CALIFORNIA
TECHNICAL FORUM

Cal TF Technical Position Paper (TPP) No. 7: Current Expected Roles/Responsibilities for High Quality, Technically Rigorous Workpaper Development; Recommended Enhancements

I.   Overview

This TPP describes current and proposed future roles/responsibilities and expectations for ensuring high-quality, technically rigorous workpapers. To prepare this draft TPP, Cal TF staff did the following:

1. Solicited Cal TF feedback on Cal TF role in QA/QC procedure in two Cal TF meetings,
2. Performed a review of the current internal utility measure development and approval processes, and
3. Reviewed recent Efficiency Savings and Performance Incentive (ESPI) Ex Ante Review Performance Reports prepared by the Commission's ex ante consultants from the past to identify additional areas for improvement.

Outlined below are the current roles and responsibilities for workpaper developers, Cal TF Staff and the Cal TF Members, followed by a list of recommended enhancements to ensure high quality, technically rigorous workpapers.

II.   Statement of Technical Forum Need

Establish a more explicit, consistent and formalized process for measure development and review for Cal TF-reviewed measures.

III.   Current Expectations and Proposed Enhancements

Current roles/responsibilities and expectations for WP development, WP review and WP quality are described below:

a. Current Expectations

Utilities/Workpaper Developer

- **Conducts Adequate "Due Diligence"**
    - o Due Diligence (California Information): Identifies and reviews existing relevant information from California, including related non-DEER workpapers and dispositions; DEER values, methods and assumptions;

prior applicable California Emerging Technology and CASE studies, and Evaluation, Measurement and Verification reports.

- o <u>Due Diligence</u> (Other Jurisdictions): Performs literature review to identify other potentially related studies from other jurisdictions. Reports on all material evaluated including information and studies considered but not used in the analysis.

- **Communicates Timeframe for Completion**: At beginning of process, provides Cal TF Staff with adequate notice to schedule at least two meetings for Cal TF feedback (draft and final workpaper), plus subcommittee meetings if needed. Communicates when workpaper must be completed for uploading into WPA for formal CPUC staff review.

- **Proposes "Reasonable Values" to Develop Savings Estimates** – Develops and proposes energy savings and other measure parameters that are neither too optimistic nor too conservative. Selects data/values that are reasonable, not biased in either an optimistic or conservative direction, leading to "reasonable expected values."

  - o Draft and final WP presented to Cal TF must include all sources (can be embedded in WP document itself) that WP developer uses to develop measure parameters.
  - o If measure parameters based on DEER values, original sources on which DEER values based do not need to be included.

- **Displays Integrity/Honest Reporting**

  - o Reports on all relevant information, even information/data/studies not used in analysis. If relevant information not used, provide explanation of why not.
  - o Forthcoming about describing weaknesses or shortcomings of data on which the Workpaper developer relies.

- **Applies Critical Thinking**

  - o Carefully reviews all studies, data, information, and identifies any weaknesses in studies or data that is used in WP development.
  - o Considers and reports on other data that could be cost-effectively collected to refine values that significantly impact savings or cost-effectiveness calculations.

- **Clearly and Systematically Responds to All Comments**

  - o Seeks to understand feedback from Cal TF, Cal TF Staff and EAR Team (staff and consultants).
  - o Documents all comments in a table, responds to all comments, then modifies Workpaper in response to comments, if needed.

- **Performs QA/QC** – Perform internal review to ensure calculation methods/inputs follow approved methods/inputs; no computation errors; documentation clear, complete and meets high "editorial" standards. Data entered into WPA in correct format.

California Technical Forum (Cal TF) Staff

- **Establish Consistent Standards**: Establish consistent standards for Cal TF review and affirmation of WP, and ensure they are known and available to all involved.
- **Process**: Manages Cal TF process, which includes providing pre-meeting review and input to Workpaper developers, working to schedule subcommittee and full meetings to meet timing needs for workpaper completion, recording and following up on Cal TF feedback to ensure WP Developer addresses appropriately prior to final workpaper.
- **Form**: Review documents to ensure they meet "form" standards.
- **Project Management**: Track and close out open issues.
- **Technical Review**: High level review for obvious technical errors or issues, but not responsible for primary technical review.

California Technical Forum (Cal TF) Members

- **Review:** Review associated material distributed prior to Cal TF meeting, which includes:
    - Reviewing embedded studies (results/study design) on which WP parameters based to ensure supports measure parameters.
    - Does not include reviewing original data unless study results appear flawed.
- **Participate:** During Cal TF meeting, participate in discussion and provide feedback to workpaper developer:
    - Includes providing information about other data/studies/methods that WP developer should consider in developing the measure values.
    - Advises on additional data collection strategies to refine measure parameters during implementation.
    - Renders opinions on best approaches to developing reasonable expected values.
    - Recommends additional methods, sources, or data of which they may be aware.
    - Recommends follow-up studies/data for improving initial forecast value(s).
- **Post Meeting Follow-Up:** Based on specific area of expertise and feedback provided at the Cal TF meeting, participate in subsequent discussions to address issues identified.

   b. **Proposed Enhancements**

Utilities/Workpaper Developer

- <u>Statewide Consistent WP Development and Approval Guidelines</u>: Formalized workpaper development and approval process, which includes at a minimum:
    - **Minimum WP Developer Qualifications**

- Establish minimum qualifications for WP developers.
  - o **Technical Review**
    - Manager review and sign-off on WP before it comes to Cal TF.
    - Internal, second peer review prior to Cal TF review.
    - If non-utility WP, must have utility sponsor prior well before WP finalized.
  - o **WPA Requirements**
    - Separate review and approval of data fields required for proper WPA submission
  - o **Second Internal Reviewer**: In addition to supervisor sign-off, additional peer reviewer reviews WP prior to sending to Cal TF. If external WP developer, assigned utility lead must thoroughly review.
  - o **Follow-Up**
    - Steps to ensure follow-through and response in a timely manner on ED feedback (could be via early abstract review, early WP feedback or formal Disposition).

- Third Party-Developed Workpapers
  - o Ensure that all Workpapers have a Program Administrator (PA) sponsor (which may include IOUs, POUs or RENs).
- Consistent Cal TF Engagement
  - o Once WP assigned for Cal TF review, engage Cal TF staff throughout process, which includes discussions with staff
  - o WP may not be pulled from Cal TF process once review started without Cal TF Staff input and consultation.
  - o Must clearly document Cal TF feedback/recommendations that WP developer declines to address, with rationale.

California Technical Forum (Cal TF) Staff

- Work with CPUC Staff to Develop Effective Early Consultation Process: Work with CPUC Staff to develop early consultation process that leads to minimal re-work and comments during formal ex ante review process.
- Work with CPUC Staff to Develop Approach to Getting Clear, Timely and *Final* Feedback on Technical/Process and Procedural Questions: Work with CPUC Staff to develop process for getting responses to questions that WP developers/others have so that ex ante values can be developed in timely and cost-efficient manner.
- Develop Workable Third Party Workpaper Development Process; Work with CPUC Staff and utilities to develop process/procedures to allow third parties (manufacturers/implementers) to propose and develop workpapers for approval**.**
- Guidelines/Standards: Continue to work with Program Administrators, Cal TF and CPUC Staff to identify, develop, seek Cal TF and CPUC Staff approval and implement guidelines and standards that will make the ex ante review process transparent, explicit and cost-efficient leading to rigorous and well-supported "reasonable expected values" for deemed measures.
- Once Available Utilizes Electronic TRM to Perform High Level QA/QC Checks

- o   Include logic in eTRM database to identify potential data anomalies.

California Technical Forum (Cal TF) Member Assigned Reviewer

- **Measure Review**: Provide thorough high-level review of the document. Cal TF member will be assigned based on their area of expertise. Cal TF member is NOT responsible for QA/QC, nor for identifying attempts to mislead or hide information. Not expected to do independent research for additional data, sources or methodologies.
- **Advises on Data/Approaches**: Considers range of methodologies, sources, and data presented by WP developer.
  - o   Renders opinions on best approaches.
  - o   Recommends additional methods, sources, or data of which they may be aware.
  - o   Recommends follow-up studies/data to improve initial forecast value(s).
- **Develops Technical Positions to Ensure Transparent/Consistent/Rigorous Treatment of Technical Issues**: Advises on overarching technical issues that should be handled in a consistent way to make sure the process and outcome are transparent, efficient and rigorous while avoiding "false precision."
- **Feedback and Questions Addressed:** As part of review, make sure questions are memorialized and addressed in initial and subsequent WP submissions.
- **Cal TF "Peer Review" Process Documentation**
  - o   Utilize the attached checklist that covers Cal TF reviewer obligations for peer review of WP.
  - o   As a condition of participating in Cal TF as member, each TF Member agrees to do a detailed review of up to 2 WP in their area of expertise each year.
  - o   This formal peer review will include a sign-off by the assigned Cal TF reviewer to document the activity.

VI. Conclusion

This process and standards for developing deemed measures must be improved to ensure transparent, cost-efficient, statewide-consistent high-quality workpapers for deemed measures. These guidelines identify reasonable current and future expectations that will yield outcomes that better meet Program Administrator and CPUC objectives for deemed measures.

Attachment A: Cal TF Peer Review Checklist: Workpaper Review Checklist for Sign-Off

After thoroughly reading the workpaper does it appear complete and comprehensive?

Do the assumptions seem reasonable?

Are there any technical questions that you don't feel were addressed (i.e. how modeled, equations, inputs, etc)?

Does the baseline consistent with code? Should industry standard practice be used instead?

Have you reviewed all sources used to develop measure parameters, and sources mentioned but determined not to be relevant?

- Did Workpaper draw correct conclusions from the cited sources?
- Were the excluded sources (determined not to be relevant) properly excluded?

Do sources cited appear to represent the best available data for this measure?

Are you aware of any additional sources of information that should be investigated to determine if any better reference data is available?

Is there anyone else you feel should review and offer feedback before it is presented to CPUC Staff?

When you have completed your review please acknowledge by signing and dating below. **_Please attach any notes or comments associated with your review._**

_____
Workpaper Reviewed (Description and Number/Revision)

_____
Cal TF Member Review (Name/Date)