Interconnecting to the PG&E Pipeline System

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Overview of Interconnection Process

1 Week

3 Weeks

5 Months

15 Months

1 Week

Intake

- Initial contact to Biomethane@p ge.com
- Assign Interconnection Manager
- Developer returns all information requested
- Initial project feasibility determined

Informational Review

- Distance to closest suitable pipeline
- Operating and maximum pressures in the pipeline
- No charge

Detailed System Study

- Confirmation that pipeline can receive gas supply 24x7
- Class 5 cost estimate (+100%/-50%)
- Route, land, permitting
- Project manager assigned
- Engineering team formed
- \$50K engineering advance
- Interconnect agreements executed

Station Engineering and Construction

- Scoping, engineering, and design to produce detailed job package
- Construction
- Progress
 payments
 depending on
 complexity
 (\$1.5M to \$2M
 total)
- Pipeline construction not included

Release to Operations

- Project is tested and confirmed as functional
- Completed project drawings
- Close-out



Pipeline Interconnection Considerations

- 1. Location of a biomethane plant relative to gas lines
 - **MASTER STAMP**

- longer lines means higher costs
- 2. Available capacity and demand to receive biomethane supply
 - pipeline must be large enough to receive developer's volumes
 - pipelines cannot receive supply without sufficient demand (load)
- 3. Pipeline pressure at the injection point
 - Biomethane must be compressed to higher than pipeline operating pressure to get into the pipe
 - Must be sufficient pressure "headroom" (difference between normal and maximum operating pressures)



Looking Ahead:

Biomethane webpage (application process and FAQs)
Pipeline Absorption Capacity map (relative ability to accept gas)

Also working on:

- Biomethane delivery to pipeline by CNG truck (investigating)
- Standardized skid-mounted station designs (Less time, lower costs)
- Contractor build of lateral pipeline (PG&E specs and oversight)
- Revised contracts to match agreement terms with project financing needs

Contact:

For pipeline interconnections: Biomethane@pge.com



Questions?