

Cal TF Custom Subcommittee Meeting #17



APRIL 3, 2024

Agenda & Goals

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- **Meeting Agenda**

- Updates – 30 min
 - ✦ TPP No. 13: Custom Initiative
 - ✦ ISP White Paper – affirmed, next steps
 - ✦ CMP Update, Engagement Survey
 - ✦ CPUC Working Groups Update
- Custom Rulebook – 30 min
- Custom Templates – 30 min
- Success Metrics – 30 min
 - ✦ What do we need to meet, and how can we measure?

- **Meeting Goals**

- Share relevant information & updates with stakeholders
- Encourage stakeholders to begin using TF-affirmed CMPs
- Stakeholder input/discussion on work in progress – Custom Rulebook and Custom Templates
- Share timing for work products for stakeholder review

Cal TF Documents

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- **Custom Initiative TPP and Brief – affirmed**
 - [Custom Initiative Brief](#)
 - [TPP No 13: Custom Initiative Recommendations and Next Steps](#)
- **ISP White Paper – affirmed**
 - [ISP White Paper](#) – key findings and recommendation
 - [ISP Research Memo](#) – background analysis and additional details on recommendations
 - **Next Steps**

ISP White Paper – Next Steps

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#	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	ISP Study Report		Final	1/6/2021	2021	SCE	Evergreen Economics
Juice Tank Insulation	ISP Study Report	??	Final	3/17/2014	2014	PG&E	PG&E
Lighting	ISP Study Report	No	Final	10/28/2022	2022	SDG&E	Willdan
Limestone Addition (Cement Industry)	ISP Study Report	Yes	Final	1/10/2013	2013	CPUC ED	CPUC ED
Medium Voltage VFDs for Water Injection Pumps	ISP Study Report						
Municipal WW Treatment	ISP Study Report						
Oil Pipeline Pump Motors	ISP Study Report						
Oilfield Steam Generator	ISP Study Report						
Oilfield WW Pump Controls	ISP Study Report						
Outdoor Steam Pipe Insulation	ISP Study Report						
Portable Irrigation Piping	ISP Study Report						
Replace Extrusion Motors with Vector VFDs	ISP Study Report						
Rod Beam Oil Well	ISP Study Report						
S&B Healthcare	ISP Study Report						
Steam Generators Feedwater Pump VFD Retrofits and Split Pass	ISP Study Report						
Thermal Oxidizers	ISP Study Report						
Tomato Processing Evaporators	ISP Study Report	??	Final	12/1/2016	2016	PG&E	AESC
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 where disposition is unknown
- Input on “status” of studies
- Studies needed

Previous Stakeholder Suggestions for Baseline Studies

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- **Electrification Measures**

- Electrification of non-residential buildings
- Electrification of gas domestic heating not covered by deemed measures for commercial (e.g., pool heater electrification)
- HVAC and WH electrification where deemed measure is not available
- Commercial heat pump water heaters for HHW systems
- Heat Pump Chillers
- Heat Pump Pool Heater

- **Agricultural / Industrial**

- All AG measures will probably need a new ISP in the next year
- Irrigation, refrigeration, chillers, and process cooling
- Glass manufacturing and food processing sectors (furnace and boiler retrofit, heat recovery system, compressed air and refrigeration systems optimization)
- Industrial Heat Pump

- **Wastewater Measures**

- Blower technologies and controls
- UV disinfection systems
- MBR systems
- Mixing for digesters, anoxic tanks, and aeration tanks
- Sludge Thickening
- Digestion

- **Other**

- Horticultural lighting
- Non-Horticultural lighting
- Pumping technologies that are not covered by DOE pump efficiency standards
- Turbo blower replacement
- Large process boilers exceeding the deemed measure package capacity
- Data Centers and UPS
- Air Compressors

Discussion / input:

- What should be added?
- What should be prioritized?
- Anything already done?

Custom Measure Packages (CMPs)

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- TF Affirmed – use!!
 - Steam boiler replacement
 - Steam boiler plant measures
 - Pumping systems
 - HVAC RCx
 - HVAC chiller systems
- In development – give input
 - Compressed air systems
 - Multifamily existing building measures
 - Non-Residential new construction, individual systems electrification

- Upcoming – help prioritize
 - Lighting
 - HVAC Controls
 - Data Centers
 - Boiler Distribution System
 - Hot Water Boiler
 - Process Refrigeration
 - Process Cooling
 - Site NMEC
 - Industrial Fuel Substitution

TF-Affirmed and in-development CMPs available in [Custom Measure Library](#).

Custom Initiative Engagement

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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

Complete [TF Member/Stakeholder Engagement Survey](#) by April 19.

CMP Working Groups

- **Ongoing**
 - Compressed Air
 - MF Existing Building
 - Non-Res 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)

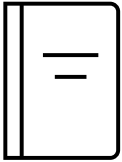
CPUC Working Groups

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- CPUC CPR Initiative
 - CPUC Staff revising workplan based on workshop discussion and stakeholder comments – **est. final workplan late April**
- CPUC PFS Working Group
 - CPUC Staff reviewing stakeholder comments; may be incorporating work with CPR Initiative Workplan
- CPUC Lighting Working Group
 - SCE updating MLC standard practice study

Custom Rulebook





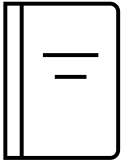
Custom Rulebook

- **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

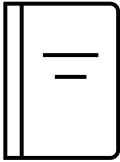
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- **Approach**

- Content – Consolidated Rules Workbook
- Form
- Update/Communication Process
- Resolving Flagged Rules

- **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**

- What other materials should we reference?
- What else to include in organization, characterization?
 - ✦ Include whether rule applies for NMEC
 - ✦ Examine policy goal/intent (for flagged rules)
- Ideas, considerations on form?
- Update process/schedule
 - ✦ Update frequency – quarterly or 2x/year with ad hoc as needed
 - ✦ Effective dates – rules effective only after added to Rulebook; clarify effective date and application to projects in-development
 - ✦ Downstream effects
- Communication process/schedule
- Examples to reference?

Custom Templates



Custom Templates

- **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**

- ❑ Are we missing templates? What should be added/removed?
- ❑ Which templates should be statewide, PA-specific, or non-standard?
- ❑ Which should be statewide, PA-specific, or non-standard?
- ❑ What data or steps are extraneous (not used, value not worth effort)?
- ❑ Where/how else can we save time, cost, effort?
- ❑ Examples to reference?

Success Metrics



Metrics / KPIs

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- Guidance clarity
- Project development
 - Reduced data/documentation requirements
 - Reduced data requests in project review
 - Can we measure cost to develop project submittal?
- Project review Time (Submittal to Approval)
 - Can we measure time to review projects?
 - Can we measure cost to review projects?
- Reduced customer/project attrition
 - Due to cost, time, policy-related rejections

Wrap-Up & Next Steps

- **Action Items**
 - Complete [TF Member/Stakeholder Engagement Survey](#) by **April 19**.
 - Use TF-affirmed [Custom Measure Packages](#)

- **Upcoming Meetings**
 - 4/25 Cal TF Meeting (Los Angeles)
 - ✦ Focus is Deemed
 - 5/1 Custom Subcommittee Meeting
 - 6/5 Custom Subcommittee Meeting