

ETF Steering Group (SG) - Project Update – March 2016

Alignment around \$15/boe unit operating costs target

To cope with an oil price that has continued its decline into 2016 industry needs to intensify its efforts even more and set its sights on a target of \$15/boe unit operating costs by way of focused company efforts as well as cross-industry initiatives through Oil & Gas UK's Efficiency Task Force.

The ETF SG is working with McKinsey & Co. to understand the bridge from 2014 to 2016: what has driven the change in unit cost so far? and assuming a US\$15/boe ambition for the basin, where are the gaps? The SG will then work with the Oil & Gas UK Board to understand what the implications might be for the ETF's current programme of work.

Business Processes

Inventory Rationalisation: After the completion of a tender process, Ampelius Trading were selected as the preferred service provider for the inventory trading system. Workgroup members are now making good progress with regards to implementing contracts with Ampelius and preparing their inventory data for upload. Further industry participation in the initiative will be encouraged, with a presentation provided at the Oil & Gas UK Supply Chain Forum on March 1.

Following the implementation, the group will turn focus to pooling opportunities and will begin the process of developing industry best practice for inventory management.

Compression Systems: The workgroup met on February 15 to discuss the recommendations and conclusions from the compression systems study. The report showed:

- 75% of losses are from 4 sources:
 - Lube/seal systems
 - Fluid conditioning
 - Compressor power/drives
 - the compressor unit
- The main root causes were found to be:
 - Operating practices (lack of, poor, not following and/or inappropriate) (57% of losses)
 - Poor maintenance (14%)
 - Stress corrosion cracking (13%)
 - Design, modifications and upgrades not original design (13%)
- A number of issues were found across operators, however there was little cross industry sharing of problems and solutions

The group are going to use REE as a mechanism of improving industry sharing of information relating to compression systems.

A wider industry workshop will be held in late April/early May to begin the process of developing a best practice document for improving compression system efficiency. The workgroup will be developing the agenda, structure and content for the workshop in the run up to this.

Standardisation

Subsea Technology: Analysis of potential cost savings by carrying out existing projects to existing industry standards rather than bespoke requirements has been completed for four projects and shown savings of 18-25% are possible. The literature review looking both internally in the oil and gas industry and at other industries has also been completed. The review shows the importance of collaboration, positive relationships and trust throughout the supply chain and strong leadership and the right behaviours. It also showed the difficulty of implementing “quick wins” and that a change in behaviour needs to be sustained over a long period of time to be fully transformational.

Eight of the twelve sub groups have completed their strawman project showing predictably a clear divide between the UKCS focused operators and global operators in terms of cost and complexity but that all operators can make improvements to reach the reference case.

Consolidation of the strawman projects commenced at the end of February and will be published once complete. Discussions will be held Oil & Gas UK’s March Board Meeting to agree how best to engage with industry to communicate and implement the findings.

Valves: The terms of reference for the work on repair vs new supply and inventory have been drafted and are awaiting finalisation by the group. A pilot study has been running in tandem with this and is providing some initial reference data. The next stage is to proactively engage with the operators and communicate the initiative and how they can benefit from the outputs. There remains some concern that the initiative will be viewed as Score centric. The BVAA are progressing the work on certification and documentation, engaging with all the relevant parts of the valves supply chain. A work group meeting will be held mid-March to review progress.

Well P&A: The final P&A study report has been provided by the contractor, incorporating analysis of 500 wells. The report is currently undergoing final review and approval by the study steering committee and will be available for wider industry discussions and review in March.

The final report will be shared with the new work groups under the OGA Decommissioning Board to progress recommendations and to address barriers identified to use of thru-tubing techniques on the UKCS. This area of work is expected to focus on the management of liabilities in future. Progress updates will be provided at the OGA Decom Board meetings.

Culture, Cooperation & Behaviours

The Industry Behaviours Charter & Collaboration Index: The charter, signed by Deirdre Michie, alongside Oil & Gas UK Co-Chairmen has since received support from all Board member companies

as well as and other companies. It is promoted on the front page of Oil & Gas UK's website, and now has a dedicated section including background on the initiative and an opportunity to sign up online, in addition to the logos of all companies supporting its key messages.

In order to drive further engagement and to measure impact a Collaboration Index (in association with Deloitte) is being compiled on the Operator Members of Oil & Gas UK's Board. Main suppliers will be asked to provide confidential feedback on how each the operator collaborates, resulting in a performance measurement tool for operators and guidance for areas of focus for the ETF. This work will be supported and promoted by teams within Oil & Gas UK, with the first set of results expected this spring, followed by a comparative set being collated in September.

The Rapid Efficiency Exchange: The REE portal for sharing successful stories in improving efficiency and for exchanging knowledge, currently holds 36 good news stories on the site – up from some 20 contributions at the beginning of the year. In total, these have received over 200 'likes' from those visiting the site. with Maersk Oil's summary of adapting an existing inspection technique forecast to produce cost savings in excess of 80% over the next five years proving the most popular.

The most compelling of these stories are being promoted by Oil & Gas UK as 'Efficiency Spotlights' and providing good examples of industry action in meetings with key stakeholders.

Since the beginning of the year, the focus has grown on sharing common industry challenges – with good feedback so far. For example, Shell UK shared a challenge they were facing with management of valves – their demand is generally for bespoke valves, but manufactures are set up for high volumes of standard valves, resulting in high cost and long lead times for the company. Within a matter of days, Shell received contact from contractor already working with another operator to address similar problems. That operator was happy to facilitate a joint visit with Shell to the contractor two days later. Whilst it's still early days for that particular project – it shows how companies can make quick connections and find support to overcome common challenges.

The Oil and Gas Continuous Improvement (CI) Network was established in September 2015 with continuous improvement specialists working in the oil and gas sector across the North East of Scotland identified to participate. The group has been brought under the banner of Oil & Gas UK and expanded to include efficiency champions from across industry with 25 companies now participating. The network will be responsible for identifying and sharing lessons learnt and challenges uploaded to the REE and working to embed changes in behaviour across industry.

New areas of focus (requested at last Board Meeting)

Procurement: Martin Bruce, ENGIE, has agreed to lead this work and a task finish group is being established. The thrust of this work will initially be on the tendering process with the key objectives being to:

- Identify the costs involved in the tendering process from both the bidders and the clients to understand the volume of currently expended in this area;

- Review the tender documentation utilised by operators and tier 1 contractors to identify potential areas of waste and standardisation i.e. QHSE requirements/questionnaires, scopes and specifications
- Review the tender responses by tier 1 contractors to identify potential areas of waste and standardisation
- Review the role of FPAL and FPAL verify in the tendering process to identify potential areas of enhancement
- support the outward communication of the guidance by means to be agreed by the group (possible launch event); and
- identify any need for follow-up or associated activities to be pursued by OGUK and/or FPAL

Maintenance: A “task and finish” work group has been formed to bring together experienced technical specialists from a range of operator member companies to contribute to cross-industry efforts to optimise and strengthen maintenance regimes on offshore installations. The group will deliver a high level framework document setting out a good practice approach to the conduct of maintenance optimisation reviews supported by case study examples. Delivery is expected by the end of April 2016 and may be published alongside a launch event.

Logistics: Logistics is an area of huge efficiency opportunity and work will be undertaken to establish how cooperation in logistics might reduce excess costs. An efficiency champion, Line Kaldestad, Statoil, has agreed to participate in this work as industry lead and the details of the project are being defined but it is likely to look at themes such as helicopter usage and supply vessel sharing.

Efficiency Roadshows: Structure drafted and being tested with Global Energy, Amec FW and ConocoPhillips. We intend to hold on-site town hall style meetings with different cross-sections of the workforce to explain the work of the ETF and to engage the workforce in the industry’s efficiency drive.