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DAC Presentation: SB 1383 Dairy Biomethane Pilot Projects CPUC Selection Process



September 20, 2019

Jamie Ormond, Sr. Analyst Energy Division 415 703 1193



<u>Decision 17-12-004</u> Determines Selection Criteria and Selection Evaluation of the Dairy Biomethane Pilot Projects:

CPUC Renewable Natural Gas Website

(Google: CPUC Renewable Natural Gas)



III. Dairy Biomethane Pilot Projects

SB 1383 requires the CPUC to direct gas corporations to implement not less than five dairy biomethane pilot projects to demonstrate interconnection to the common carrier pipeline system. CPUC consulted with CARB and CDFA on the development of R.17-06-015, the Dairy Biomethane Pilot Rulemaking, for the selection and implementation of these pilot projects.

The CPUC adopted the Decision 17-12-004, Establishing Implementation and Selection Framework to Implement the Dairy Biomethane Pilots Required by Senate Bill 1383, at the December 14, 2017 Commission meeting. http://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&DocID=201352373

The solicitation for applications is expected to be released in early spring 2018, with applications due in the summer. The pilot program rules ensure that the projects will not result in an increase of criteria pollutants or toxic air contaminant emissions in the air basin where the project is located.

An interagency Selection Committee consisting of CPUC, CARB, and CDFA, will choose the pilot projects. These pilot projects (which will process manure using anaerobic digestion and produce useable methane gas) are part of the state's efforts to reduce emissions of short-lived climate pollutants, including reducing methane emissions 40% by 2030. The program's data reporting requirements will generate information that allows the agencies to evaluate these projects.

ink to Decision 17-12-004, December 14, 2017

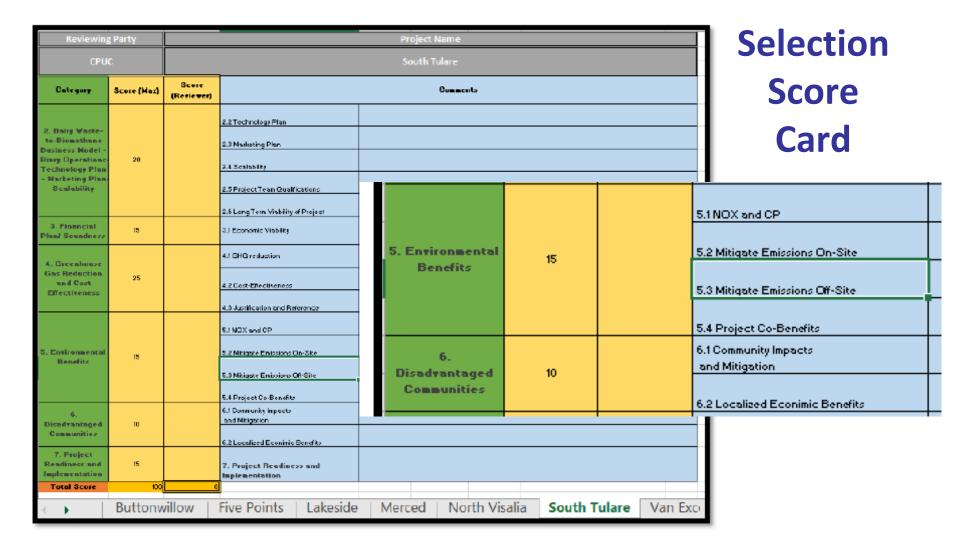
In the Decision:

- Appendix A: Dairy
 Biomethane Pilot

 Implementation Framework
- Appendix B: Selection Criteria and Framework
- Attachment A: CEQA Guidance
 - **Attachment B:** Data Reporting Parameters and Participation in Evaluations
 - CEC to develop
 - **Appendix C:** Glossary











For more details on the Selection
Process, please see the Selection Score
Card found on the CPUC Renewable
Natural Gas website.

Final Scores

Project Name	Dairy Waste-to- Biomethane Business Model - Dairy Operations- Technology Plan - Marketing Plan- Scalability	Financial Plan/ Soundness	Greenhouse Gas Reduction and Cost Effectiveness	Environmental Benefits	Disadvantaged Communities	Project Readiness and Implementation	Total Score
South Tulare	20	14	22	14	9.5	14	93.5
North Visalia	19	14	22	13	9	13	90
Buttonwillow	17.5	13.5	20	13	8.5	13	85.5
Merced-CEE	16	12	20	12	7	14	81
Lakeside	14	10	19	11	7	11	72
Five Points	14	10	18.5	9.5	8	11.5	71.5
Van Excel	12	12	17	9	7	9	66
Weststeyn	13	10	13	9	7	9	61



Total Pilot Project Costs December 3, 2018 – <u>Score Card</u> Published → To demonstrate pipeline interconnection

Total Costs

The total cost of the SB 1383 pilot projects, including the sixth project:

Total Construction	Total O&M Costs	Total All-In Costs	Total	Estimated GHG
Costs	for 20 years		Biomethane	Reduction-
			Produced -	20-year estimate
			20-year	based on
			estimates	applications
\$131,635,795	\$187,349,480	\$318,985,275	47,357,433	15,694,034
			MMBtu	mtCO2e*

Total Pilot Project Costs *Updated* April 19, 2019– Via Advice Letter Filings *corrected construction costs based on final interconnection cost estimates *corrected O&M costs spread over 20 years

total					
construction		Total O&M			total cost of
costs	\$ 121,084,816.00	over 20 years	\$ 28,549,940.00	\$ 149,634,756.00	pilots



Dairy Pilots – how much gas?

California – 5.6 Bcf/day

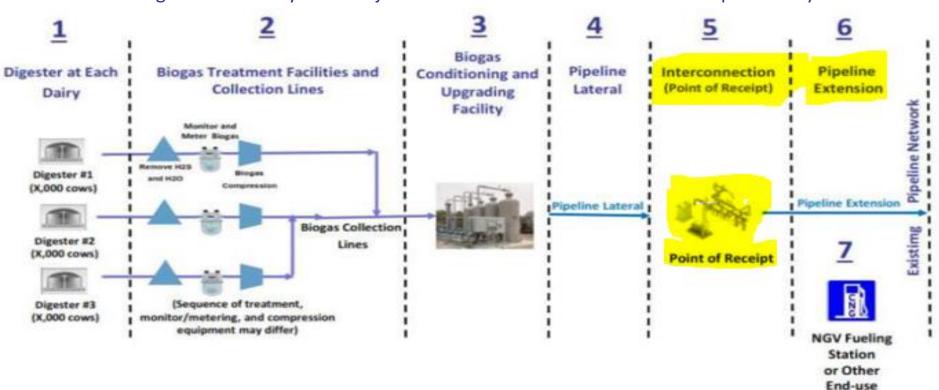
Dairy Pilots - 6300 MMBtu/day 6,300 MMBtu/day = 0.0063 Bcf/day ~ 2.36 Mcf/year ("thousand")

MMBtu to Bcf conversion: X 0.000001



Jurisdiction

Diagram from Dairy Pilot Projects Decision 17-12-004 - "For Pilot Purposes Only"



- 1. <u>Dept of Food & Ag.- Dairy Digester Program</u>
- **1-5:** <u>Air Resources Board Diary Working</u> <u>Group</u>
- **1-7**. California Energy Commission

Regular CPUC Jurisdiction: Swimlane 5 & 6

- Pipeline injection gas quality standards
- Pipeline interconnection processes
- Interconnection costs