

Major Themes and Recommendations from March 2023 CIWG Call and related CI Team Considerations

4/19/2023

Major Themes and CIWG Stakeholder Recommendations

1. Increase throughput of HVAC energy efficiency measures:
 - a. Increase prescriptive HVAC offerings.
 - b. Reduce the variability and uncertainty in the custom process, particularly with regards to the minimum requirements document (MRD).
 - c. Develop a parallel track where an initial incentive is offered, the savings estimates are detailed as the project is implemented, savings estimates, and incentives are finalized at the time of completion.
2. Characterize processes from the customer rather than from the PA perspective.
 - a. Include roles and responsibilities for each step in the process.
3. Take more concrete steps to improve communication channels.

Draft Detailed Recommendations

1. Increase prescriptive HVAC Offerings
 - a. Identify volume HVAC measures through PA database review and customer/engineering surveys.
 - b. Criteria for prescriptive could include:
 - i. Common (commodity equipment) such as terminal equipment
 - ii. Clear incremental efficiency with associated cost (assumes end of life replacement)
 - iii. Relatively simple savings methodology
 - iv. Identify opportunities and ability to bundle prescriptive controls and equipment measures
2. Reduce variability and uncertainty in the custom process by developing standard lists of project requirements and measures for system-level improvements that can inform project scopes and the MRDs. This approach could shorten review times as more typical measure packages are brought to the program while increasing consistency in project documentation and savings estimation.
 - a. Typical Project Requirements could be developed for a variety of common HVAC system types such as:
 - i. VAV air handling
 - ii. Rooftop air handling
 - iii. Laboratory air handling
 - iv. Chilled water
 - v. Hot water/Steam boiler/heating
 - vi. Boiler/Cooling tower with water source heat pump
 - vii. Boiler/chiller with fan coil units (2 pipe/4 pipe)

- b. Requirements should include the minimum documentation and measurement requirements for projects and a matrix of recommended measures associated with optimizing each system type including control strategies.
- 3. Develop a parallel track for analysis and implementation that enables projects to be expedited for qualifying customers.
 - a. Develop qualifying criteria for customers and TA providers so that only those who have demonstrated an ability to successfully advance complex projects have access to this option.
 - b. Establish an incentive/savings framework that would enable the establishment of a minimum incentive early in project development with the ability to earn out higher incentives at project completion should achieved savings significantly exceed early projections.
 - c. Establish a protocol by which a project scope, order of magnitude savings and cost estimates can be used to determine a minimum incentive authorization. More detailed savings estimates are developed as the project is developed and implemented. Include a true-up at project completion including assessment of actual savings at project completion.
- 4. Develop and communicate custom processes from the Customer Perspective
 - a. Work with CIWG members to refine spreadsheet documenting the custom process from the customer perspective.
 - b. Work with a skilled communications/marketing firm to develop a better understanding of and ability to convey information about the customer journey from the customer perspective. (Includes development of content and website updates).
 - c. Train PA staff, vendors and trade allies in how to communicate with customers about their journey and how to develop realistic expectations.
 - d. Establish and monitor a project tracking system (likely housed within each PA). Consider a central repository for such tracking so that project statuses can be shared across PAs where multiple are involved. Ideally customers should be able to access their projects within the tracking system to monitor status.
- 5. Communications recommendations, if any, TBD.
 - a. Brainstorm recommendations with the CIWG.
 - b. Establish a staffed statewide customer service center with the ability and authority to connect customers with project contacts as needed.

Current HVAC Prescriptive Measures in 2022-2024 Plan TRM

ID	Measure Name	Notes
3.31	Boiler Reset Control	
3.32	Circulator Pump	
3.33	Combo Condensing Boiler/Water Heater	
3.34	Combo Furnace/Water Heater	
3.35	Communicating Thermostat	
3.36	Condensing Boiler	
3.37	Condensing Unit Heater	
3.38	Cooler Night Cover	
3.39	Dual Enthalpy Economizer Control (DEEC)	
3.40-41	Duct Insulation	
3.42-43	Duct Sealing	
3.44-45	Ducted HPs	
3.46-48	Ductless HPs	
3.49	Energy Management System (BAS Controls)	
3.50	Furnace, Gas	
3.51-52	Heat Pump	
3.53	Heat Pump System	
3.54	High Efficiency Chiller	
3.55	High Efficiency Condensing Unit	
3.56	Hotel Occupancy Sensor	
3.57	Infrared Heater	
3.58-59	Pipe Wrap (Heating)	
3.60	Programmable T-stat	
3.61	Unitary Air Conditioner	
Additional Measures that have been indicated as going prescriptive		
	GSHP	
	Packaged Terminal HP	