Agenda and Meeting Notes

California Technical Forum (Cal TF) Meeting

"Custom Charette"

October 27, 2022

Location: LACI, Los Angeles

10:00 a.m. – 5:00 p.m.

Agenda adjusted to reflect actual meeting discussions

Time (approx.)	Agenda Item	Discussion Leader(s)
10:20 – 11:30 am	**Welcome, Agenda, Goals**	Annette Beitel
11:30 – 1:00 pm	**Background and Improvement Concepts**	Arlis Reynolds
1:00 – 2:00 pm	**Lunch**	n/a
2:15 – 3:30 pm	**Small Group Brainstorm** **ACT:** • Feedback and Comments	Cal TF Staff Facilitate
3:30 – 4:30 pm	**Small Group Reports & Large Group Discussion** **ACT:** • Feedback and Comments	Cal TF Staff Facilitate
Did not cover this topic	~~**Summarize Stakeholder Input Scope and Sequence**~~	~~Annette Beitel & Arlis Reynolds~~
Did not cover this topic	~~**Cal TF Updates (time permitting)**~~ ~~*Did not cover this topic*~~	~~Ayad Al-Shaikh~~
4:30 – 5:00 pm	**Wrap Up and Next Steps**	Annette Beitel

Meeting Materials

- **Meeting Decks**
  - [1] Agenda and PPT
  - [2] Custom Charette Small Group Discussion Template

Meeting Attendees

	In-Person	***Via Online/Telephone***
Cal TF Staff	Annette Beitel Arlis Reynolds Ayad Al-Shaikh Chau Nguyen Tomas Torres-Garcia	Randy Kwok
Cal TF Members	Alfredo Gutierrez Armen Saiyan Briana Rogers Eric Noller Kristin Heinemeier Lake Casco Steven Long Martin Vu Myrna Dayan Roger Baker Tom Eckhart Yeshpal Gupta	Adan Rosillo Andrew Parker Arash Kialashaki Charles Ehrlich Denis Livchak George Beeler Greg Barker Mike Casey Richard Ma Vrushali Mendon
Non-Cal TF Members	CPUC Amy Reardon / CPUC IOU/POU Afshan Hasan / SCG Ajay Wadhera / SCE Antonio Aliberti / Willdan Babak Yazdanpanah / LADWP Dallas Rocha / LADWP Jared Brown / LADWP Jorge Ibarra / LADWP Jorge Centeno / LADWP Luke Sun / LADWP Melanie Kwong / LADWP Sean Lim / LADWP Will Garcia / SCG Implementer / 3P / Consultant / Other Glen LaPalme / TRC	IOU/POU Danny Ng / PG&E Henry Liu / PG&E Jessie Wang / SDG&E John Zwick / SDG&E Implementer / 3P / Consultant / Other James Hanna / Energy Solutions Jeff Romberger / SBW Jeff Sage-Lauck / SBW Jennifer Scheuerell / Sound-Data Kerri-Ann Richard / DNV Mohammad Dabbagh / NORESCO Paul Kuck / Energy Solutions Saurabh Shekhadar / ICF

Meeting Notes

I. Welcome, Agenda, Goals

Presenter: Annette Beitel
Materials: Agenda and PPT

Annette Beitel shared a brief history of the Cal TF and previous Cal TF discussions regarding custom measures and programs. Cal TF staff, TF members, and other meeting attendees introduced themselves.

II. Background and Improvement Concepts

Presenter: Arlis Reynolds
Materials: Agenda and PPT

Arlis summarized past stakeholder work and efforts to study and streamline custom program processes and presented summaries of findings from past studies and analyses, including the 2022 Due Diligence Review process evaluation and ESPI scoring. Discussion ensued:

Annette Beitel: It sounds like Influence, ISP baseline, and NTG are the main issues.

- Yeshpal Gupta: [ISP] Guidance does not provide questions to ask, so there are still holes there. Who does the [ISP] study impacts how good it is. One entity should do the study, have a comment period, then it is available for 5 years, like what is done with lighting.

Ajay Wadhera: Can we break up the data where we can see the transition to a new [EAR] consultant, is it policy or the savings? We would want to understand the source of the problems, has the policy helped? What is the cross-relationship?

- [recommendation to view the EPSI scoring over time.]
- Martin Vu: Interpretation and execution will usually deviate from guidance. Assumptions in the beginning evolve.
- Glen LaPalme: Guidance documents sometimes stop projects. Should be guidance, not a rulebook. More policy created more rules, although it is intended to help, but creating more rules could be pitfalls for implementers.

Steven Long: ISP is a cross-cutting issue, there needs to be a process so that everything is done the right way, and the result is accepted.

- Armen Saiyan: Whatever is out there and if it can be documented then that should be the baseline.
- Ajay Wadhera: We consider “what is there” to be the existing baseline. If you move to AR (Accelerated Replacement), influence is another policy that you

need to meet. For the 2nd baseline you will need to do an ISP Study. We need to be careful with baselines.

- Yeshpal Gupta: the biggest issue is influence. We still have all the issues from the past, we go through all these committees and that just creates more documentation.
  - Influence = makes it zero or 1 (huge potential impact on the savings)
  - ISP = 2nd baseline is zero
  - Savings = change by a percentage then ok

Annette Beitel: Think about what the biggest issues are and think of what you would do to fix it.

- Glen LaPalme: Policy spillover.

John Zwick (chat): ESPI addresses Ex Ante issues only and not Ex Post. We are definitely seeing NTG issues in impact evaluations as evidenced by the drop in custom default NTG in the latest DEER draft. I agree that the gross savings issues are a good place to work on (i.e., standardized tools, etc.)

John Zwick: The NTG issues are showing up in impact evaluations, the DEER resolution is decreasing NTGs, 16% drop in savings. SDG&E looks at dispositions, develops themes, develops corrective actions. The data is not the whole picture, but it is a good picture.

- Annette Beitel: Can it lead to corrective actions for statewide?
- John Zwick: The data is a gold mine.
- Armen Saiyan: Why do programs spin their wheels over this? Why not leave it up to evaluations? This is a policy issue, and we do things a bit differently. A lot of money and time is spent project by project, very time consuming.
- Martin Vu: Implementer programs start to collapse if NTG changes through midstream. That is why it is so important.
- Steven Long: Sometimes you cannot get a project done because of the NTG hurdle.
- Ajay Wadhera: There is a disconnect in the Ex-Post and Ex Ante. How is influence evaluated? Why is there a difference between Ex Post and Ex Ante?
- Yeshpal Gupta: Sometimes you pay incentives, but you claim zero savings.
- Jessie Wang (chat): A lot of time, Ex-post review team using the rules/standards at the review time to judge the projects done 2-3 years ago. Thus, savings got reduced a lot.
- [Comparison to manufacturing, where the specs are agreed to before production, and not determined during or after production.]

Charles Ehrlich (chat): A statement about the 9% documentation issue. Other types of issues are caused by poor documentation. The poor documentation is due to misunderstanding the policy intent or not understanding the appropriate way to document a required bit of information. It will appear to be an influence issue if the project team did not adequately document the evidence of influence. Considering this, 9% seems low.

- Mike Casey (chat): Agree

Slide 19 - Arlis Reynolds presented a list of “Custom Areas” for further discussion and prioritization regarding important work areas for Cal TF.

1. Standardizing Custom Measures & 2. Standardizing/Improving Custom Tools

- Armen Saiyan: Can we change “1. Standardizing Custom Measures” to “Standardizing Custom Methods”?
- Steven Long: Number 1 (Standardizing Custom Measures) and 2 (Standardizing and Improving Custom Tools) are very similar.
- Ajay Wadhera: Can we draw a flow of what the highest priorities are and go down the list?
  - Annette Beitel: We will have this conversation in the afternoon.
- Charles Ehrlich (chat): #1 is a prerequisite for most of the other work.
  - John Zwick (chat): Charles yes and no. Each IOU has its own process for custom, similar but not standardized. I think it is possible to standardize portions of the process (tools, reporting, etc,). #1 in some sense is the overarching big elephant while some of the others could be considered a bite of the elephant. To maintain focus and achieve some quick wins, I might suggest that we focus on some smaller scopes where we can male some quicker gains.
  - Charles Ehrlich (chat): Good points, John.

3. Standardizing Custom Reporting Codes

- Armen Saiyan: Important subject but the solution is simple; the eTRM already has this model.
- Myrna Dayan: Cannot look between PAs [because the measures have different names and codes, making comparisons hard].
- Ajay Wadhera: It is important to look, but even more important would be what are the conditions for the code? Do you know how you derived the MAT, NTG, and requirements? The requirements are very crucial.
- Antonio Aliberti: It depends on the utility; every entity has a different solution code. SW needs to have the same solution code.
- Ajay Wadhera: We should keep the naming convention the same with the eTRM, offering ID/detail ID. Standardizing to use the eTRM.

- Armen Saiyan: What LADWP uses aligns with the conventions in the eTRM, with “d” for deemed and “c” for custom.

Continued Discussion:

- Antonio Aliberti: Why can I not use ISP studies from other jurisdictions?
- Martin Vu: In CA we do not do a good job at taking anything from other jurisdictions.
- Afshan Hasan: Sometimes documentation is very open ended, which can cause a lot of conflicts.

4. Improving Custom Project Packages

- Martin Vu: Clarifying Regulatory Guidance will probably drive Improving Custom Measure Packages.
- Ajay Wadhera: What is the actual issue? The document or the content? What are we standardizing? A lot of the content is Standardizing Custom Measures, Standardizing and Improving Custom Tools, and Standardizing Custom Reporting Codes.
    - Arlis Reynolds: This topic is about packaging the content – ensuring the content is complete, well organized, easy to find, minimal redundant information, etc.
- Tom Eckhart: Is there a difference between 3P and IOU implementation?

Chat discussion about custom projects:

- Charles Ehrlich: Thank you, "What is the appropriate level of regulatory review." Yes.
- Mike Casey: Changes in reporting requirements seem to come so fast that by the time staff has incorporated one set of changes another may have come through. Even if the new change is unrelated, the entire package template needs to be revised, even for in-flight projects.
- Charles Ehrlich: #4 All of the above.

5. Clarifying Regulatory Guidance & 6. Improving the Disposition Database

- Annette Beitel: Is the disposition database the main source [of CPUC disposition guidance]?
- Steven Long: All the documents coming out of the working group.
- Armen Saiyan: Guidance should be embedded into the requirements that you have done.
- Annette Beitel: What is the main issue?
- Steven Long: Ambiguous when working out the details, does not work for everything, there are projects where you can do one or the other and has impacts on savings.

- Ajay Wadhera: Not clearly defined, custom hours of use, now we need to defer to the average DEER hours of use. Does it align with the actual energy savings?
- Afshan Hasan: Custom documentation is open to interpretation; implementer and reviewer may look at the same things in a different way.
- Ajay Wadhera: Are the dispositions clear, and what is the context?
- Steven Long: And is the disposition database up to date?
- Armen Saiyan: I think this is a great opportunity to overhaul the whole system.
- Yeshpal Gupta: Influence is important, tech or financial. Resolution E-5115 states that you can show either, you just need to show influence but in application there are no changes because you still need to show both.
    - Steven Long: Financial is a big driver.

- Martin Vu: Can we define who we are and include all important stakeholders? We need that upfront.
- Ajay Wadhera: We need the [CPUC] reviewers to buy into the methodology; need regulatory buy-in.
    - Annette Beitel: Commission has said to not bring them anything as an idea. Show them what we come up with. Influence is not scientifically measurable.
- Ajay Wadhera: Specific project comments should be separate from global comments.
- Annette Beitel: How many dispositions are there?
    - Arlis Reynolds: Hundreds.
    - Steven Long: Sometimes not all are loaded, looked through and sometimes you cannot fund the right one.

- Annette Beitel: What is the short-term fix to make the disposition database useful?
    - Myrna Dayan: If you tie it from the offering ID would it be easier to find?
    - Charles Ehrlich: We need a single comprehensive source, that should be updated on a regular schedule.
    - Lake Casco: Consistency on the timeline that guidance is applicable.
    - Ajay Wadhera: MLC guidance is a good example. Timing is an issue.
    - Afshan Hasan: Are early opinion discussions not the same thing?
    - Ajay Wadhera: Are all early opinion discussions helpful?
    - Afshan Hasan: Not always.

- Steven Long: Clarifying Regulatory Guidance and Improving the Disposition Database are linked. If you address Clarifying Regulatory Guidance, you will not need to deal with Improving the Disposition Database.

- Glenn LaPalme: We should only cover the main issues and let the rest be dealt with argument and debate. Now it is guilty until proven innocent.
- Ajay Wadhera: For the same project that was reviewed we have had different opinions another very similar project. We need to be consistent. Are we deriving a lot based on opinion or reality?
- [Solutions discussed include a way to challenge subjective policies; a Wiki for information; and a committee/jury similar to the T24 committee]

Chat discussion about regulatory review:

- Charles Ehrlich: #5 Yes
- Mike Casey: #5 yes
- George Beeler: #5 yes!
- Jessie Wang: both 4&5
- Danny Ng: #5 there are too many CPUC decisions and resolutions out there. Some supercede others, none are officially "retired" so some aspects of a decision/resolution is deemed to be still applicable and other is obsolete. it's really hard to keep track of what the relevant guidances are.
- Jessie Wang: Agree, it'd be a long way. Maybe CalTF can help sorting these paperwork
- Danny Ng: we still get references to decisions from 2007
- Charles Ehrlich: We need single, comprehensive source for all relevant policy guidance that is updated on a predictable schedule.
- Jessie Wang: We don't have the manpower doing this:(
- Zwick, John R: The idea is that CalTF might.
- Ayad Al-Shaikh: FYI - discussion in the room now around this point of creating a comprehensive guidance document
- Jessie Wang: agree, CalTF can set up a common library for all IOUs
- Charles Ehrlich: Do I find the disposition database useful? … Not me.
- Danny Ng: creating a disposition database is a good start, but I think the end goal should be to take each disposition comment, create a lessons learned, and then implement process improvements.
- Zwick, John R: I digest of "active dispositions" that haven’t yet been reflected in guidance documents would help.
    - Jessie Wang: agree
    - [need to clarify what is current; what is expired; what is new precedent]
- Charles Ehrlich: It's important to keep the "hierarchy" of the various sources of guidance. A disposition is easy to issue and easy to amend. A resolution takes a long time to issue and requires commissioners to approve.
- Charles Ehrlich: An early opinion can be finalized in months rather than resolutions that take a year or more.

7/8/9. eTRM for Custom Measures, eTRM for Custom Projects, and Integrated Custom Data Flow

- Martin Vu: We tried to "deemify" custom measures for VFDs and we were able to see a lot of key variables in the details that you can create boundaries of what is acceptable, is that the intent?
    - Arlis Reynolds: That would be a capability we can create and a benefit from capturing and organizing data in the eTRM.

Other Topics

- Annette Beitel: Are there other topics?
    - Steven Long: Costs and cost effectiveness.
    - Glenn LaPalme: Influence.
- Annette Beitel: Are there tools that are open source?
    - Alfredo Gutierrez: The MLC is very user friendly.
    - Yeshpal Gupta: SPC calculator, these tools used to exist.
    - Steven Long: A lot of these tools are not approved.

III. Small Group Brainstorm

Presenter: Cal TF Staff Facilitate
Materials: Custom Charette Small Group Discussion Template

Arlis introduced the Discussion Template and guidelines for the small group breakouts. In-person and online groups formed for the following topics:

- 1 – Standardizing Custom Methods (includes custom measures, methods, and tools)
- 2 – ISP / Baseline Studies
- 3 – Standardizing SW Custom Offering IDs
- 4 – Improving Custom Project Packages
- 5 – Clarifying Regulatory Guidance and Improving the Disposition Database

Small groups split up and worked through the discussion template on two topics of their choice.

IV. Small Group Reports & Large Group Discussion

Presenter: Cal TF Staff Facilitate
Materials: n/a

Groups reported out on their discussions and turned their notes into Cal TF Staff. (Cal TF Staff are compiling the notes to help develop define, scope, and sequence custom activities.)

Regulatory / Disposition Database (Will Garcia, Afshan Hasan, Roger Baker)

- Challenges:
  - Open to interpretation
  - Feels like a moving target
  - Lacks clarity on expectations
- What needs to be provided to make successful
  - Guidance on what is needed so that there is no interpretation
  - Clarity on what to select and not leave it up to interpretation (ex. MAT/EUL)
  - Eliminate the disposition database; it is hard to figure out what applies
- Value
  - Cleaner projects will lead to CPUC review reduction
  - If savings/incentives are more attainable, customers view on programs will be positive
- Cost
  - Challenges: Buy-in from regulator
  - Effort into creating documents and getting them approved
- Process
  - Input from IOUs/Implementers
  - Develop proposal for CPUC, need to get stakeholders on the same page
  - Update in a timely manner, when/by whom/what to include
- Success
  - Creation of document
  - Short term: see projects developed more
  - Long term: ESPI scores increase
- Immediate
  - Clean up other issues
- Previous efforts
  - Prescriptive measure document – PG&E (no CPUC buy in)
- Questions
  - Where to get guidance?

Regulatory Guidance Group (Annette Beitel, Martin Vu, Ajay Wadhera, + others)

- Challenges
  - Clarity on how to apply guidance
  - Baseline; how to determine baseline, how does ISP impact
  - Tech; just calculate, project to program level issues
- Goal
  - Understand requirements upfront
  - Stakeholders get together early
  - Define what to look for
  - Earlier, baseline was code or use existing system (15 years ago)

- Regulatory guidance
    - Issues; what and when
    - Streamline the process
    - Comes two years after the project
    - Guidance not easily locatable, ambiguity
    - Not possible to define everything
        - There will still be ambiguity, what to do?
        - Now you are "guilty until proven innocent"
            - This attitude may be due to ESPI; to prevent shareholder incentive issues – this should no longer be a driver
            - If project developer knows best:
                - Developer chooses based on X
                - Evaluator must clearly show not reasonable, burden of proof shifts
    - Second guessing in the process
        - Regulatory input come in at lot of points in the process
        - Most upfront:
            - Cal TF, Ex Ante Consultant
            - Do not revisit two years later
- ISP
    - Challenges
        - Every project needs an ISP
        - Study can be discredited later
        - Cost is too much and could be rejected
        - Customer standard practice: Would you punish a customer for being on the edge?
        - Code, ISP up front, is measure still installed and operating (evaluation)
    - What needs to be provided to make successful
        - Get rid of ISP
        - If trying to get savings, is it worth it?
        - Old approach worked well
    - Tom Eckhart: How do you benchmark a model? If a new application, what are you basing savings on?
        - Annette Beitel: Focus on savings not the barrier
    - Success
        - Achieve greater savings while reducing costs/time

<u>Standardizing Custom Methods Group (Armen Saiyen, Lake Casco, Sean Lim, Kristin H)</u>

- Challenges
    - Too many options, IPMVP (modeling, M&V), no consistency, what measures can be standardized, not everything can fit in the box.
- Solutions
    - NY TRM: Modeling method has been standardized
    - PNNL: What should be standardized, included critical/sensitive items in documentation

  - Accuracy with highest risk
  - Measuring and modeling may come together
  - Documentation of calculation tools, not a black box
- Value
  - Streamline
  - Automate, simple solutions
  - New types of measures to create
  - Transparent
  - Focus on what is important
- Cost
  - Developing tools; volunteer to create
- Process
  - Get the right stakeholders together, brainstorm, prioritize, comprehensive
- Success
  - More projects being completed
  - Less conflicts, less uncertainty
  - 3P could apply statewide
- Stakeholders
  - All
- Priority
  - Yesterday
- Previous efforts
  - NREL
  - PNNL
  - NY TRM
- Existing efforts
  - MLC
  - Other custom working groups

Standardizing Custom Methods / Tools Group (Charles Ehrlich, Mike Casey, Arlis Reynolds, + others)

- Challenge
  - Multiple tools
  - Standardization around baseline
  - Tools become outdated (necessary cost to keep updated)
    - Title 24, inputs, weather data.
- Objective
  - Different inputs for different applications
  - Access eTRM data
- Value
  - Less confusion
  - Tools in public domain statewide
- Cost
  - Maintenance of SW tools
  - Five utilities developing their own tools; cost savings when centralizing work
  - Tools

        - Ownership of tools?
        - CPUC wanted everything open
    - Don't have to use tool
- Success
    - Acceptable to all stakeholders
    - Increased confidence in savings results
- Process
    - How to start
    - Where used?
        - Market study: what would be helpful?
        - Data mine on frequency of measures
        - Assessment of existing tools
        - Have not been approved, sources of limitations, issues
    - Look at existing deemed measures; are there gaps that can be filled
    - CPUC projects are open source, grow the industry

Questions/Discussion:

- Ajay Wadhera: Industry uses tools in assessments, there are industry standard tools. Where would the tools be hosted? Migrated tool to CEDARS, host it there. Not in WPA-CA.
- Myrna Dayan: What happens where the tool changes when going through approval process? Some guidance on how to deal with this (based upon start date) and based on when it would apply.

<u>ISP/Baseline Group (Glenn LaPalme, Eric Noller, Antonio Aliberti, Myrna Dyan)</u>

- Challenges
    - Too burdensome. Very subjective; think doing the right thing but may be off target
    - 15 years ago, baseline was, Title 24, mostly about savings
    - Now: ISP, Title 24, custom standard practices
    - NE-AR need ISP:
        - Not follow ISP, now CSP
        - Trying to apply to everything.
    - Now barrier to implementation, used to remove barriers
    - Customers are punished for being ahead of the curve
- Cost
    - Just apply to code. If not code, focus on customers investment decision. What is the customer using to sell his project?
    - Investment option is related to AR. May need to look at like-for-like vs higher efficient
    - Look at economic choices. Trying to sell high efficiency
    - If not code:
        - Use existing, keep existing going, replace with equally bad, repair indefinitely
        - Standard option from the market
- Success
    - Higher savings

Additional Notes from the Chat:

- Mike Casey (chat): ISP can change
- Mike Casey (chat): Calculation methods need to be transparent to enable review.
- Danny Ng (chat): At the end of the day, no matter the MAT, what we are after is the counterfactual explanation of "what would the customer have done outside of the Utility Program's actions/intervention"?
    - Danny Ng (chat): MAT = measure application type
    - Danny Ng (chat): This answers both the questions about Influence and Baseline.
    - Danny Ng (chat): Things have been made overly complicated with all the MAT definitions and rulesets specific to each

Cal TF staff collected notes from all groups.

V. Wrap Up and Next Steps

Presenter: Annette Beitel
Materials: n/a

Annette Beitel: Everything is important, need to explore applications of the eTRM or CEDARS/CET.

- Workplan: Document existing ideas to flush out.
- Key barriers: Different model, different mindsets, a lot has changed
- We can structure but will need Cal TF member to provide ideas

We will discuss the eTRM for Custom Measures, Projects, and Solutions at a future TF meeting; and Cal TF Staff will use the discussion started today to begin drafting a custom roadmap (for Custom Subcommittee input and TF review) to guide and prioritize Cal TF efforts related to Custom.