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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking
Concerning Energy Efficiency Rolling
Portfolios, Policies, Programs,
Evaluation, and Related Issues.

Rulemaking 13-11-005

**ADMINISTRATIVE LAW JUDGE'S RULING INVITING RESPONSES TO
POTENTIAL AND GOALS POLICY QUESTIONS**

1. Background

In October 2019, the California Public Utilities Commission's (Commission or CPUC) Energy Division held a workshop, "Approaches for Assessing Energy Efficiency Potential & Goals," to solicit stakeholder views in preparation for the next energy efficiency potential and goals study (Potential and Goals Study, or Study) and energy efficiency goals adoption, scheduled for 2021. At the workshop and in further informal written comments afterward, stakeholders provided feedback on methodological and technical approaches to assessing energy savings potential, and on broader policy issues impacting energy efficiency goals and the investor owned utility (IOU)/ program administrator portfolios.

2. 2020 – 2021 Potential & Goals Activities

As the next Potential and Goals Study and goal-setting cycle moves forward, stakeholders will be invited to participate and provide feedback in two parallel tracks:

1. Potential and Goals Study Track (Study Track):

Staff will lead efforts to assess energy savings potential via the next Potential and Goals Study. Staff will solicit ongoing, informal feedback from stakeholders on methodological and technical issues related to the Study, via the Demand Analysis Working Group. Staff will distribute a schedule of Study-related activities to the service list of this proceeding and other stakeholders.

2. Goals-adoption Policymaking Track (Policy Track):

The Commission intends to examine key energy efficiency policy questions in the lead-up to 2021 goals adoption. In particular, we will consider questions related to optimizing energy efficiency in the Commission's Integrated Resource Plan (IRP) proceeding (Rulemaking 16-02-007), and issues related to energy efficiency portfolio cost-effectiveness. Over the coming months, the Commission will solicit feedback from stakeholders on these policy questions. In this ruling, we pose several foundational policy questions to stakeholders, and outline an initial schedule of stakeholder activities for this policy track.

3. Questions

Energy efficiency in California's clean energy future:

1. In the context of California's shift toward clean energy and greenhouse gas (GHG) reductions, what should be the primary objective(s) for the energy efficiency portfolio (energy savings, GHG reductions, bill savings, avoided grid costs, resiliency, and/or others)? If you identify multiple primary objectives, describe potential tradeoffs and/or synergies posed by those multiple objectives.

Energy efficiency goals:

2. To date, the CPUC has set portfolio goals based on identifying all cost-effective energy efficiency by first identifying all technical potential and then narrowing to potential that is economic and likely to be adopted by the market.

- a. Do you believe the CPUC should continue to set goals and assess portfolio costs and benefits in this manner, or should the CPUC set goals based on an entirely different approach (e.g., setting goals as a percent reduction of total demand)? For reference, Addendum A provides a summary of different valuation frameworks.
- b. How does your recommendation support planning needs where savings estimates are reasonably expected to occur?¹

In October 2018 CPUC staff informally released a white paper² discussing the benefits and challenges of optimization of energy efficiency savings streams in the Commission's IRP process, which develops optimal portfolios of supply- and demand-side resources to achieve the state's 2030 policy goals. The staff white paper concluded that some, but not all, energy efficiency savings streams were adequate for optimization in IRP modeling. Based on that conclusion, please respond to the following questions on IRP optimization:

3. Optimizable energy efficiency:
 - a. Do you agree that energy efficiency savings streams that can be optimized should be included in the development of optimal resource portfolios in IRP? Why or why not?
 - b. If you answered yes to the previous question, how should the optimal resource portfolios from IRP be considered in the adoption of energy efficiency goals? Should energy efficiency goals be based solely on IRP portfolios for measures that can be optimized? Or should those portfolios be used to inform goals

¹ California Energy Demand 2018-2030 Revised Forecast at 39:
<https://efiling.energy.ca.gov/getdocument.aspx?tn=223244>

² Accessible at <https://www.cpuc.ca.gov/General.aspx?id=6442464362>.

adoption in other ways, such as informing procurement directives (*e.g.*, resource type, location, etc.)? Please provide justification for your recommendation.

4. Non-optimizable energy efficiency: The staff proposal concluded that not all energy efficiency savings streams are suitable for optimization. For instance, the staff proposal recommended that codes and standards, low income, and other savings streams with uncertain costs and benefits continue to function as load modifiers (*i.e.*, fixed assumptions that cannot be optimized by the model) in the IRP process.
 - a. If you recommend that goals for optimizable energy efficiency be set based on IRP, should the CPUC consider the savings potential for non-optimizable energy efficiency savings streams when setting goals? If yes, how?
 - b. Should the CPUC set separate goals for non-optimizable savings streams? Why or why not?
5. If you recommended that energy efficiency savings be based on IRP optimization in question 3, which covers only the electric sector, do you believe the assessment of savings potential and goal adoption for natural gas programs needs to be modified? If yes, how?

Portfolio assessment of cost-effectiveness and budget approval:

6. In assessing cost-effectiveness of energy efficiency portfolios where all benefits are measured against all costs, should the CPUC continue to use a portfolio-based approach, or one that requires cost-effectiveness at the individual measure or program level? Provide detailed rationale to support your recommendation.

7. Should the CPUC consider modifying the assessment of portfolio cost-effectiveness, where all portfolio benefits are assessed against all portfolio costs,³ to a paradigm in which different costs and benefits are used to set goals and budgets for different types of interventions (such as market transformation, general resource programs, resource programs that target hard-to-reach customers, non-resource programs, codes and standards, etc.)?

If not, why not? If so:

- a. Please provide recommendations and rationale for categorizing the different types of energy efficiency interventions and which costs, benefits or other metrics should be assessed for each one of the categories proposed.
 - b. Please identify which methods (*e.g.*, Avoided Cost Calculator, IRP optimization results, a combination of both) should be used to assess budget requests for your recommended types of energy efficiency interventions.
 - c. If any of the types of interventions cannot be assessed based on the Avoided Cost Calculator and/or IRP optimization:
 - i. Which methods should the CPUC consider for assessing reasonableness of budget requests (*e.g.*, if you propose that budget requests to fund non-resource programs be assessed separately from resource programs, how should the CPUC assess the reasonableness of non-resource programs budget requests)?
 - ii. What would be the appropriate metrics, goals and any other necessary method to assess the reasonableness of interventions and associated budget requests?
8. Independent of whether the CPUC continues to use a portfolio-based approach or makes any of the modifications implied in Questions 6 and 7, what role do non-resource programs play in achieving the goals assessed in the potential and goals study? Are they still necessary for

³ Decision (D.) 05-04-051 at 22 “A prospective showing of cost-effectiveness for the entire portfolio of ratepayer-funded energy efficiency activities and programs is a threshold condition for eligibility for ratepayer funds.”

ATTACHMENT 1

Addendum A: Energy Efficiency Evaluation Frameworks

Question 2 of this ruling asks parties to provide recommendations on the type of valuation framework that the Commission should use to assess the value of energy efficiency resources. Energy Division Staff has summarized several example valuation frameworks to help stakeholders understand considerations associated with each one. These valuation frameworks are examples, and parties should not limit their consideration to only the frameworks mentioned below. The summary table is a staff-developed informational resource for stakeholders, not a set of formal definitions or an exhaustive list of possible valuation frameworks or varieties of frameworks.

Valuation Framework	Summary	Considerations
<p>Avoided Cost-Based</p>	<p>Currently, energy efficiency cost-benefit analyses utilize an avoided cost-based framework. Cost effectiveness is determined utilizing cost-effectiveness tests, including the Total Resource Cost (TRC) test and the Program Administrator Cost test.</p> <p>The benefits portion of both tests are calculated using the Commission’s Avoided Cost Calculator (ACC). Benefits include avoided supply costs, the reduction in transmission, distribution, generation, and capacity costs valued at marginal costs for the periods when there is a load reduction.⁵ The benefits also include avoided costs of GHG emissions.⁶</p> <p>Using an avoided cost-based framework, energy efficiency programs are compared based on their calculated avoided cost benefits and program / participant costs. Program administrators are</p>	<ul style="list-style-type: none"> • Currently used as a common valuation framework across various CPUC DER portfolios. • Sets a unified supply-side avoided cost to select resources/portfolios that pass – rather than having DERs compete against each other. • Primarily considers grid avoided costs, with limited consideration of non-energy benefits.

⁵ Standard Practice Manual, at 18

⁶ D.17-08-033 and D.18-02-18, at 43.

	required to meet both cost-effectiveness thresholds and energy savings goals.	
GHG Reductions-Based	A greenhouse gas (GHG) reductions-based framework could identify energy efficiency (EE) resources that are cost-effective specifically based on the GHG reduction benefits they provide. Though the current avoided cost-based framework includes a greenhouse gas adder, this framework model could prioritize achieving the GHG reductions required by SB 350.	<ul style="list-style-type: none"> • The Sacramento Municipal Utilities District (SMUD) recently adopted an “avoided carbon” metric for energy efficiency programs.⁷ • Might not account for all energy system costs that EE resources avoid. • Might not account for non-energy benefits. • Following the current avoided cost valuation of GHG reductions, assessing cost effectiveness based on GHG reductions alone would not produce cost effective portfolios.
IRP-Based	<p>The Commission’s Integrated Resource Plan (IRP) process develops optimal electricity resource portfolios by prioritizing achievement of GHG reduction targets at least cost, while maintaining reliability.⁸ The portfolios serve as a guide for load-serving entities who compete to provide services based on their associated GHG emissions and costs.</p> <p>In the IRP-based framework, EE resources compete economically against both supply and demand-side resources to meet future load. Utilizing an IRP-based framework, energy efficiency goals could be set based on what measures are considered optimal according to IRP modeling. Program administrators could be required to achieve the energy efficiency targets at least cost, while maintaining reliability.</p>	<ul style="list-style-type: none"> • Regulatory demand for energy efficiency could fluctuate based on modeled procurement, which could create uncertainty in the energy efficiency market sector. • Some EE may not be optimizable in the Commission’s IRP structure: Gas EE, fuel substitution measures, codes and standards activities, and others. • Energy Division staff released an EE-IRP Integration white paper in 2018 to discuss opportunities and challenges.⁹
Least-Cost, Best-Fit	Similar to the IRP-Based framework, a Least-Cost Best-Fit framework would select the energy efficiency resource that most effectively achieve specific energy efficiency policy objectives.	<ul style="list-style-type: none"> • May result in energy efficiency programs that would not have been selected in an avoided cost-based or IRP-based framework.

⁷ SMUD presentation on avoided carbon metric: <https://www.smud.org/-/media/Documents/Corporate/About-Us/Board-Meetings-and-Agendas/2020/Jan/20200115-ERCS-Exhibit-to-Agenda-2-Final2-11520.ashx>

⁸ D.18-02-018, at 3.

⁹ Staff Proposal for Incorporating Energy Efficiency into the SB 350 Integrated Resource Planning Process (EE-IRP): <https://pda.energydataweb.com/#!/documents/2083/view>

	<p>Objectives could include energy savings, cost minimization, GHG reduction, non-energy benefit obtainment, etc.</p> <p>In this framework, energy efficiency resources would compete against each other – but not against other DERs or supply-side resources.</p>	<ul style="list-style-type: none">• Could produce energy efficiency goal setting which is inconsistent with the optimal portfolio identified in IRP.• Would require prioritization and valuation for the current energy efficiency portfolio objectives (see question 1).• Would potentially require a methodology for accurately determining the “least cost” energy efficiency resources and new measure-level modeling techniques.
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(End of Attachment 1)