



Project Value

CAPEX > £4M
CO₂ Reduction 27,000te/yr

> £5M on new Separator, to reduce oil in water (OiW) discharge

Project Scope

A Triton Asset Life Extension study undertaken in 2020 included a review of how we could practically and economically reduce emissions. Several potential emission reduction measures were identified:

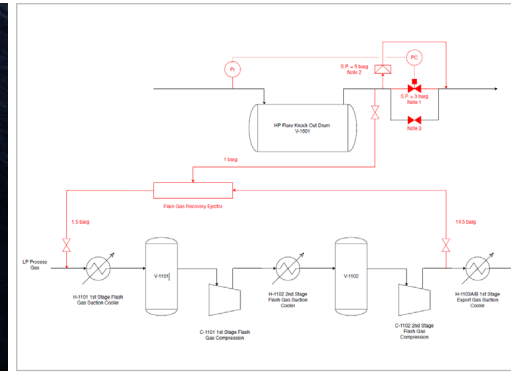
- Install a Flare Gas Ejector to the existing HP Flare Gas System
- Modify systems to use gas import to minimise start-up flaring
- Upgrade the compressor anti-surge logic to minimise emissions
- Install an electrical Reversed Osmosis Water Maker that reduces the need for steam system operation
- Design and install a new First Stage Separator that will increase production, but will also reduce oil in water discharge levels

Further identified opportunities may be implemented. Dana continues to review other ways of reducing emissions.

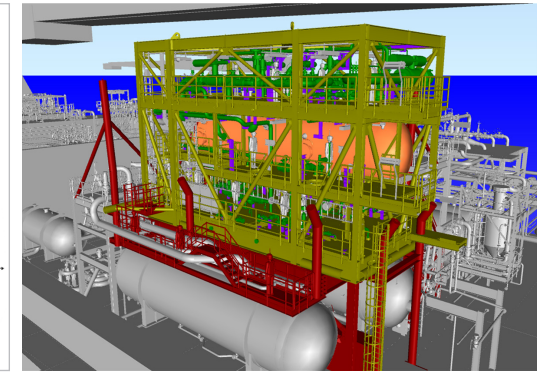
All works are subject to final approvals, with deliver anticipated during 2024.



Aerial view, Triton FPSO



Schematic, HP Gas Flare Ejector System



3D view, new First Stage Separator

Good Practice:

Process:

- A focus on emission reduction in conjunction with other ongoing assessments helped to give a more rounded approach to options identification
- A higher number of options using known technologies were identified by this combined approach
- Major scopes such as power from shore and renewals technology were ruled out due to the technology gap, cost and complexity on a brownfield site
- Five scopes were chosen for progression, with a 'hopper' of other options identified

Scope and Benefits:

- A reduction of c.50% in flare emissions is anticipated through the use of ejectors which is known technology. Further flare reduction scopes are anticipated to contribute towards an overall reduction in flaring emissions of c.60%
- Replacing the main first stage separators is planned. This is a realistic and attractive solution for Triton that can increase overall production as well as reducing overall oil in water levels, negating the environmental impact of increasing production
- Scopes are being developed further and activity delivery is planned by 2024, subject to final approvals
- 20% reduction in Triton FPSO CO₂ emissions (relative to 2018 emissions) is anticipated from the above projects, all of which are currently economic

Insight:

- A material reduction in emissions is possible on brownfield assets, even with known technology. However larger scopes can become difficult to do
- Making emission reduction part of all activity assessments as opposed to a stand-alone review can yield better results
- While reducing oil in water level is not a net zero target, projects can reduce oil discharges for ageing assets like Triton