

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



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Order Instituting Rulemaking Regarding
Policies, Procedures and Rules for the
California Solar Initiative, the Self-Generation
Incentive Program and Other Distributed
Generation Issues.

Rulemaking 12-11-005
(Filed November 8, 2012)

**COMMENTS OF THE
CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES
ON ASSIGNED COMMISSIONER'S RULING OF MARCH 27, 2015**

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The Center for Energy Efficiency and Renewable Technologies (CEERT) respectfully submits these Comments in response to the Assigned Commissioner’s Ruling (ACR) Requesting Comment on Updating Greenhouse Gas (GHG) Emission Factor for Self-Generation Incentive Program (SGIP) Eligibility issued in this proceeding on March 27, 2015 (“March 27 ACR”). These Comments are timely filed and served pursuant to the Commission’s Rules of Practice and Procedure and the March 27 ACR.

**I.
INTRODUCTION**

The March 27 ACR begins the process of implementing SB 861 (Stats.2014, Ch.35), which among other things, added Section 379.6(b)(2) to the Public Utilities (PU) Code. This statute requires the commission to “update” the avoided GHG emissions factor applied to SGIP eligibility (1) based on the most recent data available to the State Air Resources Board for GHG emission from electricity sales in the SGIP Program Administrators’ (PAs’) service territories and (2) current estimates of GHG emissions over the useful life of the distributed energy resource (DER), including consideration of the effects of the California Renewables Portfolio Standard (RPS).¹

¹ PU Code §379.6(b)(2); March 27 ACR, at p. 2.

In doing so, the March 27 ACR also reviews the Commission’s own decision (D.11-09-015) first setting a GHG emission rate eligibility threshold for the SGIP. At the time of that decision, CEERT was actively involved in Staff proposed revisions to SGIP eligibility. In particular, CEERT had supported “revisions to SGIP that would require that SGIP-eligible technologies make a positive contribution to reducing GHG emissions” and further recognized the contribution technologies such as advanced energy storage and fuel cells can make to “reducing peak demand and GHG emissions.”² For those reasons, CEERT had, in turn, supported the Proposed Decision on which D.11-09-015 was based, especially for making “the GHG emission reduction requirement the primary screen for establishing technology eligibility for the SGIP.”³ This goal has added significance given the Governor’s call in 2014 to continue the reduction of “carbon pollution” and to limit “the emissions of heat-trapping gases” beyond the 2020 Climate Change goals set by AB 32.⁴

The question now before the Commission posed by the enactment of Section 379.6(b)(2) is how best to “update” its GHG eligibility threshold (now set at 379 kgCO₂/MW based on D.11-09-015) consistent with the data required to be used for that purpose by this statute. To that end, the March 27 ACR poses several questions for party comment, following a review of the application of this eligibility threshold based on approaches that vary depending upon the resource type (i.e., electric-only generation technologies, combined heat and power (CHP) applications, and storage devices).⁵

CEERT responds to several of these questions below and reserves the right to provide further input in reply comments in response to the opening comments filed by other parties. Of

² R.10-05-004 (DG) CEERT Comments on Proposed Decision (August 8, 2011), at p. 2.

³ *Id.*; see, D.11-09-015, at p. 12.

⁴ Governor Brown’s Inaugural Address (January 5, 2015) at <http://gov.ca.gov/news.php?id=18828>.

⁵ March 27 ACR, at pp. 5-7.

particular concern to CEERT is the critical need for this Commission to work collaboratively with the California Air Resources Board (CARB), the California Energy Commission (CEC), and affected stakeholders through a transparent, public process that will provide the foundation for undertaking and providing confidence in any “update” of the GHG eligibility threshold for SGIP.

II. RESPONSES TO ACR QUESTIONS

Question 1. *Should the updated SGIP GHG eligibility factor(s) use a short run methodology, a long run methodology, or a combination of the two? Why?*

In identifying the appropriate methodological time frame for updating the SGIP GHG eligibility factors, the Commission should account for the policies and modeling taking place today to reflect GHG impacts on utility resource portfolios and planning. Specifically, this issue is now under consideration in proceedings such as R.13-12-020 (Long Term Procurement Planning (LTPP)) and R.15-02-020 (RPS).

What is clear is that SGIP-eligible technologies, such as fuel cells that can provide continued carbon emission reductions at higher renewable penetration with zero emissions of criteria air pollutants, have and will continue to play a significant role in meeting this State’s goals for the electric generation sector, which now focuses even more on longer-term GHG emissions reductions at least through 2030. However, those long-term goals cannot be met without increased reliance on DER technologies that reduce GHG and criteria pollutant emissions and displace large, conventional gas-fired generation today. Clearly, a methodology that considers both short-run and long-run GHG impacts is required.

Question 2. *Section 379.6(b)(2) directs the Commission to update the factor “based on the most recent data available to the State Air Resources Board for GHG emissions from electricity sales in the self-generation incentive program administrators’ service areas...” Based on your response to Question 1, exactly what data sources from ARB should be used and how should they be applied to derive the short run and/or long run-based factors?*

CEERT does not believe that this directive of Section 379.6(b)(2) can be met without a fully collaborative process between this Commission and CARB, in cooperation with the CEC. The Commission should not be deciding in isolation what “recent data available” to CARB should be used in updating the SGIP GHG eligibility factor, especially where the expertise on the relevancy and import of that data rests with CARB. Instead, the Commission should commence a public, transparent process that ensures the participation and input of CARB and CEC staff, as well as all affected stakeholders. This public record-building will be key to creating an adequate foundation for, and confidence in, the final “updated” GHG eligibility threshold adopted by the Commission for the SGIP.

Question 3. *The emission factor adopted in D.11-09-015 assumes that SGIP technologies will avoid the need for new renewable generation in proportion to the 20% RPS goal in effect during the time the staff developed its proposals. Section 379.6(b)(2) also directs the Commission to include “consideration of the effects of the California Renewables Portfolio Standard.” How should this be accomplished?*

CEERT does not believe that this question appropriately frames the precise task before the Commission by virtue of Section 379.6(b)(2). As stated in that law, the Commission’s obligation is to update the avoided GHG emissions factor used in the SGIP based on a two-fold consideration – “most recent data available to the State Air Resources Board for [GHG] emissions from electricity sales in the [SGIP PAs’] service areas *as well as* current estimates of [GHG] emissions over the useful life of the [DER], including consideration of the effects of the [RPS].”⁶ Using applicable principles of statutory construction, the Commission is obligated to consider all words used in a statute and give them a plain and common sense meaning consistent

⁶ PU Code §379.6(b)(2); emphasis added.

with the statute's legislative purpose.⁷ The statute's plain meaning, in fact, controls this Commission's interpretation of statutes.⁸

Here, the plain language of Section 379.6(b)(2) is unambiguous in dictating that the Commission's task of updating the GHG factor applied to SGIP involves the *combined consideration* of identified CARB data *and* current estimates of DER GHG emissions over its useful life, "including," *but not limited to*, "consideration" of RPS effects. Thus, this statute's plain language makes clear that, while consideration of RPS effects is appropriate, it is not the sole determinant of the SGIP GHG eligibility factor. Further, as Question #3 seems to suggest, that consideration is not limited to how an SGIP "may avoid the need for new renewable generation,"⁹ but also must fairly consider the value of SGIP technologies to *enhancing* reliance on increased renewable generation. As noted above, fuel cells can provide critical support for the integration of intermittent renewable generation and, in turn, improved grid reliability. These aspects of SGIP technologies cannot be ignored.

Question 4. *For factors based on long run effects, what combination of technologies, and in what proportions, should SGIP projects be assumed to displace?*

This question, like the others above, cannot be answered in a vacuum and requires informed input and participation by both affected State agencies and their staffs (CARB and CEC at the least), as well as informed, expert stakeholders. The Commission has already learned from its implementation of the RPS Program that the failure to ensure a *diverse* portfolio of renewable resources and technologies can create unwanted and unanticipated impacts on grid reliability. While CEERT has long supported increased reliance on renewable generation to meet all customer electric needs, experience has shown that relying on a single resource type

⁷ D.12-05-035, at pp. 13-15 (citing to multiple judicial decisions in support).

⁸ *Id.*

⁹ March 27 ACR, at p. 7.

may create issues related to load following and grid reliability that, in turn, could increase reliance on carbon-producing resources. Clearly, to avoid that outcome here, the Commission must make sure that diversity is achieved in SGIP eligibility and participation. Such a step requires a fair consideration and valuation of the attributes that each technology provides along with its contribution to reducing GHG emission reductions.

Question 5. *D.11-09-015 states that SGIP-funded technologies should avoid GHG emissions through at least the first ten years of operation, taking into account system degradation. Should that time frame be revised, should it be the same for all technologies, and what time frames should apply?*

CEERT believes that the ten-year time frame remains a sound foundation for the SGIP and has no alternative to recommend at this time. Similarly, CEERT is not aware of any basis to vary this timeframe between technologies.

Question 6. *Should the 1% per year assumption for performance degradation be revised for one or more SGIP-eligible technologies, and if so, using what data sources?*

CEERT does not have a position on this question at this time, but reserves the right to offer Reply Comments on this question in response to the Opening Comments of other parties.

Question 7. *Should the 7.8% line loss factor adjustment to the GHG factor be revised; if so, using what data; and should the factor vary by utility service territory, other geographic delineations, or generation profiles of different SGIP technologies?*

CEERT does not have a definitive answer on this question at this time, but, again, encourages consistency where possible among and between eligible SGIP technologies. Further, any “data” used to address this issue should be derived through the same collaborative, multi-agency public process recommended by CEERT in response to Questions #2 and #4 above.

CEERT reserves the right to address this question further in Reply Comments in response to the Opening Comments of other parties.

Question 8. *For SGIP-eligible CHP projects, should the 80% boiler efficiency factor be updated and if so, using what data; should it vary based on the capacity of the SGIP project or the size of the thermal load; and should estimate exports from CHP (or other technologies not subject to net energy metering) be subject to a different emission rate based only on other fossil-fired sources of generation?*

CEERT does not have a position on this question at this time, but reserves the right to offer Reply Comments on this question in response to the Opening Comments of other parties.

Question 9. *In determining the minimum round-trip efficiency for SGIP-eligible storage technologies and in light of the ongoing transformation in the resources serving California's load, is the assumption that combined cycle plants are marginal during off-peak hours and simple cycle plants are marginal during peak hours still valid? If not, what mix of resources should the emission factor assume are on the margin and what data sources should be used, and would production cost modeling results be useful (e.g., testimony submitted in R.12-06-013) for the avoided GHG emission calculations for storage? To the extent your proposed methodology assumes that storage affects natural gas-fired generation, should the emission factor for combined cycle and simple cycle power plants be updated, and if so, using what data, and should the current line loss factors be updated.*

Effectively answering this question requires the record-building discussed in previous answers. CEERT again encourages the Commission to address, and build a foundation to respond to, these question through the same collaborative, multi-agency public process recommended by CEERT in response to Questions #2, #4, and #7 above. These answers clearly will be informed by data and input regarding historical fuel displacement and GHG emissions reduction data from the CARB and the CEC.

Question 10. *Please describe the methodology, assumptions, data sources and resulting emission factors (or round-trip efficiencies) that should be used to determine SGIP eligibility for electric-only, CHP, and storage technologies.*

CEERT's answer to Question #10 is the same as its responses to Questions #2, #4, #7, and #9 above. Namely, and for the reasons previously stated, CEERT again encourages the Commission to address, and build a foundation to respond to, these questions through the same collaborative, multi-agency public process recommended by CEERT in response to those previous a questions.

III. CONCLUSION

CEERT welcomes this opportunity to comment on the Commission's consideration of the GHG emissions eligibility threshold for SGIP. CEERT, again, urges the Commission to coordinate and collaborate with CARB and the CEC, through a public, transparent process, to elicit the data relevant to that exercise, with input from these agencies and all affected stakeholders. CEERT looks forward to reviewing and replying to the comments of other parties.

Respectfully submitted,

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