Facility of the Future – expanding the application of un-manned facilities

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Goal - widen the application of NUIs

‘Develop a design concept that integrates existing technologies to stretch the envelope of NUI capabilities’

Key target areas:

• Expand the processing facilities beyond existing NUIs
• Organic power generation rather than imported power
• Remove water depth limitations
Case study will be a North Sea small pool.

- low/medium GOR oil
- 25,000 bblpd
- 20,000 bopd
- 150m water depth
- Northern North Sea

Applied to Crondall’s floating NUI (production buoy).
Study focus areas

Demonstrate to industry how far a NUI’s capabilities can be stretched

- Reduce OPEX / Maximise Performance / Minimise CAPEX
Study focus – OPEX

- **Material selection**
  - Eliminate fabric maintenance

- **Equipment selection**
  - Design for remote control

- **OPEX**
  - Minimise maintenance cost
  - Minimise maintenance time

- **Use of Condition Based Monitoring**
  - Walk to work

- **Plug and Play maintenance**
  - High-reliability equipment
  - Facility layout
Study execution

PHASE 1

Engage with sponsors
Engage with vendors
Design & equipment selection
Maintenance/ manning estimates
Proof of NUI concept

PHASE 2

Feedback from sponsors
Mature the design
Estimate CAPEX/OPEX
Demonstrate economic feasibility
Study outcomes

- Technical proof of concept
- Economic feasibility defined
- Ready for field-specific FEED studies
- Design, operating and maintenance philosophies
➢ The OGTC has recognised the value of this study to the UKCS and committed to match funding against that provided by industry.

➢ Study will kick off in March 2018.

➢ Crondall and the OGTC are looking for operators and vendors to participate in the study.

➢ We have four partners confirmed, but *are still looking for more participants.*
Contact locations

For more information go to

www.crondall-energy.com

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