

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



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4D PLANNING FOR LNG PLANT MAINTENANCE SIMULATION

Maintenance downtime and assets availability are critical KPIs for LNG plants, especially in the current “high gas demand” global market.

Leveraging new digital technologies, Baker Hughes has introduced the 4D Digital Outage, a new development of the Maintenance Excellence Planning capabilities that combines 3D models of a site and Gantt Chart to virtually simulate the outage before execution.

Utilizing these new digital capabilities, complex maintenance events can be planned using remote coworking to provide extremely high levels of detail and optimization to improve quality and EHS execution and duration which increases assets availability (several M\$ per day/train of production). The abstract contains three stories of large, complex maintenance events which utilized this new tool for LNG turnarounds that were planned and executed between 2019 and 2022.

Observed benefits in terms of HSEQ through outage wing-to-wing simulation, detailed simultaneous operations risk analysis, optimization of spaces and logistics and the design of customized tooling. Plant operator costs were lowered due to the optimization of outage duration, manpower and asset logistics leading to increased fleet availability and plant productivity.

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>