

Oil & Gas Authority

UKCS Production Efficiency

2016

Duncan Sewell Facilities Engineer 29th November 2017

Context

MERUK – the legal 'Central Obligation'



10 Stewardship Expectations (What, How and Why?)





SE-05 Robust Project Delivery SE-06 Production Optimisation SE-08 Technology plans SE-09 Collaboration









10 Stewardship

(What, How and

Expectations

Why?)

Benchmarking







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Asset Stewardship Strategy – one of the 'Supporting Obligations'

OGA – regulate,

Encouraging

collaboration

influence,

promote

SE-05 Robust Project Delivery SE-06 Production Optimisation SE-08 Technology plans SE-09 Collaboration





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Effective

stewardship

Promote

Investment

and action

Regulate

MER UK

> Stewardship Expectations

SE-06 Production Optimisation Implementation Guide



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10 Stewardship Expectations (What, How and Why?)





Asset Stewardship Strategy – one of the 'Supporting **Obligations**'

influence,

promote

SE-05 Robust Project Delivery SE-06 Production Optimisation SE-08 Technology plans SE-09 Collaboration





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Implementation Guides Oil & Gas Authority

> Stewardship **Expectations**

SE-06 Production Optimisation mplementation Guide

Production Efficiency History

Production potential 2000 100% Total UKCS Production Maximum Potential 90% Production Efficiency 80% 1500 70% mmboe) 60% 000 50% Production 40% Production 30% 500 20% 10% 0 0% 2009 2010 2011 2012 2013 2014 2015 2016 2008

UKCS Production Efficiency vs Production 2008-2016

Production efficiency

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- ٠ has risen to 73% in 2016
- Production potential holding steady
- Target 80% by 2018 ٠

efficiency

- PE up 13% since 2012 low
- PETF and other ٠ initiatives bearing fruit
- What will the 2017 survey reveal?

Hub level performance

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UKCS Production Efficiency for each reporting hub



- 38% of hubs are now over the target.
 This is an increase of 8% compared to 2015
- That's 35 out of 91
 achieving or exceeding
 target, 56 not.
- Hubs over target by region
 - NNS 48%
 - CNS 40%
 - SNS 30%



There is currently a potential prize of an additional 160,000 boe per day equating to 59 mmboe a year from hitting an average PE of 80% in the UKCS.

This prize grows to 220,000 boe per day (80 mmboe a year) if all hubs already over the 80% target remain at their current level whilst all hubs under raise their PE to 80% (equates to a PE of 83%)

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			Additional Production "Prize"	
PE Av	erage	Production MMboe/day	Daily MMboe/day	Yearly MMboe
90	%	2.01	+0.39	+142
80	%	1.78	+0.16	+59
73% (cu	urrent)	1.62	0	0
60	%	1.34	-0.28	-102

Focus on Losses

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Production Losses



- Plant losses remain largest category but have now fallen for 5 years (60%)
- Export losses (22%) and well losses (17%) up in 2016
- Export losses have now risen for 4 years
- Market losses (1%)

Top 10 Loss Categories



Covers 176 out of 211mmboe (>80%)



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Top 10 Loss Categories

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Covers 176 out of 211mmboe (>80%)



'Plant' Loss Categories

60% of all production losses (126 mmboe)



TARs are included

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TAR over-runs

in 'Full Plant'

- Wrench time
- Isolations
- Gas compression
- Rotating equipment

Conclusions

73% Production Efficiency. Good progress. Much more to be done



220 mboe/d prize for raising underperformers to 80% PE



Biggest impact by focusing on TARs, Plant and Terminals

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Thank you