Open Q Proposal

Program/Measure Name: Energy Design Assistance
Date: 12/1/2024

1. **Brief description of program or measure(s) proposed for Open Q consideration:**
    - Overall Summary
      [W] will provide Energy Design Assistance to influence commercial and Multi-Family new construction to beyond code savings. [W] will provide customer outreach targeted at architecture and engineering firms, enroll projects early in the design, and provide energy consulting and comparative energy analysis using Net Energy Optimizer (NEO®). Design teams and owners will be able to assemble up to 3 bundles of mechanical systems and efficiency measures and select one to implement.

    - Describe the baseline conditions for the program/measure
        - *All buildings are measured against the WA State Energy Code for which they are permitted, and the model uses a "code standard" building as the baseline for comparison.*

    - Described the proposed energy efficient measure/program
        - *Whole building new construction and deep retrofit. Can include (but not limited to): HVAC & Controls, Lighting & Controls, Windows, Insulation, plug loads, elevators. Each measure is added up to create a total (whole) building savings.*

    - What are the implementation criteria or requirements of the measure/program?
        - *Buildings must beat energy code by 10% or more.*
        - *Application. Initial consultation to ensure a good fit. Initial modeling of baseline & proposed building. Design-team meeting to review results. Final building design chosen. Building is built. Final M&V and true-up performed.*

2. **Please provide the following values and an outline of how you estimated or calculated them (if submitting technical files to show calculations, you can say "see [filename]"):**
    - Measure Savings
        - *2,500,000 kWh each year through 2028*
        - *Based on projects that are in work currently*

    - Measure Incremental Cost
      How much does the measure/program cost compared to the baseline? For example, if you are proposing to install a more efficient technology, how much more does it cost than an inefficient alternative?
        - *Depends greatly on the building types and what measures are installed.*
        - *Also adding in language sent previously to BPA on incremental costs for this program:*
            - *New construction programs rely on incremental costing—the cost difference between the baseline required by code and the cost of the more efficient piece of equipment or system. Because of this, it is not possible to rely on invoices for the equipment installed—this only provides the full cost. Since most projects don't receive quotes on the code baseline and improved equipment, [W] has developed incremental cost models. [W] collects equipment cost information from a variety of sources including RSMeans,*

equipment vendors, online pricing, Technical Reference Manuals, published studies, etc. This data is used to identify the key variables driving the cost. Through a regression analysis a cost model is developed for each strategy. This model is then applied in our NEO energy model to provide costing information during consulting. Regional cost factors are applied to account for differences in cost depending on the project location. The cost information for each strategy is reviewed and updated annually.

- Measure Life
  - *4-19 years (per table below)*

- Market Potential
  - *Total: 16,791,012 kWh (2021-2028)*
  - *Based on completed and projects that are in work currently*

3. **What method will be used to verify the savings post-installation?**

   - *[W] will verify savings are installed (through site visits, verification of equipment installed) and update calculations after initial occupancy and report final savings and incentive amount to PUD for payment of incentive.*
   - *3rd party evaluation*

4. **Will you be collecting any data from the installation sites?**
   - *Yes*

   - Would you be willing to share that data with BPA for further measure development?
     - *Yes, within our data sharing protocols and constraints of our ECA*

For Reference: Payment Rate Table from Section 5.1 of the Implementation Manual (Custom Programs Payment Rate):

PROJECT TYPE	MEASURE LIFE (YEARS)	SECTOR	PAYMENT RATE ($/KWH)
Nonresidential Lighting	All	Agricultural Commercial Industrial	$0.13
New or Retrofit Construction, Major Renovation (Excluding Nonresidential Lighting)	1	All	$0.025
	2-3	Agricultural Commercial Industrial Residential	$0.06
	4-19	Agricultural Commercial Industrial Residential Utility Distribution	$0.33
		Whole Building New Construction * Commercial Industrial	$0.35
	20+	Agricultural Commercial Industrial Residential Utility Distribution	$0.38
New Construction	45+	Residential	$0.45