Cal TF Custom Subcommittee Meeting #11

CALIFORNIA
TECHNICAL FORUM

SEPTEMBER 13, 2023

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SPENCER LIPP

Agenda & Goals

- **Announcements**
  - September 28 TF meeting (Oakland) is Data Charette, Part 2
  - October 26 TF Meeting (Downey) will focus on Custom

- **Meeting Agenda**
  - Updates (10 min)
  - 5A-1 Policy Summary and Recommendations (25 mins)
  - 5A-4 Custom Tools Summary and Recommendation (25 mins)
  - 5C-2 Custom Measure and Tool Workflow (15 mins)
  - 6B ISP White Paper Findings and Recommendations (45 mins)

- **Meeting Goals**
  - Stakeholder input on improving policy access, clarity, communication, etc.
  - Stakeholder input on needs/prioritization of custom tools
  - Stakeholder input on proposed workflow and requirements for SW measures and tools
  - Stakeholder input on initial findings and draft recommendations related to ISP (**includes live poll**)

Custom Initiative – Status

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Metric	Activity/Task	Status Update	Upcoming
5X	Custom Initiative Workplan	**Complete** (Affirmed by TF, PAC in April)	-
5A-1	Regulatory Summary & Review	Discuss recommendations on policy/guidance communication; policy/guidance pain points	Develop formal recommendations; Detailed Policy Review
5A-2	SW Custom Measure ID	PAUSED	PAUSED
5A-3	List of Measures for SW Custom Measure Packages	-	Defining hybrid measures; Stakeholder input on prioritized measures for SW standardization
5A-4	List of Custom Tools	Discuss draft prioritization	Final tool summary and prioritized list
5B	Custom Roadmap	Cal TF Staff drafting based on stakeholder input to date	Stakeholder input to identify/prioritize needs/efforts for Roadmap (next meeting)
5C-1	SW Measure Characterization	Continued updates to Steam Boiler CMP; discussing potential MF measure package	Custom Subcommittee review of Chiller Systems, HVAC RCx, and PG&E HVAC Tool
5C-2	Custom MP and Tool Development Workflow	Discuss draft proposal	Review/affirmation of proposed SW process (October meeting)
5D	eTRM Documentation	-	TBD based on eTRM implementation
5E-1	eTRM Custom Phase 1	**Complete** (Custom Library scheduled for 2024 Q1)	-
5E-2	Future Custom eTRM Modules	Drafting modules for Disposition Database; CMPA	-
6B	White Paper: ISP	Discuss draft recommendations	Draft White Paper

Blue text = status updates

Highlight = current/upcoming stakeholder input

Quick Updates

Custom Initiative & Workplan Updates

- ISP Stakeholder Survey
  - Survey is closed
  - 42 responses, **thank you!**
- SW Custom Measures/Tools
  - Steam Boiler – continued edits
  - Chillers, RCx – October meeting
  - PG&E HVAC Tool – updates under review
- New SharePoint Site
  - Custom Initiative SharePoint Site
  - Site Info/Navigation
  - **Update your bookmarks!**
- 9/28 – Cal TF Data Charette, Part 2 (Oakland)
- Else?

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Metric 5A-1

Custom Regulatory Summary Review

- **Objective**
  - Summarize the sources and scope of existing custom regulatory guidance
  - Develop recommendations to improve access and clarity for all stakeholders
- **Approach**
  - Gather and summarize existing resources (ongoing)
  - Characterize resources (e.g., accessibility, update status, update frequency, clarity, and usefulness) (ongoing)
  - Identify potential overlap, conflicts (ongoing)
  - Develop, prioritize recommendations
  - ADD: Detailed Policy Review
- **Deliverables**
  - Summary of custom regulatory, policy, and guidance resources
    - Custom Resources Workbook (new link)
    - Custom Resource Library (new link)
  - Proposal to improve approach to summarizing and providing clear guidance on custom measures, projects, and tools.
  - ADD: Formal CPUC Policy Summary

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Discussion

- How can we improve awareness and understanding of policy/guidance?
  - Current State
  - Ideal State
  - Recommendations

Custom Resources

Resource Types

Document Type	Includes policy or guidance	PII Flag	Public	Available
CA Legislation	Yes	n/a	Yes	Yes
CPUC Decisions and Resolutions	Yes	n/a	Yes	Yes
CPR Public Tracker	Yes	n/a	Yes	Yes
CPUC Guidance Document	Yes	n/a	Yes	Partial
CPUC Guidance Memo	Yes	n/a	Yes	Partial
CPUC Pilot Document	Yes	n/a	Yes	Partial
Market-Based ISP Study	Yes	n/a	Yes	Partial
CPR Dispositions (redacted)	Yes	n/a	Yes	Partial
PA-Specific Resources	Yes	n/a	Partial	Partial
Informal ISP Study (with CPUC Disposition)	Yes	may include PII	Partial	No
Early Opinion				
CPR Dispositions				
CPUC/PA Meetings; Bi-weekly meeting no				
Deemed Documentation	Maybe	n/a	Yes	Yes
Evaluation Report				
CPUC Ad Hoc Communication				
CPUC Publication				
Efficiency Savings and Performance Incentive (ESPI) Memos				
CPUC White Paper				
Stakeholder Working Group Materials				
PA Memos	No	n/a	Partial	Partial
Custom Tool Archive (CTA)	No	n/a	No	No

1 – Many different types of resources stakeholders need track for policy/guidance information.

2 – Among valuable policy/guidance resources, many aren't able to be shared publicly.

3 – Among valuable resources that can be shared, many are still not (or not consistently) available/accessible to stakeholders.

Custom Resources

Resource Locations

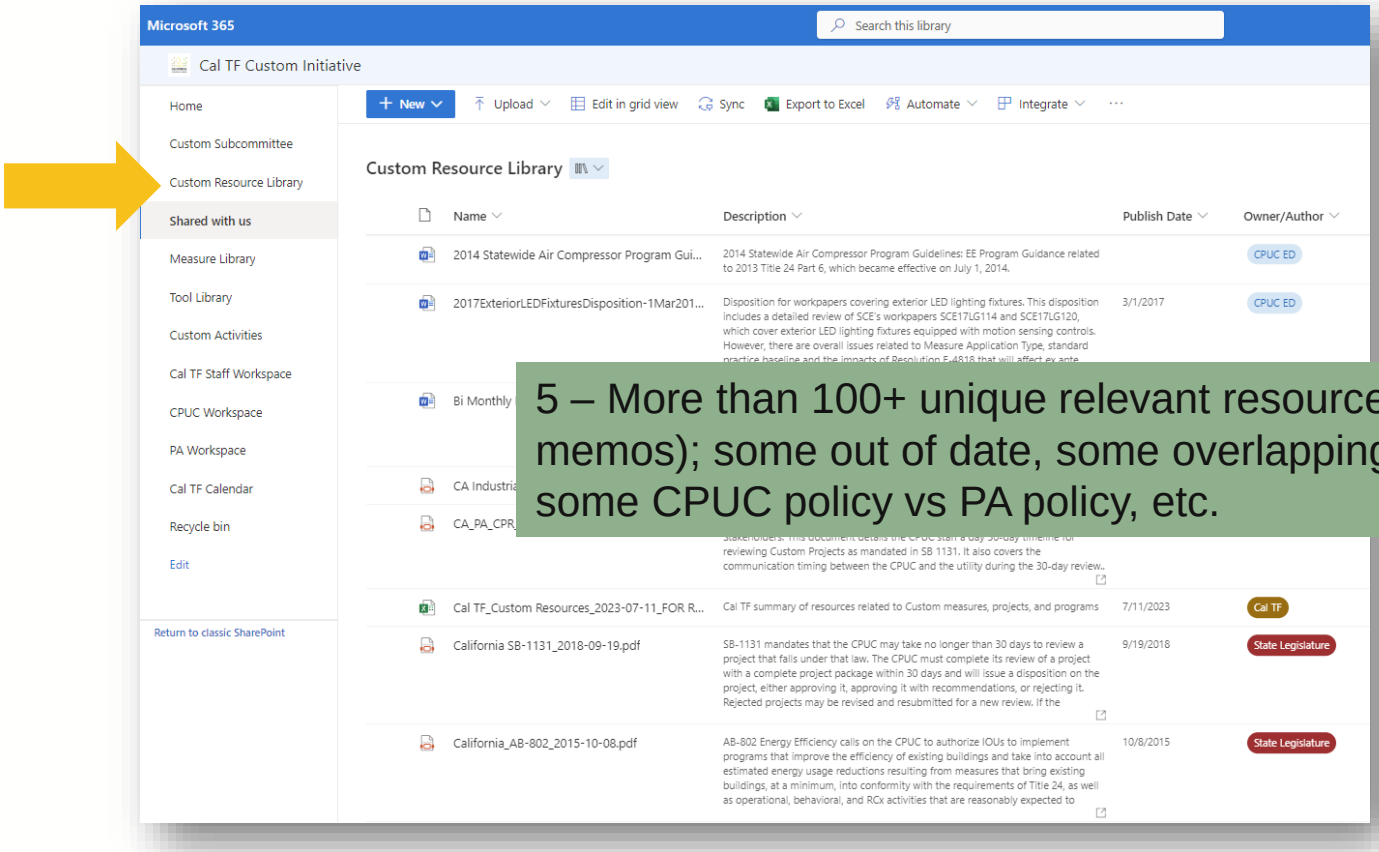
Owner	Resource Location	Weblink	Descriptions	Public
CPUC	CPUC Website: Energy Efficiency	Energy Efficiency (ca.gov)	CPUC webpage with information/resources related to Energy Efficiency	Y
CPUC	CPUC Website: EE Baselines	Energy Efficiency Baselines (ca.gov)	CPUC webpage with information/resources related to appropriate Energy Efficiency baselines	Y
CPUC	CPUC Website: CPR Home Page	Custom Projects Review Home Page (ca.gov)	CPUC webpage with information about the custom programs	Y
CPUC	CPUC Website: CPR G Page		s and	Y
CPUC	CPUC Website: CPR S Engagement Page		ous	Y
CPUC	CEDARS > DEER Res			Y*
CPUC	Custom Measure and F Archive (CMPA)		measure data submitted by PAs and reviewed by Energy Division.	No
SDG&E	CAEnergyGuidance.com ("Disposition Database")	Home Page - CA Energy Guidance	Searchable public database contains Program Administrator redacted versions of the CPUC staff dispositions, as well as ISP studies, guidance documents, and other Custom Projects related documents.	Y
SCE	Statewide Ex Ante Review Process Streamlining Work	Statewide Ex Ante Review Process Streamlining Work - Home (sharepoint.com)	SharePoint site for Statewide Resources and Coordination	No
SCE	SCE Resources for Trade Allies	Trade Professional Resources (site.com)	PA-hosted site for vendor resources	Y
SCE	SCE SmartSheet Platform		PA-hosted site for vendor resources	No
PG&E	PG&E Wiki Site	https://pge.wiki/Main_Page	PA-hosted site for vendor resources	No
SDG&E	??			??
SCG	??			??
Other PAs	??			??
Cal TF	Custom Subcommittee SharePoint	Cal TF Custom Subcommittee - Home (sharepoint.com)	Compiled custom resources and working documents related to the Cal TF Custom Initiative	Y*

4 – Custom resources are hosted in many different locations, some of which are not public or accessible to all stakeholders; often material is duplicated across multiple locations and it may not be clear which document version is current

Custom Resources

Custom Resource Library

SharePoint library of materials (in progress; updated on ongoing basis)



5 – More than 100+ unique relevant resources (policy, guidance, memos); some out of date, some overlapping, some unavailable, some CPUC policy vs PA policy, etc.

Ideal State

- **Easy to access, understand, stay up-to-date with custom policy/guidance**
  - Centralized, public access to all policy/guidance
  - Consolidate policy and guidance into single (or few) resources
  - Resources maintained up-to-date
  - Notifications for new/updated policy, guidance
- **Statewide shared understanding of policy/guidance**
  - Policy/guidance documents are clear, easy to understand
  - PA/CPUC reviews consistently reference relevant Policy/Guidance
  - Processes to request/receive/share clarifications
- **Consistent interpretation/application of policy/guidance**
  - Eliminate redundant/overlapping resources
  - Reduce reliance on PA-specific resources
  - Processes to resolve/clarify inconsistencies
- **Considerations**
  - Stakeholders differ in size, resources, capacity to track policy/rules
  - Some resource may contain PII or other confidential information
  - Some resource types/locations are required in policy (e.g., Disposition Database)

Draft Recommendations for Discussions

- **Resources**
  - Centralized, publicly accessible library of statewide policy/resources
  - Consolidate guidance into three key public resources
    - Statewide Custom Guidance Document or Wiki, updated at regular interval
    - Maintain central, running list of incremental policy, guidance
    - Statewide Baseline Database

- **Processes/Practices**
  - Communication
    - **Policy/guidance must be public, accessible**
    - Policy/guidance communication must have issue and effective dates, clarify applicability
    - Centralized communication and notifications (**not through individual PAs**)
    - Quarterly stakeholder policy updates (**statewide**, **public, documented**)
    - Establish standard for documenting guidance, referencing policy
  - Updating policy/guidance
    - All policy clarifications and guidance must be incorporated into centralized policy resources; **policy/guidance not established through dispositions or any non-public communication**
    - Update Guidance documents on defined schedule
    - Incorporate new guidance at defined intervals (**not on a rolling basis**)
    - Transparent update schedule and process with stakeholder engagement
  - Other
    - Any/all stakeholders can request policy/guidance clarifications; CPUC review and address list of clarification requests on monthly basis at minimum

Discuss: Feedback on recommendations

Detailed Policy Review

- Comprehensive policy review related to custom measures/programs
  - Understand current policy (e.g., what has been superseded)
  - Identify any overlapping/conflicting policy
  - Identify any gaps in current policy and practice
  - Seek clarification where needed
  - Make recommendations to address policy pain points

- **Discussion/Input**:
  - What specific questions do you have about custom policy/guidance?
  - Where might there be gaps in policy and practice?
  - What are key policy pain points?

Discuss: Policy/guidance questions and pain points

Next Steps

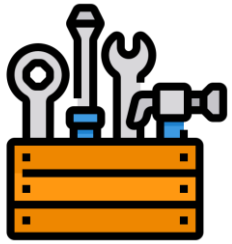
- Cal TF Staff
  - Draft formal recommendation for policy/guidance access and communication
  - Continue to populate Custom Resource Library and characterize resources
  - Continue Custom Policy Review

- Custom Stakeholders, input on:
  - which resources are most useful, need update/clarification
  - missing documents (what can't you find?)
  - policy clarifications and pain points

Metric 5A-4

List of Custom Tools

- **Objective**
  - Identify and characterize custom tools that stakeholders may use to develop custom projects
- **Approach**
  - Identify and gather existing tools
    - Need support from CPUC, IOUs, implementers to identify and access
  - Characterize tools (e.g., use, status)
  - Identify and prioritize needs to improve the library of useful tools
- **Deliverables**
  - List of characterized custom tools used in past five years.
  - Public library of custom tools with summary information
  - Prioritized list of needs to update, seek approval, and/or develop new custom tools.



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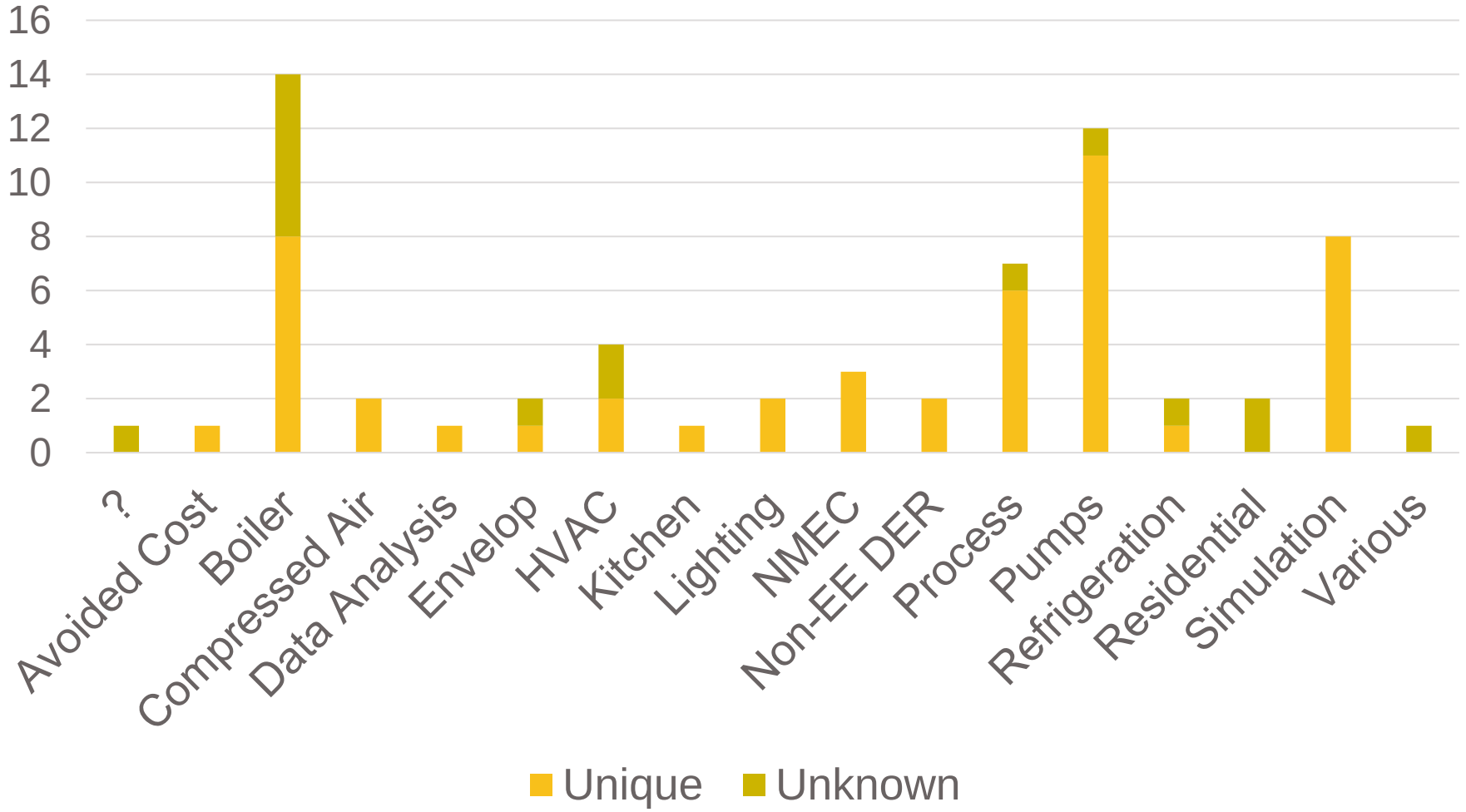
List of Custom Tools (5A-4)

- Tool sources (175 entries)
  - CPUC/IOU Custom Tool Archive (CTA)
  - Custom Subcommittee Tools List
  - POU Measure Workbooks
  - 2013 Customized Calculation Tool (CCT)
  - CEDARS and CPUC Custom Team input
- Characterization of each tool
  - Unique (49) – Primary consideration for library
  - Unknown (16) – Unclear on Unique or Removed
  - Removed (47) – Assessed to not be included
    - Deemed measures
    - Obsolete/not maintained
    - Redundant with SW tool (e.g., MLC)
  - CCT (40) – Specific tool

Unique and Unknown Tools by End Use



Thank you!

Stakeholder Response (5A-4)

- Prioritization of the 65 unique or unknown tools
  - 0-3 scale (0 = no interest, 3 = high priority)
  - 27 tools received a 3 by at least one stakeholder
  - Tools with the highest overall score
    - MLC
    - NMEC-R
- Removed Tools
  - Pool Pump Resurrection
- CCT Tools
  - No tools got a high priority 3
  - Thirteen tools received a 2

Prioritization Guidelines (5A-4)

- Cal TF suggests 50 tools are considered for the library
  - 26 require no Cal TF updates (14 of these are external to CA EE tools)
    - Any updates needed on tools without red font?
  - 8 need known updates (Red font in following slides)
  - 16 need update investigation (Red font in following slides)
- Cal TF recommends 17 tools are not included in the library.
  - Any of these tools should be “saved”?

Highest Prioritization (5A-4)

Tool	Category	Description
NMEC-R	NMEC	Open-source R package that employs multivariable linear regressions, time of week, temperature & time of week, HDD, CDD, and HDD & CDD models
MLC V13.1.2	Lighting	Current SW tool for custom, non-horticulture lighting efficiency and controls measures
eQuest	Simulation	Whole building energy simulation tool based on DOE.2 for commercial buildings.
EnergyPlus	Simulation	Open source whole building energy modeling program.
PG&E HVAC Tool	HVAC	PG&E calculation tool covers RCx, chilled water plant, hot water plant, retrofit EE, and airside system measures. QC of updates in progress. **(Chiller and RCx Custom Measure Characterization)**
MEASUR	Process	DOE consolidated tool of industrial process support systems. **(Steam Boiler Replacement CMC)**
RACC	Avoided Cost	CPUC refrigerant leakage avoided cost calculator.
3E-Plus	Insulation	Pipe and tank insulation heat loss calculator supported by DOE.

Highest Prioritization (5A-4)

Tool	Category	Description
PG&E Refrigeration Tool	Refrigeration	Suite of refrigeration system retrofits and controls measures. Updates Needed. Suggest Cal TF coordinate update.
AirMaster+	Compressed Air	DOE developed tool to model compressed air systems.
SoCalGas – Excess Air Tool	Boilers	Calculates energy savings by reducing the excess air (or oxygen level) in the flue gasses of a steam or process heating unit.
SoCalGas – Load Balance Tool	Boilers	Disaggregates energy consumption of multiple gas consuming equipment on the same meter. **(Steam Boiler Replacement CMC)**
SoCalGas – Steam Trap Tool	Boilers	Open source whole building energy modeling program.
PV Watts	Non-EE	NREL tool used to estimate hourly power production for commercial new construction projects with TMY2, TMY3, or International weather data files.
OpenStudio	Simulation	Collection of software tools to support whole building energy modeling using EnergyPlus
DEER Chiller Workbook	HVAC	CPUC developed chiller replacement savings calculator. Currently being updated by CPUC.

Medium Prioritization (5A-4)

Tool	Category	Description
SoCalGas – Furnace Tool	Process	Suite of furnace measures such as oxygen enrichment, moisture reduction, wall loss, preheat, and lighting measures.
SoCalGas – Heat Recovery Tool	Boilers	Energy savings calculators for heat exchangers to recover heat.
Super Market Tool	Refrigeration	Calculates energy savings in small-medium refrigerated spaces. Updates needed to remove deemed measures, Standard Practice, and possibly other components. Suggest Cal TF investigate.
SoCalGas – Like to Like Tool	Process	Energy savings calculation of equipment replacement based on differences in efficiencies or energy intensities.
Universal Translator 3	Data Analysis	Data analysis support tool with modules that help to identify some deficiencies in operation such as economizer functionality and set points. It also has statistical modules to build regressions and psychrometric calculator
SCE Pump Test Tool	Pumps	Pumping upgrades and savings through pump efficiency improvements. Updates needed Suggest TF investigate.
LBNL RMV 2.0	NMEC	Open-source R package for performing advanced measurement and verification 2.0

Medium Prioritization (5A-4)

Tool	Category	Description
EnergyPro	Simulation	Building simulation program for performance based (multiple measure) commercial projects.
DOE2.2R	Simulation	Whole building energy simulation tool specifically designed for refrigeration systems.
(RSG) HVAC Tool	HVAC	Calculator for energy savings relating to HVAC systems commonly found in schools. Legacy program and company. Proprietary. Likely needs updates for DEER Peak, baselines, and policy. Suggest investigate.
PG&E Grow Green Calculator	Lighting	Horticulture lighting calculator. Updates are currently in process by PG&E.
MASControl	Simulation	Tool to run multiple simulations using DEER prototype buildings.
TRACE 700	Simulation	Whole building energy simulation tool developed by Trane for commercial buildings.
Energy Explorer	Data Analysis	Models facility energy use using mean, median, simple and multiple-linear regressions including change point models. Kelly Kissock
PG&E Air Compressor	Compressed Air	Uses generic Air Master+ compressor curves with simplified inputs of operation. Updates likely. Suggest investigate updates needed.

Low Prioritization (5A-4)

Tool	Category	Description
ATS Pump and Motor Tool	Pumps	Uses generic pump curves to calculate pump energy savings (from efficiency and VFD controls upgrades). Updates likely. Suggest Investigate.
CEC – Available Heat	Boiler	Calculates the available heat of an equipment that has a specified natural gas composition and a flue gas measurement. Unclear updates. Investigate.
CEC- Use preheated combustion air for burners	Boiler	Calculates energy savings by using waste heat from the flue gas to preheat combustion air. Unclear updates. Investigate.
CEC- Preheat loads using heat from exhaust gasses	Process	Calculates energy savings by preheating material prior to loading into a heating unit. Unclear updates. Investigate.
CEC – Reduce Boiler Blowdown	Boiler	Calculates energy savings by reducing the blowdown rate from a steam boiler. Unclear updates. Investigate.
REopt Lite	Non-EE	Used to find the maximum optimal solar PV and/or battery storage system given a facilities energy consumption, demand and available area.

Low Prioritization (5A-4)

Tool	Category	Description
EnergyPro Lite	Simulation	Streamlined version of EnergyPro 5 for modeling of existing multifamily buildings and energy efficiency or electrification upgrades. Updates needed.
CEC- Recover heat from boiler blowdown	Boiler	Calculates energy savings by recovering heat from blowdown to preheat make-up water. Unclear updates. Investigate
CEC- Control air-fuel ratio	Boiler	Calculates energy savings by reducing the excess air amount in the flue gasses of a steam or process heating unit. Unclear updates. Investigate
CEC- Eliminate or reduce opening heat loss	Process	Calculates energy savings by reducing or eliminating the energy losses through openings. Unclear updates. Investigate
CEC- Minimize wall surface heat losses	Process	Calculates energy savings by reducing the wall temperature. Unclear updates. Investigate
CEC- Control humidity for a dryer	Process	Calculates energy savings due to increase in humidity levels in a dryer. Unclear updates. Investigate

Low Prioritization (5A-4)

Tool	Category	Description
Facility Centrifugal Pump VSD	Pump	A modified version is currently being used by CLEAResult. Listed as proprietary on CTA. Requested an “approval”. Investigate updates needed.
Facility Positive Displacement Pump VSD	Pump	A modified version is currently being used by CLEAResult. Listed as proprietary on CTA. Requested an “approval”. Investigate updates needed.
Gas Compressor Pump VSD	Pump	A modified version is currently being used by CLEAResult. Listed as proprietary on CTA. Requested an “approval”. Investigate updates needed.
Pump Overhaul Billing Reconciliation Calculator	Pump	Reconcile the hours of operation billed to the individual pump when more than one pump is connected to the billing. Updates Needed. Investigate.
Pump OPE Tool (Exception Package Spreadsheet)	Pump	Determine Overall Pumping Plant Efficiency (OPE) under special conditions. Updates Needed. Investigate.
CEC- Monitor and control LEL	Boiler	Calculates energy savings by increasing the lower explosive limit (LEL) or flammability limit (LEL). Unclear updates. Investigate.

Not Included (5A-4)

Tool	Category	Description/Rationale
SoCalGas – Thermal Oxidizer Tool	Process	Despite some stakeholder interest, SoCalGas did not prioritize this tool. There are eligibility concerns and thus, considers the tool obsolete.
Kitchen Vent Hood Calculator	HVAC	Overlap with SWFS012 for demand control ventilation on kitchen hoods.
SoCalGas – Pipe Insulation Calculator	Insulation	Although one stakeholder had a high prioritization, SoCalGas could not locate this tool.
Hot Water Nozzle Tool	Boiler	Calculation methodology developed for a specific project application. More of a custom calculation than a tool.
BioWin	Process	Specialized system evaluation tool from a vendor for purchase. Proprietary.
Aircuity Tool	HVAC	Laboratory system modeling tool specific to the Aircuity demand based control system. Proprietary and limited opportunity.
yyy Oil Refinary_Boiler Replacement	Boiler	Although two stakeholders listed this as a low prioritization, SoCalGas could not locate the tool.

Not Included (5A-4)

Tool	Category	Description/Rationale
POC for Rod Beam Pump tool	Pumps	Not used by CLEAResult per PG&E. Limited stakeholder interest.
Rod Beam Pump VSD	Pumps	Not used by CLEAResult per PG&E. Limited stakeholder interest.
Water Shutoff Tool	Pumps	Not used by CLEAResult per PG&E. Limited stakeholder interest.
Well Conversion Rod Beam PC Pump	Pumps	Not used by CLEAResult per PG&E. Limited stakeholder interest.
Well Conversion Rod Beam Rotoflex Pump	Pumps	Not used by CLEAResult per PG&E. Limited stakeholder interest.
ASD Fan and Pump Calc	Various	Limited Stakeholder interest. Bonneville Power Administration tool. Any updates needed would need to be taken on by a CA stakeholder.
Solar Heat Gain through windows	Envelop	No stakeholder interest (1 low priority). No project associated with the tool. Unvetted non-profit tool. https://cchrc.org/bs-calculators/
EUCA Measure Package Energy	Residential	No stakeholder interest. Energy Upgrade CA program using the tool ending in 2021.
EUC Tools	Residential	No stakeholder interest. Energy Upgrade CA program using the tool ending in 2021.

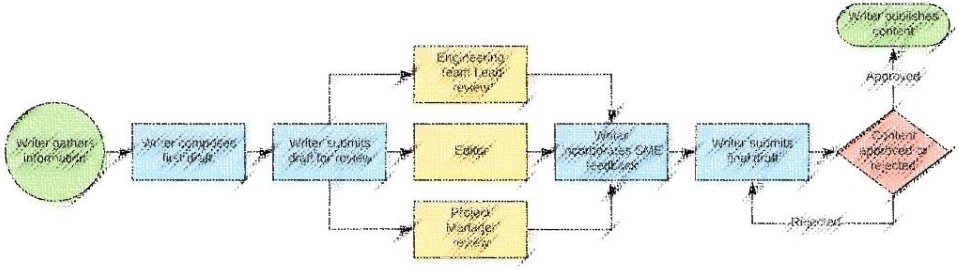
Summary / Questions

- Any additional comments or questions on the data gathering and prioritization efforts?
- Any additional tools we should consider?
- Is there interest in a Custom Tool Working Group to dive into the tools?

Metric 5C-2

Custom Measure Package and Tool Development and Update Workflow

- **Objective**
  - Formal workflow and process for **developing**, **reviewing**, and **updating** SW Custom Measures and Tools
- **Approach**
  - Adapt deemed MP workflows to custom
  - Seek CPUC buy-in to provide input and review proposed SW custom measures and tools



- **Deliverables**
  - Custom Measure Package Development and Update Workflow, presented to TF for affirmation
  - Assessment of potential to implement approved workflow in eTRM (Paused to 2024)

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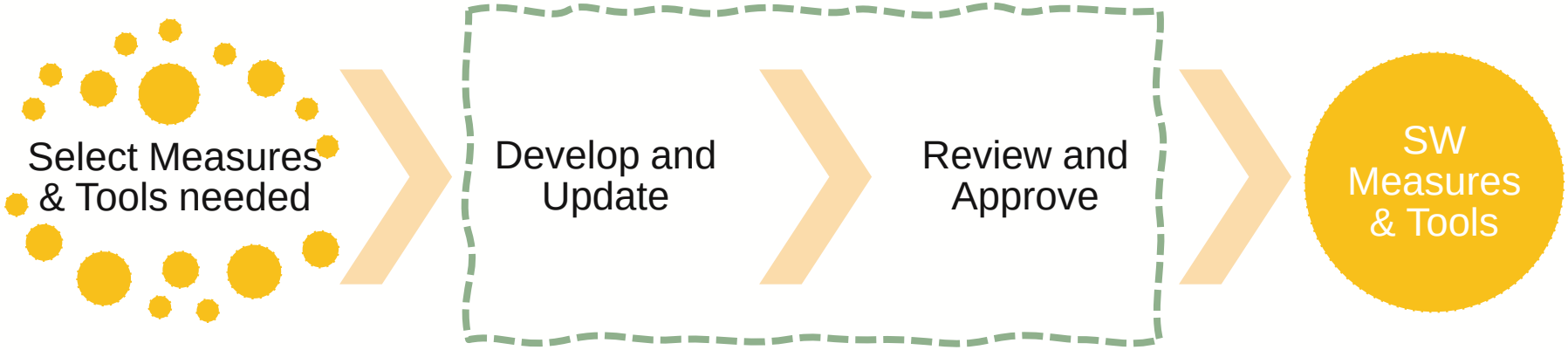
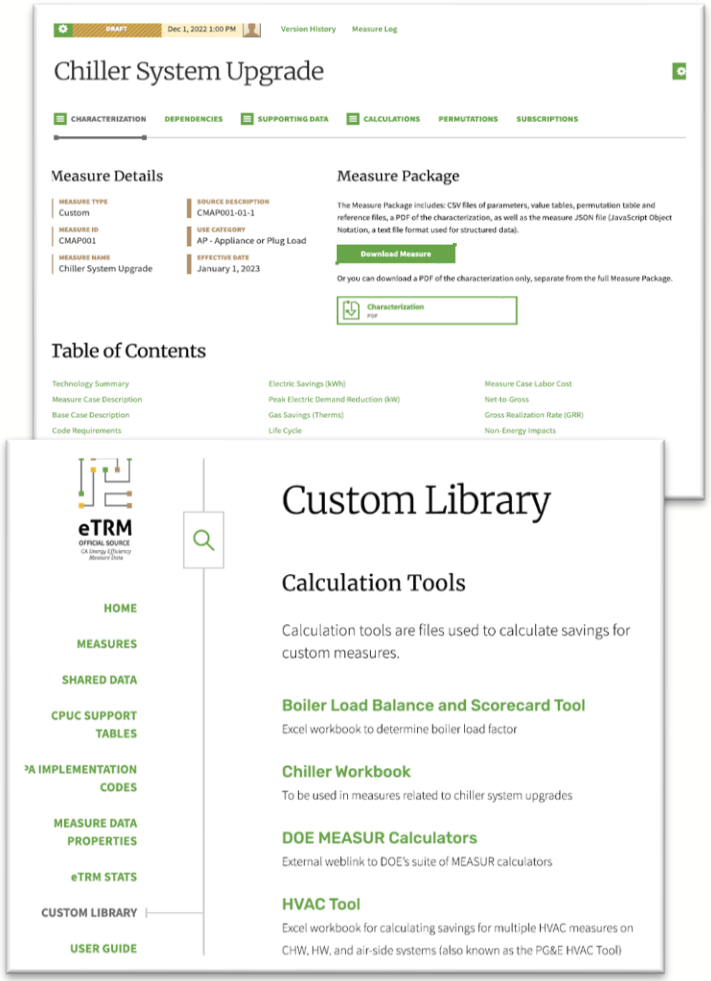
TF Discussion Questions



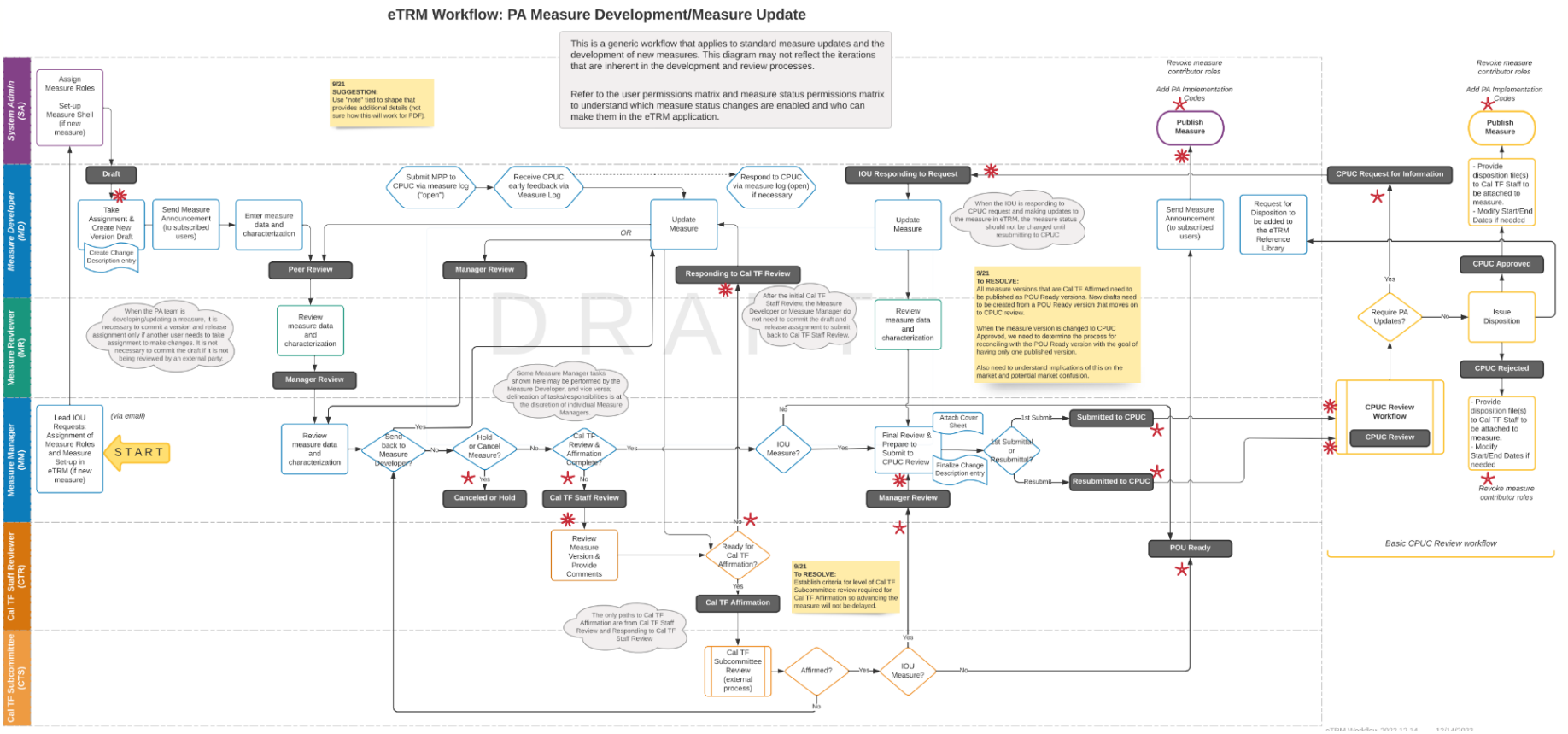
- How do we **develop** SW measures and tools?
- How should we **review** and **approve** SW measures and tools? What earns the “Cal TF Affirmation”?
- How should we **update** measures/tools as needed?

Overarching Goal

- Public library of Custom Measures and Custom Tools that are:
  - Complete
  - Clear, easy-to-read/understand
  - Consistent
    - Format
    - Development/update process
  - Well-documented
    - Include Training materials
    - Policy/guidance references
    - Changes/updates/bugs/needed updates
  - Meet appropriate technical rigor
  - Maintained up-to-date
  - Versioned
  - Reliable (ideally CPUC-approved)
  - Useful (worth the effort to develop)

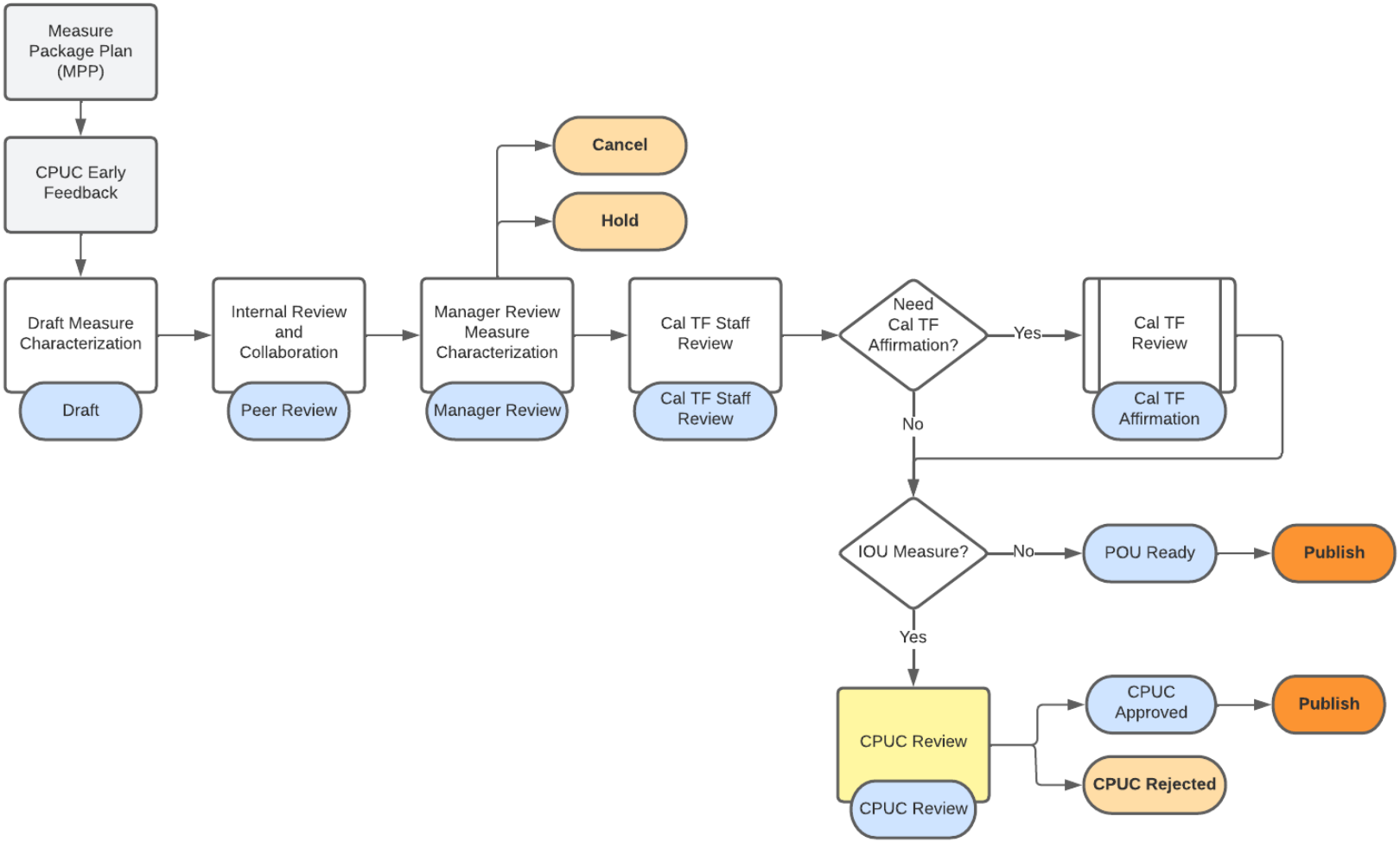


Deemed MP Development

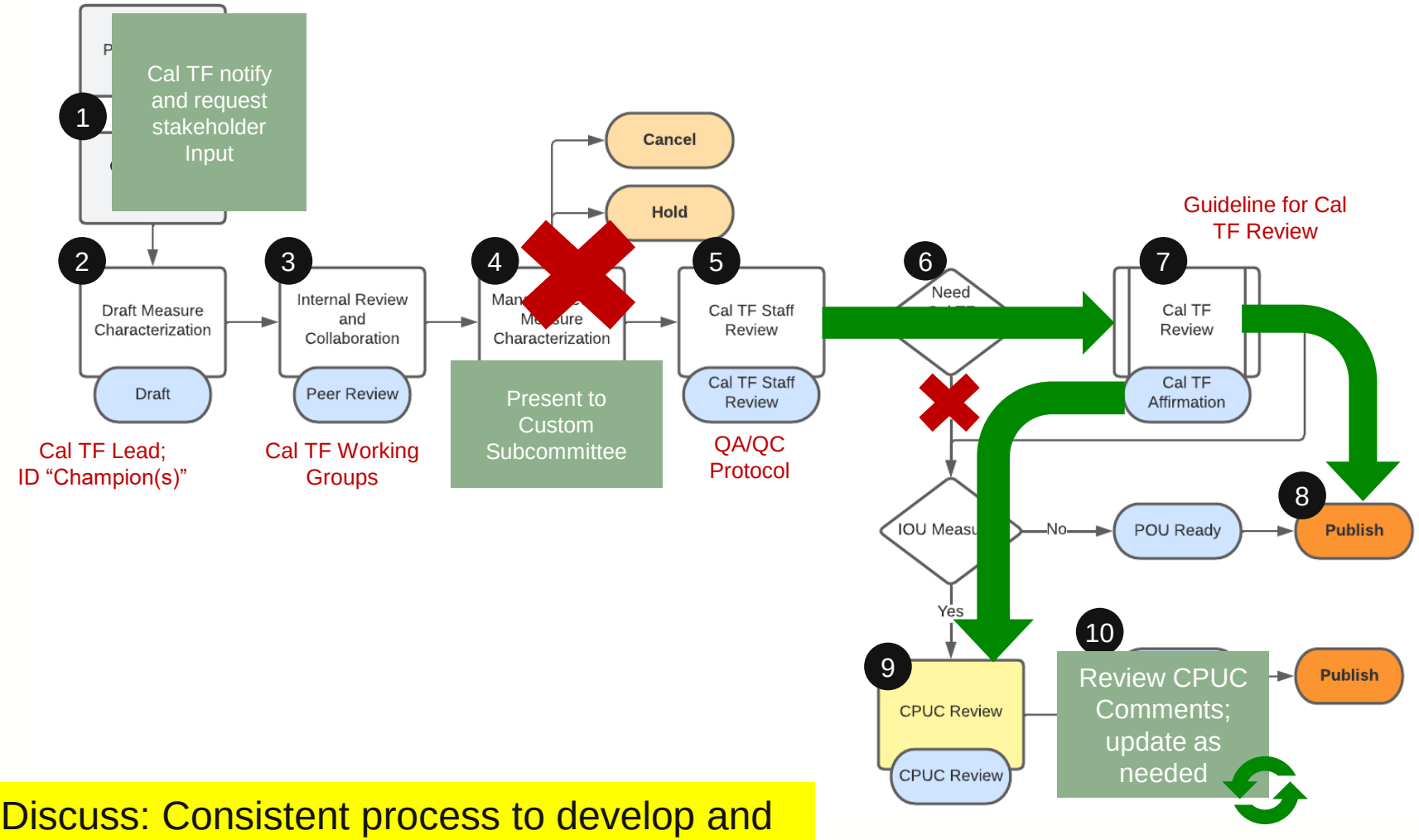


[eTRM Workflow v2.4 draft 2022.12.14.pdf]

Deemed MP Development, Simplified



Adapt Measure Package Development and Review Process for Custom Measures and Tools



Discuss: Consistent process to develop and review custom **measures** and **tools**

Summary of Key Points

Develop	Review	Maintain
• Cal TF Manage • No PA Lead/Manager requirement • ID Stakeholder Champion(s) • Solicit all stakeholder early input • Public/transparent development process • Present to Custom Subcommittee	• Cal TF Manage • QA/QC Checklist • **Cal TF Review Guide** • Require Cal TF Affirmation • Publish after Cal TF Affirmation • Seek CPUC Comments	• Identify update triggers • Cal TF annual review of update needs • Cal TF collect feedback on “bugs” and other requests • Cal TF Manage update process (or coordinate with tool lead) • Require Cal TF Affirmation on updates • Version control, notification, documentation of updates

Other Discussion Points

- TBD: Coordinating and Resourcing Tool Updates
  - Stakeholder Tools (i.e., tools owner by CA EE stakeholders)
  - External Tools (i.e., tools owned/managed by DOE, NREL, other external stakeholders)

- Else?

Next Steps

- Cal TF Staff draft formal workflow proposal (1-2 pages) for
  - Final comment at 10/4 Custom Subcommittee meeting
  - Affirmation at 10/26 Cal TF Meeting

- Workflow to guide process for ongoing and 2024 efforts to develop statewide Custom Measure Packages (measure protocols and tools).

6B ISP White Paper

- White Paper Objectives
  - Streamline ISP Process
  - Make ISPs accessible, transparent, informative, and up-to-date
  - Proactively identify ISP research needs
  - Support clarifications of ISP Guide and coordination of SP process (E-4939)
  - Identify/develop specific technical and technical policy recommendations
- Activities
  - ISP Working Group
  - Data Collection
  - Stakeholder Survey
- Today's Discussion
  - Brief summary of survey findings
  - **Live polling** on additional recommendations
  - Discuss **Baseline Database** framework/approach
  - Discuss **Baseline Applicability –** methods for defining applicability of baseline data
  - Discuss **ISP Guidance –** where are clarifications needed?

CALIFORNIA TECHNICAL FORUM

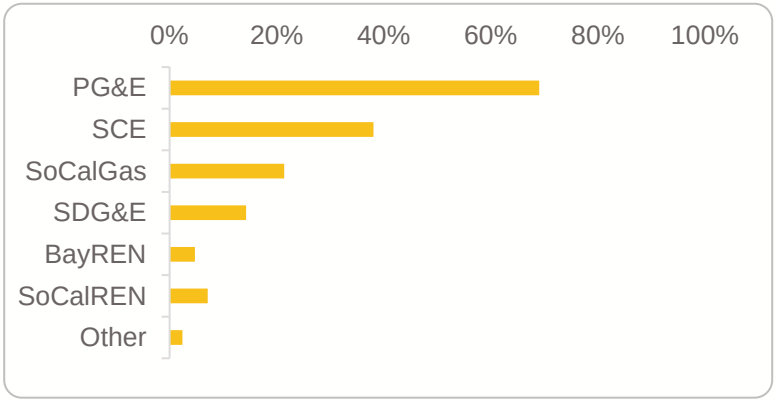
ISP Stakeholder Survey

- Audience
  - Stakeholders who have experience with custom ISP studies and Standard Practice baseline selection as part of the custom project development process in the last 3 years
- Survey Period
  - 7/17/23 – 8/20/23
- Completes: **42 completes**

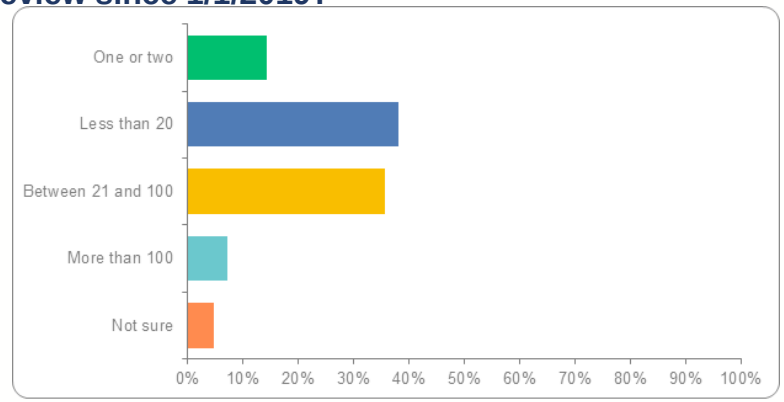
  - Experience with all PAs, sectors, aspects of ISP process
  - Staff from all IOUs participated
  - 17 unique implementer firms

Respondent Profiles

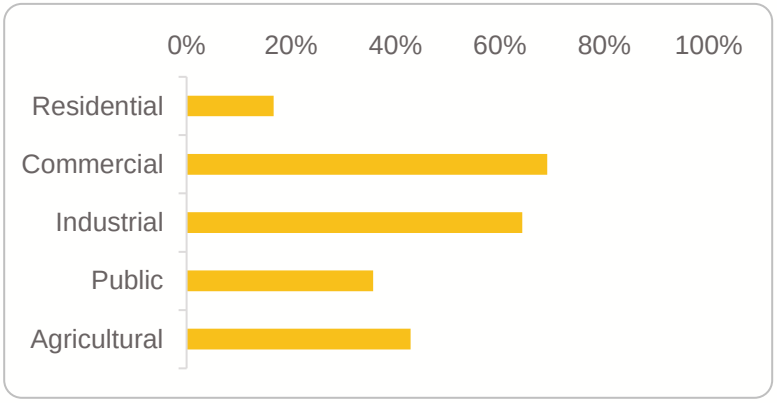
For which PA(s) have you developed, submitted, and/or reviewed custom projects?



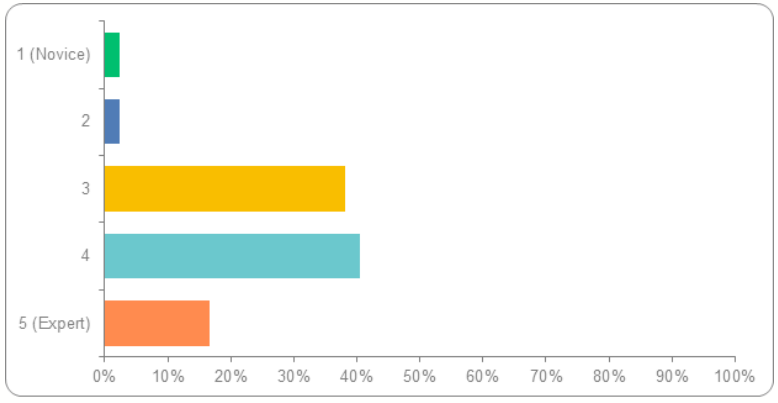
Approx. how many unique non-lighting NEW, NR, AR, and applicable AOE custom measures did you develop or review since 1/1/2019?



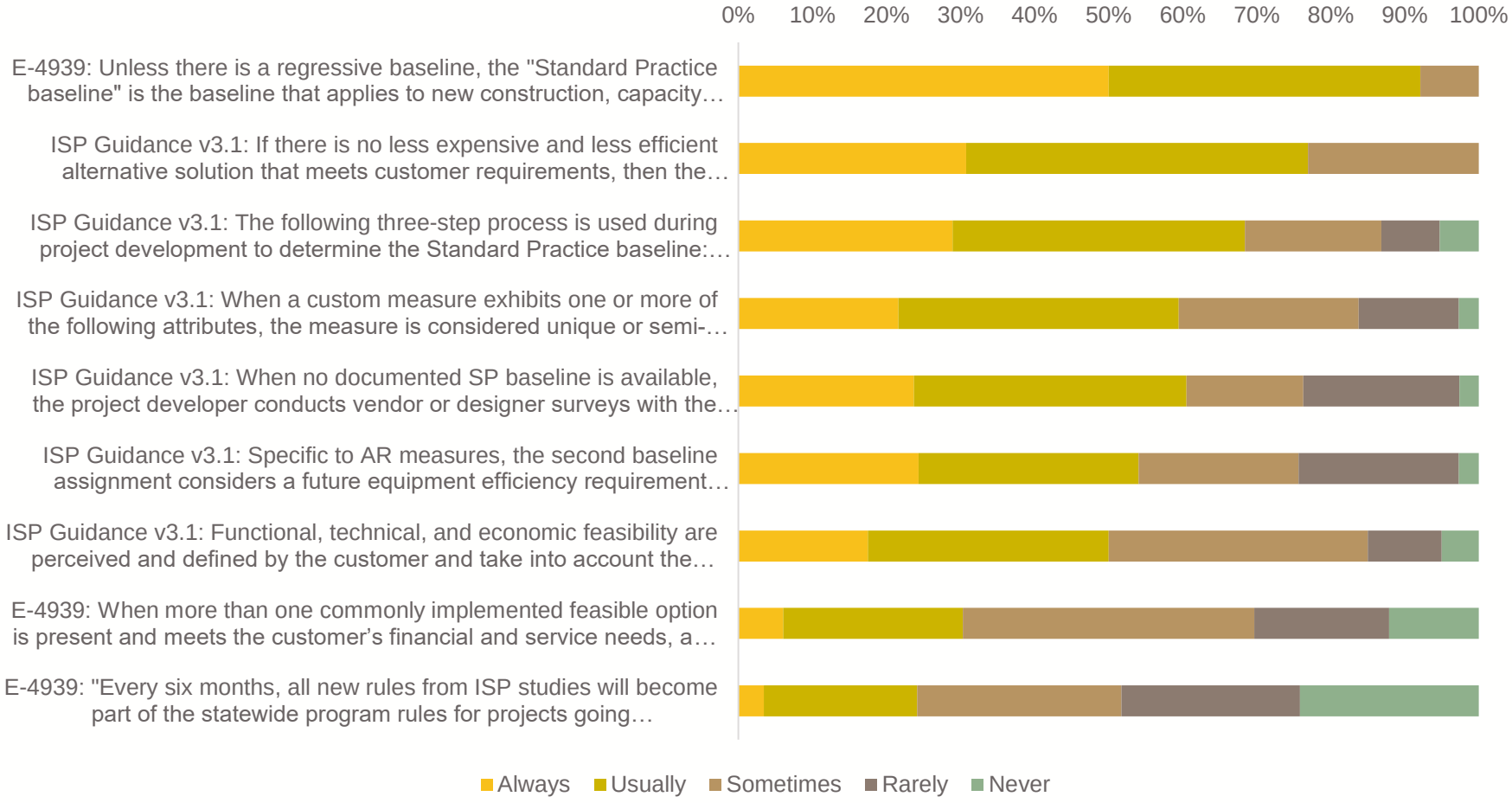
For which sector(s) have you developed and/or reviewed custom projects?



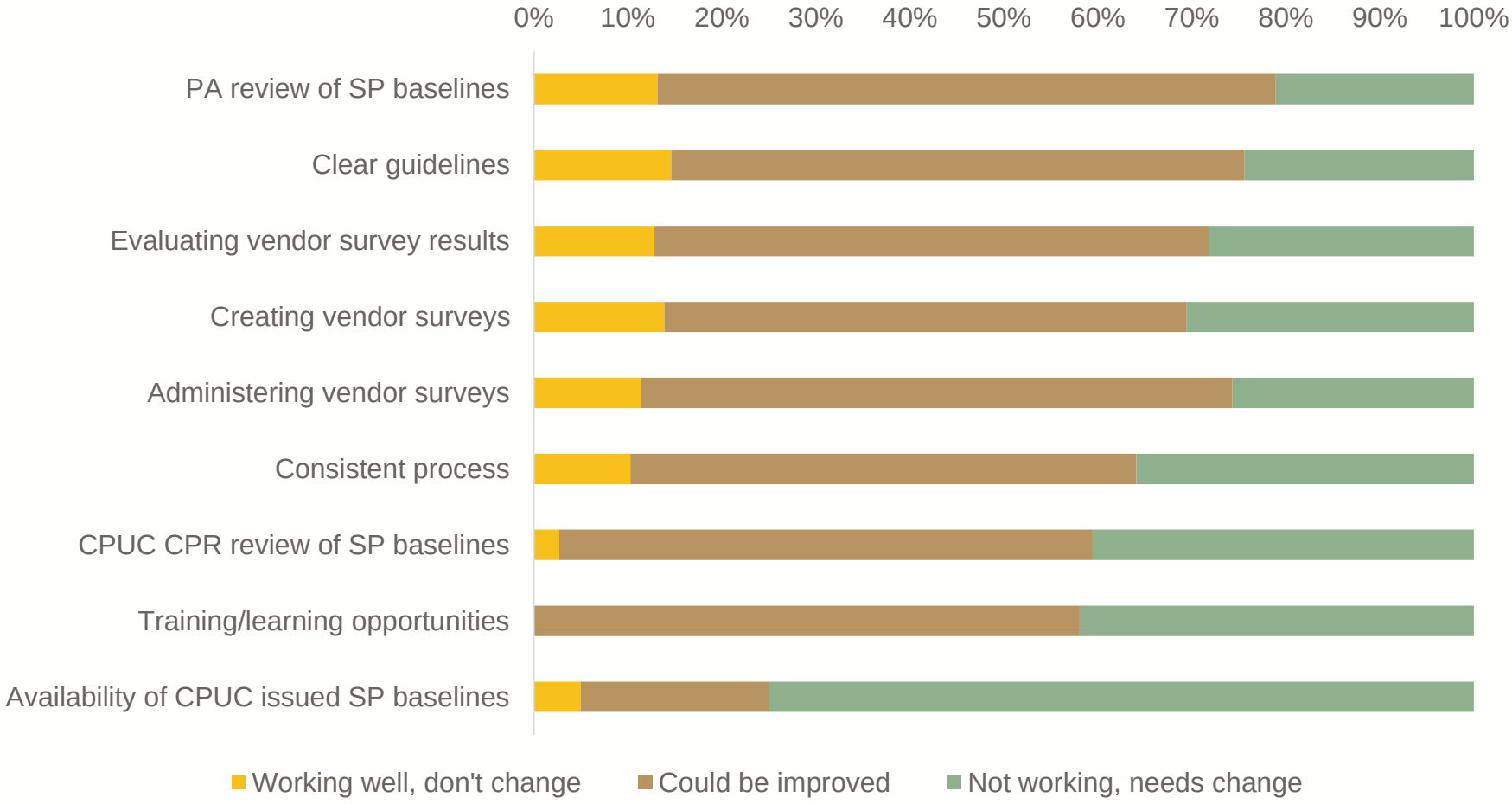
Rate your familiarity with CPUC policy and guidance related to Standard Practice assessments for Custom measures.



Rating how consistently specific policy is applied

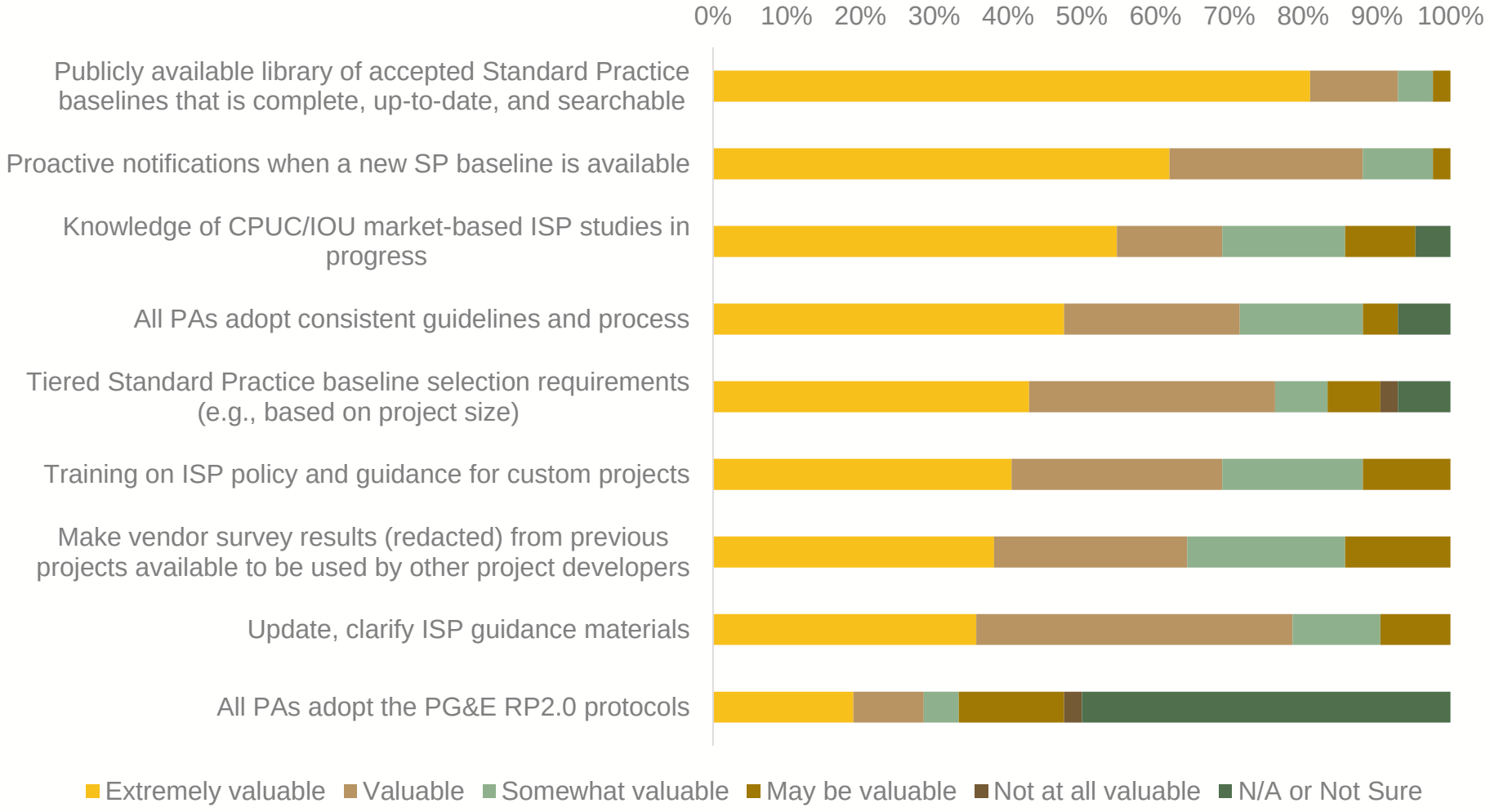


Rating aspects of the current SP baseline selection process



Rating potential improvement activities

44



Additional input on improvements (**and Live Poll**)

- Resources
  - Define and make transparent applicability of SP research and baselines
  - Support proactive research of baselines for measures, markets
  - Statewide template to improve consistency in studies and reviews
- Process
  - Establish timelines for review SP baselines (outside of CPR)
  - Engage appropriate market/sector expertise for reviews
  - Maintain continuity in assigned reviewers
  - Employ sector-specific considerations for baseline selection process
- Policy
  - Coordinate SP/Code/Influence
  - Prospective application of ISP
- Else?

slido

Rate the potential activities to indicate how helpful or valuable they would be to you

1 star = Not at all valuable
5 stars = Extremely valuable

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

Discuss: Baseline Database

Data Sources

Market Based ISP Studies

- ISP Study Summary Form
- ISP Study Summary Form

Informal ISP Studies (CPR-Reviewed)

- Modified Disposition Form
- Targeted data collection

Informal ISP Studies (PA Approved, no CPR)

- TBD
- Targeted data collection

Else?

BASELINE DATABASE

Information Fields
Baseline
Measure
MAT
Issue Date
Effective Dates
Source
Search Fields (Measure Category, Sector, End Use, Measure Code)
Approved/Rejected

… for completed studies and baseline research in progress

Discuss: Library of ISP Studies

- ISP Studies (on Custom Initiative SharePoint)

- Sources
  - CAEnergyGuidance.com (9)
  - CPUC (2)
  - PG&E ISP Studies (~20)
  - CMPA 2010-2012 Cycle ISP Studies (pending)

- **Request:**
  - Identify/share existing ISP studies to help populate baseline database
  - Baseline research in progress?

Discuss: Applicability

- Applicability
  - To what measures, customers, markets, sectors, regions, etc. can a studied standard practice be applied, and for how long?
  - How can baseline research be used to support future measures, projects?

- Defining Applicability
  - Market Based ISP Studies should define applicability; Informal ISPs do not.
  - There is no process to define applicability for existing baselines.

- **Discuss**: Guidelines on defining applicability for baselines established through informal ISPs
    - How long is the baseline data valid?
    - Does the data apply statewide or regional?
    - To what other customers, markets, etc. does the baseline apply?

Discuss: ISP Guidance

- Survey Feedback
  - Clear Guidelines: 24% say “not working” and 61% say “could be improved”
  - Update, clarify ISP Guidance: 36% say “Extremely valuable” and 43% say “Valuable”

- **Discuss**: How can the ISP Guidance Document be improved?
  - What “discrepancies, contradictions, or lack of clarity” need to be addresses in next update?
  - Other guidance improvements?

Next Steps

- Cal TF Staff outreach to complete ISP Library and baseline database
- Draft White Paper
  - Discuss at October TF Meeting

Wrap-Up & Next Steps

- **Action Items**
  - Update SharePoint bookmarks
  - Volunteer to review PG&E HVAC Tool
    - Email Spencer.Lipp@futee.biz
  - Input on items discussed today (policy recommendations, tools, workflow, ISP)

- **Upcoming Meetings**
  - Ongoing – Measure Group meetings
  - 9/28 Data Charette Part 2 (Oakland)
  - 10/4 Custom Subcommittee meeting
  - 10/26 Cal TF Meeting (Downey)
  - 11/7-8 CEDMC Fall Conference (Oakland)

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Open Discussion

- Invitation for feedback
  - Custom Subcommittee meetings & communications
    - Frequency, format, materials, discussions, etc.
  - Custom Subcommittee SharePoint
    - Navigation, access, features, etc.
- Other questions or key issues?