

**EXHIBIT NO. ___(RWS-8)
DOCKET NOS. UE-111048/UG-111049
2011 PSE GENERAL RATE CASE
WITNESS: ROBERT W. STOLARSKI**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

**Docket No. UE-111048
Docket No. UG-111049**

**SEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED REBUTTAL TESTIMONY OF
ROBERT W. STOLARSKI
ON BEHALF OF PUGET SOUND ENERGY, INC.**

JANUARY 17, 2012

Energy Efficiency Services

EM&V Framework

Attachment 1 2012-2013 Evaluation Plan

January 1, 2012

Table of Contents

INTRODUCTION 1

MANAGING PROGRAM EVALUATION 1

EVALUATION PROCESSES 2

STANDARDIZED APPROACH TO PROGRAM EVALUATIONS 4

THE PROGRAM EVALUATION TOOLBOX 4

2010-2011 EVALUATION BUDGET 5

Table of Figures

Figure 1: Four Year Plan for Program Evaluation..... 2

Figure 2: Program Evaluation Process 3

Figure 3: Program Evaluation Budget, 2012-2013 5

INTRODUCTION

This document outlines the *2012-2013 Evaluation Plan* developed by the evaluation team for Puget Sound Energy's portfolio of electric and gas energy efficiency programs. The overall role of the evaluation team at Puget Sound Energy (PSE) is to:

- Document and measure the effects of a program and determine whether it met its goals with respect to being a reliable energy resource.¹
- Help understand why those effects occurred and identify ways to improve or discontinue current programs, and develop future programs.²

In preparing this plan, the evaluation team at PSE has developed a structured process that serves to:

- Assess the overall needs for program evaluation in a systematic manner, and
- Allocate limited financial and staff resources accordingly.

This plan summarizes the program evaluation prioritization strategy for 2012 and 2013. Specific evaluation plans for PSE's Energy Efficiency Services (EES) programs will be updated annually and refined with further clarification for the Conservation Resource Advisory Group (CRAG) and Washington Utility and Transportation Commission (WUTC) staff.

MANAGING PROGRAM EVALUATION

Consistent with our EM&V Framework, Puget Sound Energy has developed a four year cyclical plan. This plan is illustrated in Figure 1 on the following page. The order of these program evaluations is based on how recently each program was last evaluated by PSE and how recently regional organizations such as the RTF or other utilities have examined the program's measures.

Pilot and new programs and measures will be given high priority for evaluation so that empirical data may be used to establish source of savings documentation and fine tune program delivery. Also, the evaluation team will be coordinating with other bodies, such as other regional utilities, the Regional Technical Forum (RTF)³, the Northwest Energy Efficiency Alliance (NEEA)⁴ and the Northwest Research Group (NWRG)⁵, to identify common evaluation objectives and pool resources as needed. These types of evaluation projects are recognized in the four year evaluation plan as the line items "Schedule 249: Pilots" and "Other Projects".

It is critical that the evaluation team take a systematic approach to the measurement and verification of savings and to providing real-time value to implementation teams.

¹ National Action Plan for Energy Efficiency (2007). Model Energy Efficiency Program Impact Evaluation Guide, Appendix B: Glossary. Prepared by Steven R. Schiller, Schiller Consulting, Inc. www.epa.gov/eeactionplan

² Id.

³ The Regional Technical Forum (RTF) is a regional advisory committee established in 1999 to develop standards to verify and evaluate measure savings.

⁴ The Northwest Energy Efficiency Alliance is a private non-profit organization funded by Northwest utilities, the Energy Trust of Oregon and the Bonneville Power Administration.

⁵ NWRG is comprised of evaluation and research staff of the regions utilities, NEEA and BPA, seeking to find common evaluation and research needs, and opportunity to collaborate.

Figure 1: Four Year Plan for Program Evaluation

	Budget Type	2012	2013	2014	2015
Sch E201/G203: Low Income	Electric Budget	x			
	Gas Budget	x			
Sch E251/G251: Commercial New Construction	Electric Budget	x			
	Gas Budget	x			
Sch E214/G214 Single Family Existing	Electric Budget	x			
	Gas Budget	x			
Sch E215/G215, E218/G218: SF & MF New Construction	Electric Budget		x		
	Gas Budget		x		
Sch E262/G262: C&I Rebates	Electric Budget		x		
	Gas Budget		x		
E217/G217: MF Existing	Electric Budget			x	
	Gas Budget			x	
Sch E253/G208: Resource Conservation Manager	Electric Budget			x	
	Gas Budget			x	
Sch E216: Gas Conversion	Electric Budget			x	
	Gas Budget			na	
Sch E250/G205, E258, E257: C&I Retrofit, Self Directed & Traffic Lights	Electric Budget				x
	Gas Budget				x
Sch 249: Pilots	Electric Budget	x	x	x	x
	Gas Budget	x	x	x	x
Other Projects	Electric Budget	x	x	x	x
	Gas Budget	x	x	x	x

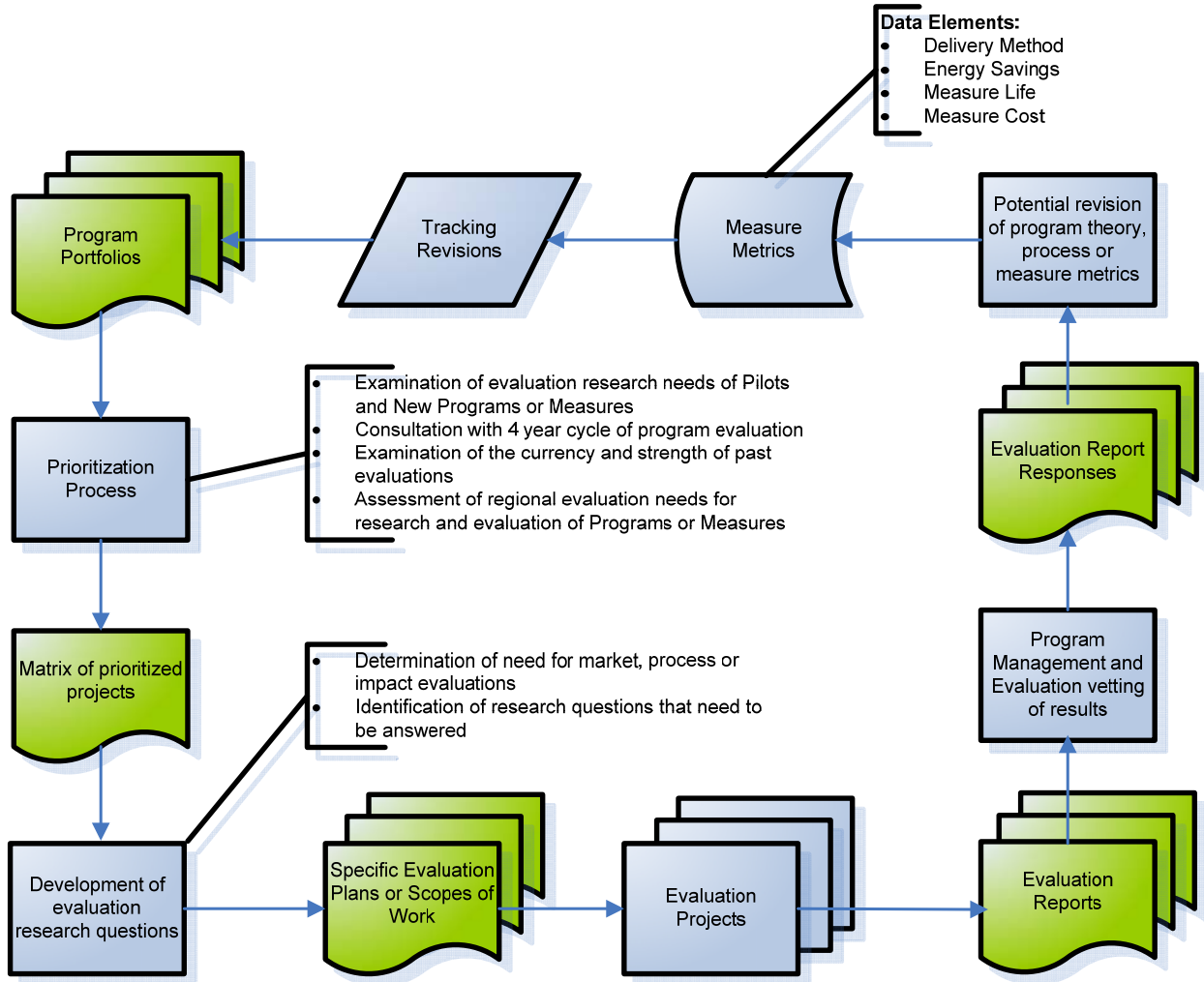
EVALUATION PROCESSES

The evaluation process at PSE starts with the company’s portfolio of Energy Efficiency Services programs. From there a prioritization of evaluation activities or projects is developed. Then an exercise of identifying evaluation research questions drives the determination of impact, process, and market elements of a project. The PSE evaluation team develops Requests for Proposals and engages external evaluators to perform most program evaluations. Evaluation projects often involve scopes of work beyond what the internal PSE evaluation team can reasonably perform in a timely manner. External evaluators may also provide specialized skills required to complete a project. Further, external evaluators may help alleviate perceived bias in assessing program performance.

Throughout the evaluation project, evaluation staff will keep the implementation staff informed of key milestones and findings. Evaluation reports will be reviewed by evaluation staff and implementation staff. The implementation staff will then produce a Evaluation Report Response document that will serve as plan going forward regarding the study’s findings and recommendations. Measure Metrics will be updated as necessary, which will lead to tracking revisions relative to the program portfolio.

This evaluation process is represented in Figure 2 on the following page.

FIGURE 2: PROGRAM EVALUATION PROCESS



STANDARDIZED APPROACH TO PROGRAM EVALUATIONS

Program-specific evaluation plans will be organized internally and will be reviewed and approved by Key program stakeholders. Each program evaluation project scope of work will include the following:

- **Review of Existing Program Data** – general program information including past and forecast budget, savings targets, and performance metrics
- **Identification of Key Program/Measure Considerations** – Any special considerations that assist in framing the history of the program or other evaluation scoping issues
- **Review of Key Performance Elements** – Identified Technical/Economic, Process, Market and Organizational elements
- **Determining Key Evaluation Research Questions** – Outstanding questions that arise from the identified risks that will drive the evaluation strategies
- **Defined Evaluation Strategy & Project Plan** – The strategies frame the near-term evaluation needs. These are articulated in a specific impact, process, and often market evaluation plans where appropriate.
- **Clearly Defined Outcomes** – Reporting, documentation, and dissemination of information

THE PROGRAM EVALUATION TOOLBOX

Scopes of work for evaluation projects will generally include one or more of the following research activities depending on what will best answer specific research questions and provide accurate and useful results:

- **Data Analysis/File Review** – Generally, program tracking, customer or market data is available to inform need for further data collection, or to form the basis of sampling methodology. It is often the first step in any impact or process evaluation.
- **Staff Interviews** – Along with Data Analysis/File Review, surveys or interviews with key PSE staff are often an initial step, and can help direct evaluation scopes of work by revealing what is known, and gaps in organizational knowledge. Outcomes often result in development of or updates of process flows and program logic models.
- **Tailored Best Practice Review** – A thorough review of regional, national or worldwide program and marketing practices can be useful to inform decisions regarding program strategies and planning.
- **Metering** – Specialized instrumentation used to monitor energy use or hours of operation is used to verify energy savings. Metering is often costly because it requires on-site installation and removal of metering equipment.
- **Billing and/or Econometric Analysis** – Analysis of weather adjusted energy use from billing or metered data, examining energy use in ex-anti and ex-post periods, often comparing a treatment group and a control group. This analysis may also statically compare billing data to engineering estimates. Econometric analysis is complimented by consumer survey data to assist in the control of exogenous variables such as changes in square footage of treated area, operational characteristics or tenant occupancy.
- **Customer Surveys** – To augment billing analysis, to assess customer satisfaction, or better understand customer or end-use characteristics, surveys of participating and non-participating customers may have a place in impact or process evaluation scopes of work.
- **Trade Ally Surveys** – Where a better understanding of market actors and business practices is needed for optimization of program delivery, surveys or key informant interviews with market actors such as contractors, distributors or manufacturers may be required.
- **Engineering Analysis** – New measures and programs often lack sufficient empirical data to verify and validate important assumptions. In this case, engineering analysis may be used to

develop interim assumptions that allow program staff a basis on which to build a program. Engineering analysis will be later followed up with empirical research when the data is available for collection.

2012-2013 EVALUATION BUDGET

The forecast Evaluation budget for electric programs in 2012 and 2013 is \$3,775,758, and the natural gas evaluation budget is \$949,209. Figure 3 shows the projected Electric and Natural Gas budgets for 2012-2013.

Figure 3: Program Evaluation Budget, 2012-2013

	Electric	Gas	Total
2012	\$ 1,461,000	\$ 757,000	\$ 2,218,000
2013	\$ 1,631,000	\$ 511,000	\$ 2,142,000
Total	\$ 3,092,000	\$ 1,268,000	\$ 4,364,000