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.

LEAD AUTHOR

Emma Eltringham Digital Studio Manager, Woodside Energy

CO-AUTHORS

Leon Burgin Platform and Engineering Manager Woodside Energy

Shawn Fernando PROC Delivery Manager Woodside Energy



SENSE, INSIGHT, ACTION AND AUTOMATION - REMOTE OPERATIONS USING A DIGITAL TWIN

Fuse, Woodside Energy's internal digital twin platform, is being developed to enable our team to focus on high value activities through the digitisation and automation of LNG Plant Operations. Fuse provides a multi-channel experience for our operations personnel, consuming insights and managing workflows in either a 3D digital twin experience, or a 2D geospatial area map, and an onsite mobile solution bringing the insights to the operator in a single pane of glass. End to end business process automation based on the rich data streams generated by both modern plants and management tools, feed into machine learning frameworks with AI developing rapid and complex insights into plant performance. Capturing the knowledge of our workforce in algorithms and automated responses facilitates a move towards cyber - physical plant operations. This rich corporate knowledge is aggregated, then 'fused' to create Fuse. The on-going development of the Fuse platform has contributed to the transformation of Woodside's Pluto LNG Plant (Karratha, Aus) operational strategy. Woodside has established the Pluto Remote Operations Centre (PROC). The PROC is used to operate the foundation Pluto offshore and onshore assets from Perth. Fuse is a core technology embedded within the PROC, it ensures better collaboration between operations and support teams, enabling Woodside to optimise production, simplify work processes, and improve decision quality and workforce productivity.

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