Evolving EE Market and Role of Pay-For-Performance Programs

Joe Fernandi and Brendan O’Donnell | November 28, 2017
1. City Light’s energy efficiency, goals, performance and the evolving market

2. How Pay for Performance (P4P) approach aligns

3. Specific P4P program designs
   [Deep Retrofit + MEETS/Energy Efficiency as a Service]

4. Legislation required
CURRENT ENERGY PORTFOLIO

Hydro 79%

Nuclear 4%
Wind 3%
Coal 1%
Other 1%
ENERGY EFFICIENCY 11%
HOW DO WE SET ENERGY EFFICIENCY TARGETS?

• Energy efficiency is City Light’s first choice resource for serving load
  o Achieve all cost effective energy efficiency

• Conservation Potential Assessment (CPA) is the analytical study used to set targets, identifying:
  • Amount, timing and cost of energy efficiency

• Aligns with Northwest Power and Conservation Council’s Power Plan methodology
Conservation Potential Assessment

- Meet I-937 Requirements
- EE Program Planning
- IRP Development
- Load Forecast

Regulatory, Bi-Annual

Business Driven
ANNUAL ENERGY EFFICIENCY POTENTIAL

12.3 aMW Annual Target
WHAT DOES THIS MEAN FOR PROGRAMS?

• Targets are still high and EE remains a good value for the utility, but source of savings is changing

• Much lower lighting potential
  o Utility programs, along with codes and standards have been very effective

• Robust savings potential remains for commercial non-lighting measures

• This requires more creative program approaches
  o Such as Pay for Performance (P4P) and MEETS/Energy Efficiency as a Service (EEaS)
PERFORMANCE-BASED PROGRAMS

Why we are pursuing - Deep Retrofit P4P & Energy Efficiency as a Service?

Joe Fernandi | November 28, 2017
BENEFITS OF PERFORMANCE-BASED PROGRAMS

• EE measured at the building meter
  o Measure blind
  o Captures O&M, behavioral and interactive savings
• Supports deep-efficiency
• Capture multiple measures through a single transaction
  o Don’t need to dissect into program boxes
• Allows for flexible and creative projects
• Simplified participation (no up-front calculations)
• Multi-year agreements provide predictable cash stream relative to savings
INITIAL PROOF OF CONCEPTS

• Deep Retrofit Pay for Performance (P4P)
  - One Union Square
  - 1111 3rd Avenue
  - Lake Union Building

• Bullitt Center (MEETS/Energy Efficiency as a Service)
DEEP RETROFIT P4P – CONCEPT

• Incentive for improving whole building energy performance ($/kWh)
• Savings determined by comparing metered to predicted consumption
• Provides customers with choice and flexibility in energy efficiency measures
DEEP RETROFIT P4P – UPDATES

• Held stakeholder workshop to inform design
• Held stakeholder workshop on workforce development
• Refined eligibility and incentive structure
• Drafted scope of work for measurement & verification guideline development

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<th>P4P Workshop Participants</th>
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<td>Service Providers</td>
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DEEP RETROFIT P4P – NEXT STEPS

• Q4 2017
  o Finalize incentive design
  o Finalize program eligibility & draft M&V guidelines
  o Integrate workforce development goals

• Q1 2018
  o Finalize M&V guidelines
  o Begin testing candidate projects for eligibility
  o Receive approval for 7-year contract authority

• Q2 2018
  o Begin enrollment
ENERGY EFFICIENCY AS A SERVICE – CONCEPT

• EEaS is a transaction structure, not an incentive

• Enables greater EE depth:
  o End users pay for energy efficiency as they would generated kilowatt hours
  o Addresses issue of split incentive between tenants and owners

• Leverage lessons learned from MEETS at the Bullitt Center

Source: www.bullittcenter.org
ENERGY EFFICIENCY AS A SERVICE – UPDATES

- Stakeholder workshop
- Impact/process evaluation of Bullitt Center
- Designing use cases for further testing
- Drafted legislation

**EEaS Workshop Participants**

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ENERGY EFFICIENCY AS A SERVICE – NEXT STEPS

• Pilot of up to 10 buildings for up to 20 years
  o Explore variety of use cases, with different:
    • Building types (office, multifamily, etc.)
    • Lease types (triple-net, gross)
    • Project types (retrofit, new construction, major renovation)
    • Investor models (owner, 3rd-party, utility?)
    • Fee/payment structures
  o Identify challenges/opportunities presented by each to guide us in determining feasibility and inform design of a full-scaled program offering
COUNCIL ACTION REQUIRED

- **CPA target setting** – *Resolution* required to set energy efficiency target for I-937 compliance

- **Deep Retrofit P4P** – *Ordinance* extending contract authority from 2-years to up to 7-years. Does not require Council approval for each building

- **EEaS** – *Ordinance* enabling a pilot of up to 10 projects for up to 20 years