

Revolutionizing LNG Turnarounds: Lessons from a High Return on Investment LNG Case Study

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Abstract:

Liquefied Natural Gas (LNG) facilities face critical challenges in minimizing downtime during equipment decontamination, particularly in pre-treatment units such as mercury guard beds, dehydrators, and filters. Traditional nitrogen purging methods are time and resource intensive, often requiring large volumes of nitrogen and hundreds of hours to meet gas test requirements to begin maintenance activities.

This presentation will feature a success story using Refined Technologies, Inc.'s (RTI) chemistry and application methods at an LNG export facility, which achieved an 80% reduction in decontamination time and an 85% reduction in nitrogen usage. Over a four-year span and multiple repeat projects, the approach consistently delivered 100-hour time savings per mega train, a six-hour payback period, and a 2400% (\$55 million dollars) return on investment to the client with every clean.

This session will highlight the operational and economic benefits of adopting RTI's technology in LNG applications and its potential to redefine industry standards for turnaround and maintenance outage efficiency. Attendees will leave with a scalable, efficient alternative to optimize maintenance timelines.

Three Takeaways:

1. **Dramatic Time Reduction:** This new process shortened LNG train decontamination time by 80%, reducing nitrogen purge duration from 168 hours to under 12 hours.
2. **Significant Resource Savings:** The method cut nitrogen truck usage by over 85%, from more than 20 trucks to just 3 per project, while maintaining safety and effectiveness.
3. **High ROI and Repeatability:** Across multiple projects over four years, the approach consistently delivered a 6-hour payback period and a 2400% return on investment, proving both its efficiency and scalability.

To view the **full technical programme**, visit <https://lng2026.com/technical-programme>

This abstract will be presented during LNG2026 conference on 2-5 February in Doha, Qatar