benefit of Pro
		Forma Interest
		Adj. 11.06: Depreciation
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SEF-12T	Susan E. Free	0 (8	refiled Rebuttal Testimony f Susan E. Free (59 pages) 8/9/17)
SEF-13	Susan E. Free	G	Natural Gas Base Rates General Rate Increase
SEF-14	Susan E. Free	P A In o	Summary of Natural Gas Proforma and Restating Adjustments and their mpact on the Actual Results of Operations
SEF-15	Susan E. Free		ndividual Adjustments – Common Assigned to Natural Gas
SEF-16	Susan E. Free		ndividual Adjustment – Natural Gas Only
SEF-17	Susan E. Free		Comparison of the Natural

		Gas Revenue Deficiencies by Adjustment Currently Filed by PSE and Opposing Parties
SEF-18	Susan E. Free	Excerpts from Staff's Response to PSE DR 27 – Impact on Staff's Natural Gas Revenue Requirement for Various Corrections
SEF-19	Susan E. Free	Excerpts from Staff's Response to PSE DR 28 – Impact on Commission Staff's Working Capital Calculation for Various Corrections
SEF-20	Susan E. Free	Comparison of Test Year, Allowed and Total Rate Case Costs Per Proceeding
SEF-21	Susan E. Free	2014 System Entry to Transfer Kent Property from Utility to Non-utility Property at Time of Sale
SEF-22	Susan E. Free	System Entries for Deferred Gain on Property Sales
SEF-23	Susan E. Free	Comparison of PSE's and Staff's methods for Allocating Unassigned Recoveries to Specific Sites for Environmental Remediation
SEF-24	Susan E. Free	Determination of PSE's Electric Environmental Remediation Adjustment Utilizing the Low Range of Future Cost Estimates
SFF-25	Susan E. Free	Determination of PSE's Gas Environmental Remediation Adjustment Utilizing the Low Range of Future Cost Estimates
SEF-26	Susan E. Free	Attachment A to PSE's First Supplemental Response to Staff DR 269
SEF-27	Susan E. Free	Transmittal Letter and Report for WNG's September 30, 1994 Environmental

		Remediation Quarterly
		Report filed December 23, 1994
SEF-28	Susan E. Free	Calculation of Working Capital – Summary
SEF-29	Susan E. Free	Calculation of Working Capital – Detail
SEF-30	Susan E. Free	Staff's Response to PSE DR 11
SEF-31	Susan E. Free	Staff's Response to PSE DRs 8 and 14 and a Presentation of How to Adjust for Working Capital Outside of the Working Capital Exhibit
CROSS-EX	AMINATION EXHIBITS	
Booga K. Gi	lbertson, Senior Vice President, Op	erations, PSE
BKG-1T	Booga K. Gilbertson	Prefiled Direct Testimony of Booga K. Gilbertson (38 pages) (1/13/17)
BKG-2	Booga K. Gilbertson	Professional Qualifications of Booga K. Gilbertson
BKG-3	Booga K. Gilbertson	Capital Expenditures by Category (1/11-9/16)
CROSS-EX	AMINATION EXHIBITS	<b>建设制件 2</b> 至 24 年 20 00 00 00 00 00 00 00 00 00 00 00 00
	Hunt, Director of Compensation an	d Benefits, PSE
TMH-1T	Thomas M. Hunt	Prefiled Direct Testimony of Thomas M. Hunt (27 pages) (1/13/17)
ТМН-2	Thomas M. Hunt	Professional Qualifications of Thomas M. Hunt
ТМН-3С	Thomas M. Hunt	***CONFIDENTIAL***  Historic Merit Average Increases
TMH-4	Thomas M. Hunt	PSE Executive Compensation
TMH-5C	Thomas M. Hunt	***CONFIDENTIAL***

		Health Benefit Plans History (2012-2016) Monthly Flex Credits and Medical Plan Costs
ТМН-6С	Thomas M. Hunt	***CONFIDENTIAL***  PSE Retirement Plan –  Monthly Assets and PBO from 1/2012 to 9/30/16
ТМН-7С	Thomas M. Hunt	***CONFIDENTIAL***  Retirement Plan for Employees of Puget Sound Energy Ten Year Deterministic Projection (2016-2025) Baseline: 2016 Preliminary Valuation Results
ТМН-8	Thomas M. Hunt	PSE 2016 Goals and Incentive Plan
CROSS-EX	AMINATION EXHIBITS	
Catherine A	Koch, Director, Planning, PSI	
CAK-1TC	Catherine A. Koch	***CONFIDENTIAL***  Confidential Prefiled Direct Testimony of Catherine A.  Koch (20 pages) (1/13/17)
CAK-2	Catherine A. Koch	Professional Qualifications of Catherine A. Koch
CAK-3C	Catherine A. Koch	***CONFIDENTIAL***  2017 and 2018 Electric  Reliability Plan
CAK-4T	Catherine A. Koch	Prefiled Rebuttal Testimony of Catherine A. Koch (43 pages) (8/19/17)
CAK-5	Catherine A. Koch	Ernest Orlando Lawrence Berkeley National Laboratory Updated Value of Service Reliability Estimates for Electric Utility Customers in

		the United States (Jan. 2015)
CAK-6	Catherine A. Koch	PSE Response to Public Counsel DR 25
CAK-7	Catherine A. Koch	PSE Response to ICNU DR 24
CAK-8	Catherine A. Koch	Ardmore Project Chronology
CROSS-E	XAMINATION EXHIBITS	BOTTON BERTHALL STATE
Brandon J	. Lohse, Corporate Treasurer for PS	E
BJL-1T	Brandon H. Lohse	Prefiled Direct Testimony of Brandon H. Lohse (21 pages) (1/13/17)
BJL-2	Brandon H. Lohse	Professional Qualifications of Brandon H. Lohse
BJL-3	Brandon H. Lohse	Utility Capital Structure Cost of Capital and Rate of Return; Utility Capital Structure Calculation; Cost of Short-Term Debt; Commitment Fees; Amortization of Short-Term Debt Issue Costs; Cost of Long Term Debt; Schedule of Annual Charges on Reacquired Debt
BJL-4	Brandon H. Lohse	Utility Capital Structure Proposed Cost of Capital and Rate of Return Requested for Rate Year 2018; Requested Cost of Debt; Short Term Debt Interest and Fees Details; Interest Calculation on \$250M Jr. Subordinated Security; Schedule of Annual Charges on Reacquired Debt
BJL-5	Brandon H. Lohse	Bonds Callable as of 9/30/16
BJL-6	Brandon H. Lohse	S&P Global Ratings Direct Summary for PSE
BJL-7	Brandon H. Lohse	Moody's Investors Service Credit Opinion on PSE, 8/5/16

	Accounting Officer
Matthew R. Marcelia	Prefiled Rebuttal Testimony of Matthew R. Marcelia (39 pages) (8/9/17)
Matthew R. Marcelia	Professional Qualifications o Matthew R. Marcelia
Matthew R. Marcelia	Colstrip Units 1 and 2 Historical Depreciation Rate
AMINATION EXHIBITS	
George E. Marshall	Prefiled Rebuttal Testimony of George E. Marshall (18 pages) (8/9/17)
George E. Marshall	Professional Qualifications o George E. Marshall
George E. Marshall	PSE Response to NWEC/RNW/NRDC DR 14
AMINATION EXHIBITS	
1	
	ns for PSE
David E. Mills	Prefiled Direct Testimony of David E. Mills (29 pages) (1/13/17, revised 2/3/17)
David E. Mills	Professional Qualifications of David E. Mills
David E. Mills	Benefits Analysis of PSE's Participation in the ISO Energy Imbalance Market
David E. Mills	Prefiled Rebuttal Testimony of David E. Mills (8 pages) (8/9/17)
	Matthew R. Marcelia Matthew R. Marcelia MINATION EXHIBITS  arshall, Manager, Transmission Pol George E. Marshall  George E. Marshall  George E. Marshall  AMINATION EXHIBITS  als, Vice President, Energy Operatio David E. Mills  David E. Mills  David E. Mills

Joel L. Mol	ander, Director, IT Business Partne	er Engagement, PSE
JLM-1T	Joel L. Molander	Prefiled Direct Testimony of Joel L. Molander (13 pages) (1/13/17)
JLM-2	Joel L. Molander	Professional Qualifications of Joel L. Molander
JLM-3	Joel L. Molander	South King Complex Strategy Assumptions, Analysis and Opinion Memorandum RE: PSE Strategic Real Estate Options, Prepared by CBRE Brokerage
JLM-4	Joel L. Molander	South King Complex Pro Forma Summary
CROSS-EX	AMINATION EXHIBITS	And the second second second
Roger A. M State Unive		e at Robinson College of Business, Georgia
RAM-1T	Roger A. Morin	Prefiled Direct Testimony of Roger A. Morin (58 pages) (1/13/17)
RAM-2	Roger A. Morin	Professional Qualifications of Roger A. Morin
RAM-3	Roger A. Morin	Investment-Grade Dividend- Paying Combination Gas and Electric Utilities Covered in Value Line's Electric Utility Industry Group
RAM-4	Roger A. Morin	Proxy Group for PSE
RAM-5	Roger A. Morin	Combination Electric and Gas Utilities DCF Analysis Value Line Growth Rates
RAM-6	Roger A. Morin	Combination of Electric and Gas Utilities DCF Analysis Analysts' Growth Forecasts
RAM-7	Roger A. Morin	Combination Electric and Gas Beta Estimates

RAM-8	Roger A. Morin	CAPM, Empirical CAPM
RAM-9	Roger A. Morin	2015 Utility Industry Historical Risk Premium
RAM-10	Roger A. Morin	Equity Risk Premium – Treasury Bond
RAM-11	Roger A. Morin	Proxy Group for PSE Common Equity Ratios
RAM-12T	Roger A. Morin	Prefiled Rebuttal Testimony of Roger A. Morin (97 pages) (8/9/17)
RAM-13	Roger A. Morin	PSE's Response to Public Counsel DR 333
CROSS-EXA	MINATION EXHIBITS	
Michael Mul	ally, Manager, Business In	tiatives, Strategic Initiatives Department
MM-1THC	Michael Mulally	*** HIGHLY
1 3		CONFIDENTIAL***  Confidential Prefiled Direct Testimony of Michael Mulally (38 pages) (1/13/17)
MM-2	Michael Mulally	Professional Qualifications of Michael Mulally
MM-3	Michael Mulally	RFP City of Buckley Sale of Natural Gas Utility
MM-4C	Michael Mulally	***CONFIDENTIAL***  Buckley Natural Gas System  RFP Overview
MM-5	Michael Mulally	June 13, 2013, Letter to City of Buckley from PSE RE: RFPs City of Buckley Sale of Natural Gas Utility
MM-6	Michael Mulally	October 15, 2013, Letter to PSE from GeoEngineers RE: Historic Research to Identify Properties of Potential Environmental Concern in Close Proximity to City of Buckley's Natural Gas

		Distribution Lines
MM-7	Michael Mulally	Assignment Agreement Between City of Buckley and PSE
MM-8	Michael Mulally	Firm Natural Gas Service Agreement Between City of Enumclaw and PSE, Docket UG-140088
ММ-9С	Michael Mulally	***CONFIDENTIAL***  Memorandum RE: Buckley Valuation Method with Appendices (revised 1/27/17)
MM-10HC	Michael Mulally	*** HIGHLY CONFIDENTIAL*** Energy Storage EPC Scoring Matrix – Clean Energy Fund Proposal (October 2014)
MM-11	Michael Mulally	PSE IRP Electric Analysis
MM-12C	Michael Mulally	***CONFIDENTIAL***  New Douglas PUD (Wells Project) PPA, EMC Informational 4/16/15 Prepared by Brennan Mueller, Energy Contract Administrator
CROSS-EXA	AMINATION EXHIBITS	
Ion A Dilion	is, Manager of Pricing and C	est of Sarviga PSF
38.0		
JAP-1T	Jon A. Piliaris	Prefiled Direct Testimony of Jon A. Piliaris (159 pages) (1/13/17)
JAP-2	Jon A. Piliaris	Professional Qualifications of Jon A. Piliaris
JAP-3	Jon A. Piliaris	Proforma Delivered Sales Electric Rates
JAP-4	Jon A. Piliaris	Gas Adjustments to Volume (Therms) by Rate Schedule

JAP-5C	Jon A. Piliaris	***CONFIDENTIAL***
		Peak Credit Method for 2014 Filing, Company Proposal
JAP-6C	Jon A. Piliaris	***CONFIDENTIAL***
Parket V		Peak Credit Method with
F-41.3	the state of the state of	Updated Data, Company
		Proposal
JAP-7	Jon A. Piliaris	 Electric Cost of Service
		Summary
JAP-8	Jon A. Piliaris	2017 Gas Cost of Service
		Study Proposed Test Year Without Gas
7.17.0	T ( 7011 1	
JAP-9	Jon A. Piliaris	2017 Gas Cost of Service Study Proposed Test Year
		With Gas
JAP-10	Jon A. Piliaris	2017 Gas Account Detail by
JAI -10	Juli A. I maris	Classification and Rate Class
JAP-11	Jon A. Piliaris	2017 Gas Cost of Service
		Study Account Inputs
JAP-12	Jon A. Piliaris	2017 Gas Cost of Service
		Study External Allocators
JAP-13	Jon A. Piliaris	Allocation of Account 376
		Distribution Mains
JAP-14	Jon A. Piliaris	Summary of Gas Cost
	,	Allocation Proforma Test
		Year with Gas
JAP-15	Jon A. Piliaris	PSE Non-Lighting Tariffed
li		Rate Components; Lighting
		Tariffed Rate Components; Summary Rate Spread;
		Summary of Proposed Rate
i i		Design Present and Proposed
1		Rates; Estimated Effect of
l		<b>Proposed Rate Base Increase</b>
		on Revenues from Electric
		Sales; Residential Rate
		Design; Secondary Voltage
		Rate Design; Primary Voltage
		Rate Design; Campus Rate Design; High Voltage Rate
		Design; Transportation and
Ш		Design, Fransportation and

		Wholesale for Resale; Area and Street Lighting Rate Design
JAP-16	Jon A. Piliaris	Proposed Electric Schedules 7, 7A, 24-26, 29, 31, 35, 40, 43, 46, 49, 50-55, 57, 58, 95, 141, 142, 149, 448, 458, and 459
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JAP-18	Jon A. Piliaris	Schedule 40 Coincident Factors by Customer
JAP-19	Jon A. Piliaris	GRC Rate Impacts
JAP-20	Jon A. Piliaris	Lighting Schedules, Classification of Lighting Costs
JAP-21	Jon A. Piliaris	Development of Unitized Lighting Costs
JAP-22	Jon A. Piliaris	Summary of Allocated Costs
JAP-23	Jon A. Piliaris	Lighting Revenues Summary Base Rate vs. Proposed 2017 GRC
JAP-24	Jon A. Piliaris	Allocation of Revenue Deficiency to Rate Classes at Existing PGA Allocation
JAP-25	Jon A. Piliaris	Current and Proposed Natural Gas Tariff Rules 21, 23, and 29, Schedules 16, 23, 31, 31T, 41, 41T, 53, 85, 85T, 185T, 86, 86T, 87, 87T, 141, Supplemental Schedule 142
JAP-26	Jon A. Piliaris	Survey of Residential Monthly Minimum Charges of Gas Utilities
JAP-27	Jon A. Piliaris	2017 Gas Cost of Service Study Procurement Charge Calculation Proforma Test Year Without Gas
JAP-28	Jon A. Piliaris	2017 Gas Proposed Rates, Estimated Combined Impact on Total Bills

JAP-29	Jon A. Piliaris	PSE Electric and Natural Gas Evaluation: Three Years of Decoupling; Independent Third-Party Evaluation of PSE's Decoupling Mechanisms, Prepared by H. Gil Peach & Associates, Forefront Economics, Inc., and Joseph Associates, Inc. (12/31/16)
JAP-30	Jon A. Piliaris	Electric Decoupling Mechanism Development of Decoupled Delivery and Power Cost Revenue by Decoupling Group; Development of Allowed Delivery Revenue & Fixed Power Cost Revenue Per Customer; Development of Delivery Revenue & Fixed Power Cost Per Unit Rates; Development of Delivery Revenue Per Unit Rates; Development of Monthly Allowed Delivery Revenue Per Customer; Development of Monthly Allowed Fixed Power Cost Revenue Per Customer; Delivery Revenue Deferral and Amortization Calculations; Fixed Power Cost Deferral and Amortization Calculations
JAP-31	Jon A. Piliaris	Gas Decoupling Mechanism Development of Decoupled Revenue by Decoupling Group; Development of Allowed Delivery Revenue Per Customer; Development of Delivery Revenue Per Unit Rates; Development of Monthly Allowed Delivery Revenue Per Customer; Delivery Revenue Deferral

		and Amortization Calculations
JAP-32	Jon A. Piliaris	Electric CRM Revenue Requirement Model; Calculation of Schedule 149 Electric Rider Rates
JAP-33C	Jon A. Piliaris	***CONFIDENTIAL***  Electric Decoupling  Mechanism Development of  Decoupled Delivery and  Power Cost Revenue by  Decoupling Group
JAP-34T	Jon A. Piliaris	Prefiled Supplemental Testimony of Jon A. Piliaris (20 pages) (4/3/17)
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JAP-38	Jon A. Piliaris	Calculation of Schedule 96 Rate; Statement of Proforma and Proposed Revenue for Schedule 95
JAP-39	Jon A. Piliaris	Tariffed Rate Components; Summary Rate Spread; Estimated Effect of Proposed Base Rate Increase on Revenues from Electric Sales; Residential Rate Design; Secondary Voltage Rate Design; Primary Voltage Rate Design; Campus Rate Design; High Voltage Rate Design; Transportation and Wholesale for Resale; Area and Street Lighting Rate

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JAP-42	Jon A. Piliaris		Gas Decoupling Mechanism Calculations
JAP-43C	Jon A. Piliaris		Electric Decoupling Mechanism Calculations
JAP-44	Jon A. Piliaris		GRC Rate Impacts; Monthly Billing Comparison by Schedule
JAP-45	Jon A. Piliaris		2017 Gas GRC Proposed Rates Estimated Combined Impact on Total Bills; Typical Residential Bill Impacts of Proposed Rate Changes
JAP-46TC	Jon A. Piliaris		***CONFIDENTIAL*** Confidential Prefiled Rebuttal Testimony of Jon A. Piliaris (86 pages) (8/9/17)
JAP-47	Jon A. Piliaris		Alternative Decoupling Calculations for Fixed Production Cost
JAP-48	Jon A. Piliaris		The Energy Project Response to PSE DR 2
JAP-49	Jon A. Piliaris		Joint Motion to Amend Order 03 and Settlement Agreement in Docket UE- 141368
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JAP-51	Jon A. Piliaris		Sample PSE Residential Electric Customer Bill
JAP-52	Jon A. Piliaris		PSE Residential Electric Rate Summary

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Ronald J. Ro	oberts, Director of Thermal Resour	rces, PSE
RJR-1TC	Ronald J. Roberts	***CONFIDENTIAL***
		Confidential Prefiled Direct Testimony of Ronald J. Roberts (76 pages)
	The state of the last	(1/13/17)
RJR-2	Ronald J. Roberts	Professional Qualifications of Ronald J. Roberts
RJR-3	Ronald J. Roberts	Construction and Ownership Agreement Between Montana Power Company and PSE
RJR-4	Ronald J. Roberts	Agreement for the Operation and Maintenance of Colstrip Steam Electric Generating Plant Between Montana Power Company and PSE
RJR-5	Ronald J. Roberts	Common Facilities Agreement Between Montana Power Company, PSE, Washington Water Power Company, Portland General Electric Company, Pacific Power, and Basin Electric Power Cooperative for Colstrip Units 1-4
RJR-6	Ronald J. Roberts	Coal Purchase and Sale Agreement By and Among PPL Montana, LLC and PSE as Buyers and Western Energy Company as Seller
RJR-7	Ronald J. Roberts	Colstrip Project Transmission Agreement between Northwestern Energy, PSE, Avista, Portland General Electric Company, and PacifiCorp

RJR-8	Ronald J. Roberts	Transmission Agreement Between Montana Power Company and PSE for Colstrip Units 1 and 2
RJR-9	Ronald J. Roberts	Amended and Restated Transmission Agreement Executed by US DOE Acting by and through the Bonneville Power Administration and Montana Intertie Users (Colstrip Project)
RJR-10	Ronald J. Roberts	EPA Rules and Proposed Rules
RJR-11	Ronald J. Roberts	US Energy Information Administration article, "Coal Made up more than 80% of Retired Electricity Generating Capacity in 2015" March 8, 2016
RJR-12	Ronald J. Roberts	"A Bleak Future for Colstrip Units 1 and 2," Institute for Energy Economics and Financial Analysis, June 2015
RJR-13	Ronald J. Roberts	Statement of Talen Energy, Jeremy McGuire, Senior VP, CFO, before the Montana Energy and Telecommunications Interim Committee, July 14, 2016
RJR-14	Ronald J. Roberts	Talen Montana Colstrip Power Plant Shutdown Water Management Options Analysis, Prepared by WorleyParsons Resources and Energy
RJR-15	Ronald J. Roberts	Feasibility Capital Cost Estimate Colstrip Units 1-4 SCR Retrofit, prepared by David Bowen for Burns & McDonnell
RJR-16	Ronald J. Roberts	USDC District of Montana

		Sierra Club and Montana Environmental Information Center v. Talen Montana, LLC, Avista, PSE, Portland General Electric Company, Northwestern Energy, and PacifiCorp Declaration of Gordon Criswell in Opposition of Plaintiff's Motion for Attorney's Fees;
RJR-17	Ronald J. Roberts	Forecast of Possible Cost Impacts of I-732
RJR-18	Ronald J. Roberts	Consent Decree from USDC District of Montana between Sierra Club, Montana Environmental Information Center and Talen Montana, LLC, Avista, PSE, Portland General Electric Company, Northwestern Energy, PacifiCorp
RJR-19	Ronald J. Roberts	General Release and Settlement Agreement between Sierra Club, Montana Environmental Information Center, National Wildlife Federation and Talen Montana, LLC, Avista, PSE, Portland General Electric Company, Northwestern Energy, PacifiCorp
RJR-20	Ronald J. Roberts	Cost Estimate to Retire and Decommission Colstrip Units 1 and 2, Black & Veatch Corporation
RJR-21	Ronald J. Roberts	Colstrip Units 1 and 2 Demolition Cost Estimate, HDR Engineering, Inc.
RJR-22	Ronald J. Roberts	Brandenburg Quote – Demolition Budget Colstrip

			Units 1 and 2
RJR-23	Ronald J. Roberts		Total Projected Decommissioning and Demolition Costs and CCR Plan Costs Colstrip Units 1 and 2
RJR-24	Ronald J. Roberts		Master Plan Summary Report Update Colstrip Steam Electric Station Prepared by Geosyntec Consultants, Revised 9/23/16
RJR-25	Ronald J. Roberts		2017 GRC vs. 2014 PCORC as filed
RJR-26C	Ronald J. Roberts		***CONFIDENTIAL***
			Amortization for Rate Years Major Maintenance Expense
RJR-27	Ronald J. Roberts		Lower Snake River Operations and Maintenance Cost Benchmark and Forecast Study
RJR-28	Ronald J. Roberts		RFP for Lower Snake River Service and Maintenance on Behalf of PSE
RJR-29C	Ronald J. Roberts		***CONFIDENTIAL*** New Siemens Wind Turbine Services Agreement
RJR-30T	Ronald J. Roberts		Prefiled Rebuttal Testimony of Ronald J. Roberts (18 pages) (8/9/17)
RJR-31	Ronald J. Roberts		The Application for a Construction Permit to the Montana Department of Health and Environmental Services for Colstrip Units 1 and 2
RJR-32	Ronald J. Roberts		Study of Alternate Ash Disposal Methods For Colstrip Units No. 1 and No. 2, issued by the Montana Power Company in February 1985

CROSS-EX	AMINATION EXHIBITS	
John K. Ro	rk, Manager, Environmental Progra	nms & Sciences Department, PSE
JKR-1T	John K. Rork	Prefiled Direct Testimony of John K. Rork (14 pages) (1/13/17)
JKR-2	John K. Rork	Professional Qualifications of John K. Rork
JKR-3	John K. Rork	Electric Sites and Former Manufactured Gas Sites Actual Costs and Insurance Recoveries through 9/16
CROSS-EX	AMINATION EXHIBITS	
Suzanne M	. Sasville, Supervisor for Energy Ass	istance Programs, PSE
SMS-1T	Suzanne M. Sasville	Prefiled Direct Testimony of Suzanne M. Sasville (8 pages) (1/13/17)
SMS-2	Suzanne M. Sasville	Professional Qualifications of Suzanne M. Sasville
SMS-3	Suzanne M. Sasville	PSE Customers Below Poverty Levels
SMS-4T	Suzanne M. Sasville	Prefiled Rebuttal Testimony of Suzanne M. Sasville (8 pages) (8/9/17)
CROSS-EX	AMINATION EXHIBITS	
Steven R. S Officer	ecrist, Senior Vice President, Gener	al Counsel, Chief Ethics and Compliance
SRS-1T	Steven R. Secrist	Prefiled Rebuttal Testimony of Steven R. Secrist (13 pages) (8/9/17)
SRS-2	Steven R. Secrist	Professional Qualifications of Steven R. Secrist
SRS-3	Steven R. Secrist	Letter to Steve McLellan,

		Washington Utilities and Transportation Commission (April 2, 1998)
CROSS-EXA	MINATION EXHIBITS	A COLUMN TO THE PROPERTY OF THE PARTY OF
John J. Span	os, Senior Vice President, G	nnett Fleming Valuation and Rate Consultants
JJS-1T	John J. Spanos	Prefiled Direct Testimony of John J. Spanos (18 pages) (1/13/17)
JJS-2	John J. Spanos	Professional Qualifications of John J. Spanos
JJS-3	John J. Spanos	2016 Depreciation Study: Calculated Annual Depreciation Accruals Related to Electric, Gas, and Common Plant as of 9/30/16, Prepared by Gannett Fleming
JJS-4T	John J. Spanos	Prefiled Rebuttal Testimony of John J. Spanos (39 pages) (8/9/17)
JJS-5	John J. Spanos	Comparison of Theoretical Net Plant as of Sept. 30, 2016
JJS-6	John J. Spanos	Depreciation Expense for Colstrip Units 3 and 4 (2025 & 2029)
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Paul K. Wetl	herbee, Director, Energy Sup	ply Merchant for PSE
PKW-1TC	Paul K. Wetherbee	***CONFIDENTIAL***  Confidential Prefiled Direct Testimony of Paul K. Wetherbee (83 pages) (1/13/17)
PKW-2	Paul K. Wetherbee	Professional Qualifications of Paul K. Wetherbee
PKW-3C	Paul K. Wetherbee	***CONFIDENTIAL*** 2017 GRC As Filed Power

		等 <b>署</b>	Costs Projections – AURORA + Not in Models Rate Year January 2018 through December 2018; Gas Price Date: 9/23/16
PKW-4C	Paul K. Wetherbee		***CONFIDENTIAL***  2017 GRC As Filed vs 2016  Power Costs Update Power  Costs Comparison
PKW-5	Paul K. Wetherbee		Greenhouse Gas Emissions Caps Metric Tons CO2 Equivalent
PKW-6C	Paul K. Wetherbee		***CONFIDENTIAL*** Change in Power Costs & Generation Due to Emission Constraints
PKW-7	Paul K. Wetherbee		PSE White River Land Parcels in Regulatory Asset Account
PKW-8CT	Paul K. Wetherbee		***CONFIDENTIAL*** Confidential Prefiled Supplemental Testimony of Paul K. Wetherbee (8 pages) (4/3/17)
PKW-9C	Paul K. Wetherbee		***CONFIDENTIAL***  2017 GRC Supplemental Power Costs Projections – AURORA + Not in Models Rate Year January 2018 through December 2018; Gas Price Date: 2/3/17
PKW-10C	Paul K. Wetherbee		***CONFIDENTIAL***  2017 GRC Supplemental vs  2017 GRC As Filed Power  Costs Comparison
PKW-11C	Paul K. Wetherbee		***CONFIDENTIAL***  2017 GRC Supplemental vs  2016 Power Costs Update Power Costs Comparison
PKW-12C	Paul K. Wetherbee	7 1	***CONFIDENTIAL***

		Change in Power Costs & Generation Due to Emission Constraints
PKW-13C	Paul K. Wetherbee	***CONFIDENTIAL***  2017 GRC Supplemental Contingent Calculation Power Costs Projections — AURORA + Not in Models Raye Year January 2018 through December 2018; Gas Price Date: 2/3/17
PKW-14C	Paul K. Wetherbee	***CONFIDENTIAL***  2017 GRC Supplemental Contingent Calculation vs 2017 GRC Supplemental Power Costs Comparison
PKW-15TC	Paul K. Wetherbee	***CONFIDENTIAL***  Confidential Prefiled  Rebuttal Testimony of Paul  K. Wetherbee (50 pages)  (8/9/17)
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PKW-16	Paul K. Wetherbee	PSE Clean Air Rule Baseline Emissions Limits and 2018 Caps (2012 through 2016)
PKW-16 PKW-17C	Paul K. Wetherbee  Paul K. Wetherbee	PSE Clean Air Rule Baseline Emissions Limits and 2018
		PSE Clean Air Rule Baseline Emissions Limits and 2018 Caps (2012 through 2016)  ***CONFIDENTIAL*** Clean Air Rule Compliance
PKW-17C	Paul K. Wetherbee	PSE Clean Air Rule Baseline Emissions Limits and 2018 Caps (2012 through 2016)  ***CONFIDENTIAL*** Clean Air Rule Compliance Cost Estimate  ***CONFIDENTIAL*** Comparisons of Actual Wind Generation with the Preconstruction, 2010 DNV,

PKW-21C	Paul K. Wetherbee	***CONFIDENTIAL***
		Updated Summary of Power Costs
PKW-22C	Paul K. Wetherbee	***CONFIDENTIAL***
		Comparison of Projected
		Power Costs Presented in
	A STATE OF THE STA	This Rebuttal Testimony with
100	ADA SERIE	the Projected Power Costs
		Presented in PSE's
	HOR STATE	Supplemental Testimony filed on April 3, 2017
PKW-23C	Paul K. Wetherbee	***CONFIDENTIAL***
	All the state of t	Comparison of Projected
		Power Costs Presented in this
		Rebuttal Testimony with the
100		Projected Power Costs
	entroller and the second	Presented in the 2016 Power
	and arrive and age and the	Costs Update
PKW-24C	Paul K. Wetherbee	***CONFIDENTIAL***
		Projected Power Costs with
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		Contract Qualifying Load
	and the second standard and	Removed
PKW-25C	Paul K. Wetherbee	***CONFIDENTIAL***
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	the second second	Power Costs Presented in this
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		Power Costs Presented in
		PSE's Supplemental
1 1 1 1 1 1		Testimony Filed on April 3,
		2017, with the Microsoft
110	Personal Property Control	Special Contract Qualifying
		Load Removed
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	r, Director Customer Care	
GJZ-1T	Greg J. Zeller	Prefiled Direct Testimony of Greg J. Zeller (22 pages)

		(1/13/17)
GJZ-2	Greg J. Zeller	Professional Qualifications of Greg J. Zeller
GJZ-3T	Greg J. Zeller	Prefiled Rebuttal Testimony of Greg J. Zeller (21 pages) (8/9/17)
GJZ-4	Greg J. Zeller	Public Counsel Response to PSE DR 7
GJZ-5	Greg J. Zeller	Public Counsel Response to PSE DR 9
CROSS-EX	KAMINATION EXHIBITS	in the second second
	COMMISSION REC	GULATORY STAFF
Jason L. B	all, Regulatory Analyst	
JLB-1T	Jason L. Ball	Prefiled Response Testimony of Jason L. Ball (56 pages) (6/30/17)
JLB-2	Jason L. Ball	Comparison of Staff and Company Electric Cost of Service Study Results and Rate Design Proposals
JLB-3	Jason L. Ball	Comparison of Staff and Company Natural Gas Rates
JLB-4C	Jason L. Ball	***CONFIDENTIAL*** Seasonal Rate Design Technical Appendix
JLB-5	Jason L. Ball	Bill Impact of Increased Basic Charge
JLB-6	Jason L. Ball	Third Block Technical Appendix
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JLB-8T	Jason L. Ball	Supplemental Testimony of Jason L. Ball (8/7/17) (8 pages)
JLB-9	Jason L. Ball	Cross-Walk of Impacts on Cost of Service from Various

		Updates
JLB-10	Jason L. Ball	PSE 1 <sup>st</sup> Revised Response to Staff DR 443
JLB-11	Jason L. Ball	Staff Response to PSE DR 24
JLB-12T	Jason L. Ball	Prefiled Cross-Answering Testimony of Jason L. Ball (8 pages) (8/9/17)
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JLB- X	NWIGU	Prefiled Testimony of Jason L. Ball in WUTC Docket Nos. 160228 & 160229 (consolidated)
3/L 1: C /		
	Cheesman, Regulatory Analyst	
MCC-1T	Melissa C. Cheesman	Prefiled Response Testimony of Melissa C. Cheesman (30 pages) (6/30/17)
MCC-2	Melissa C. Cheesman	Electric Results of Operations for 12 Months Ending 9/30/16
MCC-3	Melissa C. Cheesman	Calculation of Electric Revenue Requirement Sufficiency
MCC-4	Melissa C. Cheesman	Comparison of PSE-Staff Electric Revenue Requirements
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MCC-13	Melissa C. Cheesman	Gas Revenue Bridge
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MCC-15	Melissa C. Cheesman	PSE Response to Staff DR 382
MCC-16	Melissa C. Cheesman	PSE Response to Staff DR 371
MCC-17	Melissa C. Cheesman	PSE Response to Staff DR 372
MCC-18	Melissa C. Cheesman	PSE Witness, Ms. Susan Free Natural Gas Work Paper Adjustment 11.13
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	dahl, Regulatory Analyst	Individual a produc
BAE-1T	Betty A. Erdahl	Prefiled Response Testimony of Betty A. Erdahl (16 pages) (6/30/17)
BAE-2	Betty A. Erdahl	Comparison of Staff and PSE Working Capital Adjustments
BAE-3	Betty A. Erdahl	Detailed Staff Working Capital Calculation 13.23 and 11.23
BAE-4	Betty A. Erdahl	PSE Response to Staff DR 337
BAE-5	Betty A. Erdahl	PSE Response to Staff DR 339
BAE-6	Betty A. Erdahl	PSE Response to Staff DR 204
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Kyle A. Fra	nnkiewich, Regulatory Analyst	
KAF-1T	Kyle A. Frankiewich	Prefiled Response Testimony of Kyle A. Frankiewich (31 pages) (6/30/17)
KAF-2	Kyle A. Frankiewich	PSE's Response to Public Counsel DR 290
KAF-3	Kyle A. Frankiewich	PSE Response to Staff DR

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		323 (Including Attachments A-E) and PSE's Response to UTC Staff DR 410 (Including Attachment A)
KAF-4	Kyle A. Frankiewich	PSE Response to Staff DR 327 (Including Attachment A)
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KAF-6	Kyle A. Frankiewich	PSE Response to Staff DR 329
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KAF-8	Kyle A. Frankiewich	Staff Example of Variance in Reasonable Estimates of CAR Baseline (expansion of Exh. PKW-5)
KAF-9	Kyle A. Frankiewich	PSE Response to Staff DR 419
David C. Go	mez, Assistant Power Supply Mana	ger
DCG-1TC	David C. Gomez	***CONFIDENTIAL***  Confidential Prefiled Response Testimony of David C. Gomez (35 pages) (6/30/17)
DCG-2	David C. Gomez	PSE 2015 IRP, Appendix D
DCG-3C	David C. Gomez	***CONFIDENTIAL***  PSE Response to Staff DR 175, Attachments A&B
DCG-4C	David C. Gomez	***CONFIDENTIAL***  PSE Response to Staff DR  177
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DCG-6	David C. Gomez	PSE Response to Staff DR 177, Attachment C
DCG-7C	David C. Gomez	***CONFIDENTIAL***  PSE Response to Staff DR 176, Attachments C-F

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DCG-8C	David C. Gomez		
			PSE Response to Staff DR
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Alterior 15	Control of the contro		PSE Response to Staff DR
			176, Attachment G
DCG-10	David C. Gomez		2015 Wind Technologies
			Market Report, p. 41
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33200		40 200	311, Attachments B-F
DCG-12C	David C. Gomez		***CONFIDENTIAL***
DCG-12C	David C. Gomez	Section 200 march	
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DCG-13C	David C. Gomez	1967 122 36.	***CONFIDENTIAL***
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		Total Table	David C. Gomez, Exh. DCG-
	A Property of the Control of the Con	24- 45- 1E-0	1TC, and Gregory N. Duvall,
			Exh. GND-1TC, in Docket
	AND IN THE REAL PROPERTY AND ADDRESS OF THE PARTY.		UE-130043
DCG-14	David C. Gomez		Portions of Testimony of
	3		David E. Mills, Exh. DEM-
			11TC, in Dockets UE-111048
			and UG-111049
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		- 15 EB 85	<b>Portions of Testimony of</b>
		-37 366	David E. Mills, Exh. DEM-
		7.00	1TC, in Dockets UE-111048
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Christopher	S. Hancock, Regulatory Ana	lyst	to any determine the transcentistics
CSH-1TC	Christopher S. Hancock	1.2	***CONFIDENTIAL***
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3-7-3		A. 1	Testimony of Christopher S.
7-32		· 经1 程序 (Q)	Hancock (30 pages)
		RESERVED TO SERVED TO SERV	(6/30/17)
CSH-2C	Christopher S. Hancock		***CONFIDENTIAL***
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CSH-3	Christopher S. Hancock	PSE Response to Staff DR 143
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CSH-6T	Christopher S. Hancock	Prefiled Cross-Answering Testimony of Christopher S. Hancock (9 pages) (8/9/17)
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	egulatory Analyst	***COMPINENTIAL ***
JL-1TC	Jing Liu	***CONFIDENTIAL***
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	THE CONTRACT OF STREET	Response Testimony of Jing
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		(Revised 7/11/17)
JL-2	Jing Liu	Output of Electric
		Temperature Normalization
		Models
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		Temperature Normalization
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JL-5	Jing Liu	Output of Gas Temperature
		Normalization Models Using
		Ten Year Data
JL-6	Jing Liu	Comparison of Ten Year and
		Five Year Models for Natural
		Gas Temperature
		Normalization
JL-7C	Jing Liu	***CONFIDENTIAL***
		PSE Production Cost Trend
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JL-8	Jing Liu	Summary of PSE's Electric
J_ 0		Non-Residential Proposed
		Grouping Backcast
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	cGuire, Energy Policy Strategist	- we distribute in the little
CRM-1T	Chris R. McGuire	Prefiled Response Testimony of Chris R. McGuire (37 pages) (6/30/17)
CRM-2	Chris R. McGuire	Colstrip 1 & 2 Pro Rata Depreciation Estimate
CRM-3	Chris R. McGuire	Colstrip 1 & 2 Regulatory Asset
CRM-4	Chris R. McGuire	Report to the Audit Committees (Excerpt)
CRM-5	Chris R. McGuire	PSE Response to Public Counsel DR 424
CRM-6T	Chris R. McGuire	Prefiled Cross-Answering Testimony of Chris R. McGuire (13 pages) (8/9/17)
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Elizabeth C ECO-1TC	C. O'Connell, Regulatory Analyst  Elizabeth C. O'Connell	***CONFIDENTIAL***
		***CONFIDENTIAL*** Confidential Prefiled Direct Testimony of Elizabeth C.
der i		O'Connell (33 pages) (6/30/17)
ECO-2C	Elizabeth C. O'Connell	***CONFIDENTIAL***  Staff's Proposed  Environmental Remediation  Adjustments
ECO-3	Elizabeth C. O'Connell	Environmental Remediation Commission Orders, Start Dates, and Costs
ECO-4	Elizabeth C. O'Connell	PSE Environmental Remediation Quarterly Reports, Q1 2017
ECO-5	Elizabeth C. O'Connell	PSE Response to Staff DR 279
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ECO-6	Elizabeth C. O'Connell	PSE Response to Staff DR 284

ECO-8	Elizabeth C. O'Connell		PSE Response to Staff DR 280
ECO-9	Elizabeth C. O'Connell		PSE Response to Staff DR 270 and 271
ECO-10C	Elizabeth C. O'Connell	ALC: NO SERVICE	***CONFIDENTIAL***
	Republication of the second		PSE Response to Staff DR
			401, Attachment W
ECO-11	Elizabeth C. O'Connell		PSE Response to Staff DR 278
ECO-12	Elizabeth C. O'Connell		PSE Response to Staff DR 269, Attachment A
ECO-13C	Elizabeth C. O'Connell		***CONFIDENTIAL***
			Tacoma Tide Flats Letter
ECO-14C	Elizabeth C. O'Connell		***CONFIDENTIAL***
	فالمناخ فالمستون والمتأثث		PSE Response to Staff DR
			401, Attachment K
ECO-15	Elizabeth C. O'Connell		PSE Response to Staff DR
			281
<b>ECO-16</b>	Elizabeth C. O'Connell		Washington Natural Gas and
			PSE's Environmental
			Projects Quarterly Reports
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ECO-17	Elizabeth C. O'Connell		PSE's Summary of
			Environmental Remediation
			Costs for Gas Sites Including Tacoma Tide Flats, 12/31/97
ECO-18	Elizabeth C. O'Connell		PSE Response to Staff DR
ECO-10	Elizabeth C. O Connen		364, Attachment A
ECO-19	Elizabeth C. O'Connell		PSE Response to Staff DR
ECO-17	Enzabeth C. C Connen		364
ECO-20	Elizabeth C. O'Connell		PSE Response to Staff DR
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ECO-21	Elizabeth C. O'Connell		PSE Response to Staff DR
			312 and 408
ECO-22	Elizabeth C. O'Connell		Staff's Proposed Legal Costs
			Adjustments
ECO-23	Elizabeth C. O'Connell		PSE Response to Staff DR
			218, Attachment A
CROSS-EXA	MINATION EXHIBITS		
David C. Pare	cell, Senior Economist, Tech	mical Associates, I	nc.

DCP-1T	David C. Parcell	Prefiled Response Testimony of David C. Parcell (55 pages) (6/30/17)
DCP-2	David C. Parcell	Background and Experience
DCP-3	David C. Parcell	PSE Total Cost of Capital
DCP-4	David C. Parcell	Economic Indicators
DCP-5	David C. Parcell	PSE History of Credit Ratings
DCP-6	David C. Parcell	PSE Capital Structure Ratios
DCP-7	David C. Parcell	Proxy Companies Average Common Equity Ratios
DCP-8	David C. Parcell	Proxy Companies Basis for Selection
DCP-9	David C. Parcell	Proxy Companies DCF Cost Rates
DCP-10	David C. Parcell	Standard & Poor's 500 ROE and 20-Year Treasury Bond Returns
DCP-11	David C. Parcell	Proxy Companies CAPM Cost Rates
DCP-12	David C. Parcell	Proxy Companies ROE and Market to Book Ratios
DCP-13	David C. Parcell	Standard & Poor's 500 ROE and Market to Book Ratios
DCP-14	David C. Parcell	Risk Indicators
DCP-15	David C. Parcell	Risk Indicators of Electric Utilities by Size
CROSS-EX	KAMINATION EXHIBITS	
Andrew Ro	berts, Regulatory Analyst	A State of the sta
AR-1T	Andrew Roberts	Prefiled Response Testimony of Andrew Roberts (9 pages) (6/30/17)
AR-2	Andrew Roberts	PSE Response to Staff DR 387
AR-3	Andrew Roberts	PSE Response to Staff DR 468
AR-4	Andrew Roberts	PSE Response to Staff DR 43
AR-5	Andrew Roberts	PSE Response to Staff DR 40
AR-6	Andrew Roberts	PSE Response to Staff DR 44

AR-7	Andrew Roberts	Effect of IVR Transaction Data on SQI No. 5 Calculation
AR-8	Andrew Roberts	In the Matters of Puget Sound Power and Light Co. Dockets UE-951270 and UE-960195, Fourteenth Supplemental Order Accepting Stipulation; Approving Merger
AR-9	Andrew Roberts	PSE Response to Staff DR 386
CROSS-EX	AMINATION EXHIBITS	ARTINE VI
Thomas E.	Schooley, Assistant Director - Energ	y Regulation, Regulatory Services Division
TES-1T	Thomas E. Schooley	Prefiled Response Testimony of Thomas E. Schooley (31 pages) (6/30/17)
TES-2	Thomas E. Schooley	Charts of Storm Events
TES-3	Thomas E. Schooley	Storm Damage Expenses by Periods Ending September 30
CROSS-EX	KAMINATION EXHIBITS	
Jennifer Sn	yder, Regulatory Analyst	and the second second second second second
JES-1T	Jennifer Snyder	Prefiled Response Testimony of Jennifer Snyder (8 pages) (6/30/17)
JES-2	Jennifer Snyder	PSE Response to Staff DR 253
JES-3	Jennifer Snyder	PSE Response to Staff DR 394
JES-4C	Jennifer Snyder	***CONFIDENTIAL***
		PSE Response to Staff DR 252, Attachment A
JES-5	Jennifer Snyder	PSE Response to Staff DR 392
JES-6	Jennifer Snyder	PSE Supplemental Response to Staff DR 392
JES-7	Jennifer Snyder	Lazard, "Lazard's Levelized Cost of Storage Analysis 2.0 – Key Findings"

JES-8	Jennifer Snyder	PSE Response to Staff DR 247
JES-9	Jennifer Snyder	PSE Response to Staff DR 250
CROSS-EX	AMINATION EXHIBITS	
E. Cooper	Wright, Regulatory Analyst	
ECW-1T	E. Cooper Wright	Prefiled Response Testimony of E. Cooper Wright (27 pages) (6/30/17)
CROSS-EX	AMINATION EXHIBITS	pages) (oreo, 11)
	DUDI IC COL	INICIDI
Dawhawa D	PUBLIC COU Alexander, Independent Consultant	JNSEL
		D. Cl. I.D
BRA-1T	Barbara R. Alexander	Prefiled Response Testimony of Barbara R. Alexander (33 pages) (6/30/17)
BRA-2	Barbara R. Alexander	Resume
BRA-3	Barbara R. Alexander	PSE Response to Public Counsel DR 22
BRA-4	Barbara R. Alexander	PSE Response to Public Counsel DR 19, Attachment A
BRA-5	Barbara R. Alexander	PSE Response to Public Counsel DR 27, Attachments B, C, and D
BRA-6	Barbara R. Alexander	PSE Response to Public Counsel DR 14
BRA-7	Barbara R. Alexander	PSE Response to Public Counsel DR 15
BRA-8	Barbara R. Alexander	PSE Response to Public Counsel DR 443
BRA-9	Barbara R. Alexander	PSE Response to Public Counsel DR 28, Attachment A
BRA-10	Barbara R. Alexander	PSE Response to Public Counsel DR 358
BRA-11	Barbara R. Alexander	PSE Response to Public Counsel DR 363, Attachment A
BRA-12	Barbara R. Alexander	Customer Care Center

		Abandonment Rate Data
BRA-13	Barbara R. Alexander	Copy of PAC Customer
		Service Guarantees
BRA-14	Barbara R. Alexander	Code of Maryland
		<b>Regulations</b> , 20.50.12.08
BRA-15	Barbara R. Alexander	Pennsylvania PUC Customer
		Service Report
BRA-16	Barbara R. Alexander	Xcel Energy Tariffs: Sections
		6 and 1.9
BRA-17	Barbara R. Alexander	PSE Response to Staff DR 43
BRA-18	Barbara R. Alexander	PSE Response to Staff DR
		468
BRA-19	Barbara R. Alexander	PSE Response to Public
		Counsel DR 13
BRA-20	Barbara R. Alexander	<b>PSE Response to Public</b>
		Counsel DR 361
BRA-21	Barbara R. Alexander	<b>PSE Response to Public</b>
		Counsel DR 362
BRA-22	Barbara R. Alexander	<b>PSE Response to Public</b>
		Counsel DR 25, Attachments
		A and B
BRA-23	Barbara R. Alexander	PSE Response to Public
		Counsel DR 56
BRA-24	Barbara R. Alexander	<b>PSE Response to Public</b>
Annual V No. 194		Counsel DR 6
BRA-25	Barbara R. Alexander	PSE Responses to Public
		Counsel DRs 9, 10, 42, and 43
CROSS-EX	KAMINATION EXHIBITS	
	Brosch, President, Utilitech, Inc.	The second secon
MLB-1T	Michael L. Brosch	<b>Prefiled Response Testimony</b>
		of Michael L. Brosch
		(70 pages) (6/30/17)
MLB-2	Michael L. Brosch	Qualifications
MLB-3	Michael L. Brosch	PSE Response to Public
		Counsel DR 62, with
_		Attachment A
MLB-4	Michael L. Brosch	Hawaiian Electric Company
		RBA Tariff
MLB-5	Michael L. Brosch	PSE Responses to Public
		Counsel DRs 61 and 283

MLB-6	Michael L. Brosch	PSE Responses to Public Counsel DRs 48, 51, and 73
MLB-7	Michael L. Brosch	Puget Energy/PSE 2016 Year End Update Presentation
MLB-8	Michael L. Brosch	PSE Responses to Public Counsel DRs 71, 72, and 75
MLB-9	Michael L. Brosch	PSE Response to Public Counsel DR 388
MLB-10	Michael L. Brosch	PSE Response to Public Counsel DR 393, with Attachment A
CROSS-EX	AMINATION EXHIBITS	
N		
		t, William Dunkel and Associates
RMM-1T	Roxie M. McCullar	Prefiled Response Testimony of Roxie M. McCullar (31 pages) (6/30/17)
RMM-2	Roxie M. McCullar	Qualifications
RMM-3	Roxie M. McCullar	Comparison of Current Approved, PSE Proposed, and Public Counsel Proposed Accrual Rate and Annual Accrual Amounts
RMM-4	Roxie M. McCullar	Public Counsel's Proposed Depreciation Rates for PSE's Electric Plant
RMM-5	Roxie M. McCullar	Public Counsel's Proposed Depreciation Rates for PSE's Natural Gas Plant
RMM-6	Roxie M. McCullar	Referenced Pages from NARUC's Public Utility Depreciation Practices (August 1996)
RMM-7	Roxie M. McCullar	PSE Response to ICNU DR 27, Attachment A (PSE – 2016 – Production Net Salvage Calculations)
RMM-8	Roxie M. McCullar	Comparison of PSE Proposed Future Net Salvage Accrual and Average Net Salvage Actually Incurred in Recent

		Years for Natural Gas Plant
RMM-9	Roxie M. McCullar	Comparison of Public
		Counsel's Proposed Future
		Net Salvage Accrual and
		Average Net Salvage Actually
		Incurred in Recent Years for
		Natural Gas Plant
RMM-10	Roxie M. McCullar	Comparison of PSE Proposed
		Future Net Salvage Accrual
		and Average Net Salvage
		Actually Incurred in Recent
		Years for Electric Plant
RMM-11	Roxie M. McCullar	Comparison of Public
		Counsel's Proposed Future
		Net Salvage Accrual and
		Average Net Salvage Actually
		Incurred in Recent Years for
		Electric Plant
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CROSS-EX	AMINATION EXHIBITS	
CROSS-EX.	AMINATION EXHIBITS	
		ility Consultant I arbin & Associates
Ralph C. Sn PLLC	nith, CPA and Senior Regulatory Ut	tility Consultant, Larkin & Associates,
Ralph C. Sn		***CONFIDENTIAL***
Ralph C. Sn PLLC	nith, CPA and Senior Regulatory Ut	***CONFIDENTIAL*** Confidential Prefiled
Ralph C. Sn PLLC	nith, CPA and Senior Regulatory Ut	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph
Ralph C. Sn PLLC RCS-1TC	nith, CPA and Senior Regulatory Ut  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17)
Ralph C. Sn PLLC	nith, CPA and Senior Regulatory Ut	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph
Ralph C. Sn PLLC RCS-1TC	nith, CPA and Senior Regulatory Ut  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17)
Ralph C. Sn PLLC RCS-1TC	Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3	Ralph C. Smith  Ralph C. Smith  Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications Electric Revenue Requirement
Ralph C. Sn PLLC RCS-1TC	Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications Electric Revenue Requirement Natural Gas Revenue
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3	Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications Electric Revenue Requirement Natural Gas Revenue Requirement
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3	Ralph C. Smith  Ralph C. Smith  Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17)  Qualifications  Electric Revenue Requirement  Natural Gas Revenue Requirement  PSE Responses to Public
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3	Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications  Electric Revenue Requirement Natural Gas Revenue Requirement PSE Responses to Public Counsel DR 297 and ICNU
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3 RCS-4	Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications  Electric Revenue Requirement Natural Gas Revenue Requirement PSE Responses to Public Counsel DR 297 and ICNU DRs 63, 65, and 67
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3	Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17)  Qualifications  Electric Revenue Requirement  Natural Gas Revenue Requirement  PSE Responses to Public Counsel DR 297 and ICNU DRs 63, 65, and 67  PSE Responses to Staff DRs 6
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3 RCS-4 RCS-5	Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications  Electric Revenue Requirement Natural Gas Revenue Requirement PSE Responses to Public Counsel DR 297 and ICNU DRs 63, 65, and 67 PSE Responses to Staff DRs 6 and 46
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3 RCS-4	Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications Electric Revenue Requirement Natural Gas Revenue Requirement PSE Responses to Public Counsel DR 297 and ICNU DRs 63, 65, and 67 PSE Responses to Staff DRs 6 and 46 PSE Responses to Public
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3 RCS-4 RCS-5	Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17) Qualifications  Electric Revenue Requirement Natural Gas Revenue Requirement PSE Responses to Public Counsel DR 297 and ICNU DRs 63, 65, and 67 PSE Responses to Staff DRs 6 and 46
Ralph C. Sn PLLC RCS-1TC RCS-2 RCS-3 RCS-4 RCS-5	Ralph C. Smith  Ralph C. Smith	***CONFIDENTIAL*** Confidential Prefiled Response Testimony of Ralph C. Smith (89 pages) (6/30/17)  Qualifications  Electric Revenue Requirement  Natural Gas Revenue Requirement  PSE Responses to Public Counsel DR 297 and ICNU DRs 63, 65, and 67  PSE Responses to Staff DRs 6 and 46  PSE Responses to Public Counsel DR 126 and ICNU

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		56 and 57 (with Attachment A) and Staff DR 212
RCS-9	Ralph C. Smith	PSE Responses to Staff DR 278 (with Attachment A) and 284
RCS-10C	Ralph C. Smith	***CONFIDENTIAL*** PSE Responses to Public Counsel DRs 355, 394, 395, 420, 426 (with Attachment A); Sierra Club DR 4 (with Attachment A); Staff DRs 142, 296, 359, 359 (revised with Attachments A and B), and 461
RCS-11C	Ralph C. Smith	***CONFIDENTIAL*** Colstrip Strategic Planning Update, dated 3/2/17
RCS-12C	Ralph C. Smith	***CONFIDENTIAL*** Analysis of Pension Plans
	AMINATION EXHIBITS  atkins, Principal and Senior Econo	mist. Technical Associates, Inc.
GAW-1T	Glenn A. Watkins	Prefiled Response Testimony of Glenn A. Watkins (70 pages) (6/30/17)
GAW-2	Glenn A. Watkins	Background and Experience Profile
GAW-3	Glenn A. Watkins	Public Counsel DR 300
GAW-4	Glenn A. Watkins	Public Counsel DR 301
GAW-5	Glenn A. Watkins	PSE Wind/Hydro Production During Peak Hours
GAW-6	Glenn A. Watkins	Base-Intermediate-Peak Classification
GAW-7	Glenn A. Watkins	Gross Plant and Depreciation Reserve Hourly Assignments
GAW-8	Glenn A. Watkins	Probability of Dispatch Summary of Class Allocation Factors
GAW-9	Glenn A. Watkins	Probability of Dispatch Class Cost of Service Study
GAW-10	Glenn A. Watkins	Class Cost of Service Studies

		Parity Ratios
GAW-11	Glenn A. Watkins	Electric Residential Customer Cost Analysis
GAW-12	Glenn A. Watkins	Natural Gas Residential Customer Cost Analysis
GAW-13T	Glenn A. Watkins	Prefiled Cross-Answering Testimony of Glenn A. Watkins (10 pages) (8/9/17)
CROSS-EXA	AMINATION EXHIBITS	watkins (10 pages) (6/9/17)
J. Randall W	Voolridge, Professor of Finance, Pen	nsylvania State University
JRW-1T	J. Randall Woolridge	Prefiled Response Testimony of J. Randall Woolridge (75 pages) (6/30/17)
JRW-2	J. Randall Woolridge	Background & Experience Profile
JRW-3	J. Randall Woolridge	Recommended Cost of Capital
JRW-4	J. Randall Woolridge	Ten Year Treasury Yield
JRW-5	J. Randall Woolridge	Public Utility Bond Yields
JRW-6	J. Randall Woolridge	Summary Financial Statistics for Proxy Groups
JRW-7	J. Randall Woolridge	Capital Structures Ratios and Debt Cost Rates
JRW-8	J. Randall Woolridge	Relationship Between Expected ROE and Market- to-Book Ratios
JRW-9	J. Randall Woolridge	Public Utility Capital Cost Indicators
JRW-10	J. Randall Woolridge	Industry Average Betas
JRW-11	J. Randall Woolridge	Discount Cash Flow Model
JRW-12	J. Randall Woolridge	<b>Discount Cash Flow Study</b>
JRW-13	J. Randall Woolridge	Capital Asset Pricing Model Study
JRW-14	J. Randall Woolridge	PSE's Proposed Cost of Capital
JRW-15	J. Randall Woolridge	PSE ROE Results
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JRW-17T	J. Randall Woolridge	Prefiled Cross-Answering

		Testimony of J. Randall Woolridge (12 pages) (8/9/17)
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	THE ENERGY	
	Collins, Director, The Energy Project	
SMC-1T	Shawn M. Collins	Prefiled Response Testimony of Shawn M. Collins (32 pages) (6/30/17)
SMC-2	Shawn M. Collins	Professional Qualifications
SMC-3T	Shawn M. Collins	Prefiled Cross-Answering Testimony of Shawn M. Collins (9 pages) (8/9/17)
CROSS-EX	AMINATION EXHIBITS	
لة السيال	ICNU	
	Gorman, Consultant and Managing	Principal, Brubaker & Associates, Inc.
Michael P. ( MPG-1T		
	Gorman, Consultant and Managing	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman
MPG-1T	Gorman, Consultant and Managing  Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)
MPG-1T	Gorman, Consultant and Managing  Michael P. Gorman  Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond
MPG-1T MPG-2 MPG-3	Gorman, Consultant and Managing  Michael P. Gorman  Michael P. Gorman  Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond Yields
MPG-1T MPG-2 MPG-3 MPG-4	Gorman, Consultant and Managing  Michael P. Gorman  Michael P. Gorman  Michael P. Gorman  Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond Yields  Valuation Metrics  Accuracy of Interest Rate
MPG-1T MPG-2 MPG-3 MPG-4 MPG-5	Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond Yields  Valuation Metrics  Accuracy of Interest Rate Forecasts  ICNU's Proposed Electric
MPG-1T MPG-2 MPG-3 MPG-4 MPG-5 MPG-6 MPG-7T	Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond Yields  Valuation Metrics  Accuracy of Interest Rate Forecasts  ICNU's Proposed Electric Revenue Distribution  Prefiled Cross-Answering Testimony of Michael P.
MPG-1T MPG-2 MPG-3 MPG-4 MPG-5 MPG-6 MPG-7T	Michael P. Gorman  Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond Yields  Valuation Metrics  Accuracy of Interest Rate Forecasts  ICNU's Proposed Electric Revenue Distribution  Prefiled Cross-Answering Testimony of Michael P.
MPG-1T MPG-2 MPG-3 MPG-4 MPG-5 MPG-6 MPG-7T	Michael P. Gorman  Michael P. Gorman	Principal, Brubaker & Associates, Inc.  Prefiled Response Testimony of Michael P. Gorman (44 pages) (6/30/17)  Professional Qualifications  Treasury and Utility Bond Yields  Valuation Metrics  Accuracy of Interest Rate Forecasts  ICNU's Proposed Electric Revenue Distribution  Prefiled Cross-Answering Testimony of Michael P. Gorman (13 pages) (8/9/17)

BCC-1T	Brian C. Collins		Prefiled Response Testimony of Brian C. Collins (19 pages) (6/30/17)
BCC-2	Brian C. Collins		Qualifications
BCC-3	Brian C. Collins		Proposed Class Cost of Service
BCC-4	Brian C. Collins		Proposed Class Margin Revenue Allocation
BCC-5T	Brian C. Collins		Prefiled Cross-Answering Testimony of Brian C. Collins (8/9/17) (9 pages)
BCC-6T	Brian C. Collins	s	Prefiled Supplemental Cross- Answering Testimony of Brian C. Collins (8/15/17) (7 pages)
Edward A. Fi	inklea, Executive Director, N	orthw	est Industrial Gas Users
EAF-1T	Edward A. Finklea	и 1	Prefiled Supplemental Cross- Answering Testimony of Edward A. Finklea (8/15/17) (12 pages)
EAF-2	Edward A. Finklea		Qualifications
CROSS-EXA	MINATION EXHIBITS		
Bradley C. M	ICNU  [ullins, Independent Consult		NWIGU
BGM-1TCr	Bradley G. Mullins	ant	*** CONFIDENTIAL***
BGM-11Cf	Drauley G. Wullins	iden Liga	Prefiled Response Testimony of Bradley G. Mullins (56 pages) (6/30/17) (Revised 7/7/17)
BGM-2	Bradley G. Mullins		List of Regulatory Appearances
BGM-3	Bradley G. Mullins		Electric Services Revenue Requirement
BGM-4	Bradley G. Mullins		Natural Gas Services Revenue Requirement
BGM-5C	Bradley G. Mullins		*** CONFIDENTIAL***

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			PSE Responses to DRs
BGM-6	Bradley G. Mullins		Proposed Amortization Schedule of Early Retirement Costs
BGM-7	Bradley G. Mullins		PSE Response to ICNU DR 24
BGM-8	Bradley G. Mullins		Ardmore Substation 10 Year Planning Documents
BGM-9	Bradley G. Mullins		Ardmore Substation Project Implementation Plan
BGM-10	Bradley G. Mullins		PSE Response to ICNU DR 91, with Attachment B
BGM-11	Bradley G. Mullins		PSE Responses to ICNU DRs 24 (Supplemental), 25, 85, 86, and 87
BGM-12T	Bradley G. Mullins		Prefiled Cross-Answering Testimony of Bradley G. Mullins (16 pages) (8/9/17)
BGM-13	Bradley G. Mullins		Updated Electric Services Revenue Requirement
BGM-14	Bradley G. Mullins		Updated Natural Gas Services Revenue Requirement
BGM-15	Bradley G. Mullins		Updated Colstrip Units 1 and 2 Regulatory Asset Amortization
BGM-16	Bradley G. Mullins		PSE's Supplemental Response to ICNU DR 15
CROSS-EX.	AMINATION EXHIBITS		
	NWE.	C/KN W/NKDC	
Amanda M.			l Resources Defense Council
AML-1T	Amanda M. Levin		Prefiled Response Testimony of Amanda M. Levin (27 pages) (6/30/17)
AML-2	Amanda M. Levin		Professional Qualifications
AML-3	Amanda M. Levin		1992 Letter from WUTC Staff to NARUC
AML-4	Amanda M. Levin		PSE Response to

		NWEC/RNW/NRDC DR 43
AML-5	Amanda M. Levin	PSE Response to NWEC/RNW/NRDC DR 36
AML-6	Amanda M. Levin	PSE Response to NWEC/RNW/NRDC DR 40
AML-7	Amanda M. Levin	Chapter 4 of 2015 IRP
AML-8	Amanda M. Levin	PSE Response to NWEC/RNW/NRDC DR 49, Attachment A
AML-9	Amanda M. Levin	PSE Response to NWEC/RNW/NRDC DR 50
AML-10	Amanda M. Levin	PSE Response to NWEC/RNW/NRDC DR 47
AML-11	Amanda M. Levin	PSE Response to Public Counsel DR 62, Attachment A
AML-12	Amanda M. Levin	PSE Response to Public Counsel DR 60, Part C
AML-13T	Amanda M. Levin	Prefiled Cross-Answering Testimony of Amanda M. Levin (11 pages) (8/9/17)
AML-14	Amanda M. Levin	FEA Response to NWEC/RNW/NRDC DR 1
AML-15	Amanda M. Levin	FEA Response to NWEC/RNW/NRDC DR 3
AML-16	Amanda M. Levin	Direct Testimony of Paul Chernick, Case. No. 16-1852- EL-SSO (May 2, 2017), Public Utilities Council of Ohio (PUCO)
AML-17	Amanda M. Levin	Rebuttal Testimony (Non- Confidential) of Ralph C. Cavanagh, Docket No. UE- 121697
AML-18	Amanda M. Levin	Morgan, Pamela, "A Decade of Decoupling for US Energy Utilities: Rate Impacts, Designs, and Observations" (November 2012)
AML-19	Amanda M. Levin	Vilbert, Michael, Joseph B. Wharton, Charles Gibbons,

		Melanie Rosenberg, and Yang Wei Neo, "The impact of revenue decoupling on the cost of capital for electric utilities: an empirical investigation," BRATTLE GROUP, Prepared for The Energy Foundation (2014)
CROSS-EX	AMINATION EXHIBITS	
Michael H.	O'Brien, Research Director, Renewa	able Northwest
МНО-1Т	Michael H. O'Brien	Prefiled Response Testimony of Michael H. O'Brien (3 pages) (6/30/17)
МНО-2	Michael H. O'Brien	Professional Qualifications of Michael H. O'Brien
CROSS-EX	XAMINATION EXHIBITS	AND BOTH TO THE OWNER OF THE SECOND
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	Power, Research Professor, Univers	
TMP-1T	Thomas M. Power	Prefiled Response Testimony of Thomas M. Power (48 pages) (6/30/17)
TMP-2	Thomas M. Power	Professional Qualifications of Thomas M. Power
TMP-3	Thomas M. Power	PSE Response to Staff DR 359, Revision 1 of Attachment B
TMP-4	Thomas M. Power	PSE Response to Staff DR 359, Attachment A
TMP-5	Thomas M. Power	PSE Response to Staff DR 185 and Supplemental Response
TMP-6	Thomas M. Power	PSE Response to NWEC/RNW/NRDC DR 10
TMP-7	Thomas M. Power	PSE Response to NWEC/RNW/NRDC DR 11
TMP-8	Thomas M. Power	PSE Response to NWEC/RNW/NRDC DR 12

ТМР-9Т	Thomas M. Power	Prefiled Cross-Answering Testimony of Thomas M. Power (22 pages) (8/9/17)
TMP-10	Thomas M. Power	PSE Response to ICNU DR 103
TMP-11	Thomas M. Power	PSE Response to ICNU DR 111
TMP-12	Thomas M. Power	PSE Supplemental Response to ICNU DR 111
TMP-13	Thomas M. Power	PSE Response to Staff DR 185
TMP-14C	Thomas M. Power	*** CONFIDENTIAL***  PSE Supplemental Response to Staff DR 185
CROSS-EXA	AMINATION EXHIBITS	
Cameron B.	Yourowski, Senior Policy Man	ager, Renewable Northwest
CBY-1T	Cameron B. Yourowski	Prefiled Response Testimony of Cameron B. Yourowski (20 pages) (6/30/17)
CBY-2	Cameron B. Yourowski	Qualifications
CBY-3	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 3(a)
CBY-4	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 2, Attachment C
CBY-5	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 14
CBY-6	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 16
CBY-7	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 17
CBY-8	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 13
CBY-9	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 22
CBY-10	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 19

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CBY-11	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 2, Attachment A
CBY-12	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 18
CBY-13	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 15
CBY-14	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 27
CBY-15	Cameron B. Yourowski	PSE Response to NWEC/RNW/NRDC DR 2, Attachment B
CROSS-EX	KAMINATION EXHIBITS	
	SIERRA CI	LUB
Ezra D. Ha	usman, Independent Consultant, Ezra	Hausman Consulting
EDH-1T	Ezra D. Hausman	Prefiled Response Testimony of Ezra D. Hausman (41 pages) (6/30/17)
EDH-2	Ezra D. Hausman	Professional Qualifications of Ezra D. Hausman
EDH-3	Ezra D. Hausman	Docket UE-072300, Excerpt from Second Exhibit to Prefiled Direct Testimony of C. Richard Clarke
EDH-4	Ezra D. Hausman	Docket UE-072300, Testimony of William H. Weinman
EDH-5	Ezra D. Hausman	Docket UE-072300, Direct Testimony of Charles W. King
EDH-6	Ezra D. Hausman	Docket UE-072300, Prefiled Rebuttal Testimony of Michael J. Jones
EDH-7	Ezra D. Hausman	PSE Responses to DRs
EDH-8	Ezra D. Hausman	PSE Response to Staff DR 459, Attachment A
EDH-9	Ezra D. Hausman	PSE Response to Public Counsel DR 286, Attachment

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EDH-10	Ezra D. Hausman	Prefiled Cross-Answering Testimony of Ezra D. Hausman (7 pages) (8/9/17)
CROSS-EX	AMINATION EXHIBITS	
	KROC	
Kevin C. H	iggins, Principal, Energy Strategies	
KCH-1T	Kevin C. Higgins	Prefiled Response Testimony of Kevin C. Higgins (23 pages) (6/30/17)
KCH-2	Kevin C. Higgins	Comparison of PSE's Proposed Rate Spread and Kroger's Proposed Rate Spread at PSE's Proposed Revenue Requirement
КСН-3	Kevin C. Higgins	Kroger Proposed Rate Schedule 25 Design at PSE Requested Revenue Requirement and Spread
КСН-4Т	Kevin C. Higgins	Prefiled Cross-Answering Testimony of Kevin C. Higgins (10 pages) (8/9/17)
CROSS-EX	AMINATION EXHIBITS	
(Comp.) 1 10	FEDERAL EXECUT	TIVE AGENCIES
Ali Z. Al-Ja		nsultant, Brubaker & Associates, Inc.
AZA-1T	Ali Z. Al-Jabir	Prefiled Response Testimony of Ali Z. Al-Jabir (32 pages) (6/30/17)
AZA-2	Ali Z. Al-Jabir	Professional Qualifications of Ali Z. Al-Jabir
AZA-3	Ali Z. Al-Jabir	Electric Class Cost of Service Study Results at Present and Proposed Rates Adjusted Test Year 12 Months Ended September 2016 at Pro Forma Revenue Requirement

AZA-4	Ali Z. Al-Jabir	PSE's Proposed Electric Base Rate Revenue Increase vs. Cost-Based Rates Adjusted Test Year 12 Months Ended September 2016 at Pro Forma Revenue Requirement
AZA-5	Ali Z. Al-Jabir	FEA's Proposed Electric Revenue Allocation Adjusted Test Year 12 Months Ended September 2016 at Pro Forma Revenue Requirement
AZA-6T	Ali Z. Al-Jabir	Prefiled Cross-Answering Testimony of Ali Z. Al-Jabir (10 pages) (8/9/17)
CROSS-EX	AMINATION EXHIBITS	
	NUCC	DR STEEL
	Charles of Lange Alberta	
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CROSS-EX	AMINATION EXHIBITS	
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Patrick M	Risken, Assistant Attorney Gen	F MONTANA eral for the State of Montana
PMR-1T	Patrick M. Risken	Prefiled Cross-Answering
1 1/11/-1 1	I attick ivi. Misken	Testimony of Patrick M. Risken (12 pages) (8/9/17)
PMR-2	Patrick M. Risken	PSE Response to Public Counsel DR 415
PMR-3	Patrick M. Risken	PSE Response to NWEC/RNW/NRDC DR 5
PMR-4	Patrick M. Risken	PSE Response to NWEC/RNW/NRDC DR 6

# EXHIBIT LIST PSE 2017 GRC Dockets UE-170033 and UG-170034

PMR-5	Patrick M. Risken	PSE Response to NWEC/RNW/NRDC DR 7
PMR-6	Patrick M. Risken	Staff Response to NWEC/RNW/NRDC DRs 2-9
PMR-7	Patrick M. Risken	June 23, 2017, Letter to Chris Cavazos from Steve Gross, International Union of Operating Engineers
PMR-8	Patrick M. Risken	PSE Response to Sierra Club DR 3
PMR-9	Patrick M. Risken	Governor Gregoire's Executive Order 09-05, Washington's Leadership on Climate Change
PMR-10	Patrick M. Risken	Docket UE-121373, Order 03, Final Order Granting Petition Subject to Conditions
PMR-11	Patrick M. Risken	MOU Between State of Washington and Transalta Centralia Generation LLC (April 26, 2010)
PMR-12	Patrick M. Risken	PSE's Response to NWEC/RNW/NRDC DR 12
PMR-13	Patrick M. Risken	Commission Notice of Ex Parte Communication (August 1, 2017)
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