

“It’s how we operate”.

We share insights. We collaborate. We innovate.

Upstream PS’ leaders in their field share insights with a focus on real-world tailored solutions, lessons learnt and innovative responses to production challenges. It’s how we operate.

Achieving a more cost effective operation from day one

An Early Operability Review can be a simple mechanism that can achieve considerable savings throughout the life of the plant. The least expensive time to make a change is on paper, whether it be design, plant access or procurement philosophy....

An Early Operability Review involves the plant, systems and philosophies proposed for an oil and gas field development, conducted by an experienced operator with a view to identifying issues that can have significant negative impacts on safety, production and OPEX.

The optimal times to conduct an Early Operability Review

During FEED (Front End Engineering & Design), following Detailed Design or at the least, during construction or prior to commissioning.

Through FEED the areas to review include equipment selection, appropriate standards, design life, plant operations philosophies (manning levels, rosters), level of automation and logistics.

An Early Operability Review following Detailed Design could reveal savings in accessibility, pinch points, system design review and maintenance.

An Early Operability Review conducted during the construction or pre-commissioning phase could flush out improvements to do with hazards, visibility, manual handling and environmental issues.

Experienced operations personnel can minimise the likelihood of safety incidents

Obviously, measures to attain the safest possible operation outweigh savings objectives, but with experienced operations personnel, both can be achieved. This can include identifying the likelihood of manual handling issues, slips, trips and falls, modifications to target possible access/egress pinch points, and so on.



Operability improvements increase productivity over the life of the plant

Adequate access to areas requiring frequent maintenance (such as P/V valves) is key, as can be replacing the use of scaffolding by installing appropriate walkways and platforms. Visibility is an important factor, be it sighting of gauges from manual operation points or adequate lighting for night-time operations.

An Early Operability Review can also identify the areas of the plant that would benefit from various Operability Studies during field life.

Who does this affect?

Those with an interest in achieving the lowest possible OPEX (operating expenditure).

How will it help?

Gain an understanding of the types of savings that can be achieved throughout the life of a field by conducting an Early Operability Review.

About the Author

Captain Simon Walker has had a distinguished international career over 40 years in the oil and gas and marine industries. He manages Upstream PS’ business in WA/NT, managing several operations and maintenance contracts.

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The right procurement knowledge, at the right time, can go a very long way....

Adding an extended period to specified design life on certain materials will cater for potential life extensions, at little or no cost and deliver significant OPEX savings. Looking into interchangeable components across a plant can greatly reduce spares holding requirements. An experienced operator can provide invaluable input into major equipment selection, considering service costs and spares over the life of the plant.

Getting the most out of rotating equipment

On-line condition monitoring capability can be included during the procurement phase. This will justify extended time between inspections and overhaul frequency, reducing maintenance costs for the life of the plant. Another strategy can be to identify critical equipment that require redundancy, to prevent production being impacted by downtime. Redundancy combined with sparing allows for the implementation of “run to failure” philosophies or extension of maintenance intervals – without safety being compromised.

About Upstream PS

Upstream PS is a wholly owned subsidiary of GR Engineering (ASX:GNG) with an extensive track record in the provision of operations and maintenance, wellsites, engineering and production assurance services. The Upstream PS team has served the oil and gas industry in Australia and South East Asia for more than 18 years, with a strong reputation for providing safe, innovative and sustainable solutions to production challenges.

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