

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Implement Dairy  
Biomethane Pilot Projects to Demonstrate  
Interconnection to the Common Carrier Pipeline  
System In Compliance with Senate Bill 1383.

Rulemaking 17-06-015  
(Filed June 15, 2017)

**COMMENTS OF CALIFORNIA BIOENERGY LLC ON THE  
JOINT UTILITY DRAFT SOLICITATION FOR SB 1383 DAIRY PILOT PROJECTS**

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February 5, 2018

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The California Bioenergy LLC (“CalBio”) appreciates this opportunity the Commission has made to submit comments and questions with regard to the Joint Utility Draft Solicitation. We also want to express our appreciation to the utilities for their work in preparing the Draft Solicitation.

**I. Dairy Methane Destruction Volume and Impacts on Scoring**

**A. Lease and Feedstock Agreements versus expressions of interest**

Chapter 1, Section 3.0.3 reads “describe the phased-approached or the full cluster plan (e.g., construction, operation timeline, number of dairies in total cluster and amount of biomethane that will be generated in each phase of the cluster construction). The phased-approached cluster project must include a signed lease and feedstock agreement, not just a letter of interest or future addition.” Elsewhere, including Section 5.5.1, it refers to the ability to add dairies at a later date to the interconnection infrastructure for the cluster.

CalBio would appreciate greater clarity on scoring of methane destruction and the impact on the evaluation of project costs per metric ton of methane destroyed. Is the methane destruction volume based solely on signed lease and feedstock agreements or is a portion based on the capacity of the system? We would suggest an 80/20 split between signed agreements and future potential.

Additionally, there is the requirement to show phased construction. How is this evaluated in scoring? Finally, there is a request to show commitment by the project. How is commitment defined? Is it synonymous with having a Lease and Feedstock Agreement, or is there some other basis?

## **B. Relative Methane Reduction Scoring**

It is our reading of the Final Decision<sup>1</sup> and solicitation that projects are evaluated financially reflecting the relative dollars of methane destroyed per ratepayer funds provided. We strongly support this approach. Assuming two clusters:

- Cluster 1: \$5M cost to ratepayer that reduces 50,000 MT per year
- Cluster 2: \$10M cost to ratepayer that reduces 120,000 MT per year

Cluster 2 would score ahead of Cluster 1.

## **C. Expansion of Eligible Projects and Clarification**

Per Ch. 1, Sec. 3.0.1, CalBio recommends expansion of the definition of a “dairy operation” to include ranches that raise heifers that will later be moved to a dairy. This is an increasingly common practice and these heifer ranches, similar to other dairy operations, collect dairy manure into anaerobic lagoons, emitting methane. We suggest the ability to add such a facility into a cluster.

Per Ch. 1, Sec. 3.0.4, CalBio would like to suggest for clarification that it is sufficient for a project to inject biomethane into a vehicle in California. If the vehicle delivers goods out of state, it will nevertheless be viewed as an eligible use.

## **II. Eligibility and Financial Evaluation**

### **A. Multiple uses of the Biomethane**

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<sup>1</sup> D.17-12-004, hereinafter “Decision” or “Final Decision”.

Per Ch. 1, Sec. 4.0,

If a Pilot Project includes both delivery of biomethane to an onsite electric generator (e.g., combustion turbine, microturbine or fuel cell) and injection of biomethane into the Utility pipeline, the Pipeline Infrastructure costs that are eligible for funding shall be reduced by the percentage of the biomethane that is delivered to an onsite electric generator, rather than injected into the Utility pipeline.

The use of the biomethane for electricity generation or pipeline injection will be defined in the future. There should be no downside, for the purposes of applications to the solicitation, to understate the biomethane that will be injected into the pipeline, since this would decrease the score. In contrast, over-estimating the amount of biomethane to be injected could lead to perverse incentives. For instance, if a project has an alternative use of the biomethane and future economics encourage this alternative use, should a penalty be put in place? If this is the case, what should the report requirements be on an annual basis? And what should be the penalty provisions, if any?

**B. Failure to Deliver Estimated Methane**

This opens up a wider topic: what if a project is scored on an amount of biomethane injection and this volume is not achieved in a reasonable period of time. If the level achieved is lower than an alternative application, should that other application have been awarded? But even in such a scenario, one doesn't know what the alternative applicant would have produced in reality. One approach is that a certain percentage of the collection line payments from the ratepayers should be withheld until the projected output is reached. We would recommend this level at 20% and withheld for up to two years after COD.

A production schedule/reimbursement rate would need to be thought out for the collection line reimbursement. For instance, one approach would be that none of the 20% is paid

out for a project the only reaches 80% of projected methane levels. Similarly, the project would receive a pro-rata receipt of reimbursement for each percentage point over 80%. In other words, at 90% it would lose 10% of the reimbursement.

### **C. Reimbursement Schedule**

The reimbursement schedule is an important topic. It is our understanding that all traditional interconnection costs (point of receipt, pipeline extension) will be covered by the utility and/or ratepayers. For the collection line component, we suggest that progress payments are made reflecting the percentage of work completed. This is in keeping with CDFA's approach. CDFA withholds 10% for a payment at the end of the project. We suggest this is increased to 20% to also take into the payments withheld for failing to achieve the estimated biomethane volume.

### **III. Pipeline Infrastructure Scoping and Cost Estimation**

By March 17, 2018, Applicants must submit a request for the utilities to perform a "Pipeline Infrastructure Scoping and Cost Estimation" ("PISCE"). We have a handful of questions and comments:

- A. Are Lease and Feedstock Agreements (per Sections 3.0.3 and 5.5.1) due with requests for the PISCE desktop study on March 17 or due with applications on June 25 or both? It is our understanding, please confirm, (1) they are required by March 17 per 5.5.1.1, but (2) that this can be modified after the receipt of the PISCE, since "the Applicants shall have 15 days to submit changes to its project description" (5.1.7). We would suggest that additional Lease and Feedstock Agreements can be provided with the June 25 submission, as long as the added dairies were submitted as part of 5.5.1.2 and thus part of the capacity study.

B. Per 5.5.1, the utilities are asking for applicants to provide the location of the upgrading system (5.5.1.4) and the point of receipt (5.5.1.5). However, they are also asking for "Location(s) of the Utility pipeline extension" (5.5.1.6). It is our understanding that the location of the pipeline extension will be determined by the utility in the PISCE report and not provided by the applicant.

#### **IV. Minimizing Long-Term Risk and Impact on Project Evaluation**

Our research has exposed a potential long-term risk to projects. If a project injects at the distribution level in a rural area, there is a risk the demand on that line may diminish over time. This is especially the case if there is one large customer on that line. All parties want to ensure the long-term viability of projects and the wise expenditure of ratepayer funds.

This risk is solved for by injecting into the transmission lines to start. However, this would likely increase cost for the collection lines/pipeline extension needed to cover a longer distance and result in ongoing higher compression costs, both paid by the ratepayers.

This in turn could put a project into a disadvantaged position in the competitive analysis. One solution would be that a project isn't discounted in the financial evaluation if there is a higher cost for the ongoing compression. Rather this higher cost is seen as a worthwhile cost to prevent the risk of loss of capacity down the line. A second approach would be for the project owner to offer to pay the difference in annual compression costs. A third approach would be that a project could move to the nearest transmission line, if the distribution line was phased out, at that time, with the cost paid for by the ratepayers.

#### **V. H2S Removal**

There is a change in the solicitation from the Decision. Ch. 1 Section 4.0 Figure 1: Dairy Biomethane Pilot Primary Components, Lane 2 shows H2S being removed at the dairy prior to

injection into the collection/production line. Placing the upgrading system prior to collection line injection is inconsistent with the position taken by the PUC. Rather, the upgrading system belongs in Lane 3.

The Commission wrote in its Decision “We are convinced based on the comments that the concerns that had led us to require pre-treatment can be managed through ensuring that the digester produced biogas characteristics have been considered in the type of gathering system proposed. With this change, we are comfortable that treatment for these constituents (water and hydrogen sulfide) can occur at the same time as all other constituents are treated.” (Section 12, page 19 of the Decision)

The current language of the solicitation reads “The following Pipeline Infrastructure components are eligible for funding: Biogas collection lines and facilities for treatment of biogas before it enters the collection lines (Lane 2 of Figure 1) – owned and operated by Applicant”. CalBio recommends that it should be changed to read, “The following Pipeline Infrastructure components are eligible for funding: Biogas collection lines and dewatering facilities for treatment of biogas before it enters the collection lines (Lane 2 of Figure 1) and the H2S removal system after the biogas exits the collection line and before entering the gas upgrading system.”

Our view is that the greatest safety risk is during operations of the upgrading facility. We wrote in Reply Comments filed on December 4, 2017

With regard to the gas collection lines and the proposal to clean H2S prior to raw biogas entering the collection lines, we have a number of concerns. The risks associated with the transportation of high H2S are over stated, and the risks associated with on-dairy removal of H2S are understated. The greatest threat to safety is in the ongoing operation and maintenance of H2S removal systems. With a central facility there is one facility for H2S removal. By contrast, at a cluster of ten dairies with on-dairy H2S removal, there would be ten facilities -- with ten times the risk of an accident. Moreover, a central facility increases volume and justifies a more sophisticated

and expensive system. By contrast, the smaller volume of on-dairy H2S removal could encourage the use of systems that have substantially lower capex (in order to win the competitive solicitation) but ongoing higher costs associated with more frequent changes of the H2S media. This increase in maintenance in turn would further exacerbate the risk of an accident. We support the suggestions of Dairy Cares and AECA that the Commission should delegate to staff the authority to resolve this issue through near-term meetings to discuss prudent safety measures for H2S removal systems and gas collection design. (Footnotes omitted.)

As expressed in December, having H2S removal at the dairy site/pre-collection line, will mean, at a cluster of ten dairies, ten systems and ten points of worker risk.

In addition, to changing the reimbursement language to be consistent with the Decision, we strongly suggest the Commission hold near-term meetings with a cross selection of experts and developers. We share the same goals as other parties, to define (a) the safest approach for H2S removal; (b) a safe collection line design and (c) factor in economics, to prevent an incentive that could increase safety risk and unnecessarily cost the rate payer.

## **VI. Water Protection**

Attachment A2 reads,

Projects shall demonstrate protection of water. The design and construction of digester vessels (i.e., ponds and tanks) under this program shall be demonstrated to be protective of surface and ground water quality as determined by the appropriate regional water quality control board, including, but not limited to, each of the following:

- a. Double-lined ponds consistent with the Tier 1 specification of the Dairy General Order (R5-2013-0122) of the Central Valley Regional Water Quality Control Board;
- b. Above-ground tank;
- c. Below-grade concrete lined tank

We are supportive of these water protection requirements as follows. Only digesters that will use one of the above technologies should be counted towards the methane destruction



estimates in the application. However, while not counted in the methane reduction, a developer would be able to utilize the infrastructure built in this program for digesters that capture methane by covering an unlined lagoon. There would need to be an enforcement mechanism. If a recipient of ratepayer funding through this program were to later to use the shared infrastructure for an unlined lagoon digester that had originally been identified to meet the water protection requirements, the developer would owe back to the ratepayer the proportionate share of costs covered by the ratepayers from that particular digester.

## **VII. GHG Calculation**

Per CHAPTER 2: Required Documentation For Submitting Application, Section 2.1, 1), b reads, “Explain the current management practices in detail, including a description of lagoon(s) size (depth and volume) if currently using lagoon storage, parlor water use, bedding type, method and frequency of manure collection including percent of manure collected from each production group (i.e., lactating cows, heifers etc.)” CalBio suggests the solicitation utilizes the revised and simplified assumptions CDFA is using in its February 2018 DDRDP solicitation. This update from ARB makes set assumptions for the manure capture rate based on production group and housing type. This will save time for all parties and reducing the possibility of gaming.

## **VIII. Reply Comment Deadline**

With regard to the Schedule 5.1.4, given the importance of the solicitation, we suggest Reply Comments are due not on February 12 but on February 26 both to give time for considered analysis and to take into account the CDFA February 24 deadline. The extra time for Reply Comments should have no bearing on the June 25 deadline for applications.

Thank you for this opportunity to submit these comments and questions.

Dated: February 5, 2018

Respectfully submitted,

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