February 11, 2013

VIA E-MAIL:  
DOCKET@ENERGY.CA.GOV;  
RPS33@ENERGY.CA.GOV

California Energy Commission  
Dockets Office, MS-4  
Re: 11-RPS-01 and 02-REN-1038  
RPS Proceeding  
1516 Ninth Street  
Sacramento, CA 95814-5512

Re:  Concept Paper for the Implementation of Assembly Bill 2196 for the Renewable Portfolio Standard: Comments of Pacific Gas and Electric Company

I. INTRODUCTION

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the California Energy Commission’s (CEC) Concept Paper for the Implementation of Assembly Bill (AB) 2196 for the Renewables Portfolio Standard (RPS) (AB 2196 Staff Paper).

PG&E is deeply troubled by the CEC’s interpretation of Public Utilities Code 399.12.6 (b)(3)(A): “a common carrier pipeline that physically flows within California or toward the generating facility for which the biomethane was procured under the original contract.” The CEC has incorrectly construed this section of the statute to require that out-of-state pipelines flow only in the direction of the generation facility, with no displacement.

As described in Sections II and III of these comments, few, if any, common carrier pipelines would meet this description and, therefore, the CEC’s interpretation is effectively a ban on out-of-state biomethane. Pipelines commonly have many receipt and delivery points. Even for a pipeline flowing in one direction, it is practically impossible to determine whether the biomethane molecules entering an out-of-state pipeline physically reach California.

Additionally, standards applicable to biomethane injected into a common carrier pipeline located in California will be established under a separate stakeholder process. The companion bill to AB 2196, AB 1900, requires the establishment of standards relative to health, safety, and facility integrity for biomethane injected into common carrier pipelines. Implementation of AB 1900 will require significant work by, and consultation between and among, several state agencies, including the Office of Environmental Health Hazard Assessment, the California Air Resources
Board, CEC and the California Public Utilities Commission. Accordingly, the proposed revisions to the *Renewable Portfolio Standard Eligibility Guidebook, Seventh Edition,* should recognize that a biomethane health and safety standard will be ultimately established by the California Public Utilities Commission, and any biomethane injected into a common carrier pipeline in California must meet this standard.

II. **INTERPRETATION OF OUT-OF-STATE COMMON CARRIER PIPELINE**

While some renewable resources are both produced and consumed at the same site, biomethane, by contrast, is often produced away from an electric generating facility. It therefore must be injected into either in-state or out-of-state common carrier pipelines, where it displaces non-renewable natural gas. To ensure that the biomethane is not counted twice, a separate accounting structure needs to be developed to confirm that biomethane injected in the system truly displaces fossil-fuel consumption, with no double-counting.

AB 2196 establishes the basic framework for this system. Renewable electric generation facilities that receive “landfill gas, digester gas, or another renewable fuel . . . through a common carrier pipeline” must show that “the transaction for the procurement of that fuel . . . satisfies the requirements of Section 399.12.6 of the Public Utilities Code . . . [and] is verified pursuant to the accounting system established by the commission pursuant to Section 399.12.6” [emphasis added].

In enacting AB 2196, the Legislature recognized the CEC’s concern regarding Renewable Portfolio Standard-eligibility of biomethane from as far away as Pennsylvania and “injected into locales which make it physically impossible to verify delivery of the fuel to California, particularly because the flow of those pipelines passes though pipelines flowing in the opposite directions of California.” However, for biomethane that is not used onsite or delivered through a dedicated pipeline, Section 399.12.6 establishes a three part test: 1) the source did not inject prior to March 29, 2012; 2) the seller or purchaser of the biomethane demonstrates that the capture and injection of biomethane results in environmental benefits to California; and 3) that “the source of biomethane injects the biomethane into a common carrier pipeline that physically flows within California or toward the generating facility for which the biomethane was procured under the original contract.”

In the AB 2196 Staff Paper, the CEC interpreted Section 399.12.6 (b)(3)(A) to require a generating facility to demonstrate that, for out-of-state pipelines, the “pipeline must physically flow only in the direction of the electrical generation facility for which the biomethane was procured” and that “displacement is not allowed.”

---

2 Senate Rules Committee, AB 2196 Assembly Bill Analysis (Third Reading), available at [http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_2151-2200/ab_2196_cfa_20120831_185423_sen_floor.html](http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_2151-2200/ab_2196_cfa_20120831_185423_sen_floor.html) at 5-6.
3 Public Utilities Code 399.12.6 (b)(3)(A)
few, if any, common carrier pipelines meet this description and, therefore, the CEC’s interpretation of the statute would effectively be a ban on out-of-state biomethane. Pipelines commonly have delivery points in multiple directions, and, for a given direction, multiple drop-off points. Hence, it is practically impossible, except in limited circumstances, to determine that biomethane molecules entering an interstate pipeline out-of-state physically reach California. Accordingly, PG&E respectfully requests the following changes to page 10 of the AB 2196 Staff Paper:

**Staff proposal:**
A generating facility using biomethane for the RPS under a contract executed on or after March 29, 2012, is eligible for the RPS if the biomethane is delivered through a common carrier pipeline that physically flows within California’s geographic borders and is owned/operated by an entity regulated by the CPUC or local distribution network in California and meets all other applicable requirements set forth in the RPS Eligibility Guidebook in place at the time the Energy Commission receives a complete application for certification or precertification, whichever occurs first. If the pipeline is outside California’s geographic borders, displacement is not allowed; the pipeline must physically primarily flow only in the direction of the electrical generation facility for which the biomethane was procured under the original contract. Displacement is allowed pursuant to verification by the Commission or an independent auditor.

**Rationale:** Most interstate pipelines are unidirectional, but some are bidirectional, with two parallel pipelines running in either direction. When deliveries to an upstream facility are made, it is industry practice to contract for displacement, where a specific quantity of gas is received into the pipeline and a commensurate amount is withdrawn, without the gas necessarily flowing toward the withdrawal point.

Because biogas is fungible with conventional natural gas once it is comibled in the common carrier pipeline, the delivery of the biogas must at least be toward the generating facility to ensure that the facility is capable of using the biogas.

### III. OUTSTANDING ISSUES AND QUESTIONS

In this section PG&E provides its responses to Questions 1a, 1b, 2a and 2b in Section D of the AB 2196 Staff Paper.

**Question 1a:** For common carrier pipelines that physically flow within California, please discuss how the CEC can be assured that the biomethane remains within the state’s geographic borders?

**PG&E Response:** California is situated at the tail end of the interstate pipelines serving the west coast. Large interstate pipelines deliver substantial volumes of gas into the California market on a daily basis, and are not physically or hydraulically configured to reverse the flow of gas for delivery outside of California to the east or north. Thus, there will not be any opportunity for biogas to physically leave the state by flowing east or north on these pipes.

**Question 1b:** For pipelines that do not physically flow within California’s geographic borders, please provide examples of how a retail seller or POU can document that the delivery of
biomethane was through a common carrier pipeline that only physically flows in the direction of the electrical generation facility.

**PG&E Response:** It is infeasible for a retail seller or POU to document that a biomethane molecule injected into a common carrier pipeline outside of California’s borders only physically flows in the direction of an electrical generation facility. Pipelines commonly have delivery points in multiple directions, and, for a given direction, multiple drop-off points.

Buyers and sellers of gas cannot know with certainty, especially in advance, where pipeline volumes physically flow. Because molecules of gas cannot be tagged individually, most pipelines connecting to California cannot determine where a particular supply will physically flow on their system. Furthermore, pipeline operators manage their system to safely and efficiently meet delivery requirements rather than to assure the delivery of any particular gas molecule. Physical flow of a particular gas supply is not commercially reasonable, not relevant to contracting, does not impact the ability to preclude double counting of green attributes, and therefore should not be considered in the interpretation of AB 2196 and the related Public Utilities Code provisions concerning biomethane eligibility.

In enacting AB 2196, the Legislature recognized the CEC’s concern regarding RPS-eligibility of biomethane located as far away as Pennsylvania and “injected into locales which make it physically impossible to verify delivery of the fuel to California, particularly because the flow of those pipelines passes though pipelines flowing in the opposite directions of California.” In response to this concern, and to recognize that environmental benefits associated with biomethane are captured for California, the Legislature adopted a provision requiring out-of-state biomethane to physically flow toward the receiving generating facility.

Given the physical impossibility of tracking the physical flow of any biomethane molecule, the only reasonable interpretation of Section 399.12.6 (b)(3)(A), that does not bar the participation of out-of-state biomethane, is to allow biomethane injected into a natural gas pipeline system that is either (1) within the WECC region or (2) interconnected to a natural gas pipeline system located in the WECC region that delivers gas into California (or delivers to the electric generation facility if the electric generation facility is located outside California). This interpretation directly addresses the Legislature’s concern regarding biomethane injections without a nexus to California and is consistent with RPS-program eligibility requirements. Furthermore, this interpretation recognizes the physical aspects of both biomethane molecules and the natural gas infrastructure operations of the United States and will not preclude the participation of out-of-state biomethane.

---

(Senate Rules Committee, AB 2196 Assembly Bill Analysis (Third Reading), available at [http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_2151-2200/ab_2196_cfa_20120831_185423_sen_floor.html](http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_2151-2200/ab_2196_cfa_20120831_185423_sen_floor.html) at 5-6.)
Renewable gas projects outside of California may inject gas into various pipeline systems in the western region for contractual delivery to customers within California. All gas volumes flowing in the various pipeline systems must be scheduled in advance on a daily basis, using each pipeline’s nomination and scheduling systems. Daily nomination and scheduling records from the out-of-state facility to the California border should be considered acceptable evidence documenting the flow of biomethane to California. Tracking of the renewable gas volumes can be accomplished by documenting the pipeline paths along which the biomethane was scheduled, from its source (and initial pipeline injection) through to the end user of the gas.

The CEC’s interpretation that would effectively bar delivery of biomethane by displacement cannot be applied impartially to both in-state and out-of-state biomethane producers. Physical gas flow of a biomethane molecule cannot be known with certainty except in rare circumstances. To require such knowledge will only act as a ban on such out-of-state biomethane transactions, hindering the development of environmentally important projects and increasing costs to California customers.

Question 2a: Please provide information regarding the systems currently in place for tracking the use of landfill gas, digester gas, or another renewable fuel delivered to an electric generating facility through a common carrier pipeline. Include metrics for volume and heat content, for both production and capture of landfill gas, digester gas, or another renewable fuel delivered through a common carrier pipeline, injection into the pipeline if applicable, and delivery to the generating facility.

PG&E Response: Current tracking for biomethane is accomplished through reports from the biomethane generator, and the pipelines on which the biomethane is transported. These reports show heat content of the gas scheduled from the biomethane producer into a pipeline. Pipeline reports from that pipeline or others downstream demonstrate that contractual terms for the delivery point are met.

Question 2b: Please provide information regarding the systems currently in place for tracking the use of landfill gas, digester gas, or another renewable fuel delivered to an electric generating facility through a common carrier pipeline, to ensure that contract requirements for delivery of the fuel to the electric generating facility are met. Include metrics for volume and heat content, for both production and capture of landfill gas, digester gas, or another renewable fuel delivered through a common carrier pipeline, injection into the pipeline if applicable, and delivery to the generating facility.

PG&E Response: Please see the response for Question 2a.

IV. CONCLUSION

PG&E is happy to meet with CEC staff on these important topics.
Sincerely,

/s/

Valerie J. Winn

cc:    Kate Zocchetti by email (kate.zocchetti@energy.ca.gov)