Agenda

California Technical Forum (Cal TF) Meeting
September 24, 2020
Location: Teleconference Only
10:00 a.m. – 11:45 a.m.
1:00 p.m. – 2:30 p.m.

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Time	Agenda Item	Discussion Leader(s)
10:00 - 10:15	**Opening**	Annette Beitel
10:15 - 10:45	**Savings and Cost Methodology Guidance White Papers** **ACT:** • Affirmation	Ayad Al-Shaikh & Jennifer Holmes
10:45 - 11:45	**5 Preparing for 2021:** - 2020 Business Plan - Regulatory Engagement – CEC/EPIC - Starting 2021 Business Planning Process - Reminder: Maximizing Value of Cal TF **ACT:** • Feedback and Comments	Ayad Al-Shaikh

11:45am – 1:00pm   Break

CALIFORNIA
TECHNICAL FORUM

Time	Agenda Item	Discussion Leader(s)
1:00 – 1:45	**Measure Classification White Paper** - Discuss subcommittee feedback - How to distinguish between ET, Deemed, Custom or other measure types? **ACT:** • Feedback requested before or during the meeting.	Stefano Galiasso
1:45 - 2:15	***eTRM / DEER Resolution E-5082 Update*** - Conditional Data Source of Record - What to expect on 1/1/2021 and 1/1/2022 **ACT:** • Update only	Ayad Al-Shaikh
2:15 - 2:30	**Closing**	Annette Beitel

Meeting Materials
- **Meeting Decks**
  - Measure Classification White Paper Overview
  - eTRM / DEER Resolution E-5082 Update
  - 2020 Cal TF Business Plan Goal Update

- **For Information**
  - Final Savings Methodology Guidance
  - Final Cost Methodology Guidance

Meeting Attendees

	In-Person	*Via Telephone*
Cal TF Staff		Ayad Al-Shaikh Chau Nguyen Jennifer Holmes Roger Baker Stefano Galiasso Tomas Torres - Garcia
Cal TF Members		Abhijeet Pande Akhilesh Reddy Endurthy Alfredo Gutierrez Armen Saiyan Charles Ehrlich Dave Hanna Eduardo Reynoso Eric Noller George Beeler Greg Barker Jeff Seto Jonathan Pera Mike Casey Richard Ma Sepi Shahinfard Spencer Lipp Steven Long Vrushali Mendon Andrew Parker Gary Fernstrom Mudit Saxena Tom Eckhart

Non-Cal TF Members		CPUC
		   Amy Reardon / CPUC
		   Sasha Merigan / CPUC
		
		CPUC Consultant
		   Bing Tso / SBW
		   Bob Ramirez / DNVGL
		   Rachel Murray / DNVGL
		   Sue Haselhorst / ERS
		
		IOU
		   Adan Rosillo / PG&E
		   Anders Danryd / SCG
		   Andres Fergadiotti / SCE
		   Gary Barsley / SCE
		   Henry Liu / PG&E
		   Soe Hla / PG&E

	In-Person	*Via Telephone*
		Tai Voong / PG&E
		Danielle Dragon / PG&E
		Implementer / 3P / Consultant
		Jay Luboff / Jay Luboff Consulting
		Jeremy Sasse / RMS Consulting
		Other
		Tim Olsen / Energy Coalition

Meeting Notes

I. Opening

Presenter: Ayad Al-Shaikh
Materials: http://www.caltf.org/s/Agenda-Cal-TF-Meeting-Sept-2020-v2.pdf

II. Savings and Cost Methodology Guidance White Papers

Presenter: Ayad Al-Shaikh & Jennifer Holmes
Materials: http://www.caltf.org/s/Cost-and-Savings-Methodology-Affirmation-r1.pdf

Akhilesh Endurthy: Guideline 5, for some of the measures, we might be relying on other sources, we might not always be able to use the same data sources for both the base and the measure case costs. For newer measures there might only be 1-2 sources. We might only rely on the manufactures for measure case costs and we might rely on another source for the base case costs.

- Ayad Al-Shaikh: It should be stressed that these are intended to be guidelines (ie, best practices) rather than strict rules. If a guideline cannot be followed for a good reason, it would be complete appropriate to not the reason and move one.
- You will be able to find that there are exceptions to each guideline, this guideline is referring to measures that are more established and not newer measures where the data sources might not match.

Cost Methodology Guidance and Savings Methodology Guidance have been affirmed!

III. 2020 Business Plan Update

Presenter: Ayad Al-Shaikh
Materials: http://www.caltf.org/s/9-24-2020-CalTF-Meeting-BP-Goals-r1.pdf

Measure Ecosystem - Goal #4

Spencer Lipp: People can react faster to upcoming changes if the information is communicated to the industry early. One example is the 2021 measures that are being posted.

- Ayad Al-Shaikh: Yes, there are notifications, so maybe a meeting to discuss the opportunities would be valuable.

Jay Luboff: Is the workpaper process also included in the new measure screening process?

- Ayad Al-Shaikh: Yes, we can identify if the measure if a good candidate.

Gary Fernstrom: (Regarding the DR+EE item) The importance of storage is getting greater. From the news, Elon Musk/Tesla just developed a new battery chemistry that is a much better battery (lower cost + higher performance) than what is available on the market now. This should be highlighted as important.

- Ayad Al Shaikh: We will keep a record, there are a lot more types of measures out there that we might want to add to the list and bring the awareness to the portfolio. Some of the items at the bottom of the list have policy concerns and how they would work with EE. We try to address them early, so policy issues have longer time to resolve.

Jay Luboff: The juncture of the eTRM and the commission. First, do we have an approval process that will work between the WPs developed for deemed, hybrid, or custom? Second, would the commission approve the eTRM for the year?

- Ayad Al-Shaikh: The E-5082 resolution made the eTRM the conditional data source of record, assuming we meet certain standards, as of January 1st, 2021. The savings you see in eTRM are the approved values; they would be the same as the files in deeresouces.net.
- Ayad Al-Shaikh: We are not changing the approval process. The ExAnte review team is wonderful at providing feedback on submitted measures, and there is a lot of formal requirements in this process. Only the IOUs can submit measures for CPUC approval. The new measure process lets you get connected with an IOU member to submit your measure to the CPUC if applicable.

Steven Long: Will the whitepaper explore how to deal with the attribution question of EE v. DR v. load shift?

- Ayad Al-Shaikh: There is not enough detail now, can I follow up with you offline?
- Steven Long: It is a complicated process that has been brought up over time, but there is not a clean solution. There are other considerations, so it might be worth having separate offline discussions.
- Ayad Al-Shaikh: It is also very tough to align funding mechanisms.
- Steven Long: Funding is a big part of this.
- Jay Luboff: Please include me in the conversation with Steven, as appropriate.

ACT: Ayad Al-Shaikh to follow up with Steven Long regarding the attribution question.

Measure Ecosystem - Goal #6

Armen Saiyan: (Regarding POU custom project development piece) Is there a particular reason why we are not looking at a statewide approach? It seems to be looking at certain POUs but coming up with a standardize process across the state would be great.

- Steven Long: There are a lot of efforts and groups working on the custom process so it might be good to talk to them.
- Ayad Al-Shaikh: Noted that POU needs are different than IOU needs. Statewide custom measures, like deemed, could facilitate the process dramatically. We can take baby steps with this. It is not quite what the IOUs are doing, but similar. We can start a conversion on how to take it statewide, but it is certainly a long road.
- Steven Long: Hybrid may be a good start since it has been discussed, but not implemented. It may be more challenging to deal with other things associated with the IOU process, such as standard practice and influence.
- Armen Saiyan: Some of these topics may lead to more policy discussions. I think the focus should be technical, where there are much more commonalities. For many smaller POUs, custom ≈ POU TRM ≈ hybrid approach. Different POUs define custom differently, this is something that we should keep in mind.
- Ayad Al-Shaikh: A lot of things are worth discussing at higher level, such as naming convention. LADWP has a lot of input on naming conventions for their measures; this was the critical step in the deemed world. This may happen for custom too.
- Steven Long: Another area restricted by policy is measure application type in the custom world. This is something that can be statewide, but it is constrained by CPUC rules.
- Ayad Al-Shaikh: We will investigate this, we do not necessarily want or need to change policy, just clarify.

Review of EPIC Annual Reports

Steven Long: Quick comment. RCx and behavior would make sense. This is more on the custom side. Some of these may encompass more BRO measures than what we have.

- Ayad Al-Shaikh: How they fit in is critical in determining if they are good measures. How to enable them to figure out creative ways to get their measures to fit in. For example, you get an extra point if you develop your measure into a workpaper or they can fill out the data portion to get it evaluated. The goal is what is required over here (left side), so they can help themselves get over to here (right side). Any thoughts?

CEC R&D team: Epic Collaboration

Akhilesh Endurthy: Most EPIC studies have the savings. To enable them to become custom or deemed measures, we can add a section to identify what information they need to make the transition, something like install type, effective useful life, and other measure specific information would be very valuable. The specific information that is required for a deemed/custom project is missing from the report, which makes it hard to market.

- Abhijeet Pande: One of the key aspects of the feedback and input should be how to link the different TRL (technology readiness levels) of EPIC projects towards ET or other measure categories. Not every EPIC project produces the information necessary for a measure. On a higher level, there could be a conversion between Cal TF and EPIC on how to align the TRL.
- Ayad Al-Shaikh: Missing information is ok. The importance is getting in early to show people the opportunity to know what is developing. Good idea to connect with EPIC and see how we could potentially align.
- Greg Baker: We should just set an expectation that the performance data submitted by a manufacturer through EPIC will not be the final word on savings.
- Ayad Al-Shaikh: There is a disclaimer as you fill out the new measure process that a committee approval does not guarantee a CPUC approval. Similarly, just because you provide the data, does not mean it will be approved. However, it is a good starting point to understanding if measure can be added to the portfolio or approved in some way.

Armen Saiyan: It may be a good exercise to identify all the potential paths a measure can get introduced to the portfolios. It could be EPIC funded initially; it could become ET. Think this is a good example of one other set of efforts within the larger ecosystem of introduction of new measures within the market.

- Ayad Al-Shaikh: Lets try to identify other pathways or stakeholders that we can add.
- Armen Saiyan: Identify them discretely – what the organizations are working on this and try to make the connection.
- Steven Long: Are there jurisdictions (quasi-government, the RTF, etc.) that may be part of this?
- Armen Saiyan: This (referencing slide) is a good starting point on the category of these organizations, and we may need to fill out the details
- Jay Luboff: Yes, I agree. There may be different types of categories that come out of these organizations that will affect the measure categorization. It should be consistent.
- Armen Saiyan: Not everything in EPIC program will fit into the new measure process. We should identify what area of coverage they have and identify the gaps early on.

- Abhijeet Pande: ET study may collect all the data for a new measure, or a new measure is missing certain critical data. Having the feedback loops on what is available and what is needed will potentially align the effort more, without redundancy.
- Ayad Al-Shaikh: Feedback on which element of the data is helping or hurting the way your project looks is valuable. If you can improve the life of the measure you can change the outlook on moving forward. Hopefully, there are not just gaps but maybe areas of improvement that we are not capturing.

IV. Measure Classification White Paper

Presenter: Stefano Galiasso
Materials: http://www.caltf.org/s/Cal-TF-Measure-Classification-WP-presentation-09232020.pdf

Qualitative Comparison of Pathway

Gary Fernstrom: Where is the entry for 3rd party for ET. Let us just say that I want to propose an ET and get into utility program. Where is the doorway into that channel?
- Stefano Galiasso: We are trying to guide someone to an endpoint. The best would be to submit a measure request, so that the new measure committee can look at the available data and provide the appropriate feedbacks.
- Gary Fernstrom: Sounds very reasonable. This chart gives a good idea of the various pathways available. If I need money or financial reward for my efforts, I do not understand where that might come from.
- Stefano Galiasso: It is beyond the scope of this presentation. In some instances, the IOU will sponsor and in other, the burden may fall on the proposer. These options are down the funnel: However, this is something that we should think about.
- Gary Fernstrom: My suggestion is somewhere along the way, there be a description of a bridge, where the proposer can discuss with sponsors on how to carry their project forward
- Stefano Galiasso: EPIC is not one for one, but in certain implementation, EPIC picks up the tab before ET, as R&D support.
- Gary Fernstrom: In my experience, in practice it does not work very well. We should be clearer about how that connection will happen.
- Galib Rustamov/Andres Fergadiotti: "Are savings estimates reliable?" What is reliable in this context? How do you determine savings to be reliable? What are the criteria?
- Stefano Galiasso: We will touch on this later in the presentation, please bring this up again if I have not answered the question. (see slide)

Is It a High Volume Tech

Akhilesh Endurthy: NMEC rulings/policies are currently restricted to commercial measures. Hence it would not be a path for Res, Ag, and Industrial measures.
- Stefano Galiasso: We will investigate and clarify. We want to have opportunity to get more information.

ACT: Stefano Galiasso to go over the NMEC rulings/policies and clarify.

Determining the Pathway

Armen Saiyan: One result indicates going to the new measure pathway. Isn't this part of that pathway? Where does this lead to?
- Stefano Galiasso: The 3rd pathway. For example, ductless fume hoods, assume it is not ET; it is an existing technology in the market. (flip to example 3 slide) Follow the pathway: (Res/nonRes -> Custom/not Custom -> etc). Once you get the end point, we would offer information about different programs so the measure proposer can decide the right path. At the same time, the screening committee can follow the same questionnaire to understand the type of appropriate feedback for this measure.

V. eTRM / DEER Resolution E-5082 Update

Presenter: Ayad Al-Shaikh
Materials: http://www.caltf.org/s/eTRM-DEER-Resoluiton-Update-r1.pdf

VI. Closing

Presenter: Ayad Al-Shaikh

Open Actions
- Classification white paper
  - WE want your feedback!
  - We will post the white paper on the CalTF whitepaper.
- If you have ideas for Cal TF BP, we want to hear your feedback

Next Meeting
- Cal TF Meeting: November 19th
- We may need to add a short meeting in October regarding new measures or whitepapers (but not planned yet)