Lessons Learned from RNG Interconnections

GETTING YOUR GAS ON THE GRID

CAVANAUGH
Stewardship Through Innovation

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INTEGRATION OF RENEWABLE NATURAL GAS LESSONS LEARNED ON THE INTERCONNECTION PROCESS

Communication Planning Avoiding Gaps

- For those seeking interconnection, meeting with the interconnecting utility early in the process is essential
- The project development team, project owner, engineers/consultants must present data with high confidence
- For pioneering projects (new technology, differing feedstocks, new areas) there are essential questions that must be answered:

Questions for the Developer:

- Where else has this been done before?
- How does the process work?
- Is there variability in flow or quality?
- When is the interconnection needed?

Questions for the Utility:

- What is the tariff / gas quality specification?
- What approvals are needed; how to apply?
- What costs are to be expected for the interconnection?
- How long does the process take?

COMMON MISPLACED EXPECTATIONS

Developers:

- Tariffs and Gas Specifications are "standard"
- An interconnection can occur anywhere there is an existing pipe
  - Existing Capacity
- Established interconnection process
- Interconnection costs
- Speed and simplicity of the approval process

Utilities:

- RNG flows are continuous / do not vary
- RNG is inferior to conventional gas
- Stage of completion of the Developer
- Time impacts to the Developer
- Estimated costs vs. Actual Costs
- Speed and simplicity of the approval process

WAYS TO AVOID COMMON MISPLACED EXPECTATIONS

- Meet early to discuss the project, and establish schedule for regular updates
- Be as forthcoming and honest as possible on initial expectations → particularly with respect to time / schedule.
- Document all parties initial expectations in the form of 'questions to be answered' and 'assumptions to be confirmed'
- Seek out each others fears and concerns so that they can be addressed
- Establish an interconnection process if one does not already exist — Describe costs, timeline, specifications, documents required, etc.
- Establish an RNG Tariff or Interconnection Standards (gas spec) if one does not already exist
- Become informed! Learn from other, existing interconnections on how their processes could have been better.

INTERCONNECTION PROCESS CONSIDERATIONS

- What minimum information do you require from the Developer to evaluate a potential interconnection?
  - Proposed Location
  - Proposed RNG Flows (and expected variability, uptime, seasonality, etc.)
  - Projected RNG constituent characteristics
  - Schedule
- Process Flow Map / Diagram (of the interconnection process)
- Confidentiality Agreements
- Capacity Study / System Planning Assessment
- Interconnection Agreement – Terms and Conditions

INTERCONNECTION STANDARDS CONSIDERATIONS

- RNG Constituent Requirements / Parity with Conventional Gas
- Monitoring Requirements
- Testing Requirements
- Communications Protocol
  - Notices
  - Shared data
- Shut-in Process and Response
- Costs

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