

# Review of the Proposal

## I – ECMs and Management Approach (this module)

J – Costs and Financial Schedules

K – Financing

L – Pricing



# Milestones in the ESPC Process



• Acquisition Planning	Phase 1
• ESCO Selection	2
• Preliminary Assessment	2
• Notice of Intent to Award	2
• Request for Proposal	3
• Investment-Grade Audit	3
• Proposal	3
• Task Order Award	3
• Final Design and Construction	4
• Project Acceptance	4
• Post-Acceptance Performance Period	5

# This module focuses on the Technical Proposal

- Volume I: Technical Proposal
  - ECM Descriptions
  - ECM Performance Measurement
    - M&V Plan and energy/O&M baselines
    - Commissioning approach (not full plan)
  - Management Approach
    - Organization, RRPM, O&M/R&R, Training

## Review of ECM Descriptions

- Complete and understandable ECM descriptions should specify:
  - Affected location (building, area within building, affected floor area, etc.)
  - Potential interfaces with existing government equipment
  - Information on brand, model, size, including catalog “cut sheets”
  - All utility interruptions or physical changes to existing equipment or facilities required to implement ECMs

## **Review energy and cost savings carefully — they are the basis for the savings guarantee**

- The proposal shows for each ECM
  - Projected energy and energy cost savings
  - Projected energy-related cost savings
- ESCOs (almost) never guarantee 100% of estimated savings
  - Guaranteeing less is a safety net
  - Portion guaranteed depends on complexity of ECMs, predictability of savings, M&V type, O&M/R&R, other

# Reviewing Engineering Calculations and Assumptions

- Government review to establish:
  - Rationale/ basis for savings is reasonable
  - Based on sound engineering principals
  - Correct (i.e., check the math, spot-check large repetitive spreadsheets)
- Review of assumptions
  - All should be documented
  - You can't know that savings estimates are realistic if assumptions are invalid !

# Spreadsheets and Building Energy Simulations

- No black boxes!
- Building energy simulations
  - An acceptable way to document annual energy savings
  - Require input/output data to be provided on disk with proposal

## O&M Savings

- Defined: A reduction in costs for operation and/or maintenance resulting from installation of new ECMs
- Savings for both labor and materials are acceptable
- Verify that ESCO estimates of O&M savings comply with FEMP and agency guidance on acceptable O&M savings

## Summary: Review of ECM Energy and Cost Savings

- Thorough review includes:
  - Validation of calculation methods and arithmetic
  - Validation of assumptions and building energy simulations
  - Validation of unit costs of energy and labor rates
  - Verification that energy and cost savings for each ECM are properly identified in Schedule TO-4
- Note that FEMP ESPC team experts can help with review of advanced technologies

## Evaluating ESCO's Management Approach

- ESCO's organizational structure
- Risk, Responsibility, and Performance Matrix
- Proposed level of O&M services
  - Does it address site needs?
- Proposed repair and replacement services
  - Do responsibilities meet site requirements?
- Project timeline
  - Are they well-suited for successful implementation?

Q1: Name two things you'll find in the "Management Approach" section of the proposal.

A:

- ESCO's organizational structure
- Risk, Responsibility, and Performance Matrix
- Proposed level of O&M services
- Proposed repair and replacement services
- Project management approach and project timeline

Q2: About how much of the estimated savings does the ESCO usually guarantee?

A: Less than 100% — 95 – 99%

Q3: You should validate assumptions and calculation methods, but you can usually assume the math is correct — right?

A: Wrong

Q4: Where can you get help with review of “advanced” or renewable ECMs?

A: The FEMP ESPC team – national lab experts

**Break ►  
Before**

## **Exercise 4**

# **Proposal Review – Technical Proposal**





## Next Module: J Proposal Review – TO Financial Schedules ►

I-14