California Energy Commission
DOCKETED
13-IEP-1M
TN 71256
JUN 12 2013

Status of Bioenergy Development in California

Biomass to Power Challenges & Opportunities

June 3, 2013

Presented by
Michael Boccadoro
President

THE DOLPHIN GROUP
Strategic Public Affairs

Status of Dairy Digester Development

- Digester development has lagged in California
  - Largest dairy industry
  - 1.8 million cows; significant potential
- 4 current projects in development
  - SMUD – 2
  - PG&E – 2
- Project development has stagnated in recent years
- Roughly 24 built – fewer than a dozen still operating

Obstacles for Bioenergy Development

- Permitting obstacles and complexities
  - Programmatic EIR
  - Streamlined permitting
- High environmental compliance costs hurt economics
- Lack of long-term power purchase agreements
  - Immature carbon markets
- Difficult and uncertain interconnection process
- High financing cost
- Federal incentives declining

Outlook for Future

- California regulatory environment encourages digester development
  - AB 32 / Cap & Trade
  - RPS
  - Low Carbon Fuel Standard
  - Urban waste diversion goals
- Supportive Brown Administration
- Recent Legislative support
  - AB 1900 / AB 2196
  - SB 1122

Evolving Landscape

- AB 1900 to clarify and facilitate biomethane injection requirements
- AB 2196 establish rules for use of biomethane as RPS eligible
- SB 32 FiT program adopted last week
  - ReMAT mechanism problematic for bioenergy
  - Long delays
  - Competition from "existing" projects
- SB 1122 Bioenergy program
  - 250 MW incubation program
  - Early stages of implementation
  - Significant issues and potentially long delays
- Long-term vehicle fuel opportunities also encouraging

Thank you

Questions?