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California Energy Commission
Dockets Office, MS-4
Re: Docket No. 11-RPS-101
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Comments of Pacific Gas and Electric Company on the Lead Commissioner Workshop to Scope a Future Edition of the *Renewables Portfolio Standard Eligibility Guidebook*

I. INTRODUCTION

Pacific Gas and Electric Company ("PG&E") appreciates the opportunity to provide comments on the Lead Commissioner Workshop to Scope a Future Edition of the *Renewables Portfolio Standard Eligibility Guidebook* ("*RPS Guidebook*"), held at the California Energy Commission ("CEC" or "Commission") on January 28, 2014. PG&E thanks the CEC for its early and proactive outreach on this important topic.

The *RPS Guidebook* is essential for a well-functioning renewables market and for ensuring that California's RPS program is consistent with state policy. By accurately and transparently certifying eligible renewable generation, the *RPS Guidebook* allows load serving entities to demonstrate compliance, generators to receive appropriate credit for renewable energy, and assures that customers are receiving value for their investments. As the CEC seeks to improve on the RPS Program and update the *RPS Guidebook*, it must ensure that any changes maintain and enhance these important functions.

In Sections II and III, PG&E provides a detailed response to the six topics identified by CEC Staff and two additional topics that should be addressed as part of the Guidebook update. In particular, PG&E is providing a proposal to ensure that RPS-eligible efficiency improvements at hydroelectric generation facilities can receive the Renewable Energy Credits ("RECs") to which they are entitled under the RPS statute. The current RPS Guidebook rules for calculating the RECs produced by such improvements effectively discriminates against such projects and disincentivizes what should be a non-controversial cornerstone of the State's RPS and greenhouse gas reduction policies.

In preparing its comments, PG&E called upon the framework outlined by the CEC in the workshop notice. As shown, PG&E believes three key principles will lead to a well-functioning market and guide the next update to the *RPS Guidebook*:

- **Maintain Integrity:** The CEC should maintain the integrity of the RPS program through clear rules and transparent accounting, both of which depend on simplicity whenever possible. Integrity should include ensuring that the rules allow for all RPS-eligible resources to be counted for compliance and that non-RPS-eligible resources are not included in compliance demonstrations.

- **Improve Flexibility:** The *RPS Guidebook* should facilitate the ability of market participants to flexibly contract to develop RPS-eligible generation that provides the highest value to the State's electricity consumers.

- **Increase Efficiency:** Wherever possible, the *RPS Guidebook* should reduce administrative burdens on all parties to increase the efficiency and cost-effectiveness of the RPS Program.

II. COMMENTS ON THE RPS SCOPING WORKSHOP BY TOPIC

A. The Definition of Prime Generating Equipment for Repowering

The CEC requested stakeholder feedback for the following questions related to prime generating equipment. Below is PG&E's response:

1. **What is the appropriate definition of the prime generating equipment for a facility using biomethane from digester gas? From Landfill gas? Should the definitions be the same? Explain.**

   With respect to a facility repower, the *RPS Guidebook* separately defines prime generating equipment for a facility using biomethane from digester gas and landfill gas. Specifically, a facility using biomethane from digester gas includes the fuel production portion of the facility while a facility using biomethane from landfill gas does not. With a focus on ensuring clear and consistent rules, PG&E recommends the CEC use the definition for landfill gas as the basis for facilities using either source of biomethane. First, a single definition for a facility using biomethane from digester gas or landfill gas promotes consistent treatment amongst the two sources of biomethane. Second, excluding the fuel production portion of the facility in the definition of "prime generating equipment" and limiting the definition to the internal combustion engine or combustion turbine, as applicable, more closely aligns with the definition of "prime generating equipment" for other renewable resources.

2. **Should the definition be different for a biomethane facility receiving gas from either a dedicated pipeline (including onsite) or a common carrier pipeline? Why or why not?**

   No, the definition should be the same regardless of the source of biomethane, since the definition should focus on the generating equipment.

3. **Should any distinction be made for separate ownership of the gas collection or process equipment and the electricity generation facility using biomethane? If so, how?**

   No, PG&E recommends the proposed definition of "prime generating equipment" only encompass the electricity generation facility. Therefore, separate ownership of the gas collection or process equipment would have no bearing on the definition of "prime generating equipment", because the gas collection or process equipment would be excluded from the definition.

B. Certification Application Deadlines Relating to the Eligibility Date

The CEC requested stakeholder feedback for the following questions related to certification application deadlines. Below is PG&E's response:

1. **Is this a reasonable requirement? Why or why not? If this is not a reasonable requirement, is there a different timeframe for applying for certification that is more reasonable?**

   The current requirement of precertified facilities to apply for certification within 90 days of commencing commercial operations to retain the precertification eligibility date is reasonable. Nearly all of PG&E's contracted and utility-owned generation facilities have been successful in meeting this requirement.

   PG&E believes that it is appropriate for the Commission to establish reasonable deadlines to ensure timely compliance for individual facilities. At the same time, PG&E recognizes that new or newly eligible facilities may face unforeseen challenges as they begin commercial operations and may not comply with the current requirement for precertified facilities to apply for certification within 90 days of commencing commercial operations. Thus, PG&E supports including a waiver provision in the Guidebook, which would allow applicants to request additional time to apply for certification.

2. **Is there an alternative approach to ensure the Energy Commission receives important facility information in a timely manner?**

   During the January 28, 2014 Scoping Workshop, participants voiced various proposals, ranging from "good cause" waivers to financial penalties for facilities that fail to meet the current requirement. The CEC's current certification process, with the addition of a waiver provision, seems the best way to obtain such information in a timely manner, while also allowing for unforeseen challenges causing minor delays.

   PG&E appreciates the challenges the Commission faces in balancing the need to provide a reasonable compliance period for the applicant while also providing certainty about the eligibility of expected generation. PG&E encourages the Commission to maintain transparent rules for the precertification and certification processes. Since many power purchase agreements include financial penalties for facilities that do not receive timely RPS precertification and certification, PG&E supports retaining a reasonable timeline for all facilities but permitting some flexibility for special cases.

3. **Should a facility remain precertified if the estimated commercial operations date passes and the facility does not submit an application for certification within the specified timeframe?**

Given the importance of the CEC RPS precertification process, PG&E supports flexibility in retaining precertification status despite a delay to the estimated commercial operations dates as these approximations often shift. If a project has not yet achieved commercial operations but remains on track to do so, revoking the precertification is counterproductive since the facility will need to resubmit an application.

C. The Definition of a Dedicated Pipeline for Biomethane

The CEC requested stakeholder feedback for the following questions related to dedicated pipeline. Below is PG&E's response:

1. **Does the Energy Commission's definition of dedicated pipeline achieve the objective stated above? If not, please propose an alternative definition.**

   PG&E has no objections to the current definition of a dedicated pipeline for biomethane, as it protects common carrier pipelines, such as PG&E's.

2. **Is the Energy Commission's definition of dedicated pipeline too narrow? If so, how could it be expanded while still achieving the objective stated above?**

   No comment, see above.

D. Energy Storage Facilities

The CEC requested stakeholder feedback for the following questions related to energy storage facilities. Below is PG&E's response:

1. **Should energy storage facilities not directly connected to or metered as part of a renewable electrical generation facility be eligible for RPS certification? If so, how can the Energy Commission ensure that the output of the energy storage device is from a renewable electrical generation facility, and that no double counting of the renewable generation occurs?**

   The *RPS Guidebook* appropriately enables energy storage devices that are metered as part of a renewable energy resource generator to be included as part of an electrical generation facility. If an RPS-certified facility has integrated storage capacity and that storage device can be charged from the grid, the output from the facility should only remain RPS-eligible to the extent that controls are in place to separately account for the electricity provided solely by the integrated renewable generator.

   Eligible renewable generation should continue to be certified through the electrical generation facility to prevent double counting generation. The greenhouse gas emissions paradigm focuses on source-based emissions to prevent double counting and the CEC should similarly certify and monitor generation sources.[1]

Any changes to the *RPS Guidebook* relating to storage should be done in partnership with affected entities such as the California Public Utilities Commission ("CPUC"), the California Independent System Operator ("CAISO") and the Western Renewable Energy Generation Information System ("WREGIS").

2. **Given the inherent energy losses in storing electricity, is there any benefit for utilities to procure renewable energy that has been stored in an energy storage device rather than directly procuring it from the renewable generator and allowing generic grid electricity to be stored? Explain. Do these benefits remain if delivery to the energy storage device requires firm transmission, or another delivery arrangement similar to electrical generation facilities not interconnected to a California Balancing Authority to provide a Portfolio Content Category 1 product?**

   Renewable energy that has been stored in an energy device has certain benefits. For example, the ability to control delivery time directly supports integration of renewables and grid reliability. However, other attributes such as bid price, additional costs to account for inherent energy losses, transmission constraints, and overall portfolio fit will result in a net benefit or cost. At this time, PG&E is implementing measures that will allow the energy storage market to develop and offer products through competitive solicitations to ultimately benefit PG&E's customers. In its valuations, PG&E will consider the numerous factors that are relevant to managing its electric supply portfolio, weighing an energy storage device's benefits, costs and overall portfolio fit.

3. **Should energy storage devices be allowed to shift delivery times for Portfolio Content Category 1 deliveries? Why or why not? If yes, explain how this could be verified.**

   As described in its answer to question 1, PG&E believes the *RPS Guidebook* appropriately enables energy storage devices that are metered as part of a renewable energy resource generator to be included as part of an electrical generation facility. At this time, eligible renewable generation should continue to be certified through the electrical generation facility, and the CEC and CPUC should continue to certify RPS-certified products that are stored as part of the generation facility as Portfolio Content Category 1 products so long as the facility meets the statutory requirement of being directly connected to or dynamically scheduled into a California Balancing

[1] The California Air Resources Board at http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm and the Intergovernmental Panel on Climate Change at http://www.ipcc-nggip.iges.or.jp/public/2006gl/

Authority.[2] The delivery time should be based on when generation enters the grid and can be verified using meter data at the point of interconnection with the grid.

E. Precertification

The CEC requested stakeholder feedback for the following questions related to precertification. Below is PG&E's response:

1. **Are market participants, including facility owners, utilities, investors, or other stakeholders aware of the intended use of precertification, or is precertification being represented as having a different value intended by than the Energy Commission?**

   PG&E is aware of the intended use of precertification. RPS precertification is a requirement in RPS contracts and serves as means to guarantee the RPS eligibility of all generation from the facility, including test energy.

2. **Could the renewables market reasonably adjust to the elimination of the precertification process? Why or why not?**

   PG&E highly values the RPS precertification process for certifying test energy, indicating an individual facility's progress towards final certification and ultimately supporting RPS compliance. RPS precertification is a requirement in RPS contracts and serves as a means to guarantee the RPS eligibility of all generation from the facility, including test energy. This is a significant benefit. Large projects are often phased in, leading to months or even years of eligible test energy and PG&E and other load serving entities plan for eligible test energy to support RPS compliance.

   PG&E recognizes that the volume of precertification applications creates an administrative burden for Commission Staff. During the January 28, 2014 Scoping Workshop, several participants suggested streamlining or eliminating the precertification process. PG&E would be willing to consider changes to the precertification process or an alternative process that might ease the burden for Commission Staff, so long as they preserve the important functions described above. The renewables market could only adjust to the elimination of the precertification process if test energy continues to be certified and ultimately counted for the RPS.

3. **Could test energy, which is generated before a facility commences commercial operations, be made RPS-eligible through other means than a precertification?**

   PG&E is not aware of an existing precertification substitute but would consider another process to certify and count test energy for the RPS.

[2] *See* Cal. Pub. Util. Code § 399.16(b)(1).

4. **What measures should the Energy Commission take to ensure that applicants for precertification fully intend to complete the development of the planned facility and commence commercial operations?**

   No comment.

5. **Can the precertification process be revised to provide greater assurance to developers and the renewable electricity market? Can greater assurance be provided without guarantying the certification of a precertified facility or without evaluating the certification application under the edition of the *RPS Guidebook* used to precertify the facility?**

   No comment.

F. Application of New Eligibility Requirements to RPS Certified Facilities

The CEC requested stakeholder feedback for the following questions related to the application of new eligibility requirements. Below is PG&E's response:

1. **Should the Energy Commission hold all RPS-certified facilities to the requirements of all subsequent *RPS Guidebooks* even if new requirements are established after the facility becomes certified? Why or why not?**

   PG&E does not support a requirement to re-certify because: (1) such a requirement would increase the risk to load-serving entities of RPS noncompliance, thereby requiring such entities to over-procure RPS resources to mitigate the risk of de-certification and increasing the overall cost of RPS implementation; and (2) any de-certification of facilities could result in contractual default and costly litigation. These negative consequences could lead to disputes, further litigation, and other disruptions that could adversely affect a project's viability and contribution to the state's RPS goals. Additionally, this would create an onerous and unnecessary administrative burden on Commission Staff who are already reviewing a high volume of precertification and certification applications as well as verifying RPS deliveries.

   There are already guidelines for maintaining accurate certifications, as the *RPS Guidebook* not only outlines rules for new or newly eligible renewable resources to certify for the RPS but also identifies a process to amend certifications for facility changes as well as those facilities transitioning from utility certifications to self-certifications.

   As the Commission has previously enforced in past Guidebooks, PG&E supports the implementation of changes in RPS eligibility on a prospective basis to projects seeking new or amended RPS certifications. PG&E believes this appropriately aligns with the current certification requirements, the State's RPS goals and the continued evolution of the California RPS Program.

2. **What would be the impact, if any, on utilities if an RPS-certified facility that does not meet the requirements of the current *RPS* Guidebook was required to re-certify under the current guidebook? What would be the impact, if any, on owners of these noncompliant facilities?**

   Such regulatory uncertainty would increase the overall cost of implementing the RPS program as both utilities and facilities would assume greater risk of new rules for eligibility and subsequently mitigate that risk through actions with substantial financial impacts. As described in response to question 1, utilities would over-procure RPS resources to hedge against RPS noncompliance. Similarly, RPS-certified facilities would increase the contract price to build in compensation for potential de-certification or potentially could have problems financing some projects because of the lack of ability to mitigate this risk.

   Additionally, utilities would have to increase monitoring efforts to ensure RPS and contractual compliance. Failure of a facility to maintain certification could result in disputes, litigation and even contract termination. A significant number of contract terminations could endanger utilities' ability to meet RPS compliance. Such events would then have to be documented and explained in the appropriate regulatory filings.

   Similarly, owners of noncompliant facilities would be liable for contractual penalties and may face contract termination. These facility owners may then face greater challenges in procuring a new contract.

3. **If the eligibility of a facility is rescinded, or revised, due to a change in the *RPS Guidebook* or law, when should the change in the eligibility go into effect? When the law went into effect, upon adoption of the revised *RPS Guidebook*, or at some other time?**

   Changes in RPS eligibility requirements should continue to be applied on a prospective basis. If a certified facility in good standing would no longer be eligible given revisions to the *RPS Guidebook* or law, eligibility should be retained through the useful life of the facility or until any changes such as a repowering are made to a facility requiring an amendment to its RPS certification.

4. **To implement such requirements should RPS-certified facilities be required periodically re-certify, or re-certify due to the adoption of a new guidebook or the close of an existing contract?**

RPS-certified facilities should not be required to periodically re-certify facilities because such a requirement would introduce significant new commercial and compliance risks that will significantly increase the cost of RPS compliance, with little or no added benefit. Additionally, mandatory periodic re-certifications would tax CEC Staff with an onerous and unnecessary administrative burden.

III. ADDITIONAL COMMENTS ON PROPOSED TOPICS

PG&E outlines two additional topics for the Commission to consider in a future edition of the *RPS Guidebook.*

A. Methodology for Counting Incremental Generation from Efficiency Improvements at Hydroelectric Facilities

1. Background

Pursuant to the *7th Edition of the RPS Eligibility Guidebook*, RPS-eligible incremental generation is determined either by direct measurement (separate metering) or calculated measurement (comparison of facility output to the historical baseline on a monthly basis). Calculated measurement only counts monthly generation in excess of the baseline (monthly 20-year historical average for hydro generation facilities, 36-month historical average for other resource types) towards the RPS.[3]

2. The calculated measurement effectively discriminates against hydroelectric facilities by unfairly discounting RECs

The calculated measurement methodology likely results in zero RPS-eligible deliveries in a dry hydro year and some RPS-eligible deliveries in a normal hydro year during months when generation exceeds the monthly baseline. Only during wet hydro years, will such a methodology consistently produce RPS-eligible deliveries.

PG&E has an active incremental hydroelectric generation application at the CEC that would be subject to the calculated measurement. As more fully described in bullet three below, PG&E's investment in efficiency improvements created incremental generation over the entire load range, not just the limited amount of generation that may be above a pre-determined baseline. The existing calculated measurement methodology will undoubtedly result in erratic levels of RPS-eligible deliveries from one year to the next and unfairly discount or eliminate what should be RPS-eligible deliveries providing important benefits to PG&E's customers and the State as a whole.

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[3] RPS Guidebook at 61-62.

3. The Guidebook should include an alternative methodology that aligns with the FERC regulations for certifying efficiency upgrades and recognizes a full range of RPS-eligible deliveries

PG&E recommends that the Guidebook be revised to include an incremental generation calculation for hydroelectric facilities based on the efficiency improvement over the entire load range determined by measurement tests before and after the improvements. For example, if before and after tests determine that the efficiency improvements have resulted in a five percent increase, then five percent of total monthly generation is eligible incremental generation for the RPS. This proposal which essentially takes a pro rata approach to calculate incremental generation aligns with the FERC regulations for such incremental hydro improvements.[4] The efficiency improvement percentage approved in the FERC certification process is used as a basis for tax benefit calculations for the facility's efficiency improvements. PG&E recommends that the CEC use the FERC approved efficiency improvement percentage as a basis for calculating RPS-eligible incremental generation amounts for the facility each month. Using this proposed calculation method will result in a uniform portion of the hydroelectric facility's generation being designated as RPS-eligible each month. This proposed calculation method would greatly diminish the impact of hydro year variability on determining RPS-eligible deliveries related to efficiency improvements.

B. Counting Previous Deliveries for Eligible 40 MW or Less Hydro Generation Units that are part of a Water Supply or Conveyance System with the Interim Tracking System ("ITS")

1. Background

Pursuant to the *7th Edition of the RPS Eligibility Guidebook*, an existing hydroelectric generation unit with a nameplate capacity of 40 MW or less, which was under contract to, or owned by, a retail seller or local publicly owned electric utility as of December 31, 2005, and is operated as part of a "water supply or conveyance system," as defined by the CEC, is now RPS-eligible. The *RPS Guidebook* also provides that generation from such a facility "that is RPS-certified by the Energy Commission may be counted toward a retail seller's or POU's RPS procurement requirements beginning on January 1, 2011, consistent with SB X1-2, if an application for certification is received by the Energy Commission no later than 90 days after the adoption of the *Seventh Edition of the RPS Eligibility Guidebook*".[5]

2. The Guidebook does not currently address how to retroactively count generation not available in WREGIS

[4] FERC Renewable Energy Production Tax Credit, pursuant to the Energy Policy Act (2005) at http://www.ferc.gov/industries/hydropower/gen-info/comp-admin/credit-cert.pdf
[5] RPS Guidebook at 78.

Although the *RPS Guidebook* offers parties the opportunity to count RPS procurement from such facilities beginning on January 1, 2011, the WREGIS Operating Rules do not allow a facility registered in 2013 (after the adoption of the *7th Edition of the RPS Eligibility Guidebook*) to create WREGIS Certificates back to January 1, 2011. WREGIS Operating Rules limit the creation of WREGIS Certificates to only 75 days prior to when the facility's registration was approved in WREGIS.[6] Given this WREGIS limitation, the only way a retail seller or POU can count RPS procurement for such facilities back to January 1, 2011, would be with the ITS, since the WREGIS system cannot be used retroactively for generation in 2011, 2012 and the beginning of 2013. The *7th Edition of the RPS Eligibility Guidebook* does not allow the use of the ITS for this purpose for retail sellers beginning January 1, 2011 and for POUs beginning October 1, 2012.

3. The Guidebook should be revised to permit use of the ITS to count generation that will not be available in WREGIS

PG&E recommends that the CEC revise the *RPS Guidebook* to allow the use of the ITS from January 1, 2011 through the facility's registration date in WREGIS, in order to count RPS procurement from RPS-eligible units with a nameplate capacity of 40 MW or less, which were under contract to, or owned by, a retail seller or local publicly owned electric utility as of December 31, 2005, and operated as part of a water supply or conveyance system for instances where "an application for certification is received by the Energy Commission no later than 90 days after the adoption of the *Seventh Edition of the RPS Eligibility Guidebook*".[7]

IV. CONCLUSION

PG&E appreciates the opportunity to provide comments on the scoping workshop and looks forward to continuing to work with the Energy Commission to review and finalize a future edition of the *RPS Guidebook* consistent with the recommendations set forth above.

Should you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

/s/

Matthew Plummer

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[6] WREGIS Operating Rules at 9 and 38 (Sections 5.3 and 12.3).
[7] RPS Guidebook at 78.