

Reporting Proposal for Energy-Water Nexus Measures Work Paper


Energy Division's Energy Efficiency Data Management and Reporting team was asked to work with Water-Energy stakeholders, including IOU program managers, to propose a method for reporting savings claims for "embedded" energy savings derived from water-savings measures. The overarching goals were to:

1. Minimize changes to the current EE program tracking claims reporting structure;
2. Minimize unnecessary fields which result in excessive 'blank' values for non-water measures;
3. Allow very clear alignment of the resource measure (i.e. low-flow showerhead) and the water-energy measure.

After a discussion with the water energy working group, where the team learned details about an upcoming work paper submission by PG&E, it was determined that an appropriate reporting approach would be to create a secondary measure for the embedded savings associated with the water measure. While the water measure reports on-site energy savings, this secondary measure would solely report embedded savings.

To capture the relationship between the on-site savings and embedded savings from a water measure, the team created a WaterMeasure table, which, like the CustomMeasure and DeemedMeasure tables, has a 1-to-1 relationship with the Claim table.

Table 1. Proposed Water Measure Table

WaterMeasure	
	ClaimID: nvarchar(255)
	WaterMeasCode: nvarchar(255)
	WaterSavingsProfile: nvarchar(255)
	HydrologicRegion: nvarchar(255)
	WaterSector: nvarchar(255)
	WaterUseCategory: nvarchar(255)
	Gallons: float(53)
	AvgAnnualIOUkWh: float(53)
	AvgAnnualNonIOUkWh: float(53)
	AvgAnnualTherm: float(53)

Each Claim requires either a CustomMeasure or a DeemedMeasure record, and water-saving measures can be either Deemed or Custom measures. Claims that are water-saving measures also need a WaterMeasure 'sister' record, linked by the ClaimID. The WaterMeasure table contains the key inputs and outputs from Navigant's Water-Energy Calculator.

The process of adding this table to the EE program tracking specification would follow adopted change management guidelines, and the reporting team already has a list of proposed specification modifications for 2017 claims to which this would be added once agreed upon by the working group.

Questions for stakeholder consideration

Before adding this WaterMeasure table to the EE program tracking specification, the team has some threshold questions for energy water stakeholders:

1. Does this approach seem reasonable; if not, what modifications should be considered?
2. Does the table capture all of the appropriate fields?
3. Is there a reason why the calculator does not produce kW savings;
 - a. Should kW be added to the table? Are kW savings available for reporting?
4. Is there a reason why the water calculator provides AvAnnualTherms as a savings field for embedded water/energy savings?
 - a. This question will not impact the proposal necessarily; just informational.

Please send comments to this proposal Rory Cox at rory.cox@cpuc.ca.gov by COB November 30.