Workpaper Development Guidelines

Where can I find CPUC workpaper/deemed measure requirements?

**All:** The IOUs are developing a Statewide Workpaper Rulebook that will be shared with 3rd parties no later than Q1 2019.

**SoCalGas:** After Q1 2019, SoCalGas will be posting the Statewide Workpaper Rulebook to its EE Solicitations web site. The Statewide Workpaper Rulebook will also be circulated to interested third-parties using the CAEECC distribution list. Please refer to the attached link for more information: https://www.socalgas.com/regulatory/efficiency/index.shtml.

**SCE:** SCE created and provided workpaper training and informational materials for third parties; they can be found at this link: https://www.pepma-ca.com/Public/PublicEvents.aspx?type=1#q1. SCE also posted the mentioned workpaper training content on www.sce.com/eesolicitation.

**PG&E:** The platforms training presentation and PG&E Resource Savings Rulebook is located here: https://www.pge.com/eesolicitations/

Will the deemed rulebook be available for third parties? Where can I find it?

**All:** Yes, IOUs will also develop a Statewide Workpaper Rulebook that will be shared with 3rd parties in Q1 2019.

Existing Workpapers

Where can I get a list of already approved deemed measures?

**All:** The CPUC approved workpapers and associated measures can be found at the following website: http://deeresources.net/workpapers.

Is there a public process for listing which workpapers/measures are under development?

**All:** To maintain the confidentiality of 3rd Parties during the RFP process, the workpapers/measures under development at the request of 3rd Parties will not be publicly listed, until the workpapers/measures are approved and posted to CPUC’s website, http://deeresources.net/workpapers.

The IOUs will continue to be responsible for maintaining existing WPs. These WPs are public and as such, the IOUs will provide 3rd parties access to a running list that are under revision. IOUs will post a monthly update to updates to existing WPs or IOU new workpapers on the CalTF website (http://www.caltf.org/statewide-measure-list/).
If my measure is similar to an existing measure, should I use the existing workpaper as a starting point?

Utilizing existing workpapers as a starting point should be evaluated on a case-by-case basis as deemed appropriate and necessary. Existing workpapers are publicly available and can be found available at the website: http://deeresources.net/workpapers.

It should be noted that 3Ps have the ability to fund their own WPs, and do not necessarily have to model existing WPs. 3P developed WPs must be submitted via an IOU for CPUC approval.

SoCalGas: Please contact the SoCalGas contact listed in PEPMA to ensure the qualification of any measure. Link: https://www.pepma-ca.com/public/ContactUs.aspx.

Workpapers and the Bid Process

When do the workpapers need to be developed/submitted relative to the program launch date?

All: The workpaper submittal and approval process has two different tracks, Phase 1 and Phase 2, depending on the type of submission.
For Phase 1 workpapers, effective on January 1st of Year N:

- **CPUC Submission** must be completed by December 31st of Year N-2. For example, a new workpaper proposed to be approved and effective on 1/1/2020 must be submitted by 12/31/2018.
For Phase 2 workpapers, effective between March and December of Year N:

- **CPUC Submission** must be completed on the first or third Mondays of the month, during the months of March through December of Year N.

Third parties should also keep in mind additional workpaper development and quality control processes needed before CPUC submission. The timing for these processes will vary depending on the workpaper.

Bid process varies by IOU.

**SCE:** Solicitation respondents must use approved WP and/or DEER values to justify energy efficiency savings in their proposal. In the RFA stage, SCE may consider abstracts with non-approved workpapers (WPs) or WP updates that are currently in process. These RFA proposals will be reviewed on a case-by-case basis.

WPs need to be approved by the CPUC prior to an RFP proposal being submitted.

SCE will not contract 3rd Parties without CPUC approved WPs.

**SoCalGas, PG&E, & SDG&E:** Solicitation respondents must use approved WP and/or DEER values to justify energy efficiency savings at the time of program launch. In the RFA and RFP stage, SoCalGas, PG&E, and SDG&E may consider abstracts with non-approved workpapers (WPs) or WP updates that are currently in process. These RFA & RFP proposals will be reviewed on a case-by-case basis dependent upon risk of program delivery.

WPs need to be approved by the CPUC prior to use in a program.

**PG&E:** Awarded programs which include deemed measures must be supported by a CPUC-approved WP prior to program launch. Additionally, implementers are expected to deliver the program benefits described in the proposals that they submit. While program proposals are not required to include approved workpapers as part of their initial application, implementers should provide substantiation of their deemed measure approach with increasing specificity as the solicitation process advances and will be evaluated on a case-by-case basis dependent upon risk of program delivery.

Where do I submit my proposed workpapers [deemed measure] or workpaper [deemed measure] update?

**All:** Varies by IOU.

**SoCalGas:** Please contact the SoCalGas contact listed in PEPMA to ensure the maximum lead time for review and qualification of any measure. Link: [https://www.pepma-ca.com/public/ContactUs.aspx](https://www.pepma-ca.com/public/ContactUs.aspx).

**SCE:** Please submit your request for SCE to review and submit this workpaper to the CPUC to eas@sce.com. Please complete and submit an Engineering Analysis (EA) Request form and submit it with your request. You may download an EA Request form from sceonlineapp.com. Once you’ve accessed the website, navigate to “Forms” and select and download the EA Request form.
**PG&E:** 3Ps can submit EE offering ideas via multiple venues, including the [www.etcc-ca.com](http://www.etcc-ca.com) site, PG&E Product Managers, and other internal stakeholders.

**SDG&E:** Please comply with individual IOU solicitation requirements.

*Do I have to have a contract with one of the IOUs in order to propose a measure or work with the Cal TF?*

**All:** No.

The IOUs have the sole responsibility for reviewing and submitting workpapers to the CPUC Energy Division on behalf of third parties. Cal TF is working with the IOUs and CPUC to explore options for leveraging the expertise of the Cal TF in the workpaper review process in 2020 and beyond.

*Do you have to have a program offering or a proposed program offering? (versus a contract for review work or other support to the IOUs)*

**All:** No.

**SoCalGas:** To participate in the Rolling Portfolio as a 3rd Party, potential bidders must meet requirements in both the RFA stage and the subsequent RFP stage. If a vendor simply wishes to propose a measure and does not want to bid on a 3rd Party program offering, then please contact the SoCalGas contact listed in PEPMA to ensure the maximum lead time for review and qualification of any measure. Link: [https://www.pepma-ca.com/public/ContactUs.aspx](http://https://www.pepma-ca.com/public/ContactUs.aspx).

*If I only work/propose a program in one IOU territory, do I have to make my measure/workpaper statewide?*

**All:** Yes. Some exceptions will be made on a case-by-case basis.

**General Questions**

*Which DEER is to be used? What are the sources for getting the assumptions?*

**All:** The version of DEER that should be used is dependent upon the intended year of measure implementation. Visit the CPUC’s website, [http://www.deeresources.com/](http://www.deeresources.com/), to find all versions of DEER by program year. Further, READI (the Remote Ex-Ante Database Interface) is a program that allows users to examine the CPUC’s databases of ex ante measure information. Visit the CPUC’s website, [http://www.deeresources.com/](http://www.deeresources.com/), to find the latest version of READI.

*What workpaper template should be used?*

**All:** 3rd Parties must use the Statewide Workpaper Template (includes a Word file and Excel file), which is available on the CalTF website ([http://www.caltf.org/tools/](http://www.caltf.org/tools/)).
**SoCalGas:** Please contact the SoCalGas contact listed in PEPMA to confirm which workpaper should be used or to ensure the qualification of any measure. Link: https://www.pepma-ca.com/public/ContactUs.aspx.

*Who is responsible for developing and submitting the four ex tables and any related technology codes, lifetimes or any other new assumptions that go with it?*

**All:** The IOUs are responsible for completing the ex-ante specification tables. If the proposed workpaper or workpaper update is viable for the Energy Efficiency portfolio, IOUs will separately develop their unique data specifications and create the CPUC’s required ex ante table specification.

*Who is responsible for updating/maintaining the third-party workpapers?*

**All:** At their discretion, IOUs are responsible for updating and/or maintaining 3rd party workpapers following CPUC approval.

*Are there any measures/measure types that are not allowed?*

**All:** Yes, based upon individual program requirements and applicable policy requirements.

*Can I submit proposed updates to existing measures? How long does the review process take?*

**All:** Yes. See response to “When do the workpapers need to be developed/submitted relative to the program launch date?”

**SoCalGas:** Please refer to the solicitation timeline document that is posted on the SoCalGas website at: https://www.socalgas.com/regulatory/efficiency/docs/Joint_IOU_Solicitation_Timeline%20v_101918.v2.pdf

*Will a product that goes through the emerging technologies screening process require a separate screening through this process?*

**All:** Varies by IOU.

**SoCalGas:** Workpapers for products/measures that have gone through the Emerging Technologies screening process and whose operation and energy savings have been verified/tested and quantified by Emerging Technologies should incorporate the work and results into the WP for verification by SoCalGas. If that screening and verification has been completed by a third-party (not Emerging Technologies), SoCalGas may require that such screening and verification be completed by Emerging Technologies.
SCE: Yes. An idea for the development of innovative energy products, programs, and services for the purpose of modernizing the grid, exploring new energy opportunities, and empowering customers can be submitted at the following link: https://www.sceideas.com/Idea/ProductType

PG&E: Yes.

SDGE: SDG&E has an internal (measure coordination process-MCP) governance process for vetting new measures.

Custom Measures

*Can I propose a workpaper for a measure that is currently a custom measure (but I believe now has enough data to support a deemed measure)?*

**All:** Yes.

*Can measures be developed that are semi-deemed/custom meaning that they require one or two site-specific variables to estimate the savings?*

**All:** No, a measure is either deemed or custom.

Workpaper Development Support

*Where can I get help if I have questions about a requirement?*

**All:** Please contact the IOU contact listed in PEPMA for any Questions related to workpaper requirements. Link: https://www.pepma-ca.com/public/ContactUs.aspx.

For questions regarding the navigation and access of DEER, please contact ersdeeresources@gmail.com (READI Help).

*Will there be any help/support services/phone line to call get help on methodology, calculations, base case assumptions, appropriate DEER assumption?*

**All:** Please contact the IOU contact listed in PEPMA for any Questions related to methodology, calculations, base case assumptions, appropriate DEER assumptions. Link: https://www.pepma-ca.com/public/ContactUs.aspx.

*How do I ensure I am developing the workpaper correctly?*

**All:** Please contact the IOU contact listed in PEPMA for any Questions related to the development of a workpaper. Link: https://www.pepma-ca.com/public/ContactUs.aspx.
**WP Development Cost**

*Is there a cost/fee with submitting a workpaper for review?*

**All:** IOUs will fund the development of new WPs and modification of existing WPs, provided that the workpaper is viable for the Energy Efficiency portfolio. For SDG&E only, WPs will be funded for 3rd parties provided that their proposals has already been awarded.

If a 3rd party chooses to develop their own WP, IOUs will assume the cost of reviewing, providing review comments, submitting the paper to the Energy Division, and maintaining the workpaper once CPUC approved. The 3rd party funds the cost of developing their own WP.

*What if I don’t have the budget or expertise to develop a workpaper? Will the IOU develop the workpaper?*

**All:** IOUs will fund the development of new WPs and modification of existing WPs, provided that the workpaper is viable for the Energy Efficiency portfolio. For SDG&E only, WPs will be funded for 3rd parties provided that their proposals has already been awarded.

**WP Process Changes**

*Does the CPUC plan to make changes to their workpaper review process? If so how?*

**All:** The IOUs are unaware of the CPUC’s plans to revise the regulatory framework for workpapers.

*Has the workpaper process changed? Has it improved? How is it different?*

**All:** The process is progressing towards statewide workpapers for 2020. The IOUs’ objectives are a transparent process, consistent statewide measures, and standardization of requirements across IOUs.

*Will the policy manual be changed/updated soon?*

**All:** CPUC is working on an update to the EE Policy Manual. with an expected completion date in Q1 2019.

*Where can I find the most current version of the policy manual and standard practice manual?*

**All:** The CPUC Energy Efficiency Policy Manual can be found here: http://www.cpuc.ca.gov/energyefficiency/
What takes precedence, the IOU policy or the CPUC policy? For instance, SCE has policies above CPUC requirements, do we align with SCE or CPUC policy? Which takes precedent and does it vary by IOU?

All: If IOU policies or requirements are more stringent than CPUC, IOU policies or requirements shall take precedence.

Value Changes

Am I going to be designing my program on values that are going to change?

All: Workpapers are regularly reviewed and assessed by IOUs to determine if updates are needed based on best available data. Additionally, there are many triggers for value changes, such as CPUC dispositions, code updates, DEER Resolutions, etc. Thus, workpaper values may change.

What if my proposed measure is similar to a workpaper that is going to be updated due to E-4952?

All: 3rd parties may use the most current version of the workpaper and consider any workpaper value adjustments for their programs. All measures must comply with CPUC/DEER requirements.

If you submit a measure, and you know there is a change in 2020, and the demand period changes, how do you address that in the workpaper?

All: If the workpaper is viable for the Energy Efficiency portfolio, the IOUs will maintain the workpaper to comply with 2020 DEER requirements and will resubmit to CPUC for review and approval.

Interaction with Cal TF

Is the Cal TF process required?

All: Not at this time.

Do the Cal TF Technical Position Papers take precedence over any other directives?

All: No.

The Cal TF Technical Position Papers (TPPs) summarize Cal TF positions on various issues related to measure development. None have been formally adopted by the CPUC and, therefore, should not be considered official directive or policy. However, they can provide valuable background and information to measure developers. The Cal TF TPPs can be found in the “Tools” section of the Cal TF website: http://www.caltf.org/tools/

Is the Cal TF or IOU going to be the primary reviewer?

All: The IOUs are the primary reviewer.
Peak Savings

Can we look at TDV (time-dependent valuation) when we look at load shapes, similar to what we do with Title 24?

All: Workpapers must apply the DEER Peak Period definition for use in energy efficiency programs.

For demand savings measures, what specific hours are peak demand?

All: DEER demand reduction is defined as the average kWh reduction over a 9-hour window. Starting in 2020, the nine-hour window is from 4:00 p.m. to 9:00 p.m. over a three-consecutive weekday “heat wave”.

Are there any standard coincident factors or interactive factors that need to be applied?

All: Yes. Visit the CPUC’s website, http://www.deeresources.com/, to find the latest version of READI to examine the CPUC’s databases of ex ante measure information.

Base case

Where do I find the base case or industry standard practice?

All: Industry Standard Practice (ISP) represents today’s market trend, i.e., whether a technology would be commonly purchased by customers today (not in-situ or saturation), with consideration of key factors or barriers driving the technology adoption.

A standard practice can be established from an ISP study, from similar and recent typical activity, or from an analysis of the current viable options applicable to the customer and the customer’s typical decision-making process.

Some publications of available studies can be found on http://www.calmac.org/. Some additional ISP studies can be found at http://www.cpuc.ca.gov/General.aspx?id=4133 ; the site also includes the existing ISP guidance doc in effect. Per CPUC Resolution E-4939, the CPUC is expected to update or create a website as home to all ISP studies and redacted dispositions in the future.

Does the base case have to be code minimum or can it be existing energy use?

All: In cases where the existing conditions are more efficient than the code or standard practice, the existing conditions define the baseline. The proposed Measure Application Type also determines the baseline. Please review CPUC Resolution E-4818 for guidance on baseline determination and treatment.
How much research is required to support a measure or base case? Is there guidance on how much research is required to support a measure or base case?

**All:** Research data to support a measure or base case will vary by technology. Please review CPUC Resolution E-4818 for guidance on baseline determination and treatment.

**Measure Modeling**

What modeling tool do I have to use?

**All:** For building modeling tools, use DOE-2 based tools, such as eQuest and EnergyPro. Other modeling tools, as listed in the Customized Tool Archive, are acceptable.

In order for the use of software to be approved, documentation must be provided showing that it produces results similar to DEER.

Will there be a requirement to use EnergyPlus rather than eQuest? Is there an option to use EnergyPlus?

**All:** There is no requirement to use EnergyPlus over eQuest.

When do I need to perform whole building modeling? When is it required?

**All:** Whole building modeling is not required for all workpapers. Whole building modeling is recommended when whole building/environment interactions are important (e.g., weather variations, HVAC, and other component interactions) or when detailed component variations are of interest (insufficient lab or field data to estimate performance variation).

Will there be any templates available for California buildings?

**All:** Please see the CPUC’s measure analysis software, MASControl. The latest version can be found on the CPUC DEER website, [http://www.deeresources.com](http://www.deeresources.com).

Energy Pro or Energy Plus – there is a disposition on Savings By Design that requires calculations to be resolved within the software before it is used. What is the status of this resolution?

**All:** The directive targets several mechanical (HVAC) system baselines currently defined by the Title 24 Building Energy Efficiency Standards, and thus affects all software tools used to simulate whole building performance for SBD. Among the impacted tools is EnergyPro, which features an SBD module that automatically assigns the defined baselines for our program. In compliance with the directive, EnergyPro is undergoing modifications of its calculation methodologies specific to the SBD module. We have estimated that the resulting calculated energy savings (which can be incentivized) may be negatively affected by these modifications. This cannot be confirmed until all modifications have been successfully integrated into the tool.

Unfortunately, a projected date for the revised versions remains unavailable at this time, as IOUs are still actively working with the EnergyPro Developer.
Where can I get training on MAS control?

All: The CPUC provided a processing guide for MASControl3, which is the version of MASControl supporting DEER2020. The processing guide can be found at this link: http://www.deeresources.com/files/DEER2020/download/MASControl3%20Processing%20Guide.pdf

Using Other Tools/Models

Where can I get training on READI?

All: Visit CPUC website http://www.deeresources.com/index.php/deer-versions/readi. The website provides an overview of READI, along with support links providing instructions on how to use READI.

Where can I get training on the CET and the assumptions?

All: IOUs created and provided CET training and informational materials for third parties; they can be found at this link: https://www.pepma-ca.com/Public/PublicEvents.aspx?type=1#q1.

Will you consider using the societal cost test (SCT) instead of the total resource cost test (TRC) as the cost test?

All: Not at this time. IOUs will use the TRC and PAC tests.

IDSM/EE Interactions

Are fuel switching measures allowed and, if so, how are the savings calculated?

All: Fuel substitution measures are defined as changing from one IOU regulated fuel to another IOU regulated fuel (natural gas to electricity or electricity to natural gas, provided that they pass the three-prong test, as defined in the Energy Efficiency Policy Manual - Version 3, Adopted in Decision 05-04-051). Fuel substitution programs/measures/projects with a predominantly load building or load retention character are not eligible. The three-prong test is currently under review.

Fuel switching, defined as changing from a non-IOU regulated fuel to an IOU regulated fuel (natural gas or electricity), is not allowed.

The measure’s energy efficiency workpaper or custom project calculations are subject to CPUC ex ante calculation requirements, including but not limited to, baseline assumptions of a code or standard practice technology of the same fuel, technology and system design as the measure case.

See the PG&E Rulebook for more guidance on fuel switching projects.
If a measure incorporates distributed generation (DG) or demand response (DR), is there a way to incorporate these into the measure/workpaper?

**All:** Not at this time.

Can non-energy benefits (NEBs) be incorporated/valued within the workpaper/measure?

**All:** At this time, NEBs are not necessary within a workpaper.

Can greenhouse gases (GHGs) be incorporated/valued within the workpaper/measure?

**All:** At this time, GHG reductions are encouraged, but not necessary within a workpaper.

Can embedded water/energy savings be claimed within a workpaper/measure? If so, what is the process?

**All:** Yes. Third parties may propose water/energy savings in a workpaper which would require IOU and CPUC review and approval. See the PG&E Rulebook for more guidance on water energy nexus workpapers.

What is the mechanism for developing a behavioral, retro commissioning, operational (BRO) measure?

**All:** For deemed, a Third Party may propose a BRO measure in a workpaper which would require IOU and CPUC review and approval.

For custom, a Third Party may propose a custom measure or project which would require IOU and CPUC review and approval.

**Supporting Values (NTG, EUL, GISA)**

Where do you find guidance on using net to gross (NTG), effective useful life (EUL), gross savings and installation adjustments (GSIA), installation/application types?

**All:** Visit the CPUC’s website, [http://www.deeresources.com/](http://www.deeresources.com/), to find the latest version of READI to examine the CPUC’s databases of ex ante measure information.

If new values are proposed, what is the process for a third party to propose new EUL or NTG (or similar) values?

**All:** For deemed, a Third Party may propose new values in a workpaper which would require IOU and CPUC review and approval. New values must be supported by evidence. Third Parties may also propose new values during DEER’s annual scoping memo (typically done in May), as updates based on EM&V studies.
How will I know what the measure life is?

All: Visit the CPUC’s website, http://www.deeresources.com/, to find the latest version of READI to examine the CPUC’s databases of ex ante measure information. Navigate to the EUL source table to find a list of established effective useful life by technology.

If an approach involved an early intervention that will allow a higher NTG value, how do I claim/support this?

All: Third Party may propose the higher NTG value in a workpaper. The higher NTG value would require IOU and CPUC review and approval before a program administrator can claim the higher NTG value.

Measure Cost

Is there guidance on cost assumptions?

All: DEER shall be the primary source of cost assumptions. If DEER does not include cost assumptions for a technology, other data resources (e.g., Work Order 17, other EM&V studies) may be consulted. Visit the CPUC’s website, http://www.deeresources.com/, to find the latest version of READI to examine the CPUC’s databases of ex ante measure information regarding costs.

Best Available Data

How will you confirm that the best available data is being used? Is there any validation of third-party data?

All: Workpapers must use the latest evaluation, measurement and verification studies published in the development of ex ante values including energy impacts, cost data, effective useful life, remaining useful life, and net-to-gross ratios.

The IOUs and CPUC will require access to data referenced by third-party parties to validate the workpaper assumptions.

Can the IOUs review my data and confirm that it can be considered best available before I develop my workpaper?

All: Yes. Additional review will also take place once the workpaper is submitted to IOUs.

Is there a conditional/interim workpaper approval for product or processes that have limited amounts of available data?

All: All workpapers will proceed under a Phase 1 or Phase 2 review and approval process.
**Confidentiality**

*Can I develop a workpaper for a proprietary technology? If you are working on a product, is it product centric or product category centric?*

**All:** Yes. Third Parties may submit a workpaper for a proprietary technology. The workpaper should focus on the technology, rather than the product. Once a workpaper is approved by the CPUC, the workpaper and supporting data are publicly available.

*How do I assure that my proprietary data (or program approach or modeling tool) will be kept confidential?*

**All:** The IOUs take Intellectual Property protection very seriously and are fully committed to keeping bidder proposals confidential before, during, and after the two-stage solicitation process has concluded. In addition, the IOUs are no longer in the position of being the primary program designer, they have an obligation to dedicate a minimum of 60 percent of their portfolios to third-party proposed, designed, and delivered programs. Therefore, there would not be an opportunity for the IOUs to incorporate items from the solicitations into their own programs and meet these compliance requirements. The IOUs expect to need to justify any in-house implementation; it would be difficult for an IOU to justify implementing an offering that was substantially similar to a rejected proposal. Last, there is explicit language in the RFA/RFP and eventual contract that outlines the legal obligations around intellectual property that protects bidders from such an occurrence and provides an opportunity for recourse in the unlikely event there has been a breach. The IOUs will be hosting bidder’s conferences for each RFA to ensure that bidders are informed of these steps to protect intellectual property and have an opportunity to ask questions like this to the solicitation teams.

With respect to a bidder’s workpapers, in particular, only Commission-approved WPs become public as they are implemented in approved programs and posted on the public website for all approved workpapers and reported in CEDARS.

**Workshops**

*Will the workshops be recorded?*

**All:** Yes.

*Will the two workshops cover the same content?*

**All:** Yes, the workshops will cover the same general presentation, but may have different discussions based on the Q&A session.