

Case Story



Pipeline Pickling in an Active Transmission System

Client:

The client is a major U.S. natural gas utility operating an extensive transmission network, responsible for delivering reliable energy while meeting strict regulatory and operational requirements.

Challenge:

The client was required to pickle a section of transmission pipeline but could not isolate the line due to ongoing downstream demand. This introduced complexities around maintaining consistent flow, managing variable demand, and controlling mercaptan concentration. The operation was coordinated across three sites: upstream injection, midstream monitoring and secondary injection, and downstream flow generation and off-spec gas handling. Because the gas was intermittently off-spec, cross-compression was not feasible, and flaring was not suitable due to site visibility and proximity to the public.

TCI Solution:

To support the dynamic pickling process, the client deployed three TCI dual 4800 trailer-mounted enclosed combustion units at the downstream location. These units provided the necessary flow to pull the mercaptan through the pipeline while simultaneously combusting off-spec gas. The system also helped maintain consistent process conditions despite fluctuating demand typical of daily gas usage cycles. By combining flow generation with controlled combustion, the client was able to manage mercaptan levels effectively across the system without interrupting service to downstream customers. This approach enabled the successful completion of the pickling program in a live system environment while meeting regulatory requirements, maintaining operational continuity and minimizing public impact.



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