EXH. SLT-12 DOCKETS UE-22__/UG-22__ 2022 PSE GENERAL RATE CASE WITNESS: SUZANNE L. TAMAYO

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

Docket UE-22____ Docket UG-22____

ELEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

SUZANNE L. TAMAYO

ON BEHALF OF PUGET SOUND ENERGY

JANUARY 31, 2022

Platform of Insights/Data Enablement and Enrichment Program Year 3 - 2022 Corporate Spending Authorization (CSA)

Before starting: Contact the Capital Budget team (<u>CSA-TeamMail@pse.com</u>) for any clarification needed and review the <u>CSA Standard</u> when completing this template.

The sections provided are intended to expand with each additional year. **Ensure you provide adequate information and back-up documentation to support your business case.** If a section or item is not applicable, enter N/A with a brief description why; if unknown, enter TBD. The gray fields are provided as prompts; do not leave these fields with instructions visible.

This document should be updated and resubmitted to the steering committee & aligned Project Management Office every year, timing should coincide with the corporate five year planning timeline.

Date Submitted:11/9/2021	
Officer Sponsor:	Margaret Hopkins, Andy Wappler
Program Director Sponsor:	Brian Fellon, Carol Wallace
Program Manager:	Chaim Nel

I. Program Overview

Update each section with high level information as applicable, noting any changes from the previous request/Gate.

Business Need:	PSE's business is increasingly data-centric and faces accelerating disruption in customers' expectations, digital technology advancements, grid/network modernization requirements; an increasing deployment of distributed energy resources, decarbonization and the imperative to reduce operating costs.
	Investments in smart energy infrastructure and digital customer channels has resulted in enterprise data increasing exponentially. PSE has identified an enterprise risk based on the inability to leverage its data to drive strategic business decisions and enhanced customer offerings.
	To unlock the value of data PSE needs to:
	 Improve the ability to manage and govern enterprise data Enable the business to access, understand, manipulate and analyze data to deliver new insights, innovations and opportunities Establish a more data-centric, data-driven culture Identification of customer self-service barriers Enhanced ability to proactively resolve customer problems Increased ROI of marketing spend Increased self-service of data Reduced reliance and spend on third party analytics applications WUTC reporting and analytics
Proposed Solution:	The Data Enablement and Enrichment program and the Platform of Insights Operational Program will be combined to create a single program. The resulting program will provide tools and processes to address the risk related to the complexities of accessing, governing, and analyzing data given a rapidly growing and evolving technological landscape. The program will provide capabilities that will make data self-service an enterprise commodity,

and ensure that analyses are done with intuitive, forward-looking queries and analytics tools, and allow roles to be clearly defined across the organization. The aim is to enable PSE and its stakeholders to access data to make informed and innovative decisions that benefit the customers, employees and the company.

Data Enablement is a collection of interrelated capabilities to be able to manage and utilize enterprise data more effectively. The six data enablement dimensions are:

- 1. Strategy and Alignment
- 2. Governance and Organization
- 3. People and Talent
- 4. Processes
- 5. Insight
- 6. Technology and Architecture

There are four work streams within DEEP:

- 1) Use Cases (non-customer): focused on building data and analytics in the Business and IT domain that support PSE 2030 and the strategic direction of the organization.
- Customer Data Operations (formerly Platform of Insights Operational Program-POI/CDO): focused on building data and analytics in the customer domain that support PSE 2030 and the strategic direction of the organization.
- 3) Data Foundation
- 4) Operating Model

processes, imp	ement and Enrichment Program is a program to develop ement technology and provide employee development that strengthen, expand and extend its ability to use information ectively.
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The first objective of the Data Enablement and Enrichment Program is to detail user data enablement requirements in order to refine, and if necessary, redefine the core capabilities to meet business and IT needs. The subsequent objective is to assess how requirement-driven capabilities fit and can be integrated within PSE-owned or new tools, and their ability to be integrated into Data Enablement and Enrichment Program to effectively consolidate, manage, and expose data to users.

The progressive rollout of Data Enablement and Enrichment Program will provide a powerful platform for enabling analysis, innovation, operational streamlining and data education for PSE customers and employees.

Finally, by providing PSE employees with data needed to support discussions with the WUTC, key stakeholders, and local communities, we can more confidently highlight the great things that PSE is doing in the region.

Primary ISP Alignment:

Financial

ISP Strategy Description:

Process & Tools - Optimize product/service portfolio consistent with long-term strategy

Portfolio Description:	Strategic	Capital Allocation Definitions
II. Key Financial Information		
Expected Program Start Date:	01/2020	

Expected Program Start Date:	01/2020
Expected Program Close Out Date:	12/31/2026

Overall Estimate Investment: High-Level Budget & On Going O&M Fill in details around the Programs planned spend (this information is required, show full Program life costs) summing up all project costs and Program O&M. Details around the project should be provided in the Project CSA if applicable.

Each year update with new estimates by copying & pasting the table below, above the previous table.

Last Updated: 11/9/2021

Overall Estimated Investment:	(\$M)		
DEEP/POI Capital (contingency included)	\$24.5M		
Program O&M	\$0		
Total	\$24.5M		
Ongoing O&M (Annually)	\$566,794		

* Combined DEEP budget of \$17.5 and POI budget of \$7M and requesting extention of Program due to budget decrease to stay on same budget as approved

Last Updated: 4/30/2021

Overall Estimated Investment:	(\$M)		
DEEP Capital (contingency included)	\$17.22M		
Program O&M	\$0		
Total	\$17.22M		
Ongoing O&M (Annually)	\$531,903		

Last Updated: 4/30/2020

Overall Estimated Investment:	(\$M)
Capital (contingency included)	\$18.86M
Program O&M	\$0
Total	\$18.86M
Ongoing O&M (Annually)	\$250,000

Estimated Five-Year Allocation: Enter values in the cells below based on the Program WBS for years anticipated, up to five years.

Last Updated: 11/9/2021

Due to the outbreak of the COVID-19 virus, the budget has been reduced in 2020/2021 and 2022 as seen below. Also, with the addition of Customer Data Operations Program to the DEEP program, this allows the DEEP program to propose to extend the duration of the Program to 2026.

Category:	Initiation (2019)	Year 1 (2020)	Year 2 (2021)	Year 3 (2022)	Year 4 (2023)	Year 5 (2024)	Year 6 (2025)	Year 7 (2026)
DEEP/POI Capital (contingency included)	\$1.1M	\$4.4M	\$3M	\$3M	\$3.5M	\$3.5M	\$3.0M	\$3.0M
OMRC / Program O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

III. Ongoing Benefits:

Each year update with new estimates by copying & pasting the table below, above the previous table.

Summary of Program Benefits (see Benefits realization plan for details):	This program was initiated as a mitigation for an enterprise risk around data enablement - <i>The risk of our inability to leverage data to drive strategic business</i> <i>decisions and enhanced customer offerings</i> . This program will leverage Agile delivery. The nature of an Agile delivery program is that it starts with a backlog of work that is periodically reprioritized. As use cases are prioritized and delivered, the benefits will be documented and incrementally tracked. The program expects the following benefits:
	 Improved insights from information due to increased access and increased accuracy of data Reduced time to analyze large volumes of data Improved customer engagement and regulatory requirements Risk reduction in safety, reputation, financial, and operations Increased efficiency Reduction in third party fees(CDO) Higher customer satisfaction(CDO) Higher customer program participation(CDO) Regulatory compliance(CDO) AWS AMI Storage cost avoidance DataRaker AMI data cost avoidance(CDO)

Year:	Year 3, 2022			
Scope: Program scope increased to include Customer Data Operations (POI/CDO a sub stream within the overall DEEP program				
Budget: Program budget increased to include POI/CDO capital but removed \$1m for 2022 do to updated budget.				
Schedule:	Program schedule close out date modified from 12/31/2024 to 12/31/2026 with the inclusion of CDO			
Benefits:	Benefits increased from year to year as new use cases are implemented and the Program has the potential to increase this significantly over the next few years			

Category:	Initiation	Year 1 (2020)	Year 2 (2021)	Year 3 (2022)	Year 4 (2023)	Year 5 (2024)	Year 6 (2025)	Year 7 (2026)	Total
Ongoing O&M (to be funded by business)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ongoing O&M (requesting \$'s)	\$0	\$0	\$528,480	\$566,794	\$566,794	\$566,794	\$566,794	\$566,794	\$3,362,450
Benefits	\$0	\$0	\$40,000	\$1,240,000	\$1,240,000	\$1,240,000	\$1,240,000	\$1,240,000	\$6,240,000
Net impact (= Benefits – O&M)	\$0	\$0	(\$488,480)	\$673,206	\$673,206	\$673,206	\$673,206	\$673,206	\$2,877,550
*Payback in Years	Not Applicable								

• O&M \$'S = HANA Enterprise license total cost confirmed with Finance and includes discount from SAP

• Enterprise Data Catalog licenses(Informatica) moved from O&M to capital & MSSQL AWS not required

IV. Change Summary

Use this section for changes over the Program lifespan. To have a history of the changes at each program update, copy/paste the table below, above the previous table.

Last Updated: 4/30/2021

Category:	Initiation (2020)	Year 1 (2020)	Year 2 (2021)	Year 3 (2022)	Year 4 (2023)	Year 5 (2024)
Capital (contingency included)	\$.86M	\$4.36M	\$3M	\$3M	\$3M	\$3M
OMRC / Program O&M	\$0	\$0	\$0	\$0	\$0	\$0

Year:	Year 2, 2021		
Scope:	Program scope reduced due to budget reduction		
Budget:	Program budget reduced from \$6M a year to \$3m a year		
Schedule:	Program schedule not impacted		
Benefits:	Not applicable – No hard benefits identified to date.		

Category:	Initiation	Year 1 (2020)	Year 2 (2021)	Year 3 (2022)	Year 4 (2023)	Year 5 (2024)	Total
Ongoing O&M (to be funded by business)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ongoing O&M (requesting \$'s)	\$0	\$0	\$438,908	\$531,903	\$531,903	\$531,903	\$2,035,000
Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net impact (= Benefits – O&M)	\$0	\$0	\$438,908	\$531,903	\$531,903	\$531,903	\$2,035,000
*Payback in Years	Not Applic	able					

Impacting ongoing O&M (Requesting \$'s)

- HANA Enterprise license Meter Analytics Records
 Enterprise Data Catalog licenses(Informatica)
- MSSQL AWS licenses •

Last Updated: 4/30/2020

Category:	Initiation (2020)	Year 1 (2020)	Year 2 (2021)	Year 3 (2022)	Year 4 (2023)	Year 5 (2024)
Capital (contingency included)	\$.86M	\$4M	\$6M	\$8M	\$0	\$0
OMRC / Program O&M	\$0	\$0	\$0	\$0	\$0	\$0

Year:	Year 1, 2020		
Scope:	Program scope reduced due to budget reduction		
Budget:	Program budget reduced to \$4m, included budget from 2019		
Schedule:	Program schedule not impacted		
Benefits:	Benefits realized as the program work through the Use Cases and Foundation initiatives		

Benefits currently in review to validate any annual cash benefits

Category:	Initiation	Year 1 (2020)	Year 2 (2021)	Year 3 (2022)	Year 4 (2023)	Year 5 (2024)	Total
Ongoing O&M (to be funded by business)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ongoing O&M (requesting \$'s)	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$750,000
Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net impact (= Benefits - O&M)	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$750,000
*Payback in Years							

	Not Applicable
* Daula aluin Vaana – En	ten neeltine en en ten Net Angliegele

* Payback in Years - Enter positive amount or Not Applicable
 **For potential gaps in data management technology that may require SaaS or maintenance costs. This will be

evaluated at the end of 2021. No labor increase is assumed.

V. CSA Approvals

Add/remove rows as needed in the table below. Email approval is acceptable. To maintain a history of the changes at each program update, **copy/paste the table below above the previous table.** Send to the Capital Budget team at <u>CSA-TeamMail@pse.com</u>. A program must review the <u>Escalation Criteria</u> for appropriate escalation and approvals.

For guidance on approval authority levels, follow <u>CTM-07 Invoice Payment Approval</u>

Program Year	Year 3, 2022			
Approved By	Title	Role	Date	Signature
Chakradhari Damidi	Manager BI/BW/Data Analytics	Key Benefit Owner	7/26/2021	DEEP_POI CSA 2022 Approval Chakri.pdf
Will Spencer	Manager Data Services	Key Benefit Owner	7/26/2021	DEEP_POI CSA 2022 Approval Chakri.pdf
Claire Locke	Manager Customer Insights	Key Benefit Owner	7/26/2021	DEEP_POI CSA 2022 Approval Claire.pdf
Tim Foley	Manager Enterprise Data	Key Benefit Owner	7/26/2021	DEEP_POI CSA 2022 Approval Tim.pdf
Carol Wallace	Director Customer Solutions	Director Sponsor	7/26/2021	DEEP_POI CSA 2022 Approval Carol.pdf
Brian Fellon	Director Application Services	Director Sponsor	7/26/2021	DEEP_POI CSA 2022 Approval Brian.pdf
Andy Wappler	VP Customer Operations & Communications, Corporate Affairs	Executive Sponsor	7/26/2021	DEEP_POI CSA 2022 Approval Andy.pdf
Margaret Hopkins	Chief Information Officer	Executive Sponsor	7/26/2021	DEEP_POI CSA 2022 Approval Margaret.p

Program Year	Year 2 2021			
Approved By	Title	Role	Date	Signature
Chakradhari Damidi	Manager BI/BW/Data Analytics	Key Benefit Owner	4/23/2021	DEEP CSA 2021 Approval Chakri.pdf
Will Spencer	Manager Data Services	Key Benefit Owner	4/23/2021	DEEP CSA 2021 Approval Will.pdf
Tim Foley	Manager Enterprise Data	Key Benefit Owner	4/23/2021	DEEP CSA 2021 Approval Tim.pdf
Brian Fellon	Director Application Services	Director Sponsor	4/28/2021	DEEP CSA 2021 Approval Brian.pdf
Margaret Hopkins	Chief Information Officer	Executive Sponsor	5/9/21	RE PCRs and CSAs for week of 5 3 21.m

Program Year	Year 1 2020			
Approved By	Title	Role	Date	Signature
Will Spencer	Manager Data Services	Key Benefit Owner	6/2/2020	Will approval.msg
Tim Foley	Manager Enterprise Data	Key Benefit Owner	6/2/2020	Tim approval.msg
Brian Fellon	Director Application Services	Director Sponsor	6/1/2020	Brian approval.msg
Margaret Hopkins	Chief Information Officer	Executive Sponsor	6/4/20	Margaret approval.msg

- Please direct any questions to either:
 1. The Capital Budget team at <u>CSA-TeamMail@pse.com</u>, or
 2. The Enterprise Project and Performance Project Practices team at <u>EPP-ProjectPracticesTeam@pse.com</u>

Appendix:

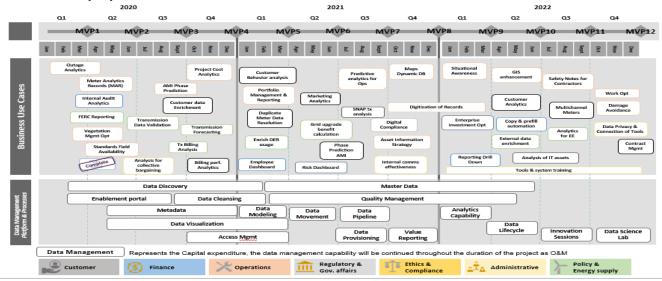
Current Year Project list, State Date & In Service Date Fill in details around the Program components/projects planned within the current year (this information is required). Details around the project should be provided in the Project CSA if applicable. Add additional rows as needed. Each year update the table by copying & pasting the table below, above the previous table.

DEEP schedule for 2020/21. Planning and prioritization of Use cases in progress for 2022. Currently have 65 Use cases & Data Foundation initiatives in the pipeline for year 2022, 2023, 2024 and 2025. Use cases for 2022 is getting prioritized by Steering Committee members during October workshop.

DEEP Program Roadmap – Update September 2021 Meter Analytic 🕁 Internal Audit Interaction Records Maps Dynamic Supply Chain Management Corporate Functions Customer Behavior Record [AMI]-68 analysis for EE And Enterprise-Wide Analytics - 67 into POI - 15 Harness Under Model validation 숬 Customer Outreach ${\sf A}$ AR Aging utilized Data DEEP Analytics - 31 Customer Report-77 Mail Return Date-74 Improved Data Phase Prediction (AMI) - 107 ☆ Quality – AMI-94 ☆ FERC LGIP Application Asset Health Outage Management Detection[AMI] Operations/ Predictive Analytics for MAR Over/Under loaded 😾 Customer Usage and Database-66 Operations - 47 Energy Supply [AMI]-98 👗 Reconciliation Transformers [AMI]-78 EMMA Case Commercial Add Commercial Add Commercial Residential Load Improve Zero Automate Zero Profile Segmentation rational Program creation via MAS Residential Detection A Consumption 2, Meter Analytics (MAS) Algorithm Algo Performance Algorithms ATTOM Data 🔆 🛛 Modeling Engine 🛠 MAS Dashhoard Tracking Enhancements Enhancements WUTC Collections Resumption Renewables, EV, Dashboards (EE, Disconnection Billing Reporting Data COVID, Marketing, Security PSE 2030 and PSE 2030 (CAR) and EE Propensity Deposit 🗙 Data Energy Burden Income Data PSE 2030 CAR Major Accts) Customer 🛦 Segments Dashboard Snapshot ð Outage <u>0</u> Notification Status History Data Proactive Outreach Analytics (MCA) Dashboard Sitecore Campaign Management Data PRT Analysis Customer 🛕 TLH 🛠 Safety 🛧 CAP Apps 😾 Cost 📐 Vegetation ERC/Trading 🕁 IT Planning IT Finance 🕁 ☆ Mgmt AGeneration telematics Enhancements managemen Reports Supply Chain Mgmt IT Avail 🛧 Dashboard Quality 📐 Forecast Accuracy Rate Case Data Reporting Management ☆ TSR Elec and Gas Sch 171 NCM Pole Services 🕁 DR Archer Power BI Dashboard Tableau to Power BI Conversion Power cost Reporting 🕁 DS Lab POC 🤸 Analytics Augment DS Lab – Prescriptive Model Value Reporting Data Foundation Unified Data Platform (UDP) – Release 1 🛦 UDP – Release 2 **Operating Model** Privacy Comp Management 🔺 Not Yet Confirmed Not Started Launched 🛧 Complete In Progress

*Note: Use Case prioritization currently in process for 2022.

Use Cases



DEEP Roadmap April 2020

	Year	3 2022
Project (s)	Anticipated Start Date	Anticipated In Service Date
Projects & Use Cases:	01/2022	12/2022
The creation of customer segmentation		
tool(s) - POI use case; Usage based		
customer segmentation and load		
disaggregation - POI use case; Tool that		
enables the reporting and triage of		
highly energy burdened and/or		
vulnerable customers - POI use case		
A dashboard that equips PSE employees		
with the data needed to proactively		
engage with local communities;		
Customer Usage Data Summary - POI		
use case; Catalog 6 additional data		
repositories - Foundation; Document		
Business context and use of catalog data		
- Foundation; Provide Data Quality		
score and cleanup plan for Critical Data		
Elements with business owners		
- Foundation; Open Data Science Lab to		
data science community - Foundation;		
Launch data management community,		
curriculum and career roadmap process		
- Foundation; Digitization of Records &		
Documentation - Non-Customer use		

case; Work Optimization - Non-	
Customer use case	
Failed Equipment Image Documentation	
Storage - Non-Customer use case; Data	
Privacy and Connection of Tools - Non-	
Customer use case; Key Risk Indicator	
Dashboard; Asset Health (utilization	
factor) 2.0 - Non-Customer use case;	
Failed Equipment Image Documentation	
Storage - Non-Customer use case;	
Pricing & Cost of Service - Non-	
Customer use case;	
Monitor Asset Health (voltage	
anomalies) - Non-Customer use case;	
Supply Chain Management Harness	
Under-utilized Data - Non-Customer	
use case; Capacity Planning / Sizing	
Assets - Non-Customer use case;	
Resource Mgmt. &	
Performance/Customer Projects	
Operations - Non-Customer use case	

Project (s)	Year 2 2021	
	Anticipated Start Date	Anticipated In Service Date
Business Use Cases; Meter Analytic	01/2021	12/2021
Record [AMI]; AR Aging Report; Predictive Analytics for Operations; Interaction Records into POI; Mail Return Date; Customer Usage; Maps Dynamic Dashboard; Asset Health; Maps Dynamic Dashboard; Customer Load Disaggregation; DER Integration; Customer Behavior analysis for EE; Outage Management Detection. Foundation Initiatives: Analytics Augment DS Lab; Operating Model; Enterprise Data Catalog; Model Value Reporting; Privacy Comp Management; ; Enterprise Data Catalog – Release 2; Provisioning Master Data; Quality Management; Foundation Initiatives:		

3/29/2020

Project (s)	Year 1 2020	
	Anticipated Start Date	Anticipated In Service Date
Business Use Cases; PDF to Excel transformer; Billing Performance Analytics; Internal Audit Analytics; FERC LGIP Application and Database; Customer Outreach	01/2020	12/2020
Analytics. Foundation Initiatives: Data Science Lab; Information Steward DQ Disc; DS Lab POC; Enablement Portal Release 1		