

Hybrid Measures Strawman



AYAD AL-SHAIKH
JANUARY 30, 2020

Hybrid Measures with the eTRM

2

- Goal
 - Review a strawman concept of a hybrid measure
 - Assemble a subcommittee to begin discussing the topic

- Business Plan Goals
 - Develop guidelines for “hybrid measures” created through consensus process
 - Identify and create hybrid measures

Hybrid Measure - *Strawman*

3

- Goals

- For a discrete (but growing) number of measures, document a framework for how to submit the custom measure
- Clarity on the submittal is expected to result in packets that:
 - ✦ Provide deeper / more complete documentation
 - ✦ Require less review / oversight
 - ✦ Provide clarity and assurance on the approval process
- Captures data in a structured format that could:
 - ✦ Improve inputs over time
 - ✦ Result in converting the hybrid measure to a deemed measure
- *Anything else? (framework is still in development)*

Hybrid Measure - *Strawman*

4

- Target Measure
 - Installed frequently, repeatably throughout the state
 - Enough clarity about the installation exists that there is no ambiguity about whether the measure should be custom or deemed
 - Minimum and maximum project sizes could exist (per unit)
 - ✦ Ideally streamlined approach can reduce the minimum threshold for accepting a project
 - Anything else? (*framework is still in development*)

Hybrid Examples

5

- Example Types

- Type 1: Today, measure considered to be custom
 - ✦ Calculation methodology generally accepted
 - ✦ Baselines generally accepted for various building types / customer sizes
 - ✦ Savings may vary significantly based upon one or more sensitive variables
 - ✦ Reasons for installation generally understood
- Type 2: Today, measure considered to be deemed
 - ✦ In addition to Type 1 notes, special cases exist that are not included in deemed methodology
 - Target market or delivery channel may not be included or possible
 - POU only measure
- After looking at examples... *Are there other Types that exist?*

Hybrid Examples

6

- Example Measures to Consider
 - VFD for Process Fans
 - Lighting
 - Steam Traps
 - Airflow Adjustments in Telecommunication Buildings
 - Evaporative Condenser
 - Process Boiler
 - VFD / Modulating Air Compressor
 - Pump Overhaul
 - Downstream HVAC – Unitary AC and HP
 - Industrial Processes (multiple shifts)

Hybrid Examples – Deeper Dive

VFD for Process Fans

7

- Methodology
 - Description: Standardized project description and methodology
 - ✦ Some customer specific nuances
 - Source: SCE CCT Energy Savings Calculation or DOE Fan Assessment Tool
- Inputs required
 - Existing and Proposed
 - Examples of inputs: (*not all inputs listed*)
 - ✦ Field Inspection Data:
 - Model number, Serial number, Motor rated hp
 - (nameplate photo, time-stamped)
 - Operating modes (customer supplied, but standardized input form)
 - ✦ Field Measurement: (*← Drive by risk assessment*)
 - Operating power:
 - <20,000 kWh = calculated with assumed load factor
 - 20,000-50,000 kWh = spot amperage measurement
 - >50,000 kWh = two-week power trend
 - ✦ Assumed Value: Motor efficiency = NEMA Nominal

Hybrid Examples – Deeper Dive

VFD for Process Fans

8

- Supporting Documents Standardized
 - *Should include any documents that we can complete (really well) but then leverage for all other projects.*
 - Application Phase
 - ✦ Baseline, code, or standard practice documentation depending upon the market sector
 - ✦ Disposition documentation linked to the measure (if exists)
 - ✦ Influence documentation clearly described, but varying by the customer size and project size
 - ✦ Baseline project cost available if needed (documented from prior submittals)
 - Installation Phase
 - ✦ Cost submitted as an invoice with material and labor costs separated

Hybrid Examples – Deeper Dive

VFD for Process Fans

- Project workflow (*TBD*)
 - Statewide forms/tools available from the eTRM – *longer term*
 - Electronic submittal to a secure location
 - Approval state clearly visible
 - *Discuss expedited/automatic approval if:*
 - ✦ *Enhance package submitted*
 - ✦ *Not part of random, spot-check process*

Hybrid – Next Steps

10

- Hybrid Subcommittee

- Please let me know if you are interested
- Meetings: Thursday (every two weeks, 2-hr)

- Meeting #1, Feb 6th
 - ✦ Goals:
 - Discuss the first three measures (Gas, Electric, POU)
 - Trying to get access to IOU and POU project history
 - Take additional feedback on the Strawman (early feedback is great!)
- Meeting #2, Feb 20th
 - ✦ Goals:
 - Three measures chosen
 - Review draft plans for methodologies, inputs and standardized documents