

## ADDENDUM F

### Puget Sound Energy 2022 General Rate Case – Index of Testimony and Exhibits UE-22 \_\_\_\_\_ and UG-22 \_\_\_\_\_

1. **Adrian J. Rodriguez**, Senior Vice President-Regulatory and Strategy, introduces PSE and provides an overview of the relief PSE is seeking in this case, why that relief is necessary, and the testimony PSE presents to support that request.

AJR-1T Direct Testimony

AJR-2 Professional Qualifications of Adrian J. Rodriguez

2. **Kazi K. Hasan**, Senior Vice President and Chief Financial Officer for PSE, provides an overview of PSE's requests for a 9.9 percent return on equity, an equity ratio that increases from 48.5 percent to 50 percent over the course of the multiyear rate plan, and provisional proforma adjustments. He discusses PSE's financial status following tax reform and the outcome of the 2019 general rate case decision, and steps PSE has taken to control cost.

KKH-1CT Direct Testimony

KKH-2 Professional Qualifications of Kazi K. Hasan

3. **Cara G. Peterman**, Corporate Treasurer for PSE, describes PSE's requested capital structure and overall rate of return.

CGP-1CT Direct Testimony

CGP-2 Professional Qualifications of Cara G. Peterman

CGP-3 PSE's Capital Structure, Cost of Capital, and Rates of Return for the Test Year (July 1, 2020, through June 30, 2021)

CGP-4 PSE's Capital Structure, Cost of Capital, and Rates of Return for the Calendar Year 2021

CGP-5 PSE's Projected Capital Structure, Cost of Capital, and Rates of Return for the Calendar Year 2022

CGP-6C PSE's Requested Capital Structure, Cost of Capital, and Rates of Return for the First Year of the MYRP (Calendar Year 2023)

- CGP-7C PSE's Requested Capital Structure, Cost of Capital, and Rates of Return for the Second Year of the MYRP (Calendar Year 2024)
- CGP-8C PSE's Requested Capital Structure, Cost of Capital, and Rates of Return for the Third Year of MYRP (Calendar Year 2025)
- CGP-9 PSE's Outstanding Issues of Callable Long-Term Debt as of December 31, 2021
- CGP-10 Rating Agencies Publications

4. **Stephen J. King**, Director, Controller and Principal Accounting Officer for PSE, presents PSE's income statement and balance sheet and addresses the processes and procedures PSE has in place to validate the completeness and accuracy of financial information used in the test year for electric and gas revenue requirements. He also discusses the calculation of PSE's capital structure and provides the Affiliated Interest and Subsidiary Transaction Report.

- SJK-1T Direct Testimony
- SJK-2 Professional Qualifications
- SJK-3 Allocated Results of Operations
- SJK-4 Balance Sheet
- SJK-5 2020 Affiliated Interest and Subsidiary Transaction Report filed with the Commission on April 30, 2021, and June 30, 2021, six months Affiliated Interest and Subsidiary Transaction report

5. **Joshua A. Kensok**, Director of Financial Planning and Analysis for PSE, explains (1) how PSE's financial planning system, tools, processes, reporting, and governance operate, (2) how they have performed over time, and (3) why they can be relied upon for developing and administering the multiyear rate plan. He also provides the planned capital spending, plant in service, and O&M spending for each year of the multiyear rate plan.

- JAK-1T Direct Testimony
- JAK-2 Professional Qualifications
- JAK-3 Actual vs. Forecast Capital Expenditures: 2014-2021
- JAK-4 Ten-Year O&M Expense Growth: 2012-2021

JAK-5 Five Year Capital Expenditures, Gross Utility Plant Additions, O&M Projections

6. **Matthew R. Marcellia**, Director of Tax and Finance IT Projects for PSE, addresses the treatment of accumulated deferred income taxes and excess deferred income taxes in the multiyear rate plan, the restating adjustment for income taxes, and potential tax law changes and their likely impact on the multiyear rate plan.

MRM-1T Direct Testimony

MRM-2 Professional Qualifications of Matthew R. Marcellia

MRM-3 Additional Detail on Book and Tax Depreciation Projections

MRM-4 Excerpts from 2019 GRC Testimony addressing EDIT

7. **Ann E. Bulkley**, a Senior Vice President for The Brattle Group, presents evidence regarding the appropriate return on equity for PSE and assesses PSE's proposed capital structure for ratemaking.

AEB-1T Direct Testimony

AEB-2 Professional Qualifications of Ann E. Bulkley

AEB-3 Proxy Group Selection

AEB-4 Constant Growth Discounted Cash Flow

AEB-5 Capital Asset Pricing Model

AEB-6 Capital Asset Pricing Model Historical Beta

AEB-7 Market Risk Premium

AEB-8 Risk Premium - Electric and Gas Utilities

AEB-9 Expected Earnings Analysis

AEB-10 2021-25 Capital Expenditures

AEB-11 Proxy Group Regulatory Risk Assessment

AEB-12 Capital Structure Analysis

8. **Todd A. Shipman, CFA**, a Principal with Utility Credit Consultancy LLC
  - TAS-1T Direct Testimony
  - TAS-2 Professional Qualifications of Todd A. Shipman
  - TAS-3 Ratings Scales
  
9. **Ronald J. Roberts**, Vice President of Energy Supply for PSE, discusses PSE’s approach to acquiring electric and natural gas energy resources, the prudence of the Tacoma Liquefied Natural Gas Project, and PSE’s remaining contractual obligations related to the Colstrip Steam Electric Station.
  - RJR-1CT Direct Testimony
  - RJR-2 Professional Qualifications of Ronald J. Roberts
  - RJR-3 Timeline and Narrative of Development and Construction Activities for the Tacoma LNG Project
  - RJR-4 Lease Between PSE and the Port of Tacoma
  - RJR-5C Cumulative Communications with the Board of Directors Regarding the Tacoma LNG Project
  - RJR-6 List of Permits Required to Develop and Construct the Tacoma LNG Project
  - RJR-7C Operations and Maintenance Contract with NAES
  - RJR-8C EPC Contract with Chicago Bridge & Iron
  - RJR-9 Load Resource Balances
  - RJR-10 Colstrip Units 1 and 2 Construction and Ownership Agreement
  - RJR-11 Colstrip Units 1 and 2 Operation and Maintenance Agreement
  - RJR-12 Colstrip Common Facilities Agreement
  - RJR-13 Colstrip Units 3 and 4 Ownership and Operating Agreement
  - RJR-14C Coal Supply Agreement
  - RJR-15 Letter from Northwestern Energy re: 2022 Budget
  - RJR-16 Letter from Owners Requesting Workshops

- RJR-17C Approved 2022 Colstrip Budget
- RJR-18C 2019 Capital Justification Summaries
- RJR-19C 2020 Capital Justification Summaries
- RJR-20C 2021 Capital Justification Summaries
- RJR-21 Dry Waste Design Description
- RJR-22 Coal Ash General Release and Settlement
- RJR-23 Letter to Owners re: Coal Ash Pond and Owners' Response
- RJR-24C Talen MT Response to Request for Information
- RJR-25C Additional Information in Response to Owners' Request
- RJR-26C 2022 Capital Justification Summaries
- RJR-27 Colstrip Administrative Order on Consent
- RJR-28 October 2021 Settlement Agreement
- RJR-29 Updated Geosyntec Reports of costs for the Colstrip AOC requirements as filed with the Montana Department of Environmental Quality on November 1, 2021

10. **Joshua J. Jacobs**, Vice President of Clean Energy Strategy for PSE, describes PSE's decarbonization efforts, Beyond Net Zero goals, and 2021 Clean Energy Implementation Plan. He also explains the investments PSE must make to further these efforts.

- JJJ-1T Direct Testimony
- JJJ-2 Professional Qualifications of Joshua J. Jacobs
- JJJ-3 Final Clean Energy Implementation Plan
- JJJ-4 Customer Survey for Gas Customer Preferences
- JJJ-5 2020 E3 Gas Decarbonization Study
- JJJ-6 2021 E3 Gas Decarbonization Study

- JJJ-7 FortisBC – Pathways for BC to Achieve GHG Reduction Goals
  - JJJ-8 Xcel – Net Zero Vision for Natural Gas
  - JJJ-9 National Grid USA - Net Zero Plan Update
11. **Paul K. Wetherbee**, Director of Energy Supply Merchant for PSE, testifies regarding power cost issues, including PSE’s projected power costs, how those costs were calculated, new resources included in the power cost projection, and transmission contracts.
- PKW-1CT Direct Testimony
  - PKW-2 Professional Qualifications of Paul K. Wetherbee
  - PKW-3C Presentation from Collaborative on Hedging and Intra-company Natural Gas Transactions
  - PKW-4C Summary of PSE’s Proposed Power Costs in Comparison with Power Costs in the 2020 PCORC Final Order
  - PKW-5C Summary of PSE’s Projected Power Costs for Years Two and Three of the Multi-year Rate Period
  - PKW-6C Memo Discussing PSE’s Bid Submission in Powerex Request for Proposals
  - PKW-7C EMC Presentation Regarding PSE’s Bid for the Powerex Summer Peak PPA
  - PKW-8C Summary of Rate-Year Power Costs by Resource
  - PKW-9C Monthly Detail of Costs and Energy Produced by Aurora
  - PKW-10C Summary of Rate Year Costs Not in Aurora
  - PKW-11C Rate Year Resource Inputs Summary
  - PKW-12C Report on Energy Imbalance Market Collaborative
  - PKW-13 Review of PSE’s Proposed EIM Methodology
  - PKW-14 EIM Greenhouse Gas Net Revenue in Rate Year Power Costs
  - PKW-15C Summary of Power Costs Using Method Approved in Prior Rate Cases
  - PKW-16C Gas Mark-to-Model and Open Transport Value
  - PKW-17C Rate Year Index Price Physical Power Supply Contracts

- PKW-18C Monthly Market Gas and Power Prices
- PKW-19C Fixed Gas-for-Power Transportation Costs
- PKW-20 Report on Wind Collaborative from PSE's 2019 GRC
- PKW-21 Clearwater Wind Integration Study Report
- PKW-22C Calculation of Rate Year Day-Ahead Wind Integration Costs
- PKW-23C Transmission Contract Costs
- PKW-24C Contract Costs of Mid-C Hydro Resources
- PKW-25C Distillate Fuel Incremental Costs
- PKW-26C Adjustment to Remove Non-Fuel Costs that are Included in Aurora's Peaker Start Costs
- PKW-27C Colstrip Units 3&4 Fixed Fuel Costs
- PKW-28 Other Power Costs Chargeable to FERC Account 557
- PKW-29 EMC Presentation Regarding Renewal of 400 MW of Mid-C Transmission Contracts
- PKW-30 EMC Presentation Regarding Two New 5MW BPA Transmission Contracts

12. **Ryan P. Blood**, Director of Northern Generation with PSE, discusses PSE's plans to regROUT and modernize the Baker River Hydro generating station.

- RPB-1T Direct Testimony
- RPB-2 Professional Qualifications of Ryan P. Blood
- RPB-3 Board of Consultants' Report
- RPB-4 PSE Jan. 29, 2018 Letter to FERC
- RPB-5 FERC March 12, 2018 Response Letter to PSE
- RPB-6 Shannon & Wilson Alternative Analysis
- RPB-7 HDR Cost and Schedule Risk Analysis
- RPB-8 AMC Presentation

13. **Kyle C. Stewart**, Director of Enterprise Risk Management for PSE, testifies regarding risk in western energy markets and explains why PSE must reduce its reliance on bilateral Mid-C trading to meet capacity requirements.

KCS-1CT Direct Testimony

KCS-2 Professional Qualifications of Kyle C. Stewart

KCS-3 2021 PSE Integrated Resource Plan - Chapter 7 Resource Adequacy Analysis

KCS-4 Ansergy Report - WECC Markets Summer 2021

KCS-5 PSE 2021 All-Source RFP

KCS-6C EMC Market Reliance Risk Mitigation Approval

KCS-7 Energy Risk Policy

KCS-8C Energy Supply Transaction and Hedging Procedures Manual

14. **Janet K. Phelps**, Manager of Energy Analysis - Power Costs for PSE, addresses PSE's proposal to annually update variable power costs included in the PCA power cost baseline rate and to retain the PCORC to recover in rates fixed costs associated with new and renewed resources.

JKP-1T Direct Testimony

JKP-2 Professional Qualifications of Janet K. Phelps

JKP-3 Historical and Projected Portfolio Capacity 2019-2031

JKP-4 Generation Resource Start and Expiration Dates vs Dates Included in Rates

JKP-5 Mid-proceeding Updates to Power Costs in Prior Proceedings (Supplemental and Rebuttal Filings)

JKP-6 Historical Power Cost Adjustment Imbalances

15. **Mark A. Carlson**, Director of Generation & Natural Gas Storage for PSE, describes the production O&M expenses that PSE presents for recovery in this proceeding, how



PSE determined those expenses, and the purpose behind and projects related to those expenses.

- MAC-1CT Direct Testimony
- MAC-2 Professional Qualifications of Mark A. Carlson
- MAC-3 Summary of Rate Year Production O&M Expenses
- MAC-4C Colstrip 3&4 Four Year Plan
- MAC-5C Amortization of Major Maintenance
- MAC-6 Summary of Fredonia Units 3 and 4 2020 Hot Gas Path Capital Charges
- MAC-7C Contractual Maintenance Agreement–Goldendale, as Amended
- MAC-8C Mint Farm Long Term Service Agreement, as Amended
- MAC-9C Letter of Agreement to Adjust FFH Fee and Maintenance Intervals - Goldendale and Mint Farm CSA’s
- MAC-10 Hydro Production O&M License Expense
- MAC-11 FERC Order Issuing Baker Operating License
- MAC-12 FERC Order Issuing Snoqualmie Operating License
- MAC-13C Wind Production Royalty and Maintenance Fees
- MAC-14C Vestas Contractual Maintenance Agreement –Wild Horse and Hopkins Ridge, as Amended
- MAC-15C Siemens Inc. Service and Maintenance Agreement –Lower Snake River, as Amended

16. **Zacarias C. Yanez**, a Commercial Acquisitions Manager on the Resource Acquisitions Team for PSE, describes the prudence of (1) the Colville Slice Agreement Extension, a three-year extension with Douglas PUD of the agreement with the Colville Tribe for a 5.5 percent share of the output of the Wells Hydroelectric Project, and (2) the Chelan Slice Agreement, an agreement with Chelan PUD for a 5 percent share of the output of the Rocky Reach and Rock Island Hydroelectric Projects.

- ZCY-1CT Direct Testimony
- ZCY-2 Professional Qualifications of Zacarias C. Yanez

- ZCY-3C Valuation Summary
- ZCY-4C Presentations to PSE's Energy Management Committee
- ZCY-5C Hydro Contracts

17. **Colin P. Crowley**, Manager of Resource Acquisition for PSE, describes the 2018 All Resources RFP evaluation and results and requests a determination of prudence for all costs associated with the Clearwater Wind Power Purchase Agreement.

- CPC-1HCT Direct Testimony
- CPC-2 Professional Qualifications of Colin P. Crowley
- CPC-3 2017 IRP Document
- CPC-4 2018 All Resources RFP Document
- CPC-5HC 2018 All Resources RFP Evaluation Process Document
- CPC-6HC Presentations Made to PSE's Board of Directors Subsequent to Phase 2 of the 2018 All Resources RFP
- CPC-7 PSE's Revised 2019 IRP Progress Report
- CPC-8C Clearwater Wind PPA (Project ID #18169)

18. **Dan'l R. Koch**, Vice President of Operations for PSE, provides an overview of PSE's electric and natural gas operations, how PSE invests in the ongoing operations and maintenance of electric and natural gas infrastructure, how PSE prioritizes natural gas and electric transmission and distribution projects, and the prudence of the Energize Eastside transmission project that PSE seeks recovery for in this proceeding.

- DRK-1T Direct Testimony
- DRK-2 Professional Qualifications of Dan'l R. Koch
- DRK-3 Eastside Needs Assessment Report (2013)
- DRK-4 Supplemental Eastside Needs Report (2015)
- DRK-5 PSE's Solutions Report (2014)
- DRK-6 Supplemental Eastside Solutions Study Report (2015)

- DRK-7 E3 Non-wires Alternatives Screening Study (2014)
- DRK-8 Strategen Eastside System Energy Storage Alternatives Screening Study (2015)
- DRK-9 Updated Strategen Eastside System Energy Storage Alternatives Screening Study (2018)
- DRK-10 City of Bellevue Utility System Efficiencies (2015)
- DRK-11 Stantec Consulting Services, Inc. Review Memo (2015)
- DRK-12 City of Newcastle by MaxETA Energy (June 2020)
- DRK-13 POWER Engineers Lake Washington Submarine Cable Alternative Feasibility Study, (2015)
- DRK-14 POWER Engineers Underground Feasibility Study (2014)
- DRK-15 EIS Phase I Chapter 2
- DRK-16 EIS Phase II Chapter 2
- DRK-17 Final EIS Chapter 2
- DRK-18 Community Advisory Group Final Report
- DRK-19 Energize Eastside Permits and Authorizations
- DRK-20 PSE's Corporate Spending Authorization (CSA) for Energize Eastside
- DRK-21 PSE's Project Implementation Plan (PIP) for Energize Eastside
- DRK-22 Tetra Tech Eastside 230 kV Project Constraint and Opportunity Study (2013)
- DRK-23 Energize Eastside Board Updates
- DRK-24 Energize Eastside EMC Presentations
- DRK-25 Energize Eastside Asset Management Committee Meeting Books

19. **Catherine A. Koch**, Director of Planning for PSE, describes the planning process PSE uses to optimize investments that benefit customers, PSE's transmission and distribution work, and storm deferrals. She provides detailed descriptions of PSE's work focused on customer and public safety, customer growth, grid modernization, and pipeline modernization. She provides testimony on the progress of PSE's AMI

investment, including the benefits resulting from the investment and requests recovery of the investment and the return on the investment in this case.

- CAK-1T Direct Testimony
- CAK-2 Professional Qualifications
- CAK-3 Customer and Public Safety
- CAK-4 Customer Growth and Service Needs
- CAK-5 Grid Modernization
- CAK-6 Pipeline Modernization
- CAK-7 Advanced Metering Infrastructure
- CAK-8 Storm Deferral
- CAK-9 Operations Training Facility Corporate Spending Authorization
- CAK-10 2017 Energy & Utility Training Benchmark Report

20. **Roque B. Bamba**, Director of Project Delivery for PSE, provides an overview of how PSE manages capital infrastructure projects and programs, including how PSE's approach is designed to ensure PSE invests wisely, how PSE optimizes the benefits from each project or program, and why flexibility is needed for PSE to optimize benefits. He also describes certain major projects in greater detail.

- RBB-1T Direct Testimony
- RBB-2 Professional Qualifications of Roque B. Bamba
- RBB-3 Lake Hills – Phantom Lake 115kV Transmission Line CSA
- RBB-4 Bellingham Substation CSA
- RBB-5 Sammamish – Juanita 115kV Transmission Line CSA
- RBB-6 Electron Heights – Enumclaw 55/115 Conversion CSA
- RBB-7 Bainbridge Island CSA
- RBB-8 Tono Substation CSA
- RBB-9 Lynden Substation CSA
- RBB-10 Sedro Woolley - Bellingham #4 115kV Mid-Phase Change Request

21. **Sanem I. Sergici**, a Principal with The Brattle Group, testifies regarding the ways in which PSE is planning to maximize the customer-facing benefits of AMI.

SIS-1T Direct Testimony

SIS-2 Professional Qualifications of Sanem I. Sergici

SIS-3 Brattle Report on “Maximizing Customer Benefits Through PSE’s Advanced Metering Infrastructure

22. **Margaret F. Hopkins**, Senior Vice President of Shared Services and Chief Information Officer for PSE, provides an overview of PSE’s Information Technology (“IT”) vision and highlights key risks and challenges IT faces in support of corporate strategic efforts to achieve beyond net zero carbon emission by 2045. Her testimony also addresses how IT supports safety, clean energy, and reliability and explains why IT modernization programs are necessary to meet customer expectations, state requirements, and threats to PSE’s infrastructure.

MFH-1T Direct Testimony

MFH-2 Professional Qualifications of Margaret F. Hopkins

23. **Suzanne L. Tamayo**, Director of Information and Technology (“IT”), describes the IT capital investments related to business enablement and systems modernization that PSE seeks recovery for in this case and reports on the status of PSE’s Get to Zero program.

SLT-1T Direct Testimony

SLT-2 Professional Qualifications of Suzanne L. Tamayo

SLT-3 In-Service Report January 1, 2019 – June 30, 2021

SLT-4 In Service Report July 1, 2021 – December 2022

SLT-5 In Service Report January 2023 – December 2024

SLT-6 Response to the UTC Order 08 GtZ Report

SLT-7 CSA IWM Electric Operations Project

- SLT-8 CSA IWM Gas Operations Project
- SLT-9 CSA GTZ Payment Platform Project
- SLT-10 CSA Corporate Security WECC CIP-014-2 Mitigation Plan Project
- SLT-11 CSA Transport Network Modernization Project
- SLT-12 CSA Data Enablement Program
- SLT-13 CSA Data Center Refresh Project
- SLT-14 CSA ADMS Program

24. **Dawn M. Reyes**, Director of Corporate Share Services for PSE, addresses recent and planned major facility changes and PSE’s procurement processes.

- DMR-1T Direct Testimony
- DMR-2 Professional Qualifications of Dawn M. Reyes
- DMR-3 Kent Puyallup Property Alternatives
- DMR-4 Puyallup Building Layout
- DMR-5 Puyallup Site Layout
- DMR-6 Kent Building Layout
- DMR-7 Kent Site Layout
- DMR-8 Puyallup Proforma Design-Bid-Build
- DMR-9 Puyallup Proforma Build-to-Suit
- DMR-10 Kent Proforma Design-Bid-Build
- DMR-11 Kent Proforma Build-to-Suit
- DMR-12 Overview of Finance Scenarios
- DMR-13 Operations Training Facility Property Alternatives
- DMR-14 Purchase and Sale Agreement
- DMR-15 Procurement Policies and Procedures

25. **Thomas M. Hunt**, Director of Compensation and Benefits for PSE, describes the elements of PSE’s compensation and benefits programs, the steps PSE takes to compete in a challenging labor market and retain a skilled workforce while controlling wage and benefits costs, and changes in the labor market and to the PSE program design since 2019, including those related to COVID-19.

TMH-1T	Direct Testimony
TMH-2	Professional Qualifications of Thomas M. Hunt
TMH-3	Washington Technology Industry Association Report: September 2021
TMH-4	Summary of Recent Wage Adjustments by Regional Municipal and PUD Organizations
TMH-5C	Projected Wage Increases
TMH-6	Compensation Discussion and Analysis excerpt from PSE’s 10K filing
TMH-7C	Flex Credit and Medical Cost Trend
TMH-8C	Pension Funding Level
TMH-9	Pension Funding Guidelines
TMH-10	Pension Funding Guideline Example
TMH-11	PSE Goals and Incentive Plan
TMH-12	National Health Expenditure Projections
TMH-13	PwC Health Research Institute Medical Cost Trend Report

26. **Jon A. Piliaris**, Director of Regulatory Affairs for PSE, provides an overview of the multiyear rate plan including the development of rates, performance-based elements, customer protections, and the regulatory process. Additionally, he addresses the allocation of Colstrip decommissioning and remediation costs, the treatment of distribution costs related to the Tacoma LNG facility, and a proposal for the removal or modification of certain outdated reporting requirements.

JAP-1T	Direct Testimony
JAP-2	Professional Qualifications of Jon A. Piliaris
JAP-3	Planned Filing Schedule During Multiyear Rate Plan

JAP-4 Microsoft Percent Share of Colstrip Decommissioning and Remediation Costs

JAP-5 Derivation of Green Direct Energy Credit

27. **Susan E. Free**, Director of Revenue Requirements and Regulatory Compliance for PSE, discusses the revenue requirement calculations for the multiyear rate plan, demonstrates that PSE's current rates are insufficient for its current operations, presents proposals for rates subject to refund, the review process for property that will become used and useful after initial setting of rates, and the recovery of Colstrip decommissioning and remediation costs. Her testimony also provides an updated baseline rate for PSE's PCA mechanism for each of the rate years.

SEF-1T Direct Testimony

SEF-2 Professional Qualifications of Susan E. Free

SEF-3 Electric Net Revenue Change Requested

SEF-4 Electric Revenue Requirement Summary Pages and Detailed Summaries

SEF-5 Electric Test Year Schedules

SEF-6 Electric Revenue Requirement Restating, Pro Forma and Provisional Pro Forma Adjustments

SEF-7 Historical Comparison of Actual versus Allowed Rate Base

SEF-8 Natural Gas Net Revenue Change Requested

SEF-9 Natural Gas Revenue Requirement Summary Pages and Detailed Summaries

SEF-10 Natural Gas Test Year Schedules

SEF-11 Natural Gas Revenue Requirement Restating, and Provisional Pro Forma Adjustments

SEF-12 Exhibit A-1 – Power Cost and Fixed Production Cost Baseline Rates for 2023 through 2025

SEF-13 Rate Base, Net Operating Income and Revenue Requirement by Adjustment

SEF-14 List of Adjustments

SEF-15 Example of Plant Related Calculations



- SEF-16 Reconciliations of Capital Additions to Revenue Requirement Adjustments
- SEF-17 Forecasted Opex
- SEF-18 PSE’s Proposal for a Colstrip Tracker and Explanation of Adjustment 6.53
- SEF-19 Example Reporting for the Colstrip Tracker
- SEF-20 Depreciation Study Impact
- SEF-21 Program Detail of Provisional Pro Forma Rate Base and Depreciation Expense
- SEF-22 Historical Spending for Programmatic Provisional Pro Forma Investments
- SEF-23 Determination of Amount of Electric Deficiencies to be assigned to Schedule 141R –Rates Subject to Refund
- SEF-24 Determination of Amount of Natural Gas Deficiencies to be assigned to Schedule 141R –Rates Subject to Refund
- SEF-25 Proposed Calendar for Annual Provisional Pro Forma Reviews

28. **William T. Einstein**, Director of New Product Development for PSE, summarizes PSE’s product development process, the ongoing Green Direct customer collaborative work, and the sale of the gas Water Heater Rental service and discontinuation of the gas Conversion Burner Rental service. Additionally, his testimony addresses cost recovery for PSE’s upcoming time-varying rate pilots; PSE’s current electric vehicle pilot products and services; PSE’s transportation electrification plan filing; the Distributed Energy Resources necessary to implement the CEIP; and PSE’s Voluntary Renewable Natural Gas service.

- WTE-1CT Direct Testimony
- WTE-2 Professional Qualifications of William T. Einstein
- WTE-3 Latest UTC EVSE Stakeholder Report (Jan-Jun 2021)
- WTE-4 Renewable Natural Gas Capital Spending Authorization Execution to Close
- WTE-5C Water Heater Sales Price Calculation

29. **Carol L. Wallace**, Director of Customer Solutions for PSE, describes PSE's efforts to serve the community and customers, including work to assist those impacted by the COVID-19 pandemic, efforts to meet customer expectations for efficient and convenient service, and expanded assistance programs and payment options for customers. Her testimony also provides an overview of how Customer Solutions supports PSE's clean energy transformation.

CLW-1T Direct Testimony

CLW-2 Professional Qualifications of Carol L. Wallace

CLW-3 PSE LINA Report

CLW-4 PSE LINA Phase 2 Report

CLW-5 CSA-Complex Billing Project

CLW-6 CSA-Arrearage Management Plan Project

CLW-7 CSA-Bill Discount Rate Project

CLW-8 CSA-Customer Relationship Management Project

CLW-9 CSA-Cash Payment Transformation Project

CLW-10 CSA-Digital Experience 2030 Project

CLW-11 CSA-Customer Usage Disaggregation and Presentment Project

CLW-12 CSA-Interactive Bill Redesign Project

30. **Ned W. Allis**, Vice President of Gannett Fleming Valuation and Rate Consultants, LLC, testifies regarding the Depreciation Study that Gannett Fleming prepared for PSE setting forth the calculated annual depreciation accrual rates by account as of June 30, 2021, for all electric, gas and common plant.

NWA-1T Direct Testimony

NWA-2 Professional Qualifications of Ned W. Allis

NWA-3 Depreciation Study Report

NWA-4 Depreciation Rates for Colstrip Excluding Net Salvage

31. **Mark Newton Lowry**, President of Pacific Economic Group Research LLC, provides testimony and a report that offers a constructive overview of performance-based ratemaking and discusses metrics and other provisions of PSE’s multiyear plan.

MNL-1T Direct Testimony

MNL-2 Professional Qualifications of Mark Newton Lowry

MNL-3 Report on Performance-Based Regulation for Puget Sound Energy

MNL-4 Details of the Scorecard Metrics

MNL-5 Details of the Demand Response PIM

32. **Ahmad Faruqui**, a Principal with The Brattle Group, describes the objectives of PSE’s TVR pilot, the time-of-use (“TOU”) rates to be tested in the pilot and how those rates were developed, the pilot design and how it compares to best industry practices, and the evaluation, measurement, and verification process that will be used to evaluate the TOU rates.

AF-1T Direct Testimony

AF-2 Professional Qualifications of Ahmed Faruqui

AF-3 Stakeholder Collaborative Attendance List

AF-4 First Stakeholder Collaborative Presentation

AF-5 Second Stakeholder Collaborative Presentation

AF-6 Third Stakeholder Collaborative Presentation

33. **Birud D. Jhaveri**, Manager of Pricing and Cost of Service for PSE, presents PSE’s electric cost of service study, rate design.

BDJ-1CT Direct Testimony

BDJ-2 Professional Qualifications of Birud D. Jhaveri

BDJ-3 PSE's normalized test year revenue from electric operations

BDJ-4 PSE's electric cost of service study

BDJ-5 Electric rate spread and rate design

BDJ-6 Lighting Cost of Service & Rate Design

- BDJ-7 Proposed Revenue Impacts
- BDJ-8 Electric and Gas Decoupling Study
- BDJ-9 Electric Decoupling Allowed Revenue Calculation
- BDJ-10 Electric FPC Decoupling Allowed Revenue Calculation
- BDJ-11 PSE's 2020 Energy Burden Analysis Report
- BDJ-12 Energy Burden and Bill Discount Rate Stakeholder Presentations
- BDJ-13 Proposed Bill Discount Rate Rider (new Schedule 129D) Sample Revenue Requirement Calculation
- BDJ-14 Residential Electric Block Study
- BDJ-15 TVR - Phase One Report
- BDJ-16 TVR - Ext. Stakeholder Collaborative No. 1 Survey Feedback
- BDJ-17 TVR - Ext. Stakeholder Collaborative No. 2 Survey Feedback
- BDJ-18 Proposed Schedule 129 Low-Income Program Funding Increase
- BDJ-19 New Electric Tariff Schedules

34. **John D. Taylor**, Managing Partner of Atrium Economics, presents PSE's natural gas cost of service study and rate design.

- JDT-1T Direct Testimony
- JDT-2 Professional Qualifications of John D. Taylor
- JDT-3 Normalized Revenues from Gas Operations
- JDT-4 PSE Gas Cost of Service Study
- JDT-5 Gas Rate Spread & Rate Design
- JDT-6 Proposed Revenue Impacts
- JDT-7 Gas Decoupling Allowed Revenue Calculation
- JDT-8 Gas Capacity Resource Allocation

JDT-9 Proposed Gas Tariff Schedule Revisions

35. **Kelly Hui Xu**, a Senior Economic Forecasting Analyst for PSE, addresses PSE’s electric and gas temperature adjustment methodologies and results used to develop the pro forma electric and gas sales.

KHX-1T Direct Testimony

KHX-2 Professional Qualifications of Kelly Hui Xu

36. **Dr. Chhandita Das**, a Senior Economic Analyst on the Pricing and Cost of Service Team for PSE, presents the results of PSE’s Class Load Research used to perform its electric cost of service study and rate design.

CD-1T Direct Testimony

CD-2 Professional Qualifications of Dr. Chhandita Das

CD-3 Load Research Report

CD-4 Net Meter Class Loads

CD-5 2017 Class Load Research Sample Design and Deployment

CD-6 2017 Net Metering Load Research Sample Design and Deployment

CD-7 Load Research Software Methodology

37. **Curt D. Puckett**, Vice President of Energy Systems, North America, Energy Insights, U.S.A., Analytics & Digitalization for Det Norske Veritas, presents the results of the gas load study conducted for the 12-month test year ending on June 30, 2021

CDP-1T Direct Testimony

CDP-2 Professional Qualifications of Curt D. Puckett

CDP-3 Gas Load Research Analysis – Report on July 2020 through June 2021