



Agenda and Meeting Notes

California Technical Forum (Cal TF) Meeting

December 15, 2022
Location: SDG&E Offices and Teleconference
10:00 a.m. – 4:30 p.m.

Please join my meeting from your computer, tablet or smartphone.

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United States: +1 (872) 240-3212

Access Code: 169-090-325

Time	Agenda Item	Discussion Leader(s)
10:00 – 10:30	Overview and Introductions	Ayad Al-Shaikh
10:30 – 11:00	2023 Business Plan Overview ACT: <ul style="list-style-type: none"> • Feedback and Comments 	Arlis Reynolds
11:00 – 12:00	Brainstorming for Goal 8 – “5 Year Roadmap” ACT: <ul style="list-style-type: none"> • Feedback and Comments 	Ayad Al-Shaikh

12:00 p.m. – 1:00 p.m.

Lunch Break

Time	Agenda Item	Discussion Leader(s)
1:00 – 2:30	Custom Charette Follow-up + Brainstorming for Goal 5 – “Custom” ACT: <ul style="list-style-type: none"> • Feedback and Comments 	Arlis Reynolds



2:30 – 4:00	Brainstorming for Goal 6 – “Key Emerging Technical and Technical Policy Issues” ACT: <ul style="list-style-type: none"> • Feedback and Comments 	Arlis Reynolds and Ayad Al-Shaikh
4:00 – 4:30	Recap Closing	Annette Beitel

Meeting Materials

- **Meeting Decks**
 - [1] White Paper Topic Survey (on Website)
 - [2] Cal TF White Paper Topic Descriptions and Comments (on Website)
 - [3] Cal TF White Paper Topic Brainstorm Template (on Website)
 - [4] Cal TF Meeting Presentation (on Website)
 - [5] 5-Year Roadmap Brainstorm Presentation (on Website)

Meeting Attendees

	<i>In-Person</i>	<i>Via Telephone</i>
<i>Cal TF Staff</i>	Arlis Reynolds Ayad Al-Shaikh Chau Nguyen Tomas Torres-Garcia	Randy Kwok
<i>Cal TF Members</i>	Chris Rogers Dave Hanna Eduardo Reynoso Roger Baker Spencer Lipp	Abhijeet Pande Adan Rosillo Alfredo Gutierrez Anders Danryd Andrew Parker Arash Kialashaki Armen Saiyan Charles Ehrlich Denis Livchak Eric Noller Gary Fernstrom George Beeler Greg Barker Lake Casco Lisa Gartland Martin Vu Mike Casey Sepideh Shahinfard Steven Long Yeshpal Gupta



	<i>In-Person</i>	<i>Via Telephone</i>
<i>Non-Cal TF Members</i>	IOU/POU Jessie Wang / SDG&E John Zwick / SDG&E James Gibson / SDG&E	CPUC Amy Reardon / CPUC IOU/POU Andres Marquez / SCG Babak Yazdanpanah / LADWP Danny Ng / PG&E James Choi / SCG Implementer / 3P / Consultant / Other Antonio Aliberti / Willdan Emily Lemei / NCPA Glen LaPalme / TRC James Hanna / Energy Solutions Jeff Romberger / SBW Mohammad Dabbagh / NORESCO Nicholas Fette / Solaris Paul Kuck / Energy Solutions

Meeting Notes

I. Overview and Introductions

Presenter: Ayad Al-Shaikh

Materials: [4]

On Slide 7, eTRM Release and Documentation – a member suggested adding the new CPUC workflow tools on the figure.

II. 2023 Business Plan Overview

Presenter: Arlis Reynolds

Materials: [4]

John Zwick: Is there still a goal for the CalTF to assist with new measures being approved?

- Ayad Al-Shaikh: Yes, we will come up with a plan early next year.
- John Zwick: This is something that we are interested in.
- Arlis Reynolds: We created the new Business Plan Metric 4A to “develop expanded new measure ID strategy”, and you’ll see on Slide 12 that we have prioritized this activity for the first quarter of 2023.



Arlis Reynolds: Regarding the proposed TF meeting schedule, please 1) let us know of any major conflicts we should be aware of, and 2) let us know if you are able to host any TF meetings.

Ayad Al-Shaikh led a brainstorm for the new Metric 3C: Develop a Stakeholder Communication Plan and Versioning Rules for Measure Package Updates.

Christopher Rodgers: Can you clarify what versioning is?

- Ayad Al-Shaikh: Providing guidance on when we keep versioning and identifying best practices, versioning is how we distinguish different measure package updates in the eTRM.
- John Zwick: We should define what will cause these version changes, CPUCs rules are different than PAs rules, the details are important. It is a challenge but something that needs to be addressed. Review other industries to see what the best practices are.
- Armen Saiyan: Can this be included in the subscription feature? Maybe we use eTRM Stats, let me rephrase. Can we create these reports on eTRM Stats and integrate with the subscription to notify stakeholders to those reports.
- Ayad Al-Shaikh: As a base user, you can subscribe to a measure package so that you can be informed about measure package changes. There is good opportunity but can be made better.
- Lake Casco: I like the thought of using subscriptions, but there should also be a report, where you can see all changes and you are able to filter. This way you can actively keep up to date with measure packages. Sometimes there is no insight on what is changing until it is approved, it would be nice to know what is planned before it happens so programs can plan.
- Spencer Lipp: PG&E put together a spreadsheet with percent changes, it was useful, but it could've been more useful because we had to manipulate it to figure out what was changing, but we should take the next step.
- John Zwick: The next milestone is PY2026-PY2027, we need to update our budgets now that we have measure packages until PY2025 we will be looking for forecasting. From an implementer perspective you will be asked that question.
- Spencer Lipp: The spreadsheet was very high level, 9% change in a measure package, but not broken down by offerings, CZ, vintages, etc.
- Ayad Al-Shaikh: There is information out there we might need to make this more available and see what we can improve.
- Eduardo Reynoso: The CET gives you a better understanding the changes between permutations. This might be better for what you want to accomplish.
- Spencer Lipp: Savings was just an example but moving forward it will be TSB. This is something that implementers will want to understand these changes.



- John Zwick: Advice letter is an adjustment of what we filed for our business plan, essentially part of that forecasting is working with implementers so there will be new information there. This will also be important for Cal TF since once budgets are submitted it is going to be tough to updates these.

III. Brainstorming for Goal 8 – “5 Year Roadmap”

Presenter: Ayad Al-Shaikh

Materials: [5]

John Zwick: Impact evaluations and ex-post work should be included in the roadmap; they drive a lot of planning and execution. Other things to consider are what are some other things that will affect EE strategy, summer reliability programs, so this may impact measures that are needed for these types of initiatives that are not part of the EE world.

- Ayad Al-Shaikh: Do IOUs need to submit a summer reliability plan?
- John Zwick: Not sure, but strategically this is something that will come up in the future. Cal TF is funded through the IOUs, however, there might be other portfolios that will benefit from this tool, like low-income, maybe that needs to go into the roadmap. These are the kind of drivers that we should consider. There are also many efforts and emphasis on decarbonization.

Spencer Lipp: Within this frame [5 years], the majority of 3P programs, the initial contract will expire, and it's not clear what will happen after that. This might drive some of the measures and impacts and it may help to dive into what is really required while updates are being done.

- John Zwick: Bids are done by sector, and each solicitation has its own schedule. Each IOU does it differently.
- Spencer Lipp: If there is no programs offering the measures, then this might be a factor.

Martin Vu: What about how the connection between CalNext and CalTF measure priority transition looks like to align to the 5-year goals for both Deemed and Custom?

- Ayad Al-Shaikh: We would love to work with those groups, so that we can see how things integrate into the eTRM and into custom.
- John Zwick: Do you already have the connections and resources?
- Ayad Al-Shaikh: Steven Long, Abhijeet Pande, and Greg Barker are heavily involved. But there is more to do, do people have ideas of what the milestones should look like?
- John Zwick: The workplan to submit new measures, the screening process would be very important.
- Abhijeet Pande: Thanks Martin, I was going to ask the same. Additionally, there may be linkages to the Hybrid pathway as well as some of the metrics listed in the 'Other' category at the bottom of this slide. Should we read the “Other” in the way they are now?



- Ayad Al-Shaikh: They are just side by side, not an inclusive list and show in any specific order, just to spark ideas. Please let us know where in the process some of these will fit.
- Abhijeet Pande: Semi-deemed is one where the CalNEXT conversation can help. In previous documentation, EPIC and other efforts/ETs, maybe that should be part of this as well.

Stakeholders noted other items to consider including: multi-measure packages, whole building technical priority map (TPM), semi-deemed measure packages, EPIC and emerging measures.

John Zwick: Looking at the business plans and seeing what is in there would be a good thing to use to develop this workplan.

Martin Vu: What about hybrid IDSM measures that centers on EE but then has storage, renewables, and/or Demand Response Features. The Summer Reliability program allows the consideration of these other DSM approaches. But it is unclear on how to integrate that into the CalTF/eTRM deemed, custom or NMEC process because of the EE policy rules.

- Ayad Al-Shaikh: Some of those ideas are important to include because there might be preliminary work that is needed. Things like this are examples of things we should add.
- John Zwick: Policy and market always changes, maybe having something to analyze.

George Beeler: Since GHG is so important to state climate goals it should be included even if not required. What about societal costs like health issues, sea level rise costs, etc.?

Amy Reardon: The reporting team has a few meetings, so if there is reporting or business plans ideas, we can definitely include these since there is a standing spot for Cal TF.

- John Zwick: We will go ahead and take this as an action item.

Lake Casco: There are few GHG frameworks that we can look at and potentially use in the eTRM. A regional and time calculation for a measure would not be impossible, there is already load shapes in the eTRM so we would just need to add a few things to calculate the GHGs.

- Steven Long: Cal ISO data can be used too.
- John Zwick: Why do we need to track GHG and why do we need to track it in the eTRM and in the EE portfolio? Is there regulatory guidance? Who is asking for it, and why? What kind of reporting do we need, and what do we have. There are a lot of other companies that do GHG tracking.
- Roger Baker: It is a combination of things, the IRP process, the avoided cost calculator, power system calculator, utilities and CCAs want to be able to estimate the value of energy efficiency as it impacts carbon targets, will help IOUs with their planning process. This means the eTRM will need to align with the CPUC approach.
- John Zwick: Would the eTRM be the data source of record?



- Roger Baker: It would not be the data source of record, but we can take the data from the calculator and other factors, and we can get pretty close to what will show up in claims. It will get you pretty close to values you can use for IRP filling.
- John Zwick: Is this a better way to do what we are doing now?
- Roger Baker: In my opinion, yes.

Amy Reardon: Going back to NMEC guidance, there was a ruling in the summer, in the responses Recurve described the various benefits of tool for program claims and processing and reporting in the tool. The CPUC will be following up soon, but this group might be able to inform if the proposed flex value tool could close some of the gaps that we are currently seeing. Just wanted to put this in people's radars.

- John Zwick: Will the ruling be an evaluation of this tool and how it fits in to reporting savings?
- Amy Reardon: Yes, we can dig up the comments and put them on there. The Recurve Flex Value Tool is based on the CET code, they rewrote the CET code in ways that would be beneficial to NMEC. But if indeed the flex value code is doing a better job analyzing NMEC better than the deemed tool then it does seem like a reasonable to look at it.
 - o Amy Reardon: Response from Recurve on July 15, 2022 ALJ Ruling Seeking Comments on Third Party and Other Issues.
<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=496418330>
- John Zwick: The SME for SDG&E are not in the room right now; we would have to take that as a look up.
- Ayad Al-Shaikh: If we get it on the roadmap, we will have a bigger group working on it.

Steven Long: Having a report of savings, cost effectiveness, and other data would be good to have for everyone who uses eTRM. Before the data was poured into CEDARS there was a tool that would allow you to visually see the data and how savings/costs were impacted, that would be nice to implement into the eTRM, EE Stats.

- Amy Reardon: EE Stats will probably not come back but getting a dashboard would be nice to have that is similar to the EE Stats that you were describing. In the PCG group we are keeping a card for CEDARS development, and I would love for someone to bring that up.
- Steven Long: It would be nice to tie in the detail that was there before at the measure level. The need, more recently, is when looking at claims data and understanding how they relate to things. The data has been messy in the past and it is being cleaned up with the eTRM, but it is hard to understand without doing excel analysis where these measures are going statewide and if they are worth keeping.
- Amy Reardon: Using the measure detail ID, we can go into the permutations tables and make the link with the detail ID that is in the eTRM.



- Ayad Al-Shaikh: Even today, this is the eTRM Stats page that connects claims data to the measure packages. You can do a lot now, but we love to hear what else is missing and what other use cases can we help with.
- Spencer Lipp: The regional aspect and by program was very helpful, this is fantastic, but those extra things were very helpful.
- Amy Reardon: If you can think of a way for CEDARS to sync to this, it would be great.
- Ayad Al-Shaikh: We will pull all this information together and please keep providing comments moving forward.
- Jessie Wang: Regarding the data support, can you consider how to make eTRM a center resource, for example ISP or sanctions, having a library in the eTRM would be great.

IV. Custom Charette Follow up + Brainstorming for Goal 5 Custom

Presenter: Arlis Reynolds

Materials: [4]

Spencer Lipp: Is the disposition goal included in the CPUC Guidance [activity]?

- Arlis Reynolds: Yes, we will tackle it at a higher level. It wasn't clear that just "fixing" the Disposition Database would address primary concern, so we've centered the activity around addressing the root concern of improving the clarity and accessibility of regulatory guidance [for custom].
- Spencer Lipp: The statewide guidance document, all references may not be all CPUC policies, there could be a combination of those things to make sure that those guideline documents are up to date. Having things written in the guidance document that are not up-to-date, updating guidance document is tough.
- Arlis Reynolds: This came up in the previous disposition discussion: how do we determine that guidance is still applicable?

Christopher Rogers: Are we developing the measures or are these other goals?

- Arlis Reynolds: Yes, there are currently several groups working on different measures, including chillers and boilers, to develop standard savings methodologies to support those type of measures.
- Christopher Rogers: This seems like they are deemed measure packages.
- Arlis Reynolds: These could be but there could be certain aspects that make it custom.

Seven Long: Does there need to be an exploration of the policy when exploring hybrid measures? There are probably some policy restraints.



- Arlis Reynolds: We are not trying to change any policy with the measure-standardization efforts, we just want to tackle creating a consistent pathway, but this [hybrid measures] is a good addition to the roadmap.

Steven Long: Not sure if we want to break it out, but all the dispositions that are being added but not being correctly implemented. Does all that need to be reworked or improved. Not sure if the next one falls within the categories listed, should there be an effort to start going through and figure out what the SW nomenclature should be? It is difficult to draft measures from one PA to the other because of different methodologies.

- Arlis Reynolds: Yes, that is there, and we are planning to tackle this in the beginning of 2023.
- Spencer Lipp: Are the IOUs buying in on this?
- Arlis Reynolds: We have had discussions on this, and we agree on the goal to achieve a statewide consistent nomenclature, or consistent naming for custom offering IDs. What that nomenclature is will need some work and discussion.
- Ayad Al-Shaikh: For deemed, we had common nomenclature, so maybe there is something there already.

Steven Long: “Deemification” does make sense to do where there is opportunity.

Arlis Reynolds led a brainstorm for an activity within the new Metric 5A: Develop a proposal to improve approach to summarizing and providing clear CPUC guidance on custom projects.

John Zwick: Custom is like case law, each disposition affects guidance. Decisions can be made with others, might not apply to us, but now the guidance applies to everyone. To keep track of all the precedents is something we need to do, is there a better way of doing it? Ideally, we would have clear guidance if a disposition affects the guidance, then the guidance should change. The idea would be, what can Cal TF do to help us so that we do a better job of storing them and maybe create a digest and that digest can become inputs for the next piece of guidance. Standardization of these inputs can be very helpful too.

- Spencer Lipp: I used that database recently, it was doable, but it took longer than it should have. The issue is that there are dispositions from 2012, but guidance came from CPUC in 2014, so just ignore everything before. But someone might not know that guidance was release in 2014. The old disposition format was very helpful, the new format is not, there is less detail and granularity to make the guidance in the dispositions useful. Maybe having a running list of guidance from dispositions so that people have one place.
- Jessie Wang: The difficult part is that there is no timeframe.
- Spencer Lipp: E4939 was helpful in providing guidance on what the baseline should be, if you found it then stop, but there is nothing to tell you how to find it.



- John Zwick: It would be more efficient if the guidance was more clear and easier to find.
- Steven Long: Another area of frustration, some of the regulatory information, the problem is that some of this is buried in decisions that are not very practical for people to find. Communications between the PAs and CPUC that implementers cannot find, but I cannot use so there is this whole transparency issue. I am not talking about private data but other information that could be useful.
- Arlis Reynolds: Is that communication between CPUC, PAs, is that ongoing information or guidance?
- Steven Long: This is specific guidance that if you wanted to do XYZ then you should follow this process.
- Spencer Lipp: Are you referring to early opinion?
- Steven Long: Not early opinion, but other guidance, like NTG.
- John Zwick: There is a lot of guidance that we cannot track, but we need to do a better job at finding out what the requirements are, the requirements need to be clear so that people do not go into rabbit holes. No one has the time and archive in their brain to remember all this stuff.
- Steven Long: It should be visible to where you can at least know where to look, but it is tough to keep track. There is too much judgement, the more people that review the project there will be different judgement.
- John Zwick: I don't think the dispositions would be the best way to do things, maybe putting this on a newsletter.
- Martin Vu: Part of the process is for stakeholder to meet in the beginning, is there EM&V protocol so that CPUC staff can sit on the table and provide guidance from the beginning then we can avoid some heartache with interpretations of guidance.
- John Zwick: In practice we have had difficulty having ex-post teams work on ex-ante things. For example, we have a POE survey, and we want the post teams to work on so that they have what they are looking for, but we have trouble doing that. There is this view of the ex-post team needing to be independent.
- Amy Reardon: There is not a true firewall, if you think the process would need to be improved then we can go ahead and bring them to the table.
- Spencer Lipp: We should be working together to ex-post so that we are aligned with what they are expecting.
- Martin Vu: If we address things up front, understanding that things do change overtime, the in terms of the guidance that would be great.
- Charles Ehrlich: SBW for the ex-post evaluation of custom projects, developed a worksheet for projects that were developed for that year. It is something to consider but not final, move us on the right direction.
- Spencer Lipp: We will have to break it down into bite size pieces.
- John Zwick: Somethings can be grouped, if we can do things in parallel with relevant work then that would be beneficial. A lot of it depends on bandwidth.



- Glenn LaPalme: In parallel we can track what fields we need to track and be consistent in dispositions.

V. Brainstorming for Goal 6 – Key Emerging Technical and Technical Policy Issues

Presenter: Arlis Reynolds and Ayad Al-Shaikh

Materials: [1], [2], [3], and [4]

Arlis Reynolds presented the ranking of seven proposed White Paper topics, based on survey input collected through December 12, 2022. The top three ranked topics are:

- Topic 1: Industry Standard Practice (ISP) Process for Custom Measures/Projects
- Topic 3: Load Shape Development and Use
- Topic 5: GHG Calculation Approach and Data Sources with Recommendations for eTRM

Survey responses also included suggestions for two additional topics:

- Hybrid Measure (Semi-Deemed/Semi-Custom Development)
- Custom Review Process

The Survey [1] is still available online, and Cal TF Staff encourage TF members and stakeholders to provide input via the survey link.

Gary Fernstrom: There is a lot of cross-over between these topics, a lot of the same needs and benefits.

- Arlis Reynolds: We will keep this in mind as we develop and discuss the topics.

Stakeholders split into small groups to complete the White Paper Brainstorm Template [3] for the three top-ranked topics; then returned to report out on their discussions to the whole group.

VI. Recap and Closing

Presenter: Ayad Al-Shaikh

Materials: [4]