

FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

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Best Practices: Performance Assurance Update

Hosted by:



Performance Assurance Plan (Plan)

Performance Assurance for UESC

- **Plan principles and perspective**
- **Task Order “Plan Deliverables” examples**
- **Strategic investments in performance**
- **Update on Guide Chapter and Training**

Plan Principles

Functionally, the Plan must

- 1) Provide accurate analyses, design, and quality installation
- 2) Prove actual performance meets or exceeds design
- 3) Provide for the Agency's preparedness to operate, maintain, verify performance, and recommission each ECM
- 4) Offer continued Utility engagement as negotiated and written in the contract

Perspective: The Plan as Task Order Deliverables

The Plan as a set of deliverables

- Performance-focused, actionable obligations
- With assigned responsibilities and schedules

When implemented:

- Deliverables ensure a working project that meets or exceeds design performance for the term of the contract and the life of each measure

Perspective: Suggested Plan Deliverables

1. **Commissioning expert:** on Utility Team committed to performance assurance planning and implementation
2. **Baseline:** a substantiated and accurate baseline
3. **Design:** ensuring quality and effectiveness in meeting project priorities, objectives, and clearly states proposed performance
4. **Training:** an ECM-specific training plan and delivered training
5. **Installation:** quality assurance, functional testing, commissioning (Cx), and Cx Report proving proposed performance has been met or exceeded
6. **Performance period plan for long-term optimal performance:** O&M plan, measurement and verification through recommissioning (rCx) and retuning
7. *(Optional)* **Performance period services:** such as rCx and O&M

Task Order Example: Project Development

Deliverable: Dedicated Plan Lead

- Plan development will be led by a commissioning expert
- The majority of the Plan development and implementation responsibilities are on the shoulders of the Utility through project acceptance
- The Agency will be engaged throughout project and plan development, including O&M experts and engineers

Task Order Example: Performance Period

Deliverables: Performance period services as negotiated in the contract

- a) Utility to provide warranty**
 - i. Wrap-around 1-year warranty
 - ii. ECM-specific extended equipment warranty
- b) Utility to provide recommissioning consultation for specified ECMs**
 - i. Provide recommissioning consultation at end of performance years 1, 4, 8, 12, and 16
 - ii. Include rCx refresher training, assist rCx walk-through, and
 - iii. Provide written observations, evaluation input, and recommendations for corrective actions as needed
- c) Utility to provide O&M services for ECM# - CHP plant**
 - i. Provide full O&M services
 - ii. Provide annual rCx
 - iii. Provide for corrective actions within negotiate costs range

Strategic Investments in Performance

Project savings when considered as a funding source, can be invested to support intended outcomes

- Invest in long term performance
- Invest proportionally on ECMs with the greatest savings potential
- Build in resources for complex ECMs e.g. rCx and O&M
- Prepare Agency staff
 - The O&M Team is responsible for day to day operations, periodic maintenance, and scheduled recommissioning
 - Facilities engineering and planning staff

Strategic Investments in Performance

Performance assurance flexibility: Prioritize project savings investments to augment existing Site capabilities when needed

- O&M resources
 - Staff knowledge, experience, and availability for specific ECM(s)
 - Funds for added O&M responsibilities from project savings or from appropriations
- ECM specific “optional services” at the level and duration negotiated
 - Recommissioning consultation
 - O&M
 - Performance guarantee

Strategic Investments in Performance

Performance assurance flexibility: Prioritize project savings investments to optimize use of warranties

- **1-year wrap around warranty:** part of the minimum performance assurance services required in every UESC
- **Extended equipment warranties:** with more frequency we see extended equipment warranties for high impact /complex ECMs
- **Performance or savings guarantees:** when ECMs are exceptionally complex, mission critical, require immediate response to alerts, investing in a guarantee may be an option

UESC Performance Assurance Updates

1) Guide Chapter:

- a. Draft is being field tested and updated with practical lessons learned
- b. Contact Deb Vasquez, deb.Vasquez@nrel.gov

2) Training

- a. 90 minute training module; 50% developed
- b. Energy Exchange Track 12; performance assurance for performance contracting

Thank You

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