

UNC Workgroup 0714 Minutes

Amendment to Network Entry Provision at Perenco Bacton terminal

Thursday 06 February 2020

at Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA

Attendees

Alan Raper Chair)	(AR)	Joint Office
Karen Visgarda (Secretary)	(KV)	Joint Office
Adam Bates	(AB)	South Hook Gas
Andrew Pearce	(AP)	BP
Angela Fletcher*	(AF)	Ancala Midstream
Anna Shrigley	(AS)	Eni Trading & Shipping
Anna Stankiewicz	(ASt)	National Grid
Ashley Adams*	(AA)	National Grid
Bill Reed	(BR)	RWE
Chris Wright	(CW)	ExxonMobil
David Adlam	(DA)	Cadent
Debra Hawkin	(DH)	TPA Solutions
Edd Fyfe*	(EF)	SGN
Emma Buckton*	(EB)	Northern Gas Networks
Jeff Chandler*	(JC)	SSE
Jennifer Randall	(JR)	National Grid
John Costa*	(JC)	EDF Energy
Julie Cox	(JCx)	Energy UK
Kamila Nugumanova*	(KN)	ESB
Kamla Rhodes	(KR)	Conoco Phillips
Lea Slokar	(LS)	Ofgem
Lea Slokar*	(LS)	Ofgem
Leteria Beccano	(LT)	Wales & West Utilities
Leyon Joseph*	(LJ)	SGN
Malcolm Montgomery	(MM)	National Grid
Nick King	(NK)	CNG
Nick Wye	(NW)	Waters Wye Associates
Paul Youngman*	(PY)	IUK
Phil Hobbins	(PH)	National Grid
Richard Fairholme	(RF)	Uniper
Shiv Singh	(SS)	Cadent
Steve Pownall	(SP)	Xoserve
Steven Britton*	(SB)	Cornwall Energy
Terry Burke	(TB)	Equinor
Tracy Brogan	(TB)	Neptune Energy

*via teleconference

Copies of all papers are available at: <http://www.gasgovernance.co.uk/0714/060220>

The Workgroup Report is due to be presented at the UNC Modification Panel by 16 April 2020.

1.0 Outline of Modification

Tracy Brogan (TB) introduced herself and explained that this Modification had been initially discussed in the December meeting during the pre-Modification introduction, and that it would be sponsored by Centrica on behalf of Neptune Energy.

TB explained the Cygnus Gas Field was a new development in the Southern North Sea which was unlocking investment in an underdeveloped area of the UKCS and was two years into a 20+ year life. She said that the Cygnus Alpha and Bravo produced gas through the EST pipeline to the Perenco Bacton terminal and that the Cygnus gas was 1% below the Gas Safety (Management) Regulations, (GS(M)R) Wobbe Index specification but was within the emergency limit. TB said that the existing gas quality requirements have already had significant impact on gas supply to the UK network from the Cygnus field and this was only set to increase in 2020.

TB further explained that the gas from the ETS pipeline presently arrives at the Perenco terminal with a Wobbe Index (WI) of 45.5 to 46.7 MJ/m³. She said the existing infrastructure enables fortuitous blending with fields flowing into the Perenco terminal and access to blend gas from the SEAL pipeline only from neighbouring terminals, with the existing Network Entry Provision with National Grid requires the gas leaving the Perenco terminal to be over 47.2 MJ/m³.

TB then reiterated the proposal was for the amendment to the Network Entry Provision between Perenco and National Grid is being sought to reduce the Wobbe Index lower limit from 47.2 to 46.5 MJ/m³. TB said the alternative options were to access further SEAL blend gas is already in progress but an extended planned shutdown of 39 days of the GAEL system in the Summer of 2020 and a reduction in SEAL gas limits the benefits from this option. TB also said that significant infrastructure modifications to enable upstream blending with other gas sources would take more than two years in duration to enact.

Richard Fairholme (RF) asked what would happen if the Modification was not approved, especially from the perspective of the flows from other fields and the cost benefit analysis aspect, particularly if there was no material impact. He added there was the potential for greater costs incurred from a blending process and that some parties may have concerns over this area.

TB said that if this was not approved, then there would be a range of consequences from the Cygnus field not flowing at all to a reduction in production. RF reiterated his concern that other entry parties would also seek derogations if this Modification was approved. TB said that the commercial blending authorisation had already been granted for Neptune Energy. Chris Wright (CW) noted that Centrica benefitted from Barrow arrangements historically and are now proposing another unique arrangement which contradicts the established industry protocol that GS(M)R applies to everyone, and he shared the views of RF. He added that in the first instance there was the need for the HSE agreement, in relation to what was being proposed in the Modification and until that was confirmed, the actual timelines were still unknown at this stage. JCx noted that the blending arrangements for Barrow gas were different in that unblended gas outside of the GS(M)R did not flow to customers.

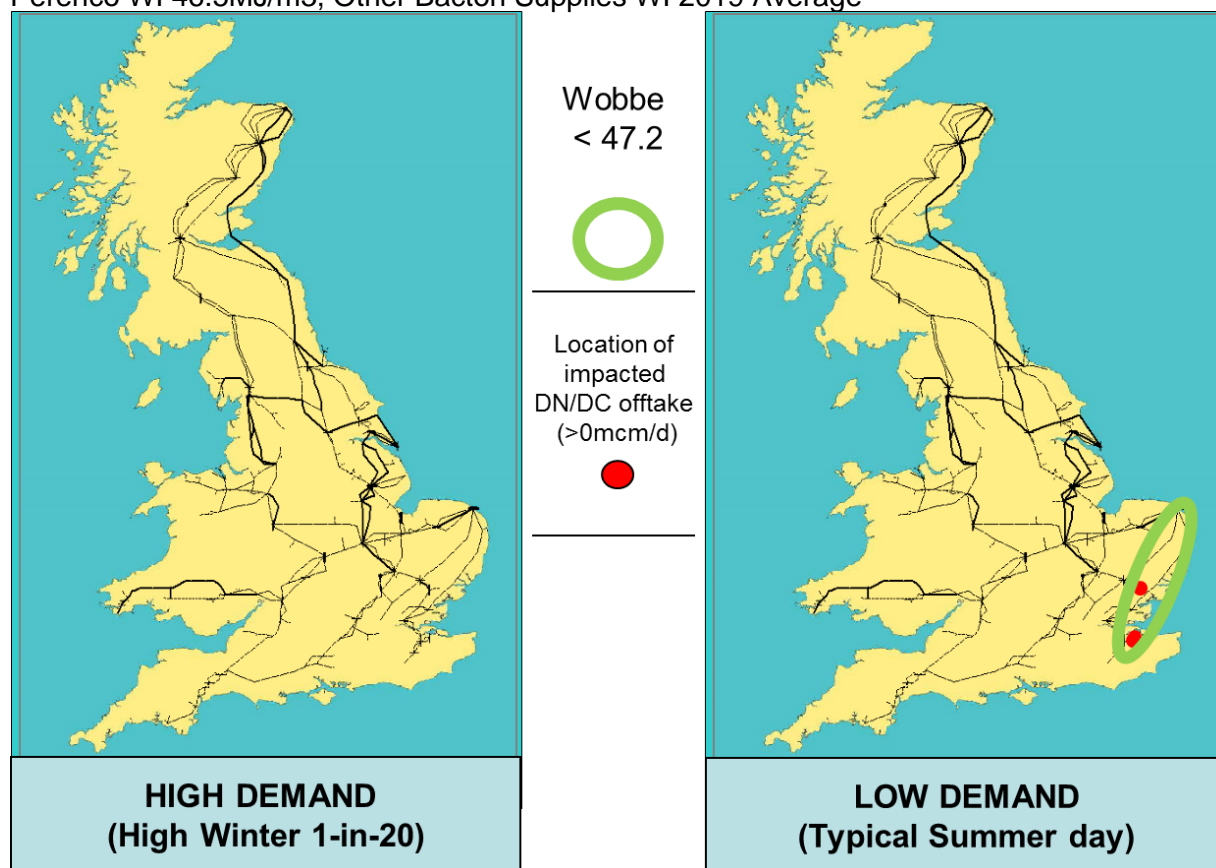
TB said that initial discussions had already taken place with Neptune Energy and National Grid and that the safety side of the work had already been done and submitted to IGEM, and that the other information would be forwarded to the HSE. Alan Raper (AR) said that the timelines were extremely tight for June and that the unknown aspects of the timeline variables needs to be recognised. TB agreed, but she reiterated that June, was the major milestone she was working towards, as June provided the real benefit. Nick King (NK) enquired if a safety case review was required and PH confirmed that this would need to accompany the GS(M)R exemption request in the submission to HSE. JCx commented that such a safety case review usually takes 3 months.

Phil Hobbins, (PH) then provided an overview of the *NTS Penetration Analysis* presentation and drew attention to the heat maps that showed some penetration of off-spec gas into the South-East under some scenarios. Julie Cox (JCx) said the Flow Weighted Average CV, (FWACV) impact needed to be assessed and investigated and there could be other consequences of this change. She added that the HSE would not look at this change from a competition perspective, only from a safety perspective and that it was for this group to and the Uniform Network Code (UNC) consultation to provide that input. PH agreed to investigate this area in more depth

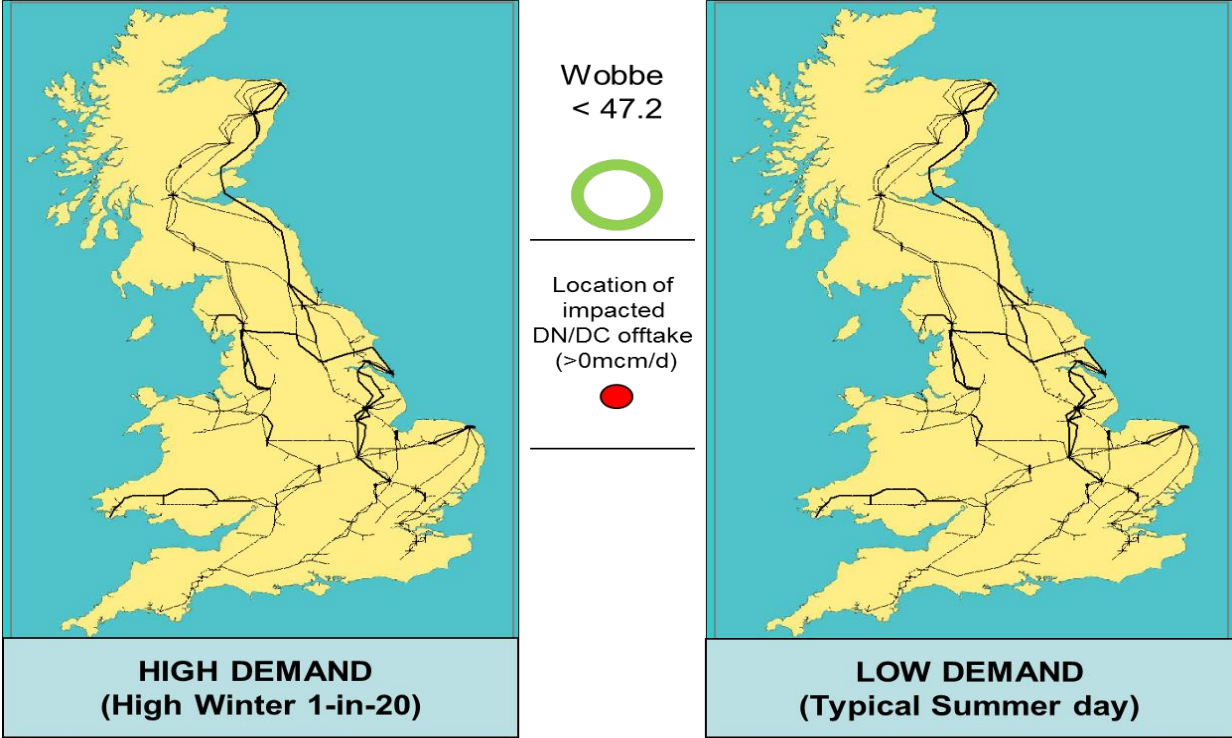
New Action 0201: National Grid (PH) to investigate the FWACV impacts on this proposed change.

PH continued to draw attention to specific areas of the presentation and explained the differences between the 3 scenarios that were for consideration and noted that the Scenario 2 as detailed below, was the most realistic option.

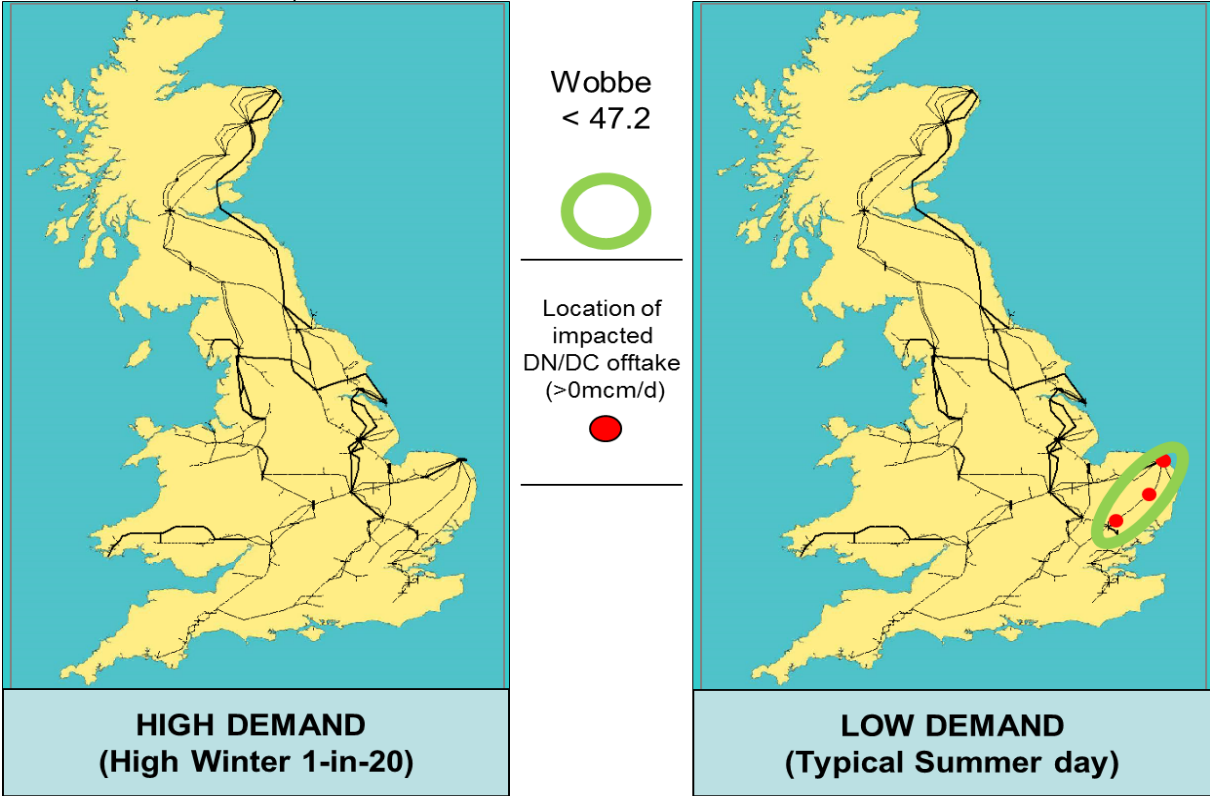
Heat Maps: 2019/20 **Scenario 2**
 Perenco WI 46.5MJ/m³, Other Bacton Supplies WI 2019 Average



Heat Maps: 2025/26 FES Network **Scenario 2** Perenco WI 46.5MJ/m³, Other Bacton Supplies WI 2019 Average



Heat Maps: 2019/20 FES Network **Scenario 3**
Max Cygnus flow at 46.5 MJ/m³, all other UKCS flows at zero, interconnectors as per FES forecasts (flow and WI).



PH then overviewed the observations in relation to the Penetration Analysis as detailed below:

Scenarios 1 and 3 are theoretical and unlikely to occur in reality

Scenario 2 is more realistic but could still overstate the impact:

- Not all Perenco inputs would be expected to be delivered at 46.5 MJ/m³

The degree and direction of penetration depends on the seasonal geographic pattern of supplies and demands

Penetration is lower in the 2025/6 scenarios due to decline in UK Continental Shelf flows
The direction of penetration is affected by flow to/from Bacton

- Where flow is towards Bacton (in summer when Interconnectors (ICs) assumed to be exporting), low WI gas tends towards the south-east
- Where flow is away from Bacton (in winter when ICs assumed to be importing), low WI gas tends towards west of Bacton not moving far south

Offtake points located at Bacton terminal (to IUK, BBL, Great Yarmouth Power Station and Bacton DN offtake) could potentially see <47.2 MJ/m³ gas under all scenarios, depending on the configuration of Bacton terminal on the day

A lengthy general discussion took place regarding the flows to Bacton from Cygnus and what would be the worst-case scenario. TB confirmed the worst scenario would be scenario 3, as detailed above in the schematic.

PH said that discussions had taken place with the affected parties and that BBL were reluctant to accept below 47.2 MJ/m³ and that IUK might participate in the solution, and further discussions were taking place with Cadent regarding the Bacton Offtake, together with work on the GS(M)R review.

New Action 0202: All to provide feedback in relation to the commercial implications of flow weighted averages and the associated impacts of the is proposed change.

AR requested that Neptune Energy/Centrica consider the overall time implications of such a limited window for June and the proposed solution for covering the outage period.

JCx also added with respect to Action 0202, as above, there was not a simple direct relationship between Wobbe index and CV, so it is difficult for parties other than National Grid to undertake any analysis, so part of it, she felt, duplicated Action 0201. Aside from this, she believed the CV shrinkage is included in NTS SO commodity charges and so paid for by all NTS offtakes. The existence of the FWACV rule protects customers connected to the DNs being billed for energy at a level greater and 1 MJ/m³ above the lowest value entering the zone. Also due to this rule some customers may be billed at a lower CV than they actually receive and hence benefit from more energy for their money.

New Action 0203: Neptune Energy/Centrica (TB) to provide a proposed solution to cover the outage period.

2.0 Initial Discussion

2.1. Issues and Questions from Panel

2.1.1. To consider the HSE timings

TB said that an exemption from the HSC would need to be gained by National Grid in order to allow the potential gas down to the existing GS(M)R emergency limit of 46.5 MJ/m³ to leave the National Grid terminal.

PH said that the timescales were very tight to achieve this by June and he was mindful that the HSE sign-off had to happen prior to Panel with the agreement of Ofgem. PH said that a full appreciation of the associated impacts was required prior to an exemption request was submitted. He added that even if Ofgem had sanctioned this, there was still the potential for the HSE to look at the safety aspect again, and the UNC would still need to investigate the economic case regulatory and competition issues.

2.1.2. Consider the impact on downstream customers.

It was agreed that more information was required on the wider impacts, which would need to be included in the Workgroup Report, and AR stated that conversations between the various parties would need to be documented within the Workgroup Report.

New Action 0204: Joint Office (AR) and National Grid (PH) to clarify the nature & extent of conversations between the affected parties for inclusion within the Workgroup Report.

New Action 0205: National Grid (PH) to contact IUK and BBL, from a commercial Stakeholder perspective, regarding the potential impacts of the proposed change at the Bacton Terminal.

AR said that it would be advantageous if all the Workgroup participants could provide feedback in respect of the commercial implications in respect of the flow weighted averages and associated impacts.

Angela Fletcher (AF) said that she was keen to have an offline conversation with TB, Neptune Energy/Centrica regarding their proposal as she said there could potentially be some joint synergies in relation to her Modification 0712: *Amending the oxygen content limit in the Network Entry Agreement (NEA) at the St Fergus SAGE plant.*

2.1.3. To consider governance arrangements.

AR confirmed that further discussion would take place in relation to the governance arrangements and that this could be further explored once the consequences and the views of the impacted parties were known.

2.2. Initial Representations

None received.

2.3. Terms of Reference

As matters have been referred from Panel a specific Terms of Reference will be published alongside the Modification at: www.gasgovernance.co.uk/0714

3.0 Next Steps

AR confirmed that his aspirations for the March meeting were to further explore the HSE timings, review the impacts on the downstream customers and discuss the governance arrangements.

4.0 Any Other Business

None.

5.0 Diary Planning

Further details of planned meetings are available at: www.gasgovernance.co.uk/events-calendar/month

Workgroup meetings will take place as follows:

Time / Date	Venue	Workgroup Programme
10:30 Thursday 05 March 2020	Elexon - Orange room 350 Euston Road London NW1 3AW	<p>Detail planned agenda items.</p> <ul style="list-style-type: none"> • Review of HSE timings • Review of impacts on downstream customers • Review of Governance Arrangements • Amended Modification • Consideration of Business Rules • Review of Impacts and Costs • Review of Relevant Objectives • Consideration of Wider Industry Impacts • Development of Workgroup Report

Action Table (as at 06 February 2020)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
1203	05/12/19	1.3.4	Neptune Energy/Centrica (TB) to contact Ofgem to ascertain if there was a requirement for them to undertake an Impact Assessment.	Neptune Energy/Centrica (TB)	Carried forward <i>(Transferred from TXWG)</i>
0201	06/02/20	1.0	National Grid (PH) to investigate the FWACV impacts on this proposed change	National Grid (PH)	Pending
0202	06/02/20	1.0	All to provide feedback in relation to the commercial implications of flow weighted averages and the associated impacts of this proposed change.	ALL	Pending
0203	06/02/20	1.0	Neptune Energy/Centrica (TB) to provide a proposed solution to cover the outage period.	Neptune Energy/Centrica (TB)	Pending
0204	06/02/20	2.1.2	Joint Office (AR) and National Grid (PH) to clarify the nature & extent of conversations between the affected parties for inclusion within the Workgroup Report.	Joint Office (AR) & National Grid (PH)	Pending

Action Table (as at 06 February 2020)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0205	06/02/20	2.1.2	National Grid (PH) to contact IUK and BBL, from a commercial Stakeholder perspective, regarding the potential impacts of the proposed change at the Bacton Terminal.	National Grid (PH)	Pending