## nationalgrid

## Exercise 'Degree'

NEC Industry Exercise 2022 - Briefing Note

With the sad passing of Her Majesty Queen Elizabeth II, an official period of mourning has begun in the UK. We will be respecting this and have taken the decision to postpone the first two days of our industry-wide NEC Assurance emergency exercise (Exercise Degree) on 13 and 14 September.

This briefing note provides an updated on the revised dates, which respectfully allows for the periods of National and Royal Family mourning.

# Exercise 'Degree' is the Gas Industry's annual Network Gas Supply Emergency (NGSE) Network Emergency Coordinator (NEC) assurance exercise.

Exercise Degree will focus on NEC communications with all industry participants through all stages of an emergency, both in the lead up and during an NGSE, and assure that industry participants are aware of their obligations to comply with NEC instructions.

#### **Executive Summary**

- It is essential for the gas industry to be able to manage an emergency situation safely and effectively; the annual exercise is one of the key methods to demonstrating its preparedness.
- The NEC has a legal requirement to provide assurance that the gas industry can take action to manage and recover from a gas deficit emergency.
- Exercise Degree will utilise mock demand data and simulate a series of supply losses to trigger a NGSE.
- Industry notifications shall be tested through the activation of a Gas Balancing Notification (GBN), Margins Notice and Emergency Declarations.
- Exercise Degree will seek to test communication methods between National Grid's Network Emergency Management Team (NEMT) and all relevant gas industry participants to complete the principal objectives set out in this briefing note.
- Exercise Degree will look to test that both gas and electricity participants can appropriately respond to a gas supply shortage which has electricity system implications.
- The NEC will request a feedback report from all participants involved upon completion of the exercise to inform the development of the post exercise report.

#### **Event dates:**

Wednesday 28<sup>th</sup> September 2022 Tuesday 4<sup>th</sup> October 2022 Wednesday 5<sup>th</sup> October 2022 Tuesday 11<sup>th</sup> October 2022



#### **Aim and Objectives**

The aim of this exercise is to demonstrate that the Gas Industry is prepared and able to meet its obligations in the event of a Network Gas Supply Emergency (NGSE). This will be demonstrated by effective two-way communications processes across the industry and its stakeholders; timely and accurate information being shared between participants; and effective emergency strategies being produced and implemented.

In achieving this demonstration, the following objectives will be met:

- Test the management of an emerging gas supply shortage, through the use of warning notices and the establishment of proactive communications channels, then gain an understanding of how these are received by industry (post exercise)
- Practice the ability of Gas Transporters, the Electricity System Operator and Electricity Network Operators to communicate in the face of technology failures
- Test the development and delivery of the pre-emergency strategy, through:
  - the simulated activation of all viable commercial and physical tools
  - the capability of the Primary Transporter to form an accurate situational awareness through industry collaboration
- Practice and enhance processes and tools associated with the interactions between gas and electricity organisations in the face of stress on the Whole Energy System, supported by active participation from the Electricity System Operator and Electricity Distribution Network Operators
- Test industry's ability to warn and inform the public through participation of Corporate Affairs' representatives from the Energy Networks Association, Gas Transporters, the Electricity System Operator and Electricity Network Operators, including changes made to modernise the public appeals process
- Assure the Gas Industry's capability to restore demand against returning supplies and return to normal operations post NGSE
- Test that recommendations from previous industry emergency exercises have been delivered and are effective
- Validate emergency procedures, specifically, National Grid's E3; the E3 documents of the Distribution Networks; the E1 Network Gas Supply Emergency Procedure<sup>1</sup> and NEC Safety Case

#### **Exercise Degree Scope**

See Figure 1 for the scope for Exercise Degree.

#### **Participants**

The diagram, in *Figure 2* overleaf, depicts the wide range of organisations scheduled to participate in Exercise Degree. Observers from the HSE may request access to the response discussions with a number of participants during the exercise. The HSE will make these arrangements directly.

#### Commencement

The exercise will commence with the briefing of the National Grid Gas System Operator Duty Officer c.09:00 hours, on Wednesday 28<sup>th</sup> September 2022. The Duty Officer will review the scenario information and determine the requirement to mobilise. Upon the decision to mobilise, a message will be issued to industry, which will include a brief situation report, utilising established communication paths, stating:

#### "EXERCISE 'DEGREE' - START EX"

The exercise will pause c.16:00 hours, on Wednesday 28<sup>th</sup> September 2022, and re-commence with a short re-briefing c.09:00 hours Tuesday 4<sup>th</sup> October 2022. This process will repeat for all four days of the exercise. The exercise will end at the discretion of Directing Staff, in discussion with the HSE, c.16:00 hours, on Tuesday 11<sup>th</sup> October 2022. A message will be issued to industry stating:

#### **'EXERCISE 'DEGREE' - END EX'**

A 'hot' debriefing will take place, immediately after the end of the exercise, for the NEMT. All other participants are requested to consider holding a similar debriefing session, in isolation, to gather feedback and identify lessons learnt.

#### **Exercise Notifications**

A range of industry notifications will be activated during Exercise Degree, namely: Gas Balancing Notification (GBN), Margins Notice and Emergency Declarations. These notices shall be clearly marked as 'for exercise'.

#### Reporting

Following the exercise and receipt of industry feedback, the Office of the NEC will prepare a report on Exercise Degree detailing the effectiveness of the industry response to NEC notifications. The report will incorporate industry feedback and relay recommendations for improvements to the emergency arrangements. This will be published on National Grid's and the HSE's websites.

Each organisation participating in Exercise Degree is requested to appoint an exercise observer who can provide observations and feedback on the exercise.

#### Contact

Should you have any queries or require further information regarding any aspect of Exercise Degree, please visit the National Grid Emergency Information website or get in touch with the National Grid Gas Emergency and Incident Framework Team using the contact details provided below:

#### For further information please contact:

Emergency and Incident Framework Team, National Grid gasops.emergencyplanning@nationalgrid.com

<sup>1:</sup> The latest copy of the E1 'Procedure for Network Gas Supply Emergency' is available here: <a href="https://www.nationalgrid.com/gas-transmission/document/136281/download">https://www.nationalgrid.com/gas-transmission/document/136281/download</a>

Figure 1 - Exercise Scope

### Exercise Degree 2022 – Scope (revised)

#### Tuesday 11<sup>th</sup> Wednesday Wednesday Tuesday 4<sup>th</sup> October 5<sup>th</sup> October 28<sup>th</sup> September October **Emerging issues** Restoration **Emergency Pre-emergency** Gas Balancing Stage 2: Flow Direction **Gas Transporter** Stage 4: Restoration & Load Shedding collaboration Notification (live exercise activation) (live exercise activation) **Gas Availability Status** Issue of Revocation (live exercise activation) **Electricity System** (GAS) report OCM balancing trades **Notices Impact** (notional) (live exercise activation) (live exercise activation) Scaleback off-peak exit **Stage 3**: Public Appeal Declaration of the end Strategy for restricting and Allocation & capacity release of further NTS of an NGSE (notional) Isolation capacity (live exercise activation) **Operating Margins** (live exercise activation) Simulated (live exercise activation) communications issues **Electricity System Margins Notice** Interactions (live exercise activation) Stage 1: 'Emergency Specification Gas' (live exercise activation) 09:00 - c.16:0009:00 - c.16:0009:00 - c.16:0009:00 - c.16:00

Figure 2 – Exercise Degree – Industry Participation

Government and Regulators	National Grid Gas Transmission and	Terminal Operators and LNG Importation Terminals		Storage Facilities	National Transmission System – Directly Connected Sites
Department for Business Energy and Industrial Strategy (BEIS)	Metering (GT&M)  GT&M Crisis  Management Team  (CMT)	TERMINALS:		Aldbrough – Equinor/	
		Easington - Gassco, Langeled	St. Fergus - Ancala	SSE Gas Storage	) <del>- 1</del>
			(Wood), SAGE	Hatfield Moor –	Gas Distribution
North Sea Transition Authority (OGA)	Network Emergency Management Team (NEMT)  GT&M Corporate Affairs Response Team (CART)	Easington - Centrica Storage, Rough	St. Fergus - NSMP (PX)	Scottish Power	Network Operators
			St. Fergus - Shell	Hilltop – EDF Energy	Cadent
Health and Safety Executive (HSE) [Observing]		Easington - Perenco, Dimlington	St. Fergus - National Grid	Hole House – EDF	Northern Gas Networks (NGN)
		Burton Point - ENI	Teesside - Antin	Energy Holford – UniPer	SGN
		Bacton - Shell, BBL	(Wood), CATS		Wales and West
Office of Gas and Electricity Markets (Ofgem)	National Transmission System (NTS) Silver Command	bacton - Shell, bbc	Teesside - PX	Hornsea – SSE Gas Storage Humbly Grove – Humbly Grove Energy	Utilities (WWU)
		Bacton - National Grid	Barrow - Spirit Energy		Interconnectors
		Bacton - SEAL	Somerset Farm		BBL – BBL Company
Network Emergency Coordinator (NEC) Energy Networks Association	National Grid Electricity System Operator (ESO)	Bacton - Perenco	Angus Energy		Irish Interconnector –
		LNG TERMINALS:		Stublach - Storengy	Gas Networks Ireland (GNI)
	Electricity System Distribution Network Operators	Milford Haven – South Hook			
		Milford Haven – Dragon		Shippers	Interconnector Limited
		Isle of Grain – National Grid			