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

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Decision 17-12-004 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.

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

December 3, 2018	Press Release Selection Committee Score Card Summary

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

Selection Score Card

Reviewing Party	Project Name
CPUC	South Tulare

Category	Score (Max)	Score (Reviewer)	Comments
2. Dairy Waste-to-Biomethane Business Model - Dairy Operations - Technology Plan - Marketing Plan - Scalability	20		2.2 Technology Plan
			2.3 Marketing Plan
			2.4 Scalability
			2.5 Project Team Qualifications
			2.6 Long Term Viability of Project
3. Financial Plan/ Soundness	15		3.1 Economic Viability
4. Greenhouse Gas Reduction and Cost Effectiveness	25		4.1 GHG reduction
			4.2 Cost-Effectiveness
			4.3 Justification and Reference
5. Environmental Benefits	15		5.1 NOX and CP
			5.2 Mitigate Emissions On-Site
			5.3 Mitigate Emissions Off-Site
			5.4 Project Co-Benefits
6. Disadvantaged Communities	10		6.1 Community Impacts and Mitigation
			6.2 Localized Econimic Benefits
7. Project Readiness and Implementation	15		7. Project Readiness and Implementation
Total Score	100	0	

5. Environmental Benefits	15		5.1 NOX and CP
			5.2 Mitigate Emissions On-Site
			5.3 Mitigate Emissions Off-Site
			5.4 Project Co-Benefits
6. Disadvantaged Communities	10		6.1 Community Impacts and Mitigation
			6.2 Localized Econimic Benefits

Buttonwillow | Five Points | Lakeside | Merced | North Visalia | **South Tulare** | Van Exc

https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Energy_Programs/Gas/Natural_Gas_Market/FinalSelectionComScoreCardSum.pdf

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 – Score Card Published
→ To demonstrate pipeline interconnection

Total Costs

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

Total Construction Costs	Total O&M Costs for 20 years	Total All-In Costs	Total Biomethane Produced - 20-year estimates	Estimated GHG Reduction- 20-year estimate based on applications
$131,635,795	$187,349,480	**$318,985,275**	47,357,433 MMBtu	15,694,034 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 costs	$ 121,084,816.00	Total O&M over 20 years	$ 28,549,940.00	$ 149,634,756.00	total cost of pilots

Dairy Pilots – how much gas?

California – 5.6 Bcf/day

Dairy Pilots - 6300 MMBtu/day

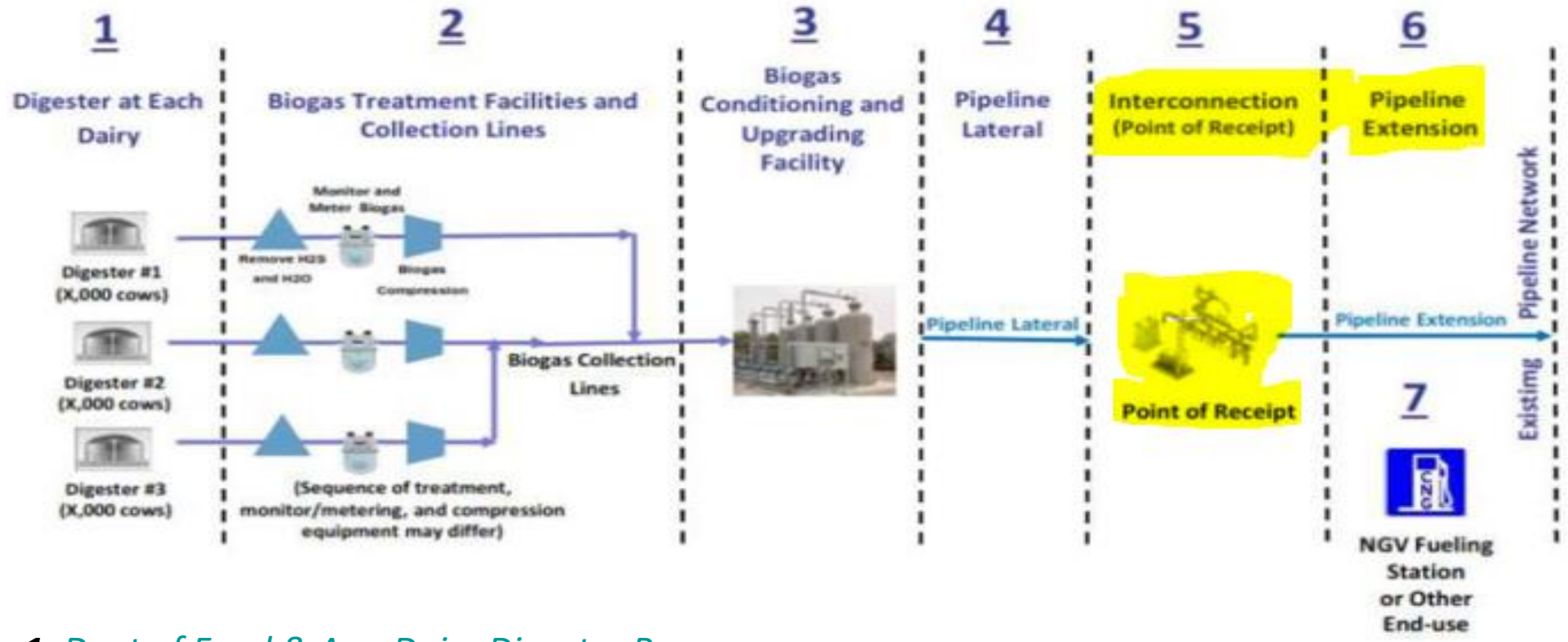
6,300 MMBtu/day = 0.0063 Bcf/day

~ 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. *Dept of Food & Ag.- Dairy Digester Program*

1-5: *Air Resources Board - Diary Working Group*

1-7. *California Energy Commission*

Regular CPUC Jurisdiction: Swimlane 5 & 6

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