EXH. JJJ-10
DOCKETS UE-19___/UG-19___
2019 PSE GENERAL RATE CASE
WITNESS: JOSHUA J. JACOBS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY,** **Respondent.**	**Docket UE-19____** **Docket UG-19____**

NINTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

JOSHUA J. JACOBS

ON BEHALF OF PUGET SOUND ENERGY

JUNE 20, 2019

Integrated Work Management
Corporate Spending Authorization (CSA)
Application Request

Date Submitted:	7/19/2018
Officer Sponsor:	Booga Gilbertson
Completed By:	John Mannetti, Brady Kinsella
Phase Gate:	**Execution**

I. Project Overview

Problem Statement:

Integrated Work Management's (IWM) mission is to drastically improve the lives of PSE customers and employees by meeting and anticipating customer needs and empowering employees to deliver a great customer experience. The reason IWM is needed is because today, the majority of PSE field work is manual and paper-based which prevents vital information-sharing and limits our workforce from being as efficient as they could be in the field. In addition, PSE has a shortage of information on work order priorities, execution timelines, work status and the ability to assign the appropriate resource based on skills, availability and location. And finally, in SAP, we have inconsistent views into the work order lifecycle from initiation through project close and lack the real-time ability to effectively track work.

Future Vision:

IWM is an enterprise approach to managing field work required to support a company's customer service work and, the construction, operation, and maintenance of its core physical assets.

The IWM project is designed to strengthen the ability for PSE to perform the right work, at the right time in an efficient manner through an automated, integrated mobile solution. IWM aims to provide visibility to all work through its lifecycle; Initiation, Planning, Scheduling, Execution and Close, and with the following outcomes:

- Better work planning and scheduling, improving workforce productivity and increasing efficiency and compliance.
- Putting in place people, processes, standards and tools to identify, monitor and prevent data quality issues.
- Improving customer engagement and satisfaction through improved self-service, automated and proactive information sharing related to billing, scheduling and services.

IWM is a foundational component in the success of Get to Zero. The enablement and rollout of a mobile solution, automated scheduling, assigning and routing of work, and work order visibility are some of the key underlying drivers of facilitating reduced call volume in PSE call centers.

Proposed Solution:	The purpose of IWM is to provide an automated, integrated mobile solution which will provide greater visibility into field operations. IWM's proposed solution is comprised of four key components: 1. SAP Work Mgmt. Systems (WMS) – Will provide visibility through the cost and lifecycle of the work. 2. Workforce Scheduling (Click) – Will be a common build of scheduling, dispatch and process and technology for all gas & electric field work. 3. Workforce Mobility- Will provide field crews electronic mobile capabilities to receive, status and report on work activities. 4. Cost Management – Full lifecycle financial tracking for the tracking of a work order. Please refer to the Project Description section further in this document for additional details.
Alternatives Evaluated:	N/A
Primary ISP Alignment:	**Processes & Tools**
Type of Project:	**Cost Benefit**
OCM Considerations:	Impacted Users (Internal): ☐< 100 ☐< 500 ☒> 500 Impacted Customers (External): ☐None ☐< 100K Electric or < 1K Gas ☒> 100K Electric or >1K Gas Internal Organizational Impact: ☐1 Dept or less ☐2-5 Dept ☒> 5 Dept / Business Platform / Enterprise
Project Complexity & Duration:	☐Straightforward, well understood ☐ < 6 months ☒Complex and well understood ☐< 12 months ☐Complex and not well articulated ☒> 12 months

II. Phase Gate Change Summary

Description of changes, including reasons and justification since the last submission / Phase Gate.

Scope:

The project scope has continued to be fine-tuned during the Design Phase to better meet the needs of our customers and to ensure the implementation plan for going live with IWM remains on track. The focus during the Design phase has been the development, building and testing of solution requirements over multiple iterative cycles (i.e. sprints.) IWM has adopted a more iterative approach to development to more quickly design, test, and release features and functionality that the business can leverage and benefit from.

The 2018 rollout plan will be to the Electric Meter Operations Org. (Meter Ops) and Meter Network Services (MNS.)

Subsequent rollouts are targeted to be Electric First Response (EFR), Gas First Response (GFR), and Customer & Systems Projects (CS&P) and will be brought forward as separate CSAs to track budget, schedule, and benefits.

Key project scope updates/changes include:

- Identification of the rollout sequence and go-live dates:
  - Meter Ops – 9/10/18
  - Meter Network Services – 12/10/18
- Tablet selection:
  - After extensive research and assessment, two different tablets have been selected for IWM implementation to field workers:
    - Dell 7212 rugged tablet – Meter Ops
    - Xplore L10 rugged tablet - MNS
- GtZ OCM costs fully capitalized (with the exception of end user training) rather than categorized as O&M, per program decision in Feb.
- Increase in tablet and accessory costs primarily due to higher than estimated device costs.
- Additional effort required related to the fine-tuning of the 3rd party scheduling software, Click
  - SOT, SVT and professional services
- Significant additions of consultants and PSE labor added to the project during the Design phase in order to size the project appropriately for successful delivery with the needed expertise.
- Change in project leadership as Brady Kinsella has taken over as Business Delivery Manager for Kassidy Warren beginning on 7/1/18.

Budget:

The current IWM Work Management 2018 budget for Capital and contingency is $23.7, which is a $1.3M increase from the budget that was established by the GtZ program at the beginning of 2018. This increase was primarily due to the solidification of the 2018 budget after previous estimates occurred in early 2018.

Overall Project Capital to date (without contingency) is now **$37,008,114**

2018 Capital forecast (without contingency) is $22,237,991

Overall Project O&M is being managed by the GtZ program and is being tracked separately

Schedule:

At the end of the Planning Phase, the IWM-scheduled rollout was to be in July of 2018, but 1st release is now slated for Sept 10, 2018. The shift in schedule is due to a new systems integrator coming on board in February and providing their assessment of the time/work required in order to go-live based on their experiences with similar rollout types.

Risk Profile:

The IWM risk profile has remained unchanged.

III. Key Schedule and Financial Information

You may copy/paste this section from the Initiation Proposal form. Be sure to update each section as applicable.

Proposed Budget Year(s):	01/01/2018 – 12/31/2018
Expected In-Service Date:	9/10/2018 – Rollout to Meter Ops 12/10/2018 – Rollout to MNS
Initial Estimate:	Capital: **$39,150,202** 2017 Capital: $15,447,332 2018 Capital: $ 23,702,870 O&M: $**1,100,120** 2017 O&M: $1,000,120 2018 O&M: Tracked at the GtZ program level

Cost Estimate Maturity Score:

To determine the Estimate Maturity Score for the project, review the guidelines and complete/update the Project Cost Estimate Classifications Document here: http://pseweb/Organizations/ProjMgt/EnterprisePM/Pages/Cost-Estimates.aspx. Include a link to, or embedded copy of, the project's completed/updated document for reference.

Score: **Class 2 - Design Complete, Solid Budget**

Cost Estimation Classification Document: IWM Project Cost Estimate Classifications

Updated Estimate for Total Project Cost:

Double-click on the table below to edit the values in cells for Phase Name, Contingency %, Capital, OMRC Costs and Total Cash Benefits. Adjust column widths if necessary. Once complete, click outside of the table frame to return to the Word document. Note, if you have issues opening the table, reboot your computer and try again.

Phase Name:	**Execution**	**Contingency %**	**15%**	
			10%	
Cost Type	**Capital**	**OMRC**	**Opex**	**Total**
Cost (without contingency)	**$ 37,008,114**			**$ 37,008,114**
Contingency (auto-calculated)	$ 1,464,879			$ 1,464,879
Total (auto-calculated)	**$ 38,472,993**	**$ -**	**$ -**	**$ 38,472,993**
TOTAL ANNUAL CASH BENEFITS	**$ 1,318,428**	**IF APPLICABLE**		
PAYBACK IN YEARS (auto-calculated)	**29.18**	**IF APPLICABLE**		
Note: For the purposes of the total annual cash benefits, the low-end (conservative), fully-realized, benefit calculation for MNS & Meter Ops (found later in this doc) was used. In addition, the benefits included in the calculation are only real savings benefits and do not include repurposed savings. **O&M will be kept at the GTZ Program level.				

Estimated Five Year Allocation: *Enter values in the cells for Capital, OMRC and Opex Costs, as well as Cash O&M Benefits, for years anticipated, up to five years, plus any expected future years.*

Category:	Year 1	Year 2	Year 3	Year 4	Year 5
Capital (not incl. contingency)	$ 14,681,263	$ 22,237,991	$0,000.00	$0,000.00	$0,000.00
OMRC	0,000.00	0,000.00	$0,000.00	$0,000.00	$0,000.00
Opex**	$834,491	0,000.00			
Cash O&M Benefits	$0,000.00	$0,000.00	$182,402	$319,252	$437,369

**O&M will be kept at the GTZ Program level.

Cash Benefits by Department: *Add/remove rows, as applicable.*

Department Name	2019	2020	2021	2022	2023
Meter Operations	$33,277	$116,471	$166,387	$249,580	$332,773.73
Meter Network Svcs.	$311,867	$415,823	$554,430	$739,241	$985,654.00

Ongoing Annual O&M by Department: (e.g., maintenance, FTEs, cloud storage, etc.)
Add/remove rows, as applicable.

Category	Year 1	Year 2	Year 3	Year 4	Year 5
IT Dept (2 FTEs)					
Software Maintenance					
Tablet Maintenance					

Non-Cash Benefits / Future Cost Avoidance:

- Reduction in the likelihood of major safety incidents
- Higher customer satisfaction – positive perception of PSE
- Operational efficiency
- Increased employee satisfaction

Cash on Cash Single Payback: 3.6%

IV. Project Description and Objectives

Project Description: Integrated Work Management (IWM) is an enterprise approach to managing field work required to support a company's customer service work and, the construction, operation, and maintenance of its core physical assets. The **Integrated Work Management Project** will entail:

1. **Cost Management:** A Common Design phase to establish changes in SAP ECC PM, FI, CO, PS, and other to enable full lifecycle financial tracking of tracking of a PM work order / operation pair for all IWM targeted work. This includes; a move away from use of standing orders & Internal orders for field work, use of planned costs captured on work orders, alignment of activity types and costing sheets with Work Centers for planning & actual costing, revise Order Types, revisit and revise the WO settlement rule derivation and FERC indicator derivation for IWM related work, move away from FERC order types. Upon rollout in conjunction with the Work Management, Scheduling, and Mobility projects, this will provide a consistent view and approach for all work in SAP. Enabling financial visibility through the lifecycle of the work from initiate to close.

2. **Workforce Scheduling:** This project is aimed at supporting the Implementation of Design, Common Build, and rollout of the Scheduling & Dispatch process and technology for all Gas & Electric field work. The functionality will enable visibility to all work that is ready to be executed and its priority, required skills, availability, and geographical location. This project will provide improved field force utilization, improved customer appointment booking, improved response to emergency events, improved staging of materials and optimized utilization of equipment. This Scheduling project is planned, designed, and executed in conjunction with the IWM Cost Management, Work Management (WMS), and Mobility projects.

3. **Work Management:** A Common Design phase for SAP ECC PM, CO, PS, and other changes to enable planning, tracking of a work order / operation for all IWM targeted field work. Scope includes; a move away from use of Standing orders & Internal orders for IWM field work, the use of one order representing one unit of work, use of operations in orders as tasks required to perform that work, planned hours and costs captured on work order, full use of Work Centers to identify crews and individuals, and the movement of all IWM field work into SAP. This WMS project is planned, designed, and executed in conjunction with the IWM Cost Management, Scheduling, and Mobility projects.

4. **Workforce Mobility:** This project is aimed at supporting the Implementation of Electronic Mobile capabilities to receive, status, and report on work activities. This project will enable near Real Time receipt of work assignments, reduce paperwork, handoffs, and extra key strokes. These capabilities will provide better asset and work order input from the field, resulting in more timely status updates. The new capabilities will eliminate many of the manual and paper processes thereby providing improved efficiencies and reduced back-office administrative tasks. This Mobility project is planned, designed, and executed in conjunction with the IWM Cost Management, Scheduling, and Work Management (WMS) projects.

5. The rollout to Gas Customer Facing, Electric Customer Facing, and Meter work includes all targeted work in SAP, managing work to the operation level with resource loading, plan to actuals, new scheduling and mobile tools integrated with SAP, and ability to see easily status of this groups work through common reporting.

ISP Alignment:

ISP Objectives, Mandatory and/or Corporate Risk	**Strategy** *Abbreviated* **ISP strategy descriptions**	**Benefit Description** *Benefit, measurement and/or scorecard affected*
Financial	☐ Five-Year Strategic Plan ☒ Maximize long-term value ☒ Grow core business ☐ Grow new business	Adoption of paperless billing Reduction in bad debt
Customer	☐ Execute the Customer Experience Intent Statement ☐ Recognition of PSE role in community ☐ Customer preparedness & safety ☒ Ideal customer behaviors ☐ Listen & dialogue with customers	Reduction in agent-handled call volume from 2014/2015 baseline Increase customer self-service transactions Increase in customer satisfaction Reduction in disconnect/reconnects
Process and Tools	☒ Streamline processes to drive effectiveness and efficiency ☒ System reliability and integrity ☒ Safety and security of systems, information and assets ☒ Extract and leverage value from existing technology and assets ☒ Optimize product/service portfolio consistent with long-term strategy	Reduced truck rolls Improved operational efficiency Reduced lag time in updates for critical processes
People	☐ Develop/Retain best employees ☒ Ownership, innovation and continuous improvement	Improved operational efficiency
Safety	☐ Educate and train employees on effective safety and wellness strategies	Reduce injuries in the workplace via reduction in the likelihood of major events/incidents

Detailed Benefits Analysis (Yearly Savings After Full Realization in 2023):

Rollout	**Benefit Description**	**Metric**	**Target Cost Savings Per Year (Low Est)**	**Target Cost Savings Per Year (High Est)**	**Data Source**
Meter Ops	Increased field worker productivity via decreased scheduling time	41 field workers*2 hours per day scheduling * 5 days per week *50 weeks per year * $73.6344 (journeyman meterman)	$ 368,172	$ 736,344	SME Estimates, Finance
Meter Ops	Reduced back office administrative work (repurposing of 1 FTE)	1-2 CSRs *$$ avg wage * hours per year hours spent *$$ per hour of avg staff wage	$ 76,422.53	$ 152,845	SME Estimates, Finance
Meter Ops	Added Cost - 1 FTE resource	Additional resource	$ (111,820.8)	$ (111,820.8)	SME Estimates,

	coordinator	coordinator cost: Fully loaded rate for FTE = $53.76 (activity rate = $32)			Finance
MNS	Reduced back office administrative work	Reduction of equivalent of 10 FTEs (high estimate used for benefit calculations instead of low estimate)	$ 534,934.40	$ 764,192.00	SME Estimates, Finance
MNS	Added Cost-Additional FTE	Hiring of 2 additional resource coordinators	$ (223,642)	$ (223,642)	SME Estimates, Finance
MNS	Added Cost-Cash reconciliation process	Cost to install cash drop boxes, cash bags, and armored car service	$ (75,000)	$ (150,000)	SME Estimates
MNS	Increased field worker productivity	Staff is reduced by 5 from the budgeted number, expect an additional 18,800 customer touch points annually (conservative figure).	$ 520,104	$ 520,104	SME Estimates, Finance
Total			**$ 1,318,427.73**	**$ $1,738,022**	

Project Objectives and Deliverables:

Objective	Outcomes / Deliverables	KPIs – Describe; Indicated Leading/Lagging	KPI Data Sources
Implement IWM with the identified scope	• Go-Live by Sept 10th, 2018 to the Meter Operations organization followed by IWM rollout to Meter Network Services by December 10th, 2018	• Project budget • Project schedule • Project scope	• BPC/SAP • Project plan • Agreed upon SOW with systems integrator
Develop and implement a change management plan	• Develop stakeholder engagement and communication plans • Perform impact assessments • Build training schedule, materials and plans and TDT execution • Develop Knowledge Transfer materials • Perform OCM risk/issue assessment	• Level of stakeholder engagement	• Stakeholder interviews • Surveys • Communication plan
Develop and implement a training plan to ensure users are trained	• Develop training material of future state solution and train PSE staff (end users, technical team, support, hardware techs)	• Training satisfaction • Completeness of training	• Surveys

Note: For additional project objectives and deliverables, please refer to the IWM Phase II RFP

Project Alternatives Assessment: *Add/remove rows, as needed.*

Alternative	Pros	Cons	Cost	Duration
Spend longer time in planning and design and rollout to all target orgs simultaneously	Wider audience to receive benefits and greater potential business impact	• Less time to course correct with any potential business changes • Satisfying all requirements for the various businesses to extend development timeline • Additional resources required to manage all of the work	>$2M	>12 months

V. Risk Management

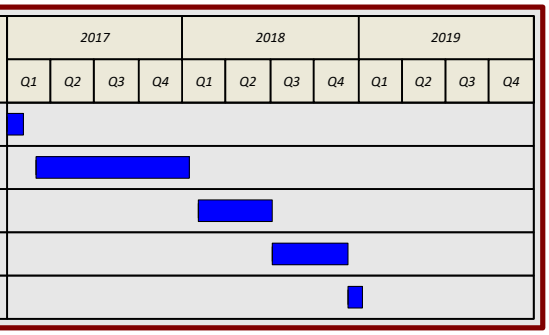
Identify anticipated risks associated with this project. Consider Federal, State, County, Local regulatory requirements, as well as contingencies, exit criteria and strategy. When the project risk register is created, utilize this section to identify critical/top risks and include a link to the risk register for further detail. Add/remove rows as necessary.

Risk	Likelihood	Impact of Occurrence	How Monitored	Mitigation
Pending business decisions specifically around workload for CSRs and hiring additional Resource Coordinators will impact the next steps between Labor Relations and the Union reps. Depending on that timeline, it could impact our ability to train the right people before IWM Go-Live	Low	High	Weekly updates during IWM risks/issues meeting	Increased communication between labor relations and union about any changes affecting roles
Delays in System Integration Testing	High	High	Daily updates on status and progress	Additional hours worked by team members and applying any excess capacity to help current team with functional design and testing.

Risk Register: IWM Risk Log

VI. High Level Schedule

Line #	Lifecylce Phase	Start	Finish
1	Initiation	1/2/2017	2/1/2017
2	Planning	2/28/2017	1/15/2018
3	Design	2/1/2018	7/4/2018
4	Execution	7/5/2018	12/10/2018
5	Close-out	12/11/2018	1/8/2019



VII. Supporting Documentation

Options: Insert hyperlink to the documents or embed a copy of a document in the sections below. If you embed a document, remove placeholder rows provided. If you choose to provide hyperlinks, ensure access to the referenced location is setup/provided in advance. Add/remove additional document rows, as needed.

Cost Estimating and Budget:	Capital Forecast estimates
Business Needs and Alternatives:	N/A
Benefits Realization Plan:	IWM Benefits: X:\ -> #GTZ_Benefits -> IWM -> Sue -> 07132018 - IWM Benefits Update (MNS Meter Ops).xlsx
Project Audit Checklist:	Phase Gate Checklist
OCM Sizing Worksheet:	OCM Change Impact Assessment
<<Document Name>>:	Insert hyperlink to or embed a copy of the document.

VIII. Original CSA Approvals: *Add/remove rows as applicable.*

I. Prepared By	Title	Role	Date	Signature
Brady Kinsella	Business Delivery Manager	Business Delivery Manager - Integrated Work Management		

Approved By	Title	Role	Date	Signature
John Mannetti	Director Energy Operations, Resource Planning, & Asset Management	GTZ Sub-Program Sponsor		
Josh Jacobs	Director Business Integration	GTZ Program Director		
Brady Kinsella	Business Delivery Manager Data Management	Business Delivery Manager		
Harry Shapiro	Director Gas Operations	Steering Committee	Approved at Steering Committee meeting held on <data>. Link to Meeting Notes: <hyperlink>	
Jennifer Tada	Director Customer & System Projects	Steering Committee		
Brian Fellon	Director IT Application Services	Steering Committee		
Dan Koch	Director Electric Operations	Steering Committee		
Cathy Koch	Director Planning	Steering Committee		
Matt Marcelia	Director Controller and Principle Accounting Officer	Steering Committee		
Greg Zeller	Director Customer Care	Steering Committee		
Mike Richardson	Director Engineering & Product Delivery / Project Delivery			

Acknowledgements	Title	Role	Date	Signature
		Benefit Owner*		
		IT		

*Benefit Owners must be added to the Approved By section during Execution Phase/Gate.