FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR
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Performance Assurance for UESC, A New Chapter

Hosted by:

FEMP
Federal Energy Management Program

Southern California Edison
Vision

Long-term success of UESC projects through sustained performance of energy conservation measures (ECMs)
Purpose

Continuous design-level performance of each measure in an awarded project is fundamental to achieving projected savings.
Objectives

1. Performance assurance plan and task order language will be aligned with legislation and Federal requirements.

2. ECM designs will clearly describe energy and water savings, include key performance indicators (kpi), specific Cx protocol, and performance evaluation templates.

3. Comprehensive training will prepare Agency staff to operate, maintain, evaluate and document performance of each ECM on schedule and with technical proficiency.

4. Performance period Utility engagement will be cost effective, include rCx refresher training, and assist performance evaluation and rCx
Performance Assurance Planning

1. Augment section content
   a) Objectives and strategies
   b) Requirements and guidance
   c) Task Order language
   d) Training on Cx and O&M
   e) Updated templates and samples

2. Provide training
   a) New slide module in training
   b) Webinar
   c) Energy exchange
Align with Federal Requirements

ECM performance and evaluation requirements

1. OMB M-12-21, II Conditions for Annual Scoring of UESCs
   a) “Energy Savings Performance Assurances”
   b) “Measurement and verification of savings through commissioning (Cx) and retrocommissioning (rtCx)”
   c) “Competition or alternatives analysis”

2. 42 USC 8253
   a) Include Cx in facility evaluations
   b) Verify performance of implemented ECMs
   c) Complete facility evaluations on a 4-year cycle
Task Order Requirements for Sustained Performance

1. Design to clearly define and demonstrate
   a) Technical and economic viability
   b) Substantiated energy savings and specific key performance indicators (kpi)
   c) Performance-based operational narrative e.g. sequence of operations

2. Require a Performance Assurance Plan to address
   a) Cx and rCx protocol, schedule, and responsibilities
   b) Manufacturers’ and design-performance operations and maintenance O&M requirements and schedule
   c) Comprehensive Training (separate slide)
Task Order Requirements for Sustained Performance

3. **Require a dedicated lead e.g. commissioning provider (CxP)**

   a) **Responsible for developing the Plan**
      
      i. Establish design performance for each ECM  
      ii. Develop Cx and rCx protocol, schedules, and templates  
      iii. Establish O&M requirements  
      iv. Training content and materials

   b) **Responsible for leading Plan implementation**
      
      i. Design – document and sign-off on energy savings, kpi, and performance aspects of ECM  
      ii. Construction – document and sign-off on equipment selection, installation, and functional testing  
      iii. Training – provide materials and instruction  
      iv. Commissioning – implement and document ECM commissioning and write Cx Report  
      v. Implement and document Utility aspects of performance period
Comprehensive Training

Inclusive of all ECMs; major equipment and systems

1. Overview of the project including priorities and objectives
2. Review design intent with emphasis on key performance indicators and interplay between ECMs and existing systems
3. Functional testing and commissioning, review the protocol and walk through the actual activities
4. Review the operations and maintenance (O&M) requirements, schedules, and performance actions
5. Review the recommissioning (rCx) protocol, evaluate and compare performance to design; document
6. Review post-acceptance services as negotiated in the contract
7. Training materials
Customize Deliverables

During the performance period the utility’s engagement will be as specified in the contract. For Example,

1. Agency performs rCx to evaluate and verify performance

2. Utility performs post-acceptance Plan activities
   a) In performance years 1, 4, 8, and 12 the utility (through CxP) will
   b) Provide rCx refresher training
   c) Assist Agency rCx
   d) Provide evaluation of the facility to identify new measures; (meets Agency training and facility evaluation requirements)

3. Agency acts on identified performance issues to return ECM to design performance as needed
Forthcoming Resources and Training

Performance Assurance Chapter

• We welcome your input
  – Comment period is November 16 – December 7, 2017
  – Please request copy and send comments to deb.Vasquez@nrel.gov

Performance Assurance Training

• Webinar
• Energy Exchange
• UESC Training Module
Thank You

Deb Vasquez
National Renewable Energy Laboratory
deb.vasquez@nrel.gov
(303) 384-7548