Network
Emergency
Co-ordinator

nationalgrid

Exercise ‘Degree’

NEC Industry Exercise 2022 - Briefing Note

Event dates:

Tuesday 13th September 2022

Wednesday 14th September 2022

Tuesday 4th October 2022

Wednesday 5th October 2022

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.

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[1] 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 Tuesday 13th 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 Tuesday 13th September 2022, and re-commence with a short re-briefing c.09:00 hours Wednesday 14th September 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 Wednesday 5th 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

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

Figure 1 – Exercise Scope

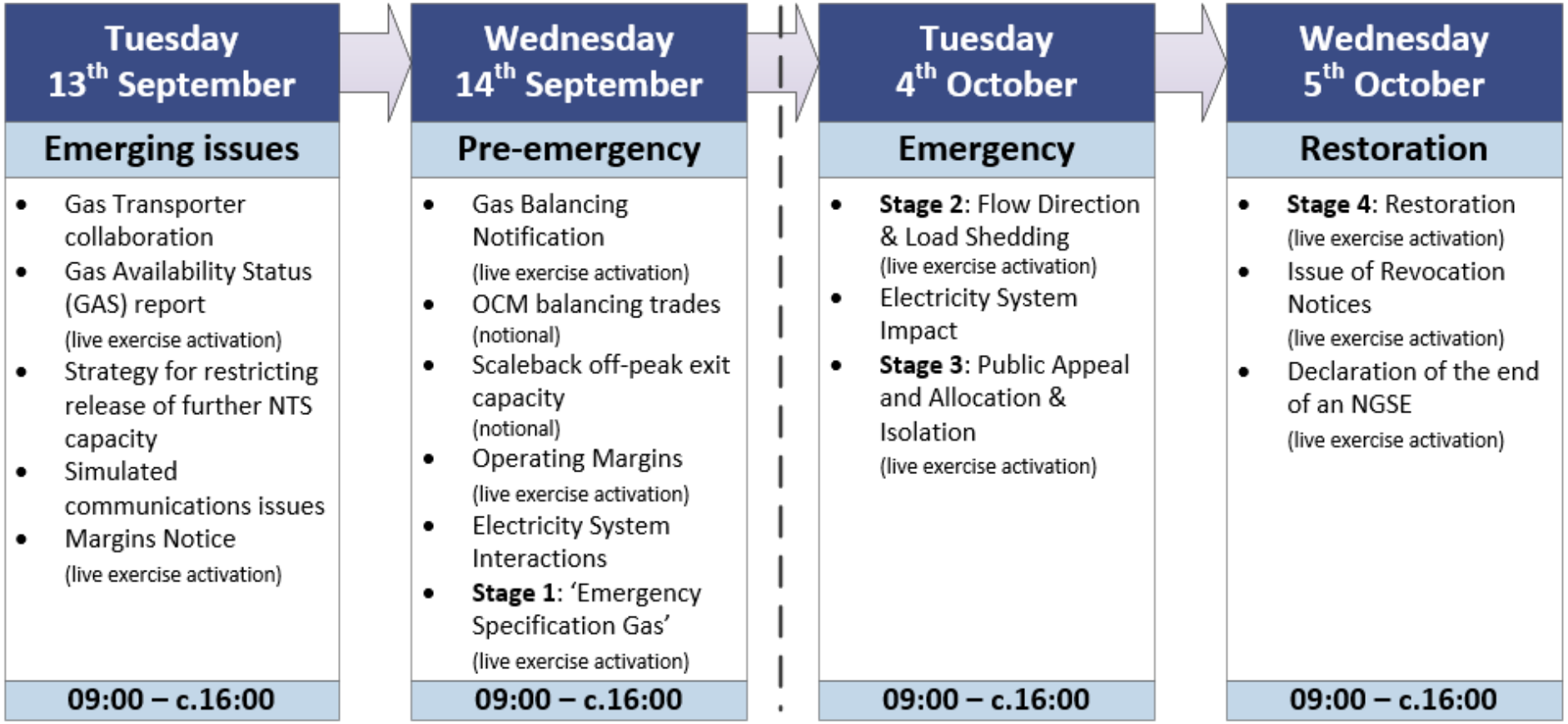

Figure 2 – Exercise Degree – Industry Participation

Government and Regulators
Department for Business Energy and Industrial Strategy (BEIS)
North Sea Transition Authority (OGA)
Health and Safety Executive (HSE) *[Observing]*
Office of Gas and Electricity Markets (Ofgem)

Network Emergency Coordinator (NEC)

Energy Networks Association

National Grid Gas Transmission and Metering (GT&M)
GT&M Crisis Management Team (CMT)
Network Emergency Management Team (NEMT)
GT&M Corporate Affairs Response Team (CART)
National Transmission System (NTS) Silver Command

National Grid Electricity System Operator (ESO)

Electricity System Distribution Network Operators

Terminal Operators and LNG Importation Terminals	
TERMINALS:	
Easington - Gassco, Langeled	St. Fergus - Ancala (Wood), SAGE
Easington - Centrica Storage, Rough	St. Fergus - NSMP (PX)
Easington - Perenco, Dimlington	St. Fergus - Shell
Burton Point - ENI	St. Fergus - National Grid
Bacton - Shell, BBL	Teesside - Antin (Wood), CATS
Bacton - National Grid	Teesside - PX
Bacton - SEAL	Barrow - Spirit Energy
Bacton - Perenco	Somerset Farm
	Angus Energy
LNG TERMINALS:	
Milford Haven – South Hook	
Milford Haven – Dragon	
Isle of Grain – National Grid	

Storage Facilities
Aldbrough – Equinor/ SSE Gas Storage
Hatfield Moor – Scottish Power
Hilltop – EDF Energy
Hole House – EDF Energy
Holford – UniPer
Hornsea – SSE Gas Storage
Humbly Grove – Humbly Grove Energy
Stublach - Storengy

Shippers

National Transmission System – Directly Connected Sites

Gas Distribution Network Operators
Cadent
Northern Gas Networks (NGN)
SGN
Wales and West Utilities (WWU)

Interconnectors
BBL – BBL Company
Irish Interconnector – Gas Networks Ireland (GNI)
Interconnector Limited