WHITE PAPER

CALIFORNIA
TECHNICAL FORUM

"Measure Classification" Issue Statement

Entrepreneurs, vendors and implementers are not always clear on how to get a new measure into the California IOU or POU EE portfolios, and if/when/how to pursue the ET, custom, or deemed path. It is important to establish clear, consistent, and transparent measure definitions, criteria, and pathways that will be utilized in the New Measure Development and Update Review process through which 3Ps can propose new EE measures. In this new process the Cal TF Measure Review Committee will need to provide clear and consistent feedback in response to new measure proposals and recommend an alternative path for measures that are not to be eligible for the deemed measure status.

The objective of this white paper is to develop clear definitions and criteria for the following measure types and pathways into the EE portfolio:

- Deemed measure
- Custom measure
- Emerging technology (ET) measure
- Research, development, and demonstration (RD&D) measure

Target Audience *Who cares about this problem? Who are we trying to persuade? Who will be able to take action?*	• 3P measure developers • IOUs and POUs • Manufacturers • Technology developers entering ETP process
Potential Research / Analysis Approach *What is the analysis approach to the research that needs to be done to devise one or more potential solution(s)?*	• Review SEE Action Guide, Custom Rulebook, NMEC Rulebook • Reach out to utility policy teams, identify past CPUC decisions, descriptions, etc. • Coordinate with ET program managers and SCE product/engineering team managers
Potential Data Sources (Primary and Secondary) *What are the data sources that will be analyzed? Is the data accessible?*	• SEE Action Guide, Custom Rulebook, NMEC Rulebook, other guidelines • Past Cal TF review of CPUC decisions • ETP knowledge index (ask Carol Yin)

Key Technical & Policy Considerations and Challenges	There is currently no rulebook/reference that provides guidance for measure classification before a measure enters into a specific path (deemed, custom, NMEC …) (BR)

Key Technical & Policy Considerations and Challenges

What are the barriers to address this problem? What are the barriers to completing this white paper? Any timeline considerations?

There is currently no rulebook/reference that provides guidance for measure classification before a measure enters into a specific path (deemed, custom, NMEC …) (BR)

Implementers do not have clear path, "pushed around" (RM)

Deemed Measure

- SW Rulebook already assumes measure is classified as deemed
- Recommendations for development and use of deemed savings (SEE Action Guide: Guidance on Establishing and Maintaining TRMs)
  - o Well understood, clear and transparent guidelines, industry standard assumptions/calc methods, current info, independent peer reviewed, thorough documentation
    - There are new measures/techs that utilities do not have good understanding about but have been in the market. Example: res cooking oven is new to programs b/c have not had testing requirements, but there are thousands of models in the market. Now testing oven models. (CP)
    - How should we define "well understood" for deemed?
  - o Deemed values should be applied to: measures well understood, strong central tendency in distribution of savings across installations; measure savings with reliable data sources/methods; well defined conditions applications for which deemed values apply/do not apply; verifiable conditions; not highly dependent upon application of consistent quality control of measure installation; not highly dependent upon customer behavior.
    - Reliable sources vary by measure (BR)
    - Accept manufacturer data? Staring with mfr data could be valuable as a starting point. (CY)
    - ETP should substantiate/validate manufacturer data (Sepi)
    - Reliable data sources do not necessarily translate to reliable savings values because where the measure installed might not align with population in deemed value data sample (CP)
    - Customer behavior criteria does not apply to CA (Sepi)
  - o SEE defines measures for which deemed calc with input variables (partially deemed) should be applied
    - In CA these measures are classified as custom, have simplified custom process (Sepi)
    - Can a deemed measure become partially deemed? (AA to discuss w/ Bob R or Sue)
    - LADWP approach – have prototypes for which site-specific inputs are applied
    - Calc method is deemed, savings values are not. (CP)
    - Should we include partially deemed category to the white paper?
  - o Values and calcs based upon input assumptions that are realistic, not conservative or optimistic
    - Deemed measures are mass market, not site specific (BR)

- Uncertainty/savings trade off – may be uncertainty but want savings, so instead of taking custom approach take average approach as best value regardless of uncertainty (BR)
- Should deemed develop "knowledge index" similar to ETP?
- Deemed needs to be agnostic to manufacturer. If only one manufacture should it be deemed? (BR)
  (See CPUC guidance, letter from P. Biermayer)

(Due to time constraints, group did not review remaining deemed measure recommendations in SEE TRM Guide)

Custom Measure

- Assumptions not standard (Sepi)

Emerging Technology

- ETP uses "knowledge index" to characterize dimensions (like technical performance) to assess confidence of performance (CY)
- How are ET and RD&D measures distinguished?
  - Likely based on how far along commercialization process, # of manufacturers, production levels (CY)
- Should a RD&D measure go through ETP first?
  - Not necessary (CY)
  - Example: ETP validated measure, mfr wasn't able to produce product for field testing so determined not a viable technology. Now that technology is coming in custom review, being submetered (Sepi)
  - In measure screening process ask about production level, product availability, additional ET study questions that should be asked but might not be asked right now.
- Action – Carol Yin will follow up with ETP program managers on definition/criteria of an ET measures

Additional questions (not discussed during meeting):

- *What is NOT a deemed measure?*
- *What is NOT a custom measure?*
- *What is NOT an ET measure?*
- *Does a measure have to be an ET before deemed? Does a measure have to be a custom before deemed?*
- *Can a measure be deemed for certain applications and custom or ET for others? (different classifications for CZs, building types, etc)?*

Availability of Resources to Complete Whitepaper *Are enough people able and willing to contribute to the development of this white paper? List subcommittee members here.*	Champion: Sepi Shahinfard Participants of April 10th subcommittee and other interested parties include: Sepi Shahinfard (SBW), Bob Ramirez (DNV GL), Chan Paek (SCG), Carol Yin (Yinsight), Richard Ma (Ecology Action), Armen Saiyan (LADWP)

Value/Potential Impact
 	
Rate the impact on the CA EE/IDSM industry (high, med, low) and describe. Is the impact commensurate with level of effort/costs required?
	• Classifications of EE measure types will provide measure developers and program administrators with clarity and understanding of pathways into the EE portfolios.
	
	    o Time, cost, and process efficiency when the appropriate classification and pathway is known.
	
	    o Measures that were denied in one pathway (deemed, for example) could enter another (ET for example) instead of "hitting a wall".