

Technical Forum Meeting



MARCH 28, 2024
OAKLAND

Cal TF will record the meeting for notetaking purposes

Agenda

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Time (PST)	Agenda Item & Action	Discussion Leader(s)
10:00 – 10:15	Agenda Review and Quick Updates	Annette Beitel
10:15 – 11:00	Key Cal TF Initiatives and Opportunities for TF Member/Stakeholder Engagement <i>ACT: TF Member/Stakeholder Indicate Interest and Focus Areas for 2024</i>	Annette Beitel
11:00 – 12:00	ISP White Paper Affirmation <i>ACT: TF Affirmation of ISP White Paper</i>	Arlis Reynolds
12:00 – 12:45	Lunch	n/a
12:45 – 2:15	Custom Initiative – Approach, Success Metrics	Arlis Reynolds
2:15 – 2:30	Break	n/a
2:30 – 4:00	Custom Measure Packages (CMPs) <ul style="list-style-type: none">Custom Measure Characterization TemplateBoiler Plant Add-On CMPPump Systems CMP <i>ACT: TF Affirmation of CMPs</i>	Spencer Lipp
4:30 – 6:00	No Host Happy Hour @ Drake's Dealership (2325 Broadway)	n/a

Meeting Materials: <http://www.caltf.org/tf-meeting-materials>

Cal TF Quick Updates

- [2024 Q1 Business Plan Progress Report](#)
- New TF Member
 - **Nicolas Fette** – Senior Engineer, Lincus Energy

Key Cal TF Initiatives and Opportunities for TF Member/Stakeholder Engagement



ANNETTE BEITEL

Cal TF Key Initiatives

- **Purpose**
 - Introduce Cal TF Key Initiatives
 - Describe planned stakeholder engagement activities/opportunities
 - Solicit TF Member interest on key engagement areas for 2024
- **TF Member/Stakeholder Survey**
 - *Where do you want/plan to engage?*

TF Member Expectations

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- **Cal TF Meetings**
 - Participate in monthly TF meetings
- **Pre-Meeting Preparation**
 - Review material that is circulated in advance.
- **Subcommittee Work:** Participate in at least one initiative to:
 - Review draft measure packages for statewide *deemed or custom* measures
 - Participate in the development of TPPs or whitepapers
- **Maintain the Cal TF**
[Code of Independence and Code of Conduct](#)

2024 Cal TF Key Initiatives

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- Custom Initiative (Arlis/Spencer)
- Measure Screening Committee (Ayad)
- Deemed Measure Subcommittee (Ayad)
 - Process Improvement
 - Measure Streamlining
 - eTRM Roadmap
- TPP on EE Challenges and Solutions (TF)

Custom Subcommittee

- **Custom Initiative**
 - Custom Rulebook
 - Custom Project Documentation Templates
 - Custom Influence Templates
 - Baseline Database
 - Custom Tool Library
 - CMP Updates/Feedback
- **Stakeholder Input** –PAs, Implementers, Technical Reviewers, CPUC Staff Consultants
- **Work Product Review**
- **Meetings:** Monthly, 1st Wednesdays

CMP Working Groups

- **Ongoing**
 - Compressed Air
 - MF Existing Building
 - NonRes New Construction, Systems
- **Planned/Potential**
 - Lighting
 - HVAC Controls
 - Data Centers
 - Boiler Distribution System
 - Hot Water Boiler
 - Process Refrigeration
 - Process Cooling
 - Site NMEC
 - Industrial Fuel Substitution
- **Meetings:** Biweekly (varies)

- Stakeholder Engagement
 - Measure Screening Committee Mtgs – Monthly, 3rd Thursday
 - New Measure Portal through Cal TF Website
 - Ad Hoc Meetings for key issues
 - New Measures Presented at TF Meetings
 - Updates/discussion at TF and PAC Meetings
- Resource/Activity Hub
 - [Proposed Measure List \(www.CalTF.org\)](http://www.CalTF.org)
 - [Cal TF New Measure Initiative - Home \(sharepoint.com\)](https://sharepoint.com)

New

Deemed Measure Subcommittee



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- Goals:

- Identify and tackle the remaining obstacles in deemed measure development and implementation
- Leverage a highly-utilized, highly-successful, statewide resource (eTRM) to solve other obstacles in the EE ecosystem

- Stakeholder Engagement

- Monthly meetings, topics including:
 - ✦ Deemed Measure Development Process Review – *How can we accelerate getting good deemed measures approved?*
 - ✦ Deemed Permutation Streamlining – *How can we reduce the complexity (improve the usability) of deemed measures?*
 - ✦ eTRM Quality and Governance – *Performance/Stability, Security, Development Standards, Governance*
 - ✦ eTRM Integration and Database Consolidation – *Regulator / PA / Implementer integration*
 - ✦ eTRM Documentation and Training – *Maintenance Policy, Training / Support Plan*
 - ✦ Software Modules – *Custom Measures, Customer Focus, Data Analytics / Data Visualization*
 - ✦ New Measure Types – *Low Income, POU, Emerging Measures*

Me **Next Step** – Overview and strategy presented at the April Cal TF meeting

TF Member/Stakeholder Survey

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- **Action**

- Please access this [survey link](#) to identify the 2024 initiative(s) that you would like to contribute to.

- **Timeline**

- Survey will remain open until: April 19th
- *We will follow up in early April to provide a reminder.*

Cal TF White Paper: Industry Standard Practice



ARLIS REYNOLDS

Presentation Overview

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- **Today we are seeking TF affirmation of the:**
 - [ISP White Paper](#) – key findings and recommendation
 - [ISP Research Memo](#) – background analysis and additional details on recommendations
- Review final recommendations
- Questions/discussion
- TF poll on Recommendation #5
- **TF Affirmation**

Slido Poll

Quick History

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- **2023 – ISP White Paper Subcommittee**
 - July – Stakeholder Survey
 - October – Discussed draft recommendations at TF Meeting
 - December – Draft White Paper and Research Memo (v1.0)

- **2024**
 - February – Revised White Paper/Memo (v2.0)
 - ✦ Reordered recommendations; 2nd option for Rec. #5
 - March – Final Draft White Paper/Memo (v3.0)
 - ✦ No substantive changes compared to v2
 - **Yesterday (3/27) – Cal TF PAC Affirmed**

- **Today: TF Affirmation**

Challenges & Recommendations

#	Current Practice	Recommendation
1	ISP Guidance is Complex, Unclear, and Inconsistently Interpreted; Supplemental Guidance and Clarifications Are Not Consistently Accessible to Stakeholders	Update, Clarify, and Simplify ISP Guidance, and Provide Means for Ongoing Updates, Clarifications, and Training
2	Incomplete and Out-of-Date Central Repository and Limited Accessibility of Market-Based and Other ISP Studies and Baselines	Create a Central, Public, Searchable Database of Market-Based ISP Studies and Approved Baselines with Key Data Including Date of Issuance, Applicability, and Effective Dates
3	No Consistent Format or Data in ISP Studies	Establish Consistent Format and Data Requirements for ISP Studies to Clarify Baseline Definition and Applicability
4	No Coordinated, Public Planning Process for Market-Based ISP Studies	Develop Statewide Market-Based ISP Study Public Planning Process
5	Most Informal ISP studies exceed the cost of the custom project incentive	Remove the Informal ISP Study Requirement for All Custom Measures <u>OR</u> for Custom Measures Smaller Than 1000 MWh or 100,000 Therms or With Incentive Less Than \$100,000 (Tiered Baseline Approach)

Slido Poll

- Recommendation modifies the baseline selection process *when an Informal ISP Study would be triggered under the current practice* as follows:
 - Where baselines are current, applicable, and public (i.e., in the Baseline Database), the measure should use those established baselines consistent with E-4939.
 - If no existing, applicable baseline is published in the baseline database, use code or applicable regulatory requirement (e.g., AQMD requirements).
 - If no code/applicable Requirements, use existing conditions.
- **Option A** – Apply for **All** Custom Measures
- **Option B** – Tiered Baseline Approach: Apply for All Custom Measures Smaller than 1,000 MWh or 100,000 Therms or with Incentive Less Than \$100,000

slido



**Which is your
preference for the
Streamlined Baseline
approach?**

① Start presenting to display the poll results on this slide.

TF Affirmation

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- ***Affirmation: Cal TF affirms the ISP White Paper and ISP Research Memo***

Recommendations & Next Steps

#	Current Practice	Next Steps
1	Update, Clarify, and Simplify ISP Guidance, and Provide Means for Ongoing Updates, Clarifications, and Training	Incorporate ISP Guidance into Custom Rulebook activity
2	Create a Central, Public, Searchable Database of Market-Based ISP Studies and Approved Baselines with Key Data Including Date of Issuance, Applicability, and Effective Dates	1: Finalize and post database 2: Complete study summaries for existing studies and assess applicability
3	Establish Consistent Format and Data Requirements for ISP Studies to Clarify Baseline Definition and Applicability	Apply for future studies
4	Develop Statewide Market-Based ISP Study Public Planning Process	Compile existing recommendations for stakeholder input and initiate public planning process
5	Remove the Informal ISP Study Requirement for All Custom Measures <u>OR</u> for Custom Measures Smaller Than 1000 MWh or 100,000 Therms or With Incentive Less Than \$100,000 (Tiered Baseline Approach)	Incorporate ISP Guidance into Custom Rulebook activity

Baseline Data

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● Custom Resource Library > Summary of ISP Documentation

MEASURE / MEASURE GROUP	Document Type	CPUC-Approved SP Determination	Draft / Final	Date	YEAR	Lead Org	Document Author
Ag Pump VFD	ISP Study Report	??	Final	4/1/2019	2019	PG&E	BASE Energy
Baseline Air unit Specific Efficiency for Refrigerated Warehouses	ISP Study Report	N/A	Final	11/15/2017	2017	PG&E	Vacom Technologies
Cannabis Lighting	ISP Study Report	No	Final	12/21/2021	2021	CPUC	SBW
Controls for Oil Well Pumps	ISP Study Report	??	Final	2/5/2013	2013	CPUC	Itron
DCV	ISP Study Report	??	Final	6/30/2014	2014	SCE	ASWB Engineering
Elevator AC Motor Replacement with VVFD	ISP Study Report	??	Final	11/19/2014	2014	SCE	ASWB Engineering
MM	ISP Study Report	??	Final	1/24/2013	2013	CPUC	ERS
Indoor Horticulture	ISP Study Report		Final	8/2/2019	2019	SCE	Evergreen Economics
Indoor Horticulture	ISP Study Report		Final	1/3/2019	2019	SCE	Evergreen Economics
Indoor Horticulture							
Juice Tank Insulation							
Lighting							
Limestone Addition (Cement)							
Medium Voltage VFDs for W							
Municipal WW Treatment							
Oil Pipeline Pump Motors							
Oilfield Steam Generator							
Oilfield WW Pump Controls							
Outdoor Steam Pipe Insulation							
Portable Irrigation Piping							
Replace Extrusion Motors with							
Rod Beam Oil Well							
SBD Healthcare							
Steam Generators Feedwater							
Thermal Oxidizers							
Tomato Processing Evaporator							
Vertical Roller Mills for Cement Plant Finish Grinding	ISP Study Report	??	UNK	2/19/2015	2015	SCE	ASWB Engineering
WWTP Pumps VFD	ISP Study Report	??	Final	6/10/2014	2014	SCE	ASWB Engineering

Discussion / input:

- Missing studies / reports
- Outcomes of studies with unknown disposition
- Input on “status” of studies
- Studies needed

LUNCH

12:00 – 12:45

Agenda

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Cal TF Custom Initiative



ARLIS REYNOLDS

Cal TF Custom Initiative

- **Success Metrics**
 - What are near term success metrics we can use to assess value and impact?
 - What data are available to measure success, value, and impact?
- **Custom Rulebook**
- **Custom Templates**

Custom Rulebook

- **Work Product**

- **Resource:** Single, accessible, organized, clear, up-to-date, easy-to-understand, easy-to-navigate source for all custom rules
- **Process:** Incorporate all new/updated rules and guidance through the Custom Rulebook via a regular, transparent update process

- **Potential Success Metrics**

- Ensure rules align with policy; address clarify/consistency
- Improved stakeholder understanding of rules
- Fewer guidance docs to find rules and to update/maintain
- Improved project compliance; eliminate errors due to policy, eligibility
- Eliminate mid-project “surprises” due to unknown, new policy rules
- Reduce project development/review time and cost

Custom Rulebook

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- **Approach**

- Consolidated Rules
- Form
- Update/Communication Process
- Stakeholder Input/Discussion

- **Timing**

- **May/June** – Review rules; identify issues (areas that need clarification/discussion; areas that create hurdles for customers)
- **End of June** – Draft consolidated set of rules
- **End of July** – Draft form + maintenance/communication approach
- **Q3** – Work to resolve outstanding issues, establish common, statewide understanding of Rulebook

Custom Rulebook

- **Discussion**

- Approach
- Form
- Update/communication process/schedule
 - ✦ Ethan - Quarterly – Monthly too soon but twice a year too infrequent.
 - If decisions and resolutions that changes rules, takes effect based on rulebook rather than “immediately” or some other time. Aligns with T-24
 - ✦ Jessie - Set regular timeframe like twice a year with ad hoc updates
 - ✦ Lake – Adopted and then 90 day in effect is an issue
 - Annette – Also discussed at the PAC. Need a process for the effectiveness of rules for downstream effects.
 - ✦ PAC members suggested Cal TF could update and maintain but CPUC Staff would need to be engaged on rule interpretations
- Measurable Success Metrics
- Models from other jurisdictions

Custom Templates

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- **Work Product**

- Single set of simplified, statewide templates for custom project development and review
 - ✦ Eliminate redundancy
 - ✦ Align data requirements with policy; eliminate unneeded information
 - ✦ Align with Custom Measure Packages and other resources for consistency, accuracy, streamlining
 - ✦ Incorporate automated population, workflows, QA/QC

- **Potential Success Metrics**

- Reduced project development time/cost (eliminate redundant material)
- Improved project submittal quality (complete, well-organized)
- Reduced number of additional data requests (NRD, SDR, etc.)
- Reduced technical review time/cost

Custom Templates

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- **Approach**

- Identify all templates/forms
- Identify/eliminate redundancy; extraneous data
- Align with Custom Rules
- Organize/structure for streamlining

- **Timing**

- May – Review Data Dictionary; what should be “tiered”
- June – Review Draft templates

Custom Templates

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- **Discussion**
 - Approach
 - ✦ What data or steps are extraneous?
 - ✦ What should be Statewide vs PA-Specific?
 - Measurable Success Metrics
 - ✦ Target length, cost for Project Packages?
 - Models from other jurisdictions

Custom Measure Packages



SPENCER LIPP, PE

Overview

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- CMPs for Affirmation
 - [Steam Boiler Plant Add-On](#)
 - [Pumping Systems](#)
- Update CMP Template for TF review/input

Custom Measure Package Template



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Evolution of the CMC Template

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Deemed
Measure
Characterization
Template

2023 Custom
Measure
Characterizations

2024
Streamlined
Custom Measure
Characterization

2024 Streamlined CMC Template

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Overall Structure

- Single section versus deemed template with four sections
- Custom CMC aligns with Project Feasibility Study as a single section with references

Interactions

- Deemed and custom have different interactions and dependencies
- Product eligibility, measure implementation eligibility, and program exclusions

Data Collection, M&V, and Savings

- Data collection and savings are not dependent in deemed
- M&V and data collection should be dependent on the calculation method
- Combined section for flow of energy savings methods, data collection, and M&V

Next Steps

- **Action Items**
 - Complete [Cal TF Member Engagement Survey](#) by **April 19**
- **Next TF Meeting**
 - Thursday, April 25, 2024
 - LACI, Los Angeles