Cal TF – PAC Meeting

CALIFORNIA
TECHNICAL FORUM

JUNE 21,2022
ANNETTE BEITEL
AYAD AL-SHAIKH
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Agenda

- ## Leveraging the eTRM for Custom Projects
  - ❑ Continued discussion on how existing eTRM tools/processes can be used to standardize and streamline custom projects

June 8 — Introduce concept
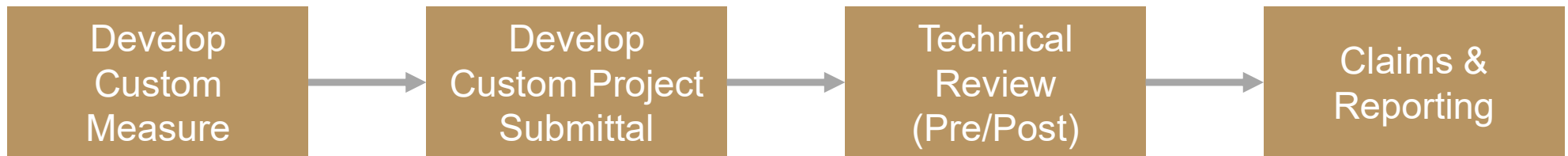
June 21 — eTRM capabilities and benefits

July TBD — Long term vision and roadmap

PAC and stakeholder input

eTRM Benefits for Custom

Develop Custom Measure	→	Develop Custom Project Submittal	→	Technical Review (Pre/Post)	→	Claims & Reporting

Cost Savings

Time Savings

Customer Experience
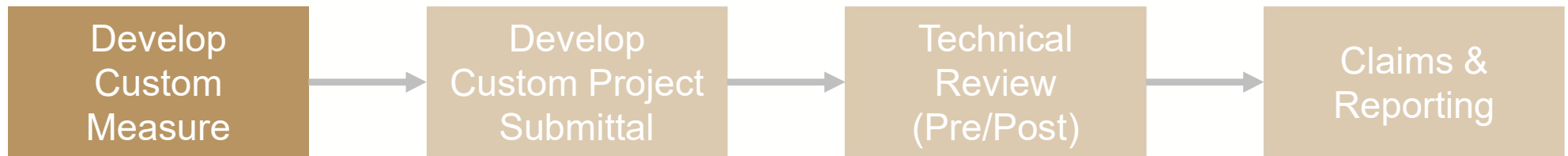
Standardization

Transparency

Stakeholder Engagement

Stage: Custom Measure

(4)

Different methods and tools for similar measures

Nonstandard documentation difficult to navigate and review

Develop Custom Measure → Develop Custom Project Submittal → Technical Review (Pre/Post) → Claims & Reporting

Library of approved tools for semi-deemed measures

Standard savings template for custom measures

eTRM Measure Package

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Develop Custom Measures

eTRM template can readily accommodate semi-deemed measure characterization

Future potential to perform calculations directly in eTRM

Direct download of appropriate version of approved calculator (populated with default values)

Characterization includes defined data and M&V requirements.

Embedded references to key documents

Stages: Project Package

Incomplete project package

Nonstandard formatting

Large number of supporting documents

Develop Custom Measure	→	Develop Custom Project Submittal	→	Technical Review (Pre/Post)	→	Claims & Reporting
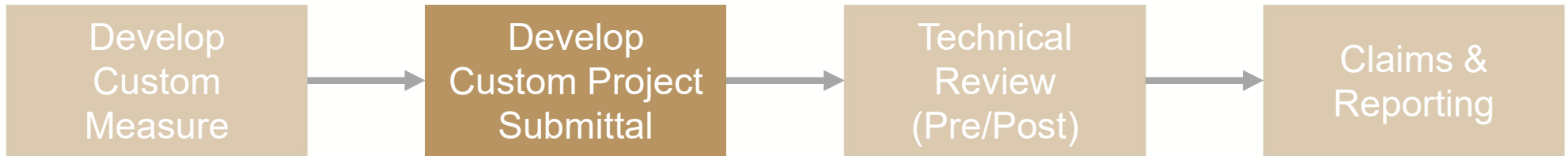
Complete, consistent, organized project packages

Reduced documentation requirements for semi-deemed

eTRM Measure Package Template

6/21/2022

Custom Project Packages

Project Feasibility Study

Customer Name

Address Street
City, CA 92867

Project Title – Project #

Prepared by:

Implementer/Developer Name

Address City, CA 95403

Primary Contact Name

Email

Phone: xxx-xxx-xxxx

PA-specific materials

Supporting Files

California Statewide Deemed Measures

eTRM
best in class

Statewide Custom Project Characterization Template

VERSION 2.0

Last Updated April 30, 2021

Supporting Documentation

Standard filenames, data tags, Searchable
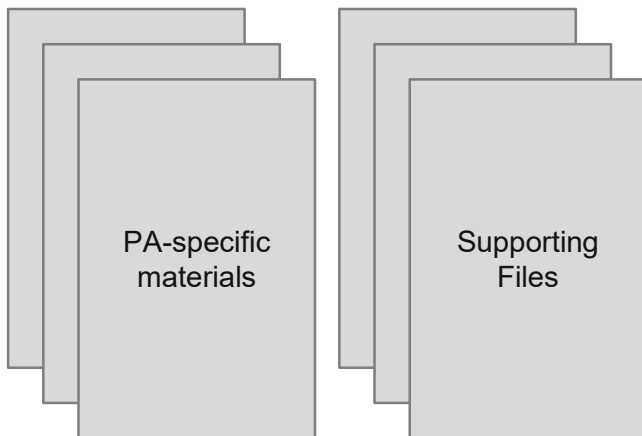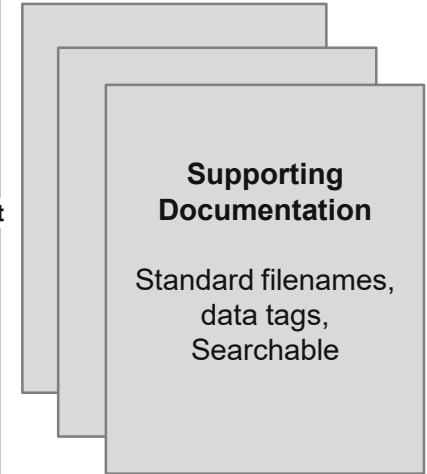
Data validation for completeness and QA/QC

Project Data Fields

Pre-populated templates for reviews and disposition reports

6/21/2022

Custom Project Packages

Base Case Material Cost ($/Unit)

The material cost data for baseline and measure case air-cooled chillers was gathered from two equipment manufacturers who also participate in Upstream HVAC program. This data was collected in October - November 2020 and includes the average equipment cost per ton for the two capacity ranges and three efficiency tiers (baseline, Tier 1 and Tier 2). The average of the two manufactures cost was used as the average equipment cost. See the cost calculation **R1397** for details.

References

R103 Itron, Inc. 2011. *DEER Database 2011 Update Documentation*. Prepared for the California Public Utilities Commission.
⬇ **Download** (PDF, 2.6 MB)

R104 California Public Utilities Commission (CPUC), Energy Division. 2003. *Energy Efficiency Policy Manual v 2.0.* ⬇ **Download** (PDF, 159.0 KB)

R105 California Public Utilities Commission (CPUC), Energy Division. 2013. *Energy Efficiency Policy Manual Version 5.* ⬇ **Download** (PDF, 1.3 MB)

R1397 Southern California Edison (SCE). 2020. "SWHC020-02 Air-Cooled Chiller-Cost Calculations.xlsx." ⬇ **Download** (XLSX, 21.4 KB)
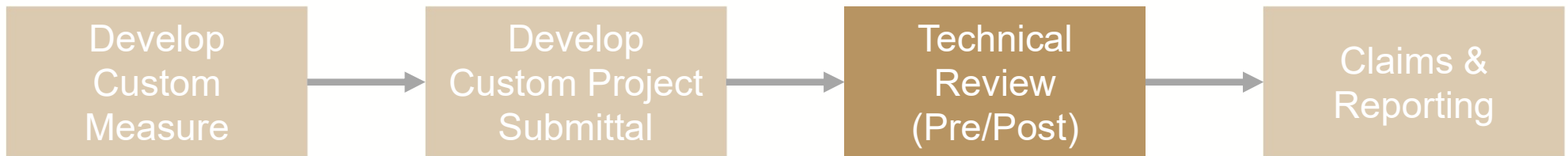
Reference tags in project materials connect to source documentation

Stage: Technical Review

Different process for each PA

Back-and-forth communication

Manual tracking

Limited transparency

Develop Custom Measure	→	Develop Custom Project Submittal	→	Technical Review (Pre/Post)	→	Claims & Reporting

Clear, consistent, structured reviews

Transparent status and history

Automated tracking and reporting

Measure Package Review

Review Comments

Reviewer comments and responses are systematically tracked

Communication Log

eTRM tracks and stores stakeholder communication throughout review

Review Status

eTRM tracks status, comments, and additional documentation throughout review

Status and Review History

eTRM shows current status review history

Timestamps can be used to track and enforce review periods

Notifications

Email notifications keep users informed

User Dashboards

CPUC Administrator Dashboard

Status Reports

Measure Log Activity Report

Measure Package Review Summary Report

CPUC Review Assignment Report

Measure Package Plan Submittals

CPUC Review Status Report

Measures Under Review

Number of days since measure version was last submitted or resubmitted to the CPUC for review.

LESS THAN 7 DAYS	7 TO 15 DAYS	15 TO 30 DAYS	30 TO 60 DAYS	60 DAYS OR MORE
SWLG009-02-11 LED, Tube	SWHC001-02-5 Wall Furnace, Residential	SWAP008-01-4 Room Air Cleaner, Residential	SWRE003-00-14 Heater for Pool or Spa, Comme...	SWWH004-02-3 Laminar Flow Restrictor, Comm...
SWLG018-01-12 LED, Tube, Type B and Type C	SWFS021-02-5 Fryer, Commercial, Fuel Subst...	SWCR018-02-3 Reach-In Refrigerator or Free...	SWAP015-draft Induction Cooking with or wit...	SWWH019-03-3 Faucet Aerator, Commercial
SWFS006-01-7 Ice Machine, Commercial	SWFS022-01-5 Convection Oven, Commercial, ...	SWAP006-01-6 Dishwasher, Residential	SWAP003-03-2 Clothes Dryer, Residential	SWFS002-draft Door-Type Dishwasher, Commerc...
SWHC052-00-8 Air-Cooled Chiller, Path B	SWCR005-02-5 Auto Closer for Refrigerated ...	SWSV005-01-4 Economizer Repair, Commercial	SWCR020-draft Medium-Temperature Open Displ...	SWFS013-01-4 Low-Flow Pre-Rinse Spray Valve
	SWCR004-01-7 ECM Retrofit for a Walk-in Co...	SWSV010-01-2 Economizer Controls, Commerci...	SWHC048-02-3 Packaged Air Conditioner Heat...	SWWH020-03-4 Low-Flow Showerhead, Commerci...
	(21 total measures in this bucket)	*(26 total measures in this bucket)*	*(16 total measures in this bucket)*	*(13 total measures in this bucket)*

Additional measures under review can be viewed in the **CPUC Review Status Report**

User dashboard shows review activity

Stages: Claims and Reporting

Different names/codes for similar measures

Project data in different systems

Project data not readily available for ex post analysis

| Develop Custom Measure | → | Develop Custom Project Submittal | → | Technical Review (Pre/Post) | → | Claims & Reporting |
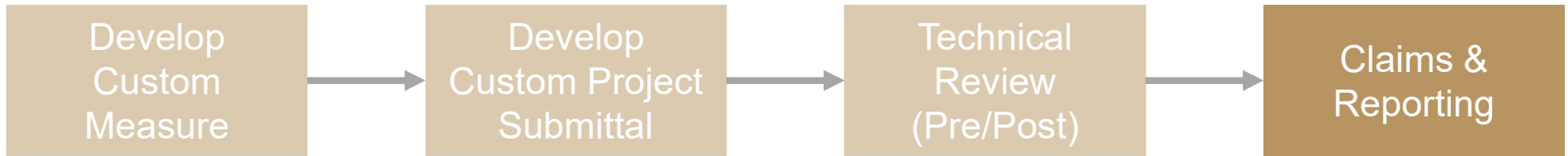
Data housed and organized in central location

Accessible and tagged data for reporting and analytics

eTRM database and reporting tools

6/21/2022

Aggregated data and common nomenclature improves reporting and analytics

Integrations

YOUR PERSONAL API KEY

Generate key

Generate a unique API key to enable consumption of eTRM data in external applications.

CET Integration

eTRM allows users to download measure files for analysis in the CEDARS Cost Effectiveness Tool (CET). The CET output may be uploaded into the measure permutations.
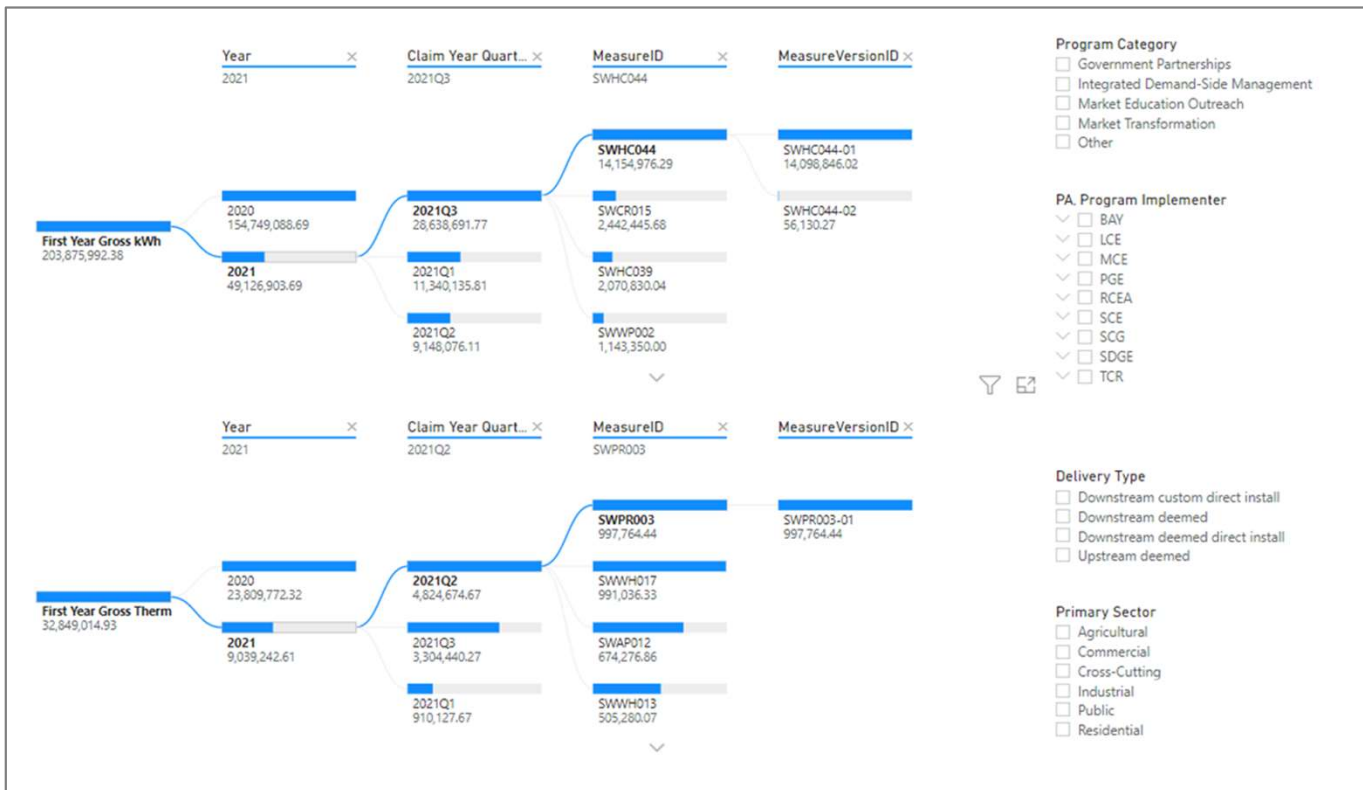
DOWNLOAD CET INPUT FILE (ZIP)

Automate data transfers and data structures enable integration with other data systems

User-Friendly Interface

- User dashboards
- Enhanced search functions
- Customizable reports and subscriptions
- Alignment with deemed

eTRM user interface was designed by user-stakeholders

User types, roles, affiliations, and assignments control users access to data and functions

Next Steps for Cal TF

- <u>Ongoing Stakeholder Input</u>: Continue to solicit input/comment from key stakeholders to develop/refine
  - ❑ White Paper(s)
  - ❑ Graphical models
  - ❑ Identify value and barriers/challenges to moving forward

- <u>Engineering</u>: Collect custom tools/data requirements (IOU/POU). Review/standardize through Cal TF subcommittees

- <u>eTRM Updates</u>: Refine enhancements to eTRM so custom tools can be uploaded, and later possibly customer projects

Next Steps for PAC

June 8 — Introduce concept

June 21 — eTRM capabilities and benefits

July TBD — Long term vision and roadmap

PAC and stakeholder input

Please complete doodle poll for July PAC meeting (7/14, 7/15, 7/21, or 7/22)

6/21/2022