



CEC 2012 Intergrated Energy Policy Update
Evaluating & Capturing the Benefits of Renewable Energy for California
April 12, 2012

SoCalGas & SDGE Biomethane Development Status

Tamara Rasberry- State Agency Affairs Manager

Drivers of Biomethane Production

– California Regulatory Environment

- * Renewable Portfolio Standard of 33%
- * Assembly Bill 32: cap-and-trade to return to 1990 emission levels (i.e. 30% vehicle GHG emissions reductions by 2016, overall 30% state reduction from 2020 projected emissions, target high global warming potential gases)
- * Low Carbon Fuel Standard: 10% reduction in carbon content of passenger vehicle fuels by 2020

– **Large demand for in-state renewable fuels** for on-site distributed generation, central generation, and vehicles to meet Green House Gas (**GHG**) reduction targets

– **Availability of feedstocks** that currently vent or flare methane: wastewater, food waste, dairy, biomass = potential 16% of CA daily natural gas consumption.

– **Potential under cap-and-trade** for credit/offset value from captured GHG emissions

Development Challenges

- **Permitting:** on-site biogas generation challenged by air quality permitting (NOx) and required air, water, and land use multi-layer regulatory approvals

- **Feedstock aggregation**
 - Multiple feedstock for improved flow rates v. groundwater issues
 - Rights-of-way for aggregation infrastructure
 - Multiple dairy owners agreement required
 - Engineering of aggregation is site-specific

- **Perceived technology risk**
 - SoCalGas Rule 30 and PG&E Rule 21 gas specifications
 - Limited demonstration projects to the financial community

- **Uneven biogas incentives:** federal biogas on-site generation incentives not available for pipeline biomethane production

- **Administrative:** marketing and contractual arrangements for sale of biomethane required

Sempra Utilities Biogas Initiatives

▪ Pipeline Biomethane Injection Readiness

- Rule 30 Biogas Guidance Document released September 2009
- Participating in Gas Technology Institute (GTI) studies - dairy biogas, landfill gas
- Support for biogas regulatory policies:
 - * CARB rules to permit offsets for digesters – improves biogas/biomethane economics
 - * CEC - RPS eligibility advocacy
 - * CPUC Regulatory definition: “gas derived from renewable organic sources”

▪ Propose SoCalGas Biogas Conditioning/Upgrading Tariff

- Where production cost < MPR of biomethane, provide tariff biogas conditioning service
- Enable large customers to produce biogas and/or pipeline quality biomethane from their organic feedstock. Facilitates onsite gen, NGV fueling, pipeline biomethane supplies.
- SoCalGas to own/maintain biogas conditioning equipment and charge customer a fee under a long-term contract.
- Requires CPUC approval.
- Enlisting the support of local and statewide agencies