



**California Technical Forum (Cal TF)
Policy Advisory Committee (PAC) Meeting
Thursday, October 16, 2014
Los Angeles Department of Water and Power (LADWP)**

I. Participants

In Person:

Annette Beitel, Cal TF staff
Alejandra Mejia, Cal TF staff
Jenny Roecks, Cal TF staff

PAC Members

Bryan Cope, Southern California Public Power Authority (SCPPA)
Jan Berman, Pacific Gas & Electric (PG&E)
Peter Miller, Natural Resources Defense Council (NRDC)
Margie Gardner, Energy Efficiency Industry Council (Efficiency Council)
Nancy Jenkins, Southern California Edison (SCE)
Beckie Menten, Marin Clean Energy (MCE)
Howard Choy, County of Los Angeles, (LA)
David Jacot, Los Angeles Department of Water and Power (LADWP)
Dan Rendler, Southern California Gas (SCG)

Visiting TF Member

Armen Saiyan, LADWP

On the Phone:

PAC Members

Lisa Davidson, San Diego Gas & Electric (SDG&E)
Bob Emmert, California Independent System Operator (CAISO)
Jonathan Changus, Northern California Power Agency (NCPA)
Don Gilligan, National Association of Energy Service Companies (NAESCO)

II. Key Action Items/Proposed Changes

- ACT: Utilities and POU's to discuss 2015 Cal TF funding level, and respective IOU/POU contributions. The level of funding will need to be informed by the 2015 Work Plan approved by the PAC in the December PAC meeting.
- ACT: Cal TF staff will incorporate review of POU TRM into 2015 Work Plan.



- ACT: Cal TF staff to work with Bryan Cope and team to refine POU TRM review implementation plan for 2015 Work Plan.
- ACT: Cal TF staff will refine 2015 Work Plan that incorporates PAC-identified topics through consultation with interested PAC members for review and approval at the December PAC meeting. PAC-identified topics for the 2015 Cal TF Work Plan include:
 - Cal TF review of POU TRM
 - Develop policy on appropriate baseline
 - Review how and when on-site meters can be used in EM&V
 - Determining program load shapes
 - Defining Industry Standard Practice (ISP) and how to determine for various industries/measures
 - Estimating the effects of behavioral measures

III. Opening

Annette Beitel—Thank you all for making the trip down, or in some cases up the street. Thanks you very much to David Jacot and LADWP for hosting us this time. It is great to be able to see so many of the southern California PAC members in the room in person.

Just one note before we get started: Bryan Cope has a 2015 Work Plan proposal he would like to make on behalf of many of the POUs, but he has to leave at 2:00 to catch a flight. So, to accommodate his schedule, we will abbreviate the 2014 Work Plan briefing to also fit the 2015 Work Plan discussion before 2:00.

III. 2014 Work Plan

Annette Beitel—2014 Work Plan PowerPoint presentation.

Margie Gardner, Efficiency Council—I would just like to say that I am really happy with what has already been achieved in 2014. The website is beautiful and accessible and I've received great feedback about it. It is also fantastic to already have workpapers completed and reviewed in such a short time.

My question to the group is: What have you heard from regulators and other outside actors about the Cal TF?

David Jacot, LADWP—My first reaction is that it takes a while. I would say that it is too soon to judge any CPUC reaction at this point.



Beckie Menten, MCE—I think low awareness of Cal TF is still somewhat of a problem, so more visibility would help.

I also wonder how this will interact with the Rolling Portfolio stakeholder group.

Peter Miller, NRDC—Alejandra and I have both been staying informed of the work being done, but I would say that right now the goal is to be aware how the Cal TF would interact with the final process but not be overly prescriptive in any fillings.

Nancy Jenkins, SCE—I think Margie’s question is the million-dollar question because I did hear from Jaclyn Marks at one point that there is a lot of information coming out of the TF that her team may not be able to handle.

Margie Gardner, Efficiency Council—Has Jaclyn’s ex ante team been participating in the TF’s work?

Annette Beitel—Yes, we have been keeping them abreast, and to use this question to segue into the 2015 Work Plan, we did talk to them about what they think about the process and what they would like to see next year. Jaclyn agreed to allow the expansion of the scope into two important areas: Existing outdated measures and crosscutting technical/policy issues.

The other thing that is very telling is that in conversations the rhetoric has stopped being about conflict. The level of trust has definitely increased.

Dan Rendler, SCG—However, we won’t really know for sure until we get formal decisions from them.

Annette Beitel—That is absolutely true and it is something we need to be very mindful of.

IV. 2015 Work Plan

Annette Beitel—2015 Work Plan PowerPoint presentation.

However, what this presentation does not contemplate is the POUs’ new proposal. I will now give the floor to Bryan so he can tell you about that concept.

Bryan Cope, SCPPA—As I am sure you are well aware of, the POUs have developed their own TRM. We did this because we needed to develop a tool that was easy for all of our Program Administrators to use. What we want to propose



to this group is that the Technical Forum spend some of their time next year reviewing our TRM.

What the state really needs is a truly statewide TRM, and this would be a great first step in this direction.

Peter Miller, NRDC—Could you say a little more about the details of the proposal? For instance, what parts of the TRM would you like the TF to review?

Bryan Cope, SCPPA—I say that we are open to review of any technical components of our TRM.

David Jacot, LADWP—I think the best thing that the POU TRM brings to the table is a transparent, centralized, organized structure. Keeping that structure as a starting point for reviewing the sources—DEER, workpapers, etc—seems like the best approach to me.

Jonathan Changus, NCPA—I would echo David’s comments about the structure. Our chief goal when we first started was a centralized transparent base.

We are also interested in building in baseline flexibility as well as better ways to estimate savings from behavior programs.

Margie Gardner, Efficiency Council—So, let’s say we are successful and a year from now we have a fantastic statewide TRM, what happens next?

David Jacot, LADWP—I think we said it at the start of the discussion: we create a fantastic technical product and then it will be a policy call left to the decision makers.

Bryan Cope, SCPPA—And that is why it would be helpful to start reaching out and building support at the CEC. After all, that is where the ex ante system originated

Howard Choy, LA—And wouldn’t the third party in this space, CAISO, love statewide values?

Group—Of course.

Beckie Menten, MCE—How would this be any different from DEER?



Annette Beitel—Jenny’s presentation will expand on this later, but in short: This, like the current version of the POU TRM, would be a lot less complex, and it would produce easily reproducible point values.

Peter Miller, NRDC—A third difference is that because of the measure complexity, there are so many combinations and factors that it is virtually impossible to design a program because there are too many variables.

Jan Berman, PG&E—Yes, it is hard to work with the level of detail in ‘DEER’ during program design and program implementation in the real world. You end up having to compress values into averages anyway.

Jonathan Changus, NCPA—To follow up on that, the POU TRM was designed by the utilities for the utilities so it is more usable. It had program implementation in mind.

And I will also echo the benefits of transparency and the structure.

Annette Beitel—Since this idea was just brought up recently, we clearly need to do more work on refining an implementation plan. However, are there any initial reactions from the the PAC?

Nancy Jenkins, SCE—I think this is an interesting idea, but do we have the autonomy to make this change in scope? What would CPUC staff say?

Jan Berman, PG&E—Given that the Cal TF is an independent research organization, I think they have that liberty. The question is if it would make complications for the IOUs when they go through CPUC processes.

Nancy Jenkins, SCE—Would Energy Division see it that way?

Annette Beitel—Commission staff’s perspective on whether they can and should control the work of Cal TF has evolved over time. Initially, Commission staff wanted approval rights of the Cal TF Work Plan, and the Cal TF 2014 Work Plan only includes items that they approved. However, based on input from CPUC’s Law Department, Commission staff’s role in Cal TF is now more “hands off.” Nonetheless, Cal TF staff still seeks to maintain a close working relationship with staff, and to solicit as much input and feedback from staff as possible, given their time constraints. I have already mentioned to Jaclyn that we hope to get her input on the 2015 Business Plan prior to the December PAC meeting.



Lastly, at the very beginning of this process I told Jaclyn that we were interested in involving the POUs in order to create a truly statewide process. Her response to that was that that would be fine as long as the POUs were willing to pay their fair share.

David Jacot, LADWP—I think Jaclyn is absolutely right. We have been approached about the funding question, and I believe SMUD too. We are definitely amenable to the idea. What we haven't seen is a dollar amount, and we would at least need to know an order of magnitude.

Bryan Cope, SCPPA—We would like to see clear budgetary requirements by the December PAC meeting.

Jonathan Changus, NCPA—Budgetary question are very sensitive here at NCPA, we would need to know how much and whether it would replace other TRM expenditures.

Annette Beitel – The overall level of funding for 2015 will depend on the amount of work contained in the 2015 work plan approved by the PAC.

Utilities and POUs to discuss 2015 Cal TF funding level, and respective IOU/POU contributions. The level of funding will need to be informed by the 2015 Work Plan approved by the PAC in the December PAC meeting.

Annette Beitel—Does the group think Cal TF review of the POU TRM is a worthwhile idea to flesh out and start discussing CPUC staff?

Group—General agreement

- ACT: Cal TF staff will incorporate review of POU TRM into the draft 2015 Work Plan.

Bryan Cope, SCPPA—Well, thank you all for listening to our proposal. Before I leave for the airport I will say one more thing: a key question for the group to answer is how we will bring the idea to regulatory staff. Top down or bottom up?

Beckie Menten, MCE—I would recommend top down.

David Jacot, LADWP—Well, let's be clear that we as a group don't have to ask for authorization although the IOUs do need to make that strategic call.



Margie Gardner, Efficiency Council—Since it seems that Annette has a good relationship with Jaclyn and her staff, I would encourage her to let her know this is coming so she isn't blind-sided.

Dan Rendler, SCG—It is important if we are making the investment that the end result will be allowed for the IOUs to use. I would recommend approaching the CPUC both bottom up and top down.

Annette Beitel—So we have marching orders from the PAC to add Cal TF review of the TRM POU as a line item for 2015 and to work with Bryan Cope and the POUs to refine the implementation details.

Group—Agreement

- ACT: Cal TF staff to work with Bryan Cope and POUs to refine POU TRM review implementation plan for 2015 Work Plan.

Jan Berman, PG&E—I think a good idea would be to use DEER as a California-based benchmark to develop a research agenda for the project.

Annette Beitel—2015 Work Plan Overview PowerPoint Presentation.

Are there any other suggestions from the group?

Beckie Menten, MCE—Is there a desire to stay away from issues other groups are already working on like the water energy nexus?

Annette Beitel—I think that would probably not be the best use of our resources.

Dan Rendler, MCE—What about the custom process?

Jan Berman, PG&E—I think there are aspects of the custom process that also have overlap with the ex ante process. ISP and baselines for retro-commissioning for instance. Those would be appropriate for the Cal TF.

David Jacot, LADWP—I can see the technical questions like ISP being within scope, but not really the policy questions about the custom process.

Jonathan Changus, NCPA—I strongly agree with that.

Don Gilligan, NAESCO—I strongly support the baseline work



Jan Berman, PG&E—An interesting issue we may like to consider is the idea of using the meter to measure impact with analytics pre- and post- modeling. Although we may have covered it with retro-commissioning.

Margie Gardner, Efficiency Council—That also goes to the question of baseline flexibility.

Annette Beitel—Great. Any other ideas from the phone?

Don Gilligan, NAESCO—I would just like to reiterate the huge importance of the baseline work.

Bob Emmert, CAISO—CAISO wants to understand program load shapes.

Lisa Davidson, SDG&E—I agree with the baseline issue and would like to echo Dan’s comment that the interaction with the custom projects is valuable. I think the plan is looking good.

Peter Miller, NRDC—Just a warning not to get confused with NTG when we delve into baselines, because that is a common mistake that confuses ex ante and ex post.

Annette Beitel—We will connect individually with ‘idea sponsors’ to flesh out the Work Plan and bring a more formal proposal to the group in December. Please reach out if you would like to discuss any of these ideas further.

Group—Agreement.

- ACT: Cal TF staff will refine 2015 Work Plan for review and approval at the December PAC meeting.

V. Other Achievements

Jenny Roecks—DEER Requirements PowerPoint presentation.

Margie Gardner, Efficiency Council—Why are some of the CPUC Staff dispositions not publically available?

Jenny Roecks—It’s because they are from previous program cycles. They are available in a private system shared between Staff and the IOUs, but not accessible to the general public. However, even though they are from prior



program cycles, it is appropriate to still review them prior to developing the same or a similar measure

Margie Gardner, Efficiency Council—I have also heard that Staff only reviews a very small percentage of workpapers. Do the IOUs have the authority to go ahead and use deemed values even if the ED doesn't review the vast majority of them?

Nancy Jenkins, SCE—We are at risk if we choose to do so.

Jan Berman, PG&E—It is unclear the extent to which ex ante savings can be claimed if workpapers aren't approved.

Margie Gardner, Efficiency Council—Maybe we can take this discussion off line so I can better understand the current process.

Beckie Menten, MCE—In the course of this work, are you finding that the ex ante team is timely and responsive and if so has the information you are requesting?

Jenny Roecks—We have been very grateful to work closely with the ex ante team during this project. However, speaking more from my experience as an engineer, timeliness and availability of information doesn't generally describe the process. If the team does have a ready answer to a question that is posed, they will share it, but that is not often the case.

Beckie Menten, MCE—That has also been my experience.

Peter Miller, NRDC—I have sort of a 'meta' question. Have you explored with them what "DEER requirements" actually means? By that I mean whether a "requirement" is a rule, policy, expectation, or a methodology.

Jenny Roecks—It means using approved methodologies from previous measures to help guide current workpapers. However, as you can see from the clothes washer example, it is unclear how to best align with/approach DEER methodologies. It is hard to make those decisions until you get the details or explanations for each measure, and currently that necessitates interacting with Staff.

Margie Gardner, Efficiency Council—That seems more like DEER assumptions than requirements.



Beckie Menten, MCE—Furthermore, the actual methodologies/requirements are not well documents at all. This makes it very hard to write workpapers as new Program Administrators.

Annette Beitel—Furthermore, staff themselves often don't know the technical details since their consultants have developed those. The current system requires a lot of labor on both sides: the workpaper developers and the ex ante consultants. I believe that the NW RTF and TRM's cookbook approaches are much more efficient.

Howard Choy, LA—Edison's Preferred Resources RFOs seem to put the burden of evidence on the providers. I have heard that CPUC energy efficiency staff has working to get the procurement staff to make those requirements much more onerous.

Peter Miller, NRDC—I have heard that it would be safe to expect the burdensome energy efficiency-style process to show up at the procurement side of CPUC Staff for those RFOs. This will only be for EE, not for distributed solar.

Nancy Jenkins, SCE—There are already clauses for EM&V performance in the contracts.

Beckie Menten, MCE—I think this might be a big opportunity for Cal TF to be involved in the rolling portfolio.

Jan Berman, PG&E—The trouble with that is Cal TF staff's limited resources to cover that time-consuming process.

Peter Miller, NRDC—There are some instances where DEER does not align with Commission decisions. I will send Alejandra recent NRDC comments to this effect.

Jenny Roecks—Measure Complexity PowerPoint presentation.

Dan Rendler, SCG—When I think about complexity, I've never heard of it as something good. A system shouldn't be complex, it should be usable. That should be our goal here.

Jan Berman, PG&E—Let me ask about the 'audience' feedback from the TF. It presumes that there is a trade of between reduced complexity and accuracy. This furthers the idea that PAs don't care about ratepayer protection, when reality is that increased complexity does not affect accuracy nor ratepayer protection. In



fact, complexity creates more room for error. That in turn often reduces ratepayer protection.

Margie Gardner, Efficiency Council—Are there any advocates left for increased complexity?

Beckie Menten, MCE—I believe certain groups, like the building standards team at the CEC, still insist on complexity. Commissioner McAllister would be really helpful in facilitating this conversation with them.

Peter Miller, NRDC—There are some bright lines we can definitely draw. For instance, if a system should not be so complex that it can't be operationalized in program design.

Annette Beitel—Another bright line is statistical significance.

Beckie Menten, MCE—Also, it would be helpful to consider a portfolio-wide impact rule of thumb rather than just measure-level impact.

Howard Choy, LA—Has there been any discussion about quantifying the benefits of reduced complexity?

Annette Beitel—We have a memo on quantifying costs and benefits of the Cal TF relative to the current process, but it isn't quite ready for public comment.

Jan Berman, PG&E—And what are the next steps after this work on the complexity issue?

Annette Beitel—We are drafting a policy on measure complexity that the TF will review in the November TF meeting. The policy will help the TF consistently review what level of complexity is appropriate as they consider new measures. The "complexity policy" could also guide the POU TRM review.

Beckie Menten, MCE—I don't know if you can address the ex ante complexity issue without addressing the more holistic framework because the deemed database is so linked with the goals and potential.

Annette Beitel—Great point, thanks.

Jan Berman, PG&E—This may be a little step too far, but at one point it may be better to use meter data. In the quest for accuracy, is there some point where going by the measure is no longer better than by the building being targeted?



VI. Other Achievements, continued.

Alejandra Mejia—Website Tour

Dan Rendler, SCG—Are any sections of the website secure?

Alejandra Mejia—No, everything is publicly available except for materials that are confidential, such as TF member applications, which will not be posted.

Beckie Menten, MCE—Looks like this will be a real resource. As Program Administrators we lack a centralized location for measure information and this will help address that problem.

Alejandra Mejia—Measure Selection Process and Subcommittee Process PowerPoint Presentation

Alejandra Mejia—Draft Operations Manual PowerPoint Presentation

Peter Miller, NRDC—The Cal TF Operations Manual will also be helpful for others that want to emulate our model.

VII. Closing

Annette Beitel—Between now and the December meeting, we will put together a draft 2015 Work Plan that addresses the various suggestions made at this meeting. The document will be posted 10 days in advance of the December meeting. We hope you can find the time to read the document carefully since we will be asking you to approve it before the end of the year.

We will be in contact with those of you who have made suggestions during the meeting.

On that note, we are trying to strike the right balance between keeping you all informed and taking too much of your time with our communications. Please let us know if you feel you are not getting enough information and we can revise our communication strategy.

Margie Gardner, Efficiency Council—What will the role of the PAC be in 2015?



Annette Beitel—In the Operations Manual states what the PAC role is. Key PAC responsibilities include approving Work Plans, monitoring progress towards Work Plan goals..

Margie Gardner, Efficiency Council—Having read the roles in the Operations Manual, it seems that there is not a lot of monitoring required. We may not need to meet every quarter.

Annette Beitel—I think half a day once a quarter is still a good plan. I think there is still a knowledge gap between those doing the technical work and those more focused on policy, and these meetings are a good way of bridging that gap.

Margie Gardner, Efficiency Council—If this effort is more about educating us as policy people, that is a good thing.

Dan Rendler, SCG—There are governance issues as well.

Annette Beitel—That is exactly right.