Natural Gas Emergency Plan

No: AO/PR/153 Rev. 5.0 Date: April 2021

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FOREWORD

The Commission for Regulation of Utilities CRU approved this procedure in April 2021 for use by all those with a duty of cooperation as provided in the Gas (Interim) (Regulations) Act 2002 as amended.

The procedure is revised, when necessary, by the issue of new editions. Users must ensure that they are in possession of the latest edition available on the Gas Networks Ireland website or by contacting Gas Networks Ireland.

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REVISION HISTORY

Version	Brief description of change	Approved
1	First issue published.	January 2009
2	First revision.	September 2011
3	Changed from 5-stage to 4-stage process in line with United Kingdom (UK) NEC procedure. Editorial updates.	January 2014
4	Changed references from Gaslink and Bord Gáis Networks to Gas Networks Ireland. Added reference to the role of Authorised Officer in accordance with SI 336 (2013). Editorial updates.	February 2016
5	Document review and update including changes to EU Regulations from 994/2010 to 2017/1938, updating emergency stages by introducing Crisis Levels and Crisis Manager role, reference to Solidarity between member EU states updated and Editorial updates.	April 2021

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1 EXECUTIVE SUMMARY

The Natural Gas Emergency Plan (NGEP) is the management procedure for managing a Natural Gas Emergency and provides detail on the role of the National Gas Emergency Manager (NGEM).

A Natural Gas Emergency means any event or circumstance or combination of events or circumstances which may have occurred or may occur on the gas network or on any interconnected system, including the supply, shipping, production and storage of natural gas, which adversely affects or may adversely affect, the safety or operational integrity of the onshore gas networks or any localised part thereof or which results or may result in a risk to the safety of life, property or the environment.

A Natural Gas Emergency could be caused by:

a) Insufficient gas supplies available to the gas transportation network.

b) A critical transportation constraint (this may occur where there is sufficient gas available but due to a constraint on the transmission network the gas cannot be transported to the required location).

c) Off-specification natural gas entering the transportation network.

To provide a measured, appropriate and co-ordinated response to a Natural Gas Emergency, three stages of emergency have been defined. The NGEM may request emergency actions are completed out of sequence if deemed appropriate in the interests of health and safety. Below (table 1.1) are the three-stages of a Natural Gas Emergency Crisis Level set out in EU Regulation 2017/1938.

NATURAL GAS EMERGENCY CLASSIFICATION	
Emergency Stage	
Early warning	Potential Emergency
Alert	Emergency Declared and voluntary Load Shedding
Emergency	Load Shedding, Allocation & Isolation Restoration

Table 1.1 Natural Gas Emergency Classification (high Level description)

The NGEP provides further information on these emergency stages as well as detail on the prioritisation of gas consumers and communication routes in an emergency. The procedure also provides a summary of the roles and responsibilities of the NGEM, Crisis Manager and Gas Networks Ireland (GNI) as the Transporter.

Note: *In accordance with national legislation, S.I. No. 697/2007 - European Communities (Security of Natural Gas Supply) Regulations 2007, the CRU appointed GNI as the NGEM. In accordance with EU Regulation 2017/1938 the CRU appointed GNI as the Crisis Manager.*

2 INTRODUCTION

2.1 Scope

The Natural Gas Emergency Plan (NGEP) is the industry procedure for managing a Network Gas Emergency and provides detail on the roles of Gas Networks Ireland (GNI), the NGEM and the Crisis Manager. Detailed procedures not included in the NGEP should be incorporated into the emergency plans of affected parties.

The NGEP has been prepared by Gas Networks Ireland (GNI) as designated holder of the natural gas license for the operation of the transmission and distribution systems in accordance with the requirements of the Gas (Interim) (Regulations) Act 2002 as amended.

The NGEP does not outline how GNI as the Transporter manages the gas transportation system on a day-to-day basis. The NGEP is the procedure that should be used when all normal operational tools available to the Transporter have failed to address the developing emergency situation. The GNI Crisis Management Plan HSQE/PR/081, Transmission Response and Repair Manual AO/MN/005 and the Distribution Emergency Response Team plan AO/PR/151 describes the operational activities for dealing with physical emergencies on the GNI network.

2.2 Regulation

EU Regulation 994/2010 (now repealed) was introduced to safeguard security of natural gas supply and since its adoption has been a key driver in facilitating cooperation between Ireland, Northern Ireland and the UK. The Commission for Regulation of Utilities (CRU) was the designated Competent Authority responsible for the implementation of the measures set out in these Regulations.

Regulation 994/2010 was repealed on 25th October 2017 and replaced with EU Regulation 2017/1938. concerning measures to safeguard the security of gas supply. The CRU continues to be the Competent Authority for the purposes of the new Regulation and has been designated as such.

The CRU has also appointed GNI as the Crisis Manager in accordance with Article 10 of the Regulation. The Crisis Manager will provide technical liaison between the NGEM, the National Co-ordination Group and the European Gas Co-ordination Group. This role may include the provision of technical updates at NCG press briefings.

The CRU is also responsible for appointment of the National Gas Emergency Manager in accordance with the Gas (Interim) (Regulations) Act 2002. Gas Networks Ireland is the NGEM pursuant to the appointment of the CRU.

Article 11 Declaration of a crisis; There shall be the following three crisis levels:

- Early warning
- Alert
- Emergency

Article 13 of the EU Regulation 2017/1938 provides guidance on Solidarity (Co-operation) between member States.

Statutory Instrument S.I. No. 336/2013 - European Union (Security of Natural Gas Supply) Regulations 2013 outlines the Power of Authorised Officers.

2.3 Purpose

The NGEP is intended to provide for the matters specified in Section 19B (3) of the Gas (Interim) (Regulations) Act 2002 including;

a) Provisions for the appointment of the National Gas Emergency Manager.

b) Provisions for the appointment of the Crisis Manager.

c) Procedures for the holder of a natural gas license for the operation of a transmission system to declare a Natural Gas Emergency.

d) The roles and responsibilities of the CRU, energy undertakings, final customers and holders of petroleum leases involved in the emergency response.

e) Measures to minimise the impact on electricity generation and on the safe, secure, reliable operation of the national electricity system in so far as that system is dependent on natural gas.

f) Measures to ensure that supplies for household customers and in so far as it is possible small and medium sized enterprises and other customers that cannot switch their gas consumption to other energy sources are protected in the event of a Natural Gas Emergency.

Measures taken to protect supplies of gas for household customers shall avoid undue discrimination between holders of shipping licences or between holders of supply licences.

A Natural Gas Emergency[1] is defined in the Gas (Interim) (Regulations) Act 2002 as any event or circumstance or combination of events or circumstances which may have occurred or may occur on the gas network or on any interconnected system, including the supply, shipping, production and storage of natural gas, which adversely affects or may adversely affect, the safety or operational integrity of the onshore gas networks or any localised part thereof or which results or may result in a risk to the safety of life, property or the environment.

The monitoring and control of the specification for natural gas delivered to the network is essential to the safe and secure operation of the network. Non-compliance with the gas quality specification may result in a Natural Gas Emergency.

2.4 Governance

GNI is the gas Transmission System Operator (TSO) for Ireland with responsibility for system operation, network planning and market arrangements.

The Natural Gas Emergency Plan (NGEP) is prepared by Gas Networks Ireland (GNI) pursuant to the direction of the Commission for Regulation of Utilities (CRU) and is subject to approval by the CRU in pursuance of its statutory functions.

[1] *Emergencies for the purpose of this plan are natural gas emergencies. The management of electricity supply emergencies is the responsibility of EirGrid and the Electric Supply Board (ESB) Networks as the operators of the electricity system in Ireland.*

2.5 Solidarity (Co-operation)

Article 13 of EU Regulation 2017/1938 requires Member States shall also provide the solidarity measure to another Member State to which it is connected via a third country unless flows are restricted through the third country. Such an extension of the measure shall be subject to the agreement of the relevant Member States, who shall involve, as appropriate, the third country through which they are connected.

Solidarity measure shall be taken as a last resort and shall apply only if the requesting Member State has:

a) Not been able to cover the deficit in gas supply to its solidarity protected customers despite the application.

b) Exhausted all market-based measures and all measures provided in its emergency plan;

c) Notified an explicit request to the Commission and to the competent authorities of all Member States with which it is connected either directly or Indirectly.

Solidarity protected customer' means a household customer who is connected to a gas distribution network, and, in addition, may include one or both of the following:

a) A district heating installation if it is a protected customer in the relevant Member State and only in so far as it delivers heating to households or essential social services other than educational and public administration services;
b) An essential social service if it is a protected customer in the relevant Member State, other than educational and public administration services

Any request for Solidarity shall only be made with the approval of the Gas Emergency Response Team (GERT).

2.6 Emergency Framework

The emergency framework in place following or in anticipation of a Natural Gas Emergency consists of emergency planning and operational response.

Emergency planning for the purposes of the NGEP will be undertaken by GNI in consultation with the gas industry, electricity industry, the regulator and government. The consultation is undertaken at the Gas Electricity Emergency Planning Group (GEEP) and presentations made to the Code Modification Forum where necessary.

Operational response will be undertaken by the Gas Emergency Response Team (GERT). This body will be chaired by the NGEM and will have a core membership of the Department of the Environment, Climate and Communications (DECC), CRU, GNI, and EirGrid. The GERT will only be established in the event of a potential or actual emergency and will support the NGEM in the implementation of the NGEP. The GERT may also be established as required to test the effectiveness of the arrangements.

The members of the GERT will interface with and provide information to the NGEM and be responsible for implementing the directions of the NGEM. The NGEM may request other agencies and individuals to participate in the GERT as the NGEM considers appropriate. The structure of the GERT is shown in Figure 1 below.

In the event of a joint electricity and gas emergency the NGEM and the EirGrid Operations Director will jointly chair a group known as the Joint Energy Emergency Response Team (JEERT). This group will be comprised of key personnel from the DECC, CRU, GNI, EirGrid and ESB Networks.

Depending on the nature and duration of the emergency it may be necessary to convene the Energy Press Officers Network (EPON). The EPON will consist of communication experts from DECC, CRU, EirGrid, GNI and ESB Networks as required. The purpose of the EPON is to ensure the delivery of a consistent national media response in the event of an emergency. In the event of a Natural Gas Emergency, GNI will coordinate

the national media response through the EPON. In the event that the government's National Coordination Group (NCG) is convened, the NCG will manage the national media response.

The Crisis Manager will provide technical liaison between the NGEM, the National Co-ordination Group (NCG) and the European Gas Co-ordination Group and could include the provision of technical updates at NCG press briefings.

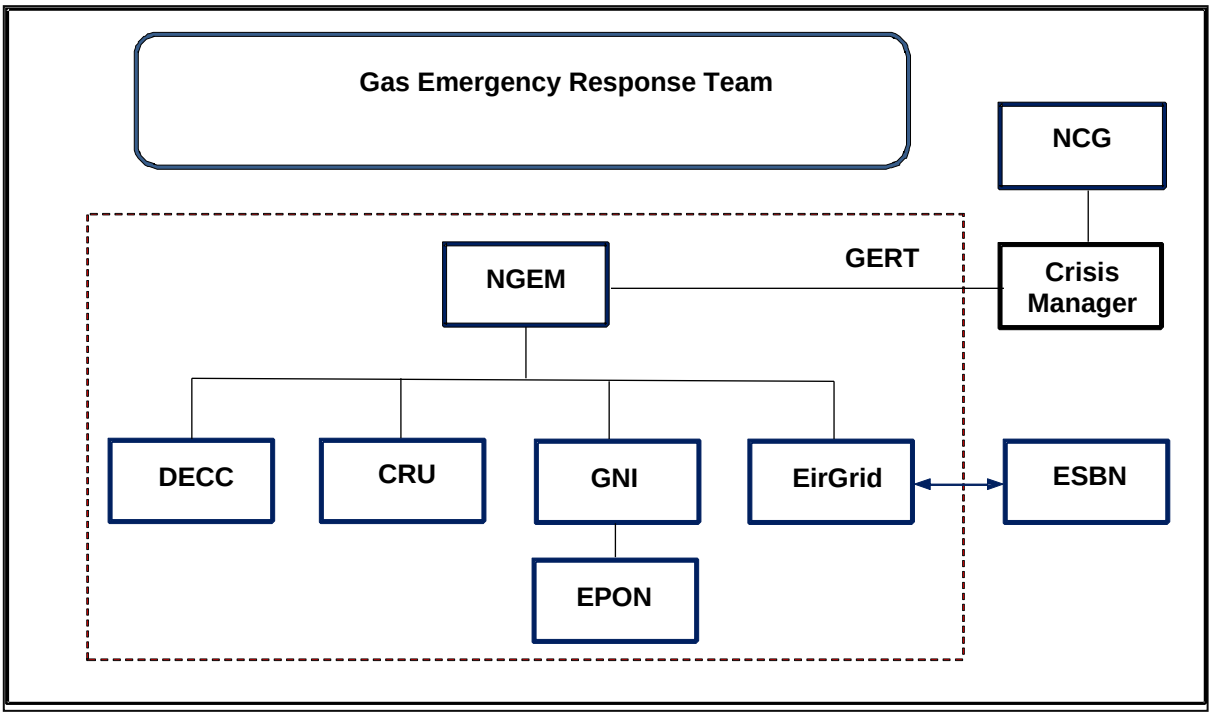

Figure 1 GERT Structure

2.7 Roles and Responsibilities

The roles and responsibilities of the primary actors in the context of the Gas Emergency Response Team are outlined below;

Note: *Section 7 summarises the tasks of required of Primary Actors in an Emergency.*

a) The National Gas Emergency Manager (NGEM) is appointed by the CRU and is responsible for co-ordinating the response to a Natural Gas Emergency in accordance with the NGEP. The NGEM acts as Incident Controller and leads the Gas Emergency Response Team (GERT). The NGEM will approve the declaration of a Natural Gas Emergency and its termination. The NGEM is responsible for ensuring that the NGEP has been subject to test and that it is fit for purpose. It is also the responsibility of the NGEM to ensure that any recommended improvements to the NGEP are implemented. The NGEM must ensure that the Natural Gas Emergency Plan (NGEP) is subject to annual review and with the approval of the CRU.

The Crisis Manager is appointed by the CRU in accordance with Article 10 of the Regulation. The Crisis Manager will provide technical liaison between the NGEM, the National Co-ordination Group and the European Gas Co-ordination Group. This role may also include the provision of technical updates at NCG press briefings.

b) The Department of the Environment, Climate and Communications (DECC) is the Government Department responsible for the formulation of energy policy including security of supply. In the context of a gas emergency, DECC will assume the role of Lead Government Department. As Lead

Department, DECC is responsible for convening and chairing the National Co-ordination Group (NCG), which consists of all Government Departments and the relevant agencies. The NCG will also co-ordinate the national media response and in terms of its interactions with Europe, the DECC is a member of the European Gas Co-ordination Group. The DECC is also a member of the Gas Emergency Response Team (GERT) and it can seek the implementation of national emergency powers and other assistance if necessary.

c) The Commission for Regulation of Utilities (CRU) is the Regulatory Authority for electricity and gas in Ireland. The CRU has, *inter alia*, statutory responsibility for monitoring and ensuring security of gas and electricity supplies. The CRU has been designated by DECC as the Competent Authority under Article 2.2 of Regulation (EU) 2017/1938 to ensure the implementation of the measures set out in the Regulation and is also invited to attend the European Gas Co-ordination Group meetings. The CRU is responsible for the appointment of the NGEM and Crisis Manager and approves the NGEP. The CRU is also is also a member of the Gas Emergency Response Team (GERT) and will provide the interface with the regulators in Northern Ireland and Great Britain. It will also seek the power of the High Court to ensure compliance with the directions of the NGEM if necessary. The CRU, as the designated Competent Authority, reserves the right to deviate from the outlined procedures in the event of exceptional circumstances, and shall inform the European Commission, in accordance with 11(4) of the Regulation.

d) Gas Networks Ireland (GNI) is the gas Transmission System Operator (TSO) for Ireland with responsibility for system operation, network planning and market arrangements. The CRU has appointed GNI as the NGEM and is responsible under its licence for the development of the NGEP, which is approved by the CRU. GNI is also a member of the Gas Emergency Response Team (GERT). The CRU has also appointed GNI as the Crisis Manager in accordance with Article 10 of Regulation (EU) 2017/1938.

   GNI provides the interface with the gas industry in the Ireland including producers, storage operators, shippers and end users. It also provides the interface with the Connected System Operators (CSO's) in Northern Ireland (Mutual Energy Ltd. (MEL) and the Isle of Man (Manx Utilities) as well as National Grid in Great Britain as necessary.

e) EirGrid is Ireland's electricity TSO, and will decide during a gas supply emergency, which power stations if required should fuel switch, reduce output or come off load in the event of a gas supply emergency. EirGrid will provide the interface with ESB Networks, the electricity network operator in Ireland and the operator of the electricity system in Northern Ireland, System Operator Northern Ireland (SONI) as necessary. EirGrid is also a member of the Gas Emergency Response Team (GERT).

ESB Networks manages the operation of the electricity distribution network in Ireland and provides the interface with the distribution network operator in Northern Ireland, Northern Ireland Electricity (NIE).

The following table summarises the general roles and responsibilities of other parties that may have a role in a Natural Gas Emergency.

Organisation	Role & Responsibilities
Holders of Petroleum Lease	Responsible for the production and delivery of gas to the network and responding to requests or complying with directions from the NGEM.
Storage/LNG Operators	Responsible for the supply of gas to the network and responding to requests or complying with directions from the NGEM.
Shippers	Responsible for providing gas to consumers and responding to requests or complying with directions from the NGEM.
Consumers	Gas and electricity consumers responding to demand reduction requests from the NGEM and/or the electricity network operators.
Generators	Gas fired power stations responding to requests to reduce demand or switch fuel supplies from EirGrid under the direction of the NGEM.
Connected System Operators	Operators of gas networks connected to the GNI gas transportation system responding to directions/requests from the NGEM.
Emergency Services	Emergency Services/Local Authorities in Ireland manage the social consequences of the gas supply emergency.
GNI(UK)	Holder of gas system operator licence for the South - North Pipeline.
Manx Utilities	Operating utilities in the Isle of Man.
Supplier of last resort	Responsible for providing gas to consumers in the event of the loss of a major gas market participant and responding to requests or complying with directions from the NGEM.
Transmission System Operator (TSO)	Holder of a natural gas license for the operation of a transmission system.
Network Emergency Co-ordinator (NEC)	Is the equivalent of the NGEM in the UK and will direct all flow curtailment volumes at the Moffat entry as a result of a gas supply emergency in the UK.
Northern Ireland Network Emergency Co-ordinator (NINEC)	Is the equivalent of the NGEM in Northern Ireland. The NGEM will direct all flow curtailments at Twynholm and Gormanston which feed the connected Northern Ireland network in a gas supply emergency. The NINEC may also request the use of the North South pipeline in the event of a localised gas supply emergency in Northern Ireland.

Table 2.1 Roles & Responsibilities of relevant parties

3 THE NETWORK

The GNI Network consists of a Transmission network and a Distribution network. The Transmission network transports natural gas from the entry points at Moffat, and Bellanaboy (Corrib) to the Distribution networks in Ireland and directly connected loads (e.g. gas-fired power generators). The GNI Transmission network also supplies natural gas to Northern Ireland (Twynholm and Gormanston) and the Isle of Man.

The Moffat entry point connects the GNI network to the National Grid gas network in Great Britain and allows for the importation of natural gas to Ireland from an onshore pipeline in Scotland via two sub-sea interconnectors (IC1 and IC2). The landfall installations for the two sub-sea interconnectors entering Ireland are located at Gormanston and Loughshinny.

The Bellanaboy entry point connects the Corrib gas field to the onshore GNI network.

GNIs has two major entry points: -

1) Moffat (GB)
2) Corrib (RoI)

The Northern Ireland gas network connects to the GNI network at Tywnholm in Scotland and delivers gas to Northern Ireland via the Scotland to Northern Ireland Pipeline (SNIP). The South North Pipeline (SNP) is an onshore gas transmission pipeline from Gormanston to Northern Ireland that facilitates gas flow from Gormanston for delivery to Northern Ireland. An Incident would also be coordinated with the Northern Ireland Network Emergency Coordinator (NINIC).

Inch entry point (ROI) has been planned for decommissioning in 2021 and is currently not used to supply the network with gas, however it is currently a live pipeline (entry point).

Gas supply to the Isle of Man is via the GNI Transmission network from IC2.

The GNI Transmission network is the sole source of natural gas for the GNI Distribution networks, directly connected loads, Northern Ireland and the Isle of Man.

GNI operates both the Transmission and Distribution networks in Ireland. Operation is controlled from the GNI Grid Control Centre located at GNI Headquarters, Cork. The GNI Grid Control Centre is responsible for the continuous monitoring and control of the network ensuring its safe operation at all times. In addition, it undertakes the application of commercial activities associated with the Code of Operations.

The quality of natural gas delivered at an entry point to the GNI network is monitored by GNI to ensure compliance with the quality specification in the Code of Operations.

GNI have a 3rd party constructed 4 bar Biomethane network connection at Cush, County Kildare, where biomethane gas can be injected into GNI's distribution network, it is envisaged that further biomethane injection points will be entering the GNI network in future and should be considered as part of emergency planning arrangements.

A high-level overview diagram of the Network identifying key location has been included in Appendix B for reference and real time access to flow information is available on the GNI website here.

4 CODE OF OPERATION

The Code of Operations, section H sets out the operational arrangements in the event of an emergency and section G reference gas quality specification.

Emergency means a Natural Gas Emergency or any event or circumstance or combination of events or circumstances which have occurred or may occur and which in the opinion of the Transporter adversely affects, or may adversely affect, the safety or operational integrity of the Transportation System or any localised part thereof or which results or may result in the safety of life, property or the environment being at risk, including the event or circumstance which gives rise to such Emergency.

Upon the NGEM declaring the end of an emergency, normal commercial arrangements will resume at the start of the following gas day.

Natural gas delivered at an entry point to the GNI transportation system is monitored for adherence to the quality specification in the Code of Operations.

5 OPERATIONS OVERVIEW

This section is intended to provide guidance on the implementation and operation of the Natural Gas Emergency Plan. The following table indicates the relevant sections of the plan.

OPERATIONS OVERVIEW	
Incident Trigger **Section 5.1**	Describes the triggers for declaring a potential or actual emergency and the information source **Early Warning**
Activation **Section 5.2**	Describes the arrangements for the notification and declaration of a potential or actual emergency and the implementation of the plan **Alert**
Operation **Section 5.3**	Describes the arrangements for the operation of the plan **Emergency**

Table 5.1 Operations Overview

5.1 NGEP Triggers

It is the responsibility of GNI ('the Transporter') as the holder of a natural gas license for the operation of the transmission and distribution systems to declare a Natural Gas Emergency on the instruction of the NGEM. The main triggers for declaring an emergency are summarised in Figure 2 below.

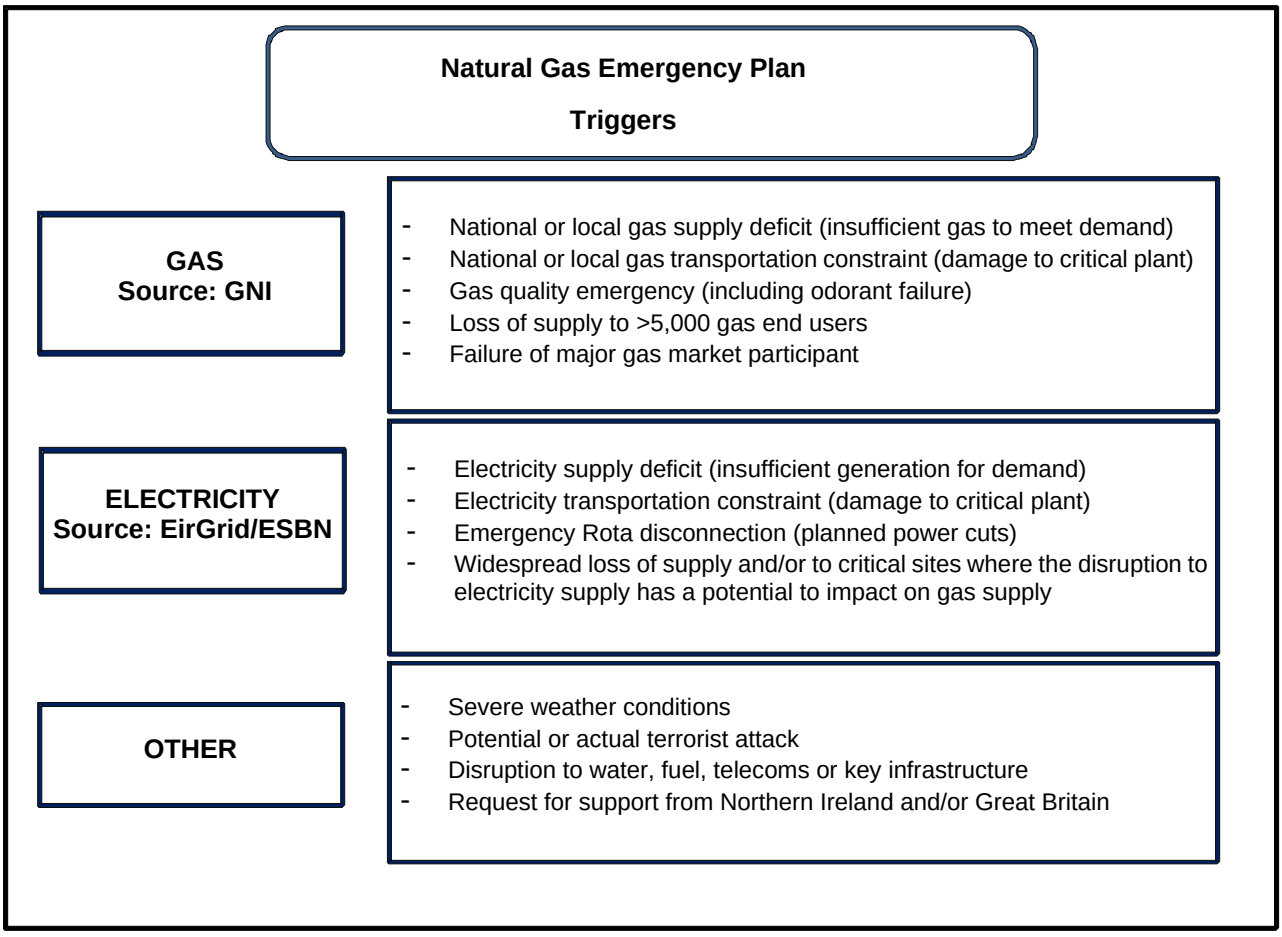

Figure 2 Natural Gas Emergency Plan Triggers

5.1.1 These triggers are intended to provide guidance to the NGEM on the declaration of a Natural Gas Emergency and thus activating the relevant provisions of the NGEP. The triggers listed may not always result in the declaration of a Natural Gas Emergency and/or activation of all of the provisions of the NGEP but the NGEM needs to be aware of possible incidents that could result in the initiation of the plan.

5.1.2 There may be other types of incident that would require an emergency response and the activation of the NGEP (in whole or in part). The NGEM has discretion to approve or require the Transporter to declare an emergency.

5.1.3 In deciding if it is appropriate to approve or instruct the declaration of a Natural Gas Emergency the NGEM may consult with other members of the GERT if there is sufficient time.

5.1.4 Without prejudice to the right of the NGEM to issue such instruction or directions as it considers appropriate, the NGEM shall on approving or instructing the declaration of a Natural Gas Emergency or as soon as practical thereafter, instruct that activities in whole or in part of such one or more of the documents referred to in Section 6.2 as appropriate and may from time to time in the case of Natural Gas Emergency authorise or instruct the omission, implementation or cessation of any action contemplated by such procedures.

5.1.5 The CRU has designated a Supplier of Last Resort to ensure that customers are protected when the licence of one or more persons who are holders of a licence to supply natural gas is revoked or in the event that the holder of a licence to supply natural gas decides to discontinue such licensed

activity. The NGEM shall exercise such of its powers and functions as may be appropriate to facilitate the Supplier of Last Resort in protecting customers in accordance with the directions of the CRU.

5.2 NGEP Activation

The arrangements for declaring a Natural Gas Emergency and for activating the NGEP are shown in the Figure 3 below.

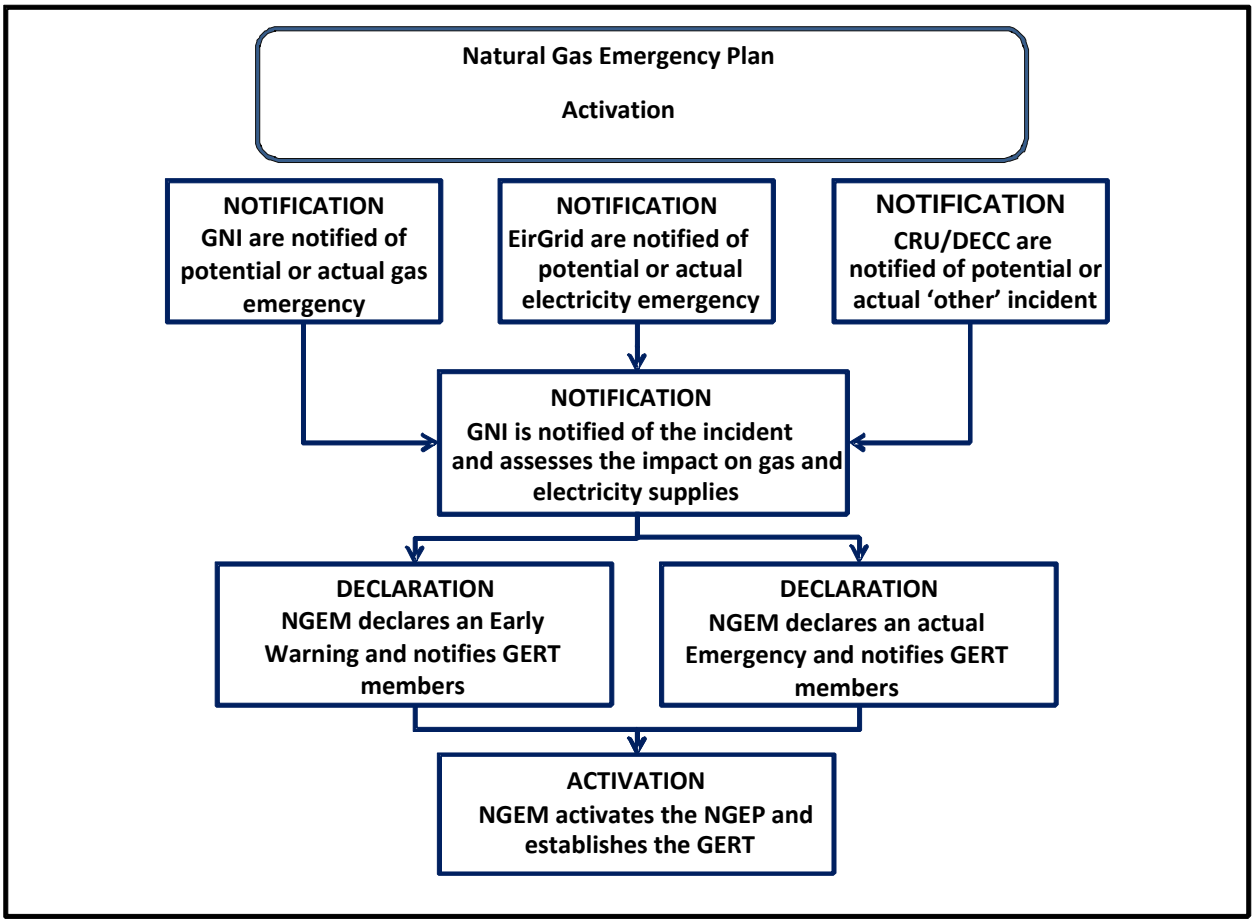

Figure 3 Natural Gas Emergency Plan Activation

5.2.1 Notification of an incident potentially impacting on gas supply or resulting in a Natural Gas Emergency can come from a number of sources depending on the nature of the emergency. In all cases the information source should initially notify the GNI Grid Control Centre located in Cork. The GNI Grid Control Centre will in turn notify the NGEM.

5.2.2 The NGEM will assess the scale of the incident against the triggers and determine if it is necessary to activate the NGEP and to establish the GERT.

5.2.3 If appropriate the NGEM will formally declare a Natural Gas Emergency using the agreed template.

5.2.4 The Transporter will provide support in issuing declarations and contacting GERT members as necessary.

5.3 The Gas Emergency Response Team (GERT)

The structure of the GERT is shown in Figure 4 below.

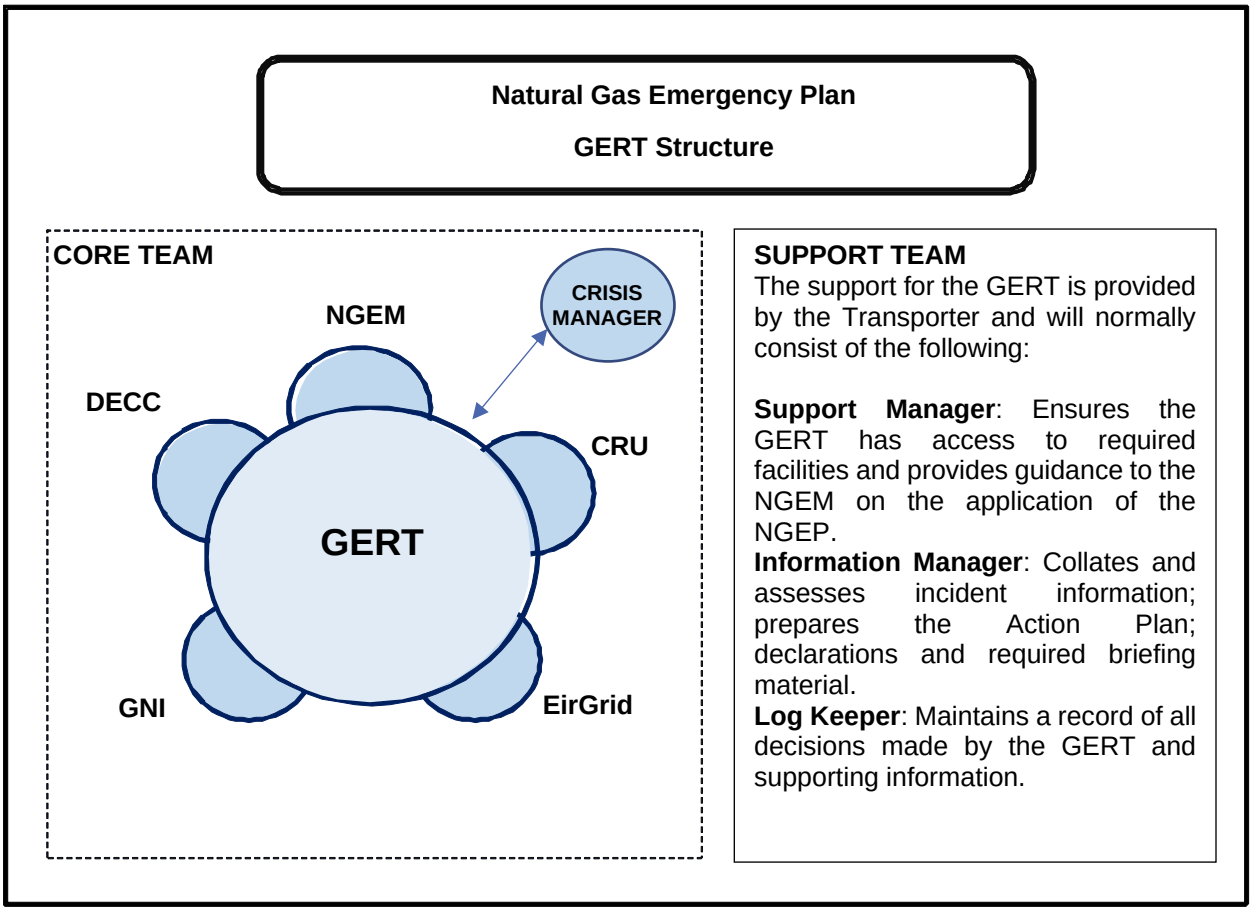

Figure 4 GERT Structure

The GERT will normally be based at the GNI Headquarters in Cork. However, the NGEM may choose to establish the team at another location or remotely depending on the nature of the emergency and the NGEM will advise team members accordingly. Communication between team members will be via conference call number provided by GNI.

The Support Team established to assist the NGEM and the GERT will be provided by GNI and be based at GNI Headquarters in Cork or a designated backup location if necessary.

5.3.1 GERT Operation

The operation of the NGEP during an emergency is outlined in Figure 5 below and summarised as follows.

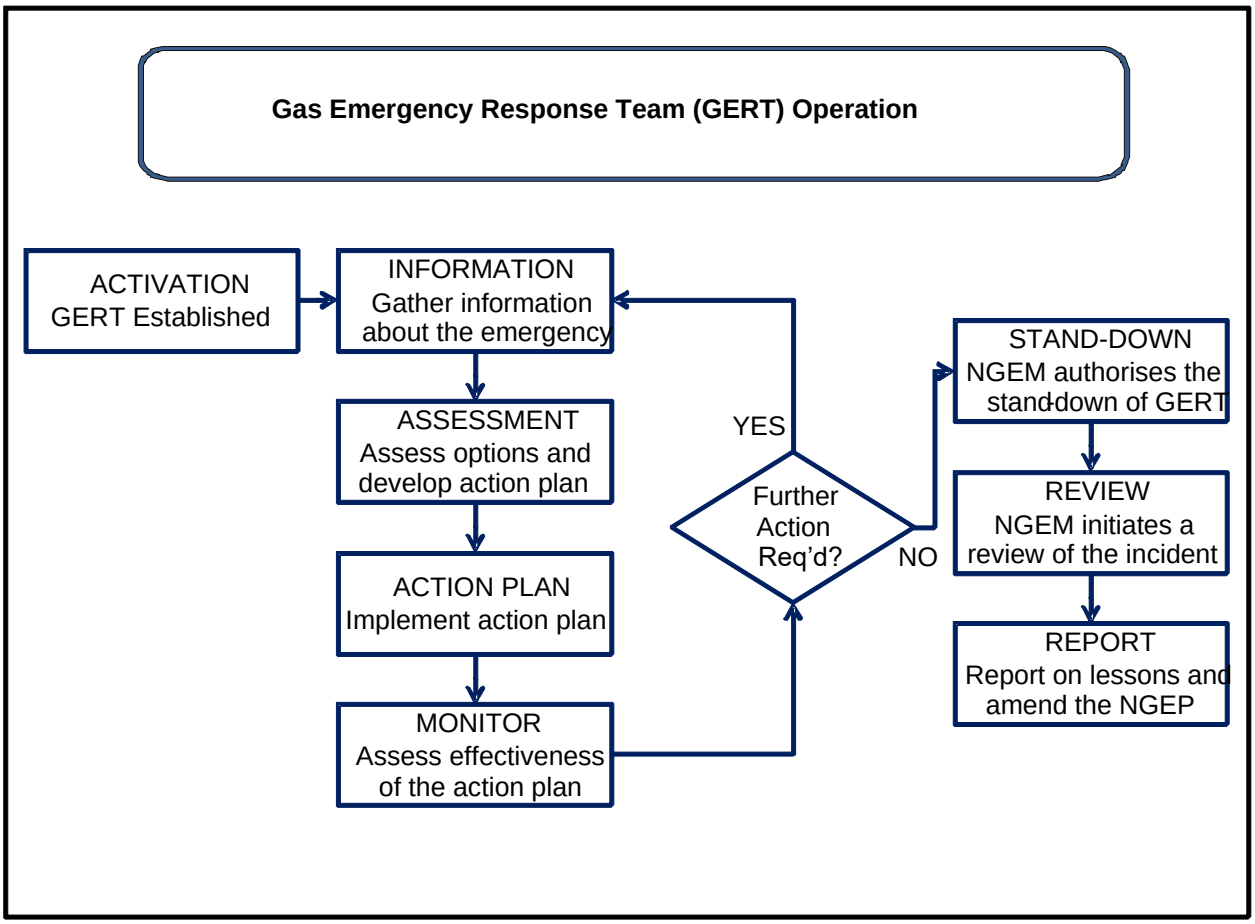

Figure 5 GERT Operation

a) Activation: the NGEM will determine the regularity of the GERT meetings depending on the nature and severity of the emergency.

b) Information/Assessment: The Support Team will gather information on the emergency, assess the extent and consequences and produce a Situation Report (SITREP).

c) Action Plan: The Support Team will prepare an Action Plan and the NGEM with the support of the GERT will review and, if appropriate[1], approve the Action Plan. The Action Plan will be communicated to all relevant parties by the Support Team.

d) Monitor: The GNI Support Team will monitor the effectiveness of the Action Plan on behalf of the NGEM and will report back to the GERT as required.

e) Stand Down: if the NGEM confirms that the emergency has been resolved then he/she can authorise

[1] *In some instances, action may have to be taken by the NGEM prior to GERT review / approval to maintain / preserve gas stock on the system. These actions will be presented for review to the GERT when time permits.*

for the GERT to stand down. Depending on the nature of the emergency and the risk of re-occurrence the NGEM may require the team to remain available to re-convene if necessary.

f) Review: after any emergency requiring the establishment of the GERT the NGEM will arrange for a review of the emergency to be undertaken to ensure any learning points are captured.

g) Report: a report on the emergency will be prepared and will normally be provided to the GERT by the NGEM within 4 weeks of stand down. Any recommendations made in the report will be incorporated in the NGEP at the discretion of the NGEM.

6 SUPPORTING INFORMATION

This section summarises the task of participants in an emergency (this list is not exhaustive).

6.1 Role Guidance Notes

6.1.1 National Gas Emergency Manager (NGEM)

NATIONAL GAS EMERGENCY MANAGER (NGEM)
The NGEM is responsible for the coordination of the response to a Natural Gas Emergency in accordance with the Natural Gas Emergency Plan (NGEP).
TASKS • Determine if it is necessary to declare an emergency based on information provided by GNI, EirGrid or CRU. • Approve the declaration of a Natural Gas Emergency in accordance with the NGEP • Confirm NGEM contact information for all responders involved in the emergency. • Establish the Gas Emergency Response Team (GERT) confirming membership, location, communications and time/frequency of meetings. • Liaise with the appointed Crisis Manager who will provides technical liaison between the NGEM, the National Co-ordination Group and the European Gas Co-ordination Group • In conjunction with the GERT develop a Situation Report (SITREP). • Approve the SITREP and agree the circulation list for use by the GNI Support Team. • Advising the GERT of any actions undertaken prior to the first meeting. • In conjunction with the GERT develop an Action Plan for responding to the emergency. • Approve the Action Plan and prepare the necessary directions for the GNI Support Team to issue. • Through the GERT monitor the effectiveness of the Action Plan. • Amend and reissue the SITREP and Action Plan as required during the emergency. • Ensure a handover of duties process has been put in place should the event timescales require rest time for individuals working on the emergency. • The NGEM may vary the membership and the time/frequency of response team meetings as required during the emergency. • Ensure that a log of the emergency is maintained and that all relevant documentation is secured. • Inform the Transporter of the end of the emergency and make arrangements for a review of the incident and the preparation of a report.

6.1.2 Gas Networks Ireland (GNI) Representative

GAS NETWORKS IRELAND (GNI) REPRESENTATIVE
GNI is responsible for the operation of the gas transmission network and to provide information on the operation of the gas supply network and support the NGEM and the response team.
TASKS • Implement NGEM and GERT directions. • Provide information on the emergency to the NGEM including nature of the incident and the current/projected supply/demand balance and any actions taken. • Ensure that the NGEM emergency declaration is sent to all emergency responders. • Advise Natural Gas Undertakings that an early warning has been declared and when it has been revoked. • Establish the Support Team for the GERT and provide suitable meeting and communications facilities. • Provide the gas industry input into the development and amendment of the Situation Report (SITREP). • Following approval by the NGEM ensure that the SITREP is sent to all agreed responders confirming receipt. • Provide the gas industry input into the development and amendment of the Action Plan. • Following approval by the NGEM ensure that all necessary directions are issued to responders confirming receipt. • Monitor the effectiveness of Action Plan and report to the GERT as appropriate. • At the end of the emergency issue the NGEM declaration to all responders and stand down the Support Team. • Provide all relevant information, logs and documents to the NGEM for the post emergency review and report. Participate in a post emergency review highlighting issues and lessons learnt and prepare a report for the CRU (if requested).

6.1.3 EirGrid Representative

EIRGRID REPRESENTATIVE
To provide relevant information and guidance on the operation of the electricity transmission system and generation capability in Ireland.
TASKS • Provide information on the impacts on the electricity industry of the emergency to the NGEM. • Confirm the contact information for the EirGrid representative and the emergency team. • Provide the electricity industry input into the development and amendment of the Situation Report (SITREP). • Ensure that all relevant sectors of the electricity industry are briefed on the emergency. • Provide the electricity industry input into the development and amendment of the Action Plan. • Implement NGEM directions. • Manage any required switching to alternative supplies by power generators and/or electricity demand management. • Monitor the effectiveness of Action Plan and report to the GERT as appropriate. • Provide all relevant information, logs and documents to the NGEM for the post emergency review and report.

6.1.4 CRU Representative

CRU REPRESENTATIVE
To provide the interface with the central government response, to access emergency powers and to provide guidance to government issues.
TASKS • Determine whether an early warning should be declared in Ireland and declare an early warning if necessary. [1] • Confirm the contact information for the CRU Representative and the emergency team. • Provide input into the development and amendment of the Situation Report (SITREP). • Provide input into the development and amendment of the Action Plan. • Advise the Crisis Manager that an early warning has been issued and the rationale for the declaration if necessary. • Communication with the EU commission via the gas Co-ordination group, that an early warning has been declared in Ireland and the rationale for the declaration, if necessary. • Inform the Department of Communications, Climate Action and Environment (DCCAE) as lead Government Department that an early warning has been declared in Ireland and the rationale for the declaration, if necessary. • Implement NGEM Directions. • Monitor the effectiveness of Action Plan and report to the Gas Emergency Response Team as appropriate. • Authorise any deviations to this plan during an emergency situation. • Provide all relevant information, logs and documents to the NGEM for the post emergency review and report. • Appoint persons nominated by GNI to be Authorised Officers for the purposes of ensuring compliance with a direction of the NGEM per S.I. no. 336 of 2013. • Seek the power of the High Court where necessary to ensure compliance with a direction of the NGEM. • Decide whether to remove, maintain or escalate the Crisis Level.

[1] *The declaration of a crisis level (i.e. early warning, alert and emergency) refers to the scenario whereby the CRU is responsible for informing the EU Commission of an emergency. The NGEM shall still be required to declare an emergency in accordance with the Natural Gas Emergency Plan. The declaration of a crisis level by the CRU may take the form of a written notification to the EU Commission via the European Gas Coordination Group email circulation list, or any other communication method deemed appropriate by the CRU."*

6.1.5 Crisis Manager

CRISIS MANAGER
To provide technical liaison between NGEM, National Co-ordination Group and the European Gas Co-ordination Group.
TASKS • The Crisis Manager will provide technical liaison between the NGEM, the National Co-ordination Group (NCG) and the European Gas Co-ordination Group. • This role may include the provision of technical updates at NCG press briefings. • Liaise with the appointed National Gas Emergency Manager. • Provide situation reports to CRU if appropriate, and information to the CRU in accordance with the Regulations. • Request additional resources from 3rd parties if required. • Produce a closing report for the CRU if required.

6.1.6 Gas Emergency Response Team (GERT) Support Team

GAS EMERGENCY RESPONSE TEAM (GERT) SUPPORT TEAM
To ensure that the Gas Emergency Response Team (GERT) has access to all required facilities and to provide guidance and assistance to the NGEM on the application of the plan.
The GERT Support Team is provided by GNI and has three key roles. • Support Manager - Provide leadership for the support team. - Ensure that the GERT has all required office facilities. - Ensure that the GERT has all required communications. - Provide guidance to the NGEM on the application of the plan. • Information Manager - Gather and assess all information from responders. - Develop and maintain the Situation Report (SITREP). - Develop and maintain the Action Plan. - Issue SITREPS and NGEM Directions. • Log Keeper - Maintain an emergency log recording all relevant information and actions. - Hold copies of all relevant documentation and Directions, - Maintain contact information for all Response Team members. The NGEM may request additional specialist roles in the support team, including; • Legal Representation. • Press Office Representation (coordinating with the EPON if established). • Technical Representation.

6.2 Related Documentation

A number of related documents have been developed by the Transporter for the management of natural gas emergencies as per Table 6.1 below. The joint procedures between GNI and National Grid, GNI and EirGrid and GNI and MEL are agreed between the respective parties. The procedure for monitoring and management of gas quality is agreed with the CRU.

Procedure	Description	Owner
National Grid /GNI Joint Protocol for Load Shedding in Gas Supply Emergencies	Describes the load shedding arrangements in place between National Grid and GNI in the event of a Natural Gas Emergency.	GNI/National Grid
GNI/EirGrid Joint Gas & Electricity Emergency Arrangements	Describes the arrangements for GNI and EirGrid to manage the consequences of a gas emergency on electricity supply.	GNI/EirGrid
Distribution Emergency Response Plan	Describes the arrangements for GNI to manage emergencies on the Distribution network.	GNI
Transmission Response and repair manual	Describes the arrangements for GNI to cover operational, management and administrative emergencies response on the Transmission network.	GNI
Joint Procedure for Emergency Use of the South North Pipeline	Outline the steps to be followed in the event of a natural gas emergency on the Northern Ireland gas transmission network, or a gas emergency on the GNI gas transmission network in the Republic Of Ireland, necessitating a request to flow from North to South.	GNI/MEL
Sub Sea Pipeline Repair Procedures & Emergency Repairs in Shallow Water	The purpose of these procedures is to guide GNI personnel involved with an emergency and to bring the emergency under control as quickly as possible.	GNI (Wood Group Kenny)
GNI Crisis Management Plan	The purpose of this plan is to set out a framework for managing crisis situations affecting GNI and to ensure that the needs of all internal and external stakeholders are recognised.	GNI
NGEM Emergency Declaration Template	Template generated by GNI to advise status of Emergency.	GNI

Table 6.1 Related Documents

7 NATURAL GAS EMERGENCY ARRANGEMENTS

These arrangements summarise the procedure for managing natural gas emergencies in Ireland.

The NGEM is responsible for the following actions;

a) The co-ordination of the response to an emergency in accordance with the NGEP.

b) The approval of the declaration of an emergency by the Transporter.

c) The co-ordination of an escalation of the emergency.

d) The instruction of the holder of a natural gas licence for the operation of a transmission system or distribution system with respect to an emergency (including the end of such emergency).

The Transporter will declare an Early Warning, Alert or Natural Gas Emergency on or affecting the network (in whole or in part) with the approval of the NGEM. The NGEM will coordinate all parties affected by the Natural Gas Emergency.

7.1 Natural Gas Emergency Classification

The NGEM has 3 clear stages to manage a Natural Gas Emergency as outlined in Table 7.1 below. The same stages apply for all types of emergency. Although the stages run 1 to 3 the NGEM may declare the stages sequentially or simultaneously to address the supply/demand imbalance (however nothing in this arrangement shall limit or inhibit the NGEM in issuing such directions as the NGEM considers appropriate from time to time). As the implemented measures take effects the NGEM may revoke some or all of the stages until the emergency is declared over.

The final stage also includes restoring gas supplies to all users in a safe manner once the emergency has been declared to be ended by the Transporter.

NATURAL GAS EMERGENCY CLASSIFICATION	
Stage	**Action**
Early Warning	• Interrupt injection into storage • Use of Interconnector inventory and system linepack Cease all non-essential maintenance • Advise stakeholders as appropriate
Alert	• Voluntary increase in indigenous gas supplies • Voluntary load reduction in power generation by fuel switching • Request withdrawal from storage
Emergency	• Emergency Declared • Maximise indigenous gas production • Initiate Firm Load Shedding of LDM Sector (power generation initially) • Progressive Firm Load Shedding of LDM (non-power generation) • Maximise use of system linepack and storage • Public Appeal/Voluntary Load Reduction • Progressive Firm Load Shedding of DM and NDM Sectors • Allocate existing gas supplies to protected customers and Isolation as required • Restoration of supplies (or gas quality) and revoke emergency steps

Table 7.1 Natural Gas Emergency Classification

7.2 Provision of Information

The NGEM requires information from all Shippers/Producers/Storage Operators to enable the best utilisation of all facilities in the event of a potential or actual Natural Gas Emergency; this may include the following;

a) Forecast deliveries at all entry points;

b) Maximum available deliveries at all entry points;

c) Forecast deliveries from storage facilities; and

d) Maximum available deliveries from all storage facilities.

It is the responsibility of the Shippers/Producers/Storage Operators to provide such information to the NGEM when requested.

7.3 Key Interfaces

The key interfaces with the NGEM and high-level data flows between the NGEM and those parties who may be affected by a Natural Gas Emergency are described below.

a) Shippers: Shipping gas from entry points to end users, as defined in the Code of Operations.

b) Connected System Operators (CSOs): Indigenous gas producers, storage operators and operators of connected gas transmission systems, e.g.

- Mutual Energy Limited (MEL) – the SNIP Transporter in Northern Ireland.
- VEPIL – the producer connected at the Bellanaboy entry point.

c) NEC: The Network Emergency Co-ordinator in Great Britain. The role of the NEC is to manage a Natural Gas Supply Emergency (NGSE) in Great Britain in accordance with its approved procedure (T/PM/E/1). The role of the NEC is fulfilled by National Grid.

d) National Grid: the gas transmission system (NTS) operator in Great Britain.

e) NINEC: The Northern Ireland Network Emergency Co-ordinator. The role of the NINEC is to manage a Natural Gas Supply Emergency in Northern Ireland in accordance with its approved procedure (NINEC Safety Case). The duty holder of the NINEC Safety Case is Mutual Energy Limited (MEL)

f) Manx Utilities operating in the Isle of Man.

g) End users at LDM Offtakes and DM Offtakes, including power generating stations, Industrial & Commercial customers who have a contract with Shippers for gas supply.

h) Crisis Manager provides technical liaison between NGEM, National Co-ordination Group and the European Gas Co-ordination Group.

i) EirGrid: the electricity transmission system operator in Ireland.

The relationships are shown in Figure 6 below.

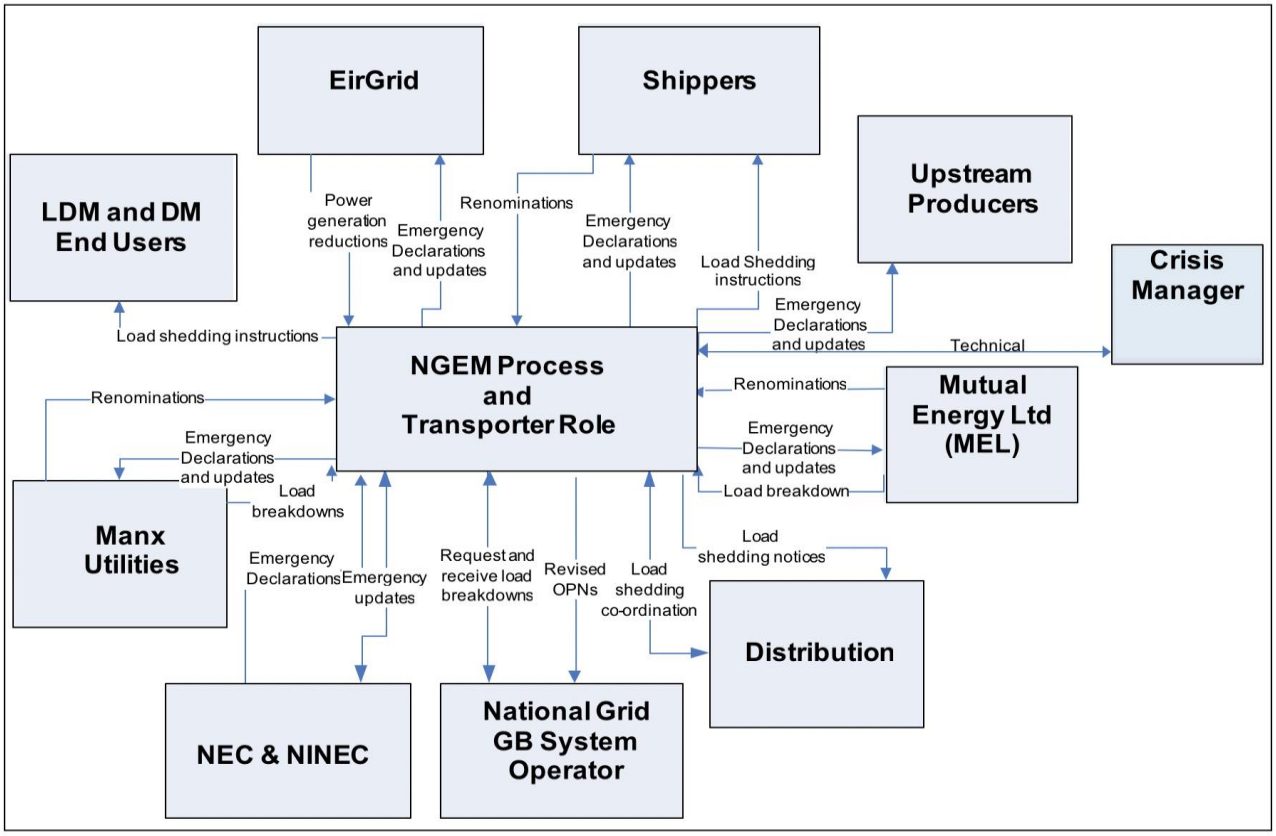

Figure 6 Key Interfaces with the NGEM

At a high level, the following is anticipated:

- In the event of a Natural Gas Emergency or in order to avert a Natural Gas Emergency affecting Moffat, GNI and National Grid will co-ordinate all activities.
- In the event that a Natural Gas Emergency is declared and affects Moffat, the NEC (Network Emergency Co-ordinator in Great Britain) shall notify the NGEM of emergency details.
- The NGEM shall issue or authorise the issue of all the notifications of an emergency, including details of likely duration etc. to GNI and all other affected parties e.g. Shippers, CSOs, EirGrid etc.
- GNI may issue all instructions to Shippers/CSOs/EirGrid on behalf of the NGEM with regard to maximising indigenous gas production, firm load shedding, load category breakdowns. All communications will be issued using approved templates.
- GNI and National Grid will communicate (in the case of a gas supply emergency affecting Moffat) on load category breakdowns and the required gas demand reductions.

It should be noted, for natural gas emergencies affecting the Moffat entry point GNI(UK) is considered by the NGEM as the primary Transporter and Mutual Energy Ltd (MEL) is considered as the secondary Transporter.

Similarly, in Northern Ireland, GNI(UK) as Transporter on the North West Pipeline, is considered a secondary Transporter to MEL.

For natural gas emergencies affecting Moffat, GNI(UK) acting on behalf of the NGEM, will communicate directly with the NINEC and they will manage the emergency on behalf of its downstream (secondary) Transporters, including GNI(UK).

7.4 Initiation of NGEM Process

The Crisis Level Alert Stage of the gas emergency response begins when the Transporter has established that it is not possible to maintain an acceptable balance between supply and demand or there is insufficient gas leading to the possibility of a Natural Gas Emergency developing.

7.5 EirGrid Joint procedure for the control of Emergencies

The purpose of the (EirGrid/GNI) procedure is to describe the joint steps to be followed by Gas Networks Ireland (GNI) and EirGrid in dealing with a Natural Gas Emergency affecting gas-fired power stations on the GNI Network.

After all actions during NGEP crisis level Alert have been undertaken including:

- Voluntary load reduction in power generation
- Voluntary increase in indigenous gas supplies
- Interrupt injection into storage
- Use of Interconnector inventory and system linepack
- Request withdrawal from storage

And load shedding is required, emergencies have been classified as:

- Category A: National Gas Supply Emergency
- Category B: Regional Gas Supply Emergency
- Category C: Local Gas Supply Emergency (affecting a single gas fired power station)

The EirGrid/GNI Joint procedure should be read in conjunction with the NGEP when dealing with Natural Gas Emergency affecting gas-fired power stations on the GNI Network.

7.6 Joint Procedure for Emergency use of the South North Pipeline

The purpose of this joint procedure between GNI and MEL is to outline the steps to be followed in the event of a natural gas emergency on the Northern Ireland gas transmission network necessitating a request from the Northern Ireland Network Emergency Coordinator (NINEC) to the NGEM for gas to flow[1] from the South North Interconnection Point at Gormanston via the South North Pipeline to Northern Ireland i.e. South to North Emergency Flows, or

In the event of a natural gas emergency on the GNI gas transmission network in the Republic Of Ireland, necessitating a request from the NGEM to the NINEC for gas to flow from Twynholm via the Scotland Northern Ireland Pipeline and the South North Pipeline to the Republic Of Ireland Pipeline i.e. North to South Emergency Flows or

In the event any potential or actual emergency that has the potential to or will require the reduction of gas flow in the South Section of the South North pipeline.

[1] *In the instance where gas is already flowing commercially through Gormanston, then the request from NINEC to NGEM may be to increase the flow of gas through Gormanston, if possible.*

The MEL/GNI Joint procedure should be read in conjunction with the NGEP when dealing with Natural Gas Emergency affecting the pipeline or flows through the pipeline.

8 NATURAL GAS EMERGENCY PROCEDURE

8.1 Alert Crisis Level: Natural Gas Emergency

Actions available to the Transporter in the event a crisis level Alert stage been declared by the NGEM.

A potential Natural Gas Emergency exists where information available to the transporter indicates that by the use of crisis level 'Alert' actions (see Table 7.1) there is sufficient time and sufficient gas available for the gas transportation network to be rebalanced and the balance maintained without moving to crisis level 'Emergency Stage'.

The Alert stage actions are not required to be taken in the order listed in Table 7.1 and may be taken simultaneously if deemed necessary by the NGEM.

The Transporter in consultation with the NGEM will set out a methodology by which the gas transportation network can be rebalanced. This will include a combination of voluntary load reduction in the power generation sector and maximising indigenous gas supplies on a voluntary basis. The use of balancing actions may also be considered; their use being dependant on the expected duration of the potential emergency. Injection into storage will be suspended.

Voluntary load reduction in the power generation sector will be requested and co-ordinated via EirGrid. Voluntary load reduction in Northern Ireland and Isle of Man will also be requested from MEL and Manx Utilities respectively.

Voluntary increases in indigenous gas supplies will be requested of Shippers/Suppliers and copied to producers.

The Transporter and NGEM will monitor the effects of actions taken at the Alert stage and based on the results decide whether a potential or an actual emergency exists before moving to crisis level 'Emergency'

If a potential emergency exists, the Transporter will issue on behalf of the NGEM the following notices which will require remedial action by a specified time. The parties issued with the notices are expected to revert to the Transporter with their response.

- NGEM: **Instruction** to Shippers for:
  - Interruption of injection to storage facilities;
  - Voluntary increases to indigenous supplies including withdrawal from storage; and
  - Notification of voluntary reductions in the power generation sector.

- NGEM: **Notification** to upstream producers for:
  - Interruption of withdrawal to storage facilities; and
  - Request for voluntary increases to indigenous supplies including withdrawal from storage.

- NGEM: **Request** to Isle of Man and Northern Ireland for:
  - Voluntary reductions in the power generation sector.

- NGEM**: Instruction** to EirGrid to:
  - Co-ordinate voluntary reductions in the power generation sector.

If as a result of the Alert Stage actions the supply/demand is rebalanced the NGEM will move to Restoration. If the system cannot be rebalanced based on the actions taken in Alert Stage, the NGEM will move to crisis level 'Emergency' stage.

8.2 Emergency Crisis Level: Emergency Declaration & Firm Load Shedding

If the actions available to the Transporter at the Alert Stage are insufficient to address the supply/demand imbalance or the transportation constraint the NGEM will consider declaring a Natural Gas Emergency.

Upon declaration of a Natural Gas Emergency the NGEM will categorise the type of emergency that exists.

There are three types of Natural Gas Emergency:

a) Gas supply deficit (national or local) where there is insufficient gas supply into the network to meet demand. This is a situation which has resulted in, or could result in, loss of pressure in the gas transportation network.

b) Transportation constraint (national or local) where there is a failure of critical plant resulting in, or could result in, loss of pressure in the gas transportation network.

c) Gas quality where the gas supplied to the gas transportation network is off-specification and could present a potential or actual risk to public safety.

Below outlines the actions available to the Transporter at the Emergency Crisis level Stage.

8.3 Maximise Indigenous Gas Production & Storage Withdrawal

If it has been identified that there are additional indigenous gas supplies available then the Transporter will request that Shippers source as much gas as they can for delivery at the relevant entry point. Any issues with this request will be communicated to the GERT if required.

In the case of storage gas, the Transporter will communicate directly with the storage operator for the delivery of this gas at the relevant entry point.

8.3.1 Public Appeal

If approved by the NGEM the Transporter may instigate the use of public appeal. For a potential supply/demand imbalance or where the emergency is likely to impact electricity supplies and gas supplies to domestic customers the public appeal process will be coordinated centrally through the GERT. The GERT will deliver these centrally coordinated appeals via the Energy Press Officers Network (EPON).

8.3.2 Firm Load Shedding

If the network cannot be rebalanced based on the actions taken, the NGEM will authorise progress to firm load shedding. Firm load shedding is the procedure used by the Transporter to secure a graduated and controlled reduction in firm demand in order to keep the system securely pressurised. This procedure is put into effect by the NGEM directing certain end users to reduce or cease their consumption of gas.

Firm load shedding is divided into tranches of increasing severity and effect. This enables the NGEM to have a measure of control in matching the load shedding to the amount of gas required to rebalance the network or maintain the balance in the network. The quantity of firm load shedding required to rebalance the network will be determined by the NGEM in consultation with the Transporter.

The NGEM may authorise the use of simultaneous firm load shedding if it would prevent an emergency occurring or further developing.

Any changes to the sequencing of load shedding or additions to the protected customer category will be approved by the GERT and ultimately authorised by the CRU as the competent authority.

The Transporter has categorised all end users into one of the following 3 categories as per the Code of Operations:

- Large Daily Metered (LDM)
- Daily Metered (DM)
- Non-Daily Metered (NDM)

The NGEM has identified three tranches for firm load shedding of LDM's.

- LDM 1: Any LDM Offtake which has an Annual Consumption greater than 1,500,000MWh.
- LDM 2: Any LDM Offtake which has an Annual Consumption greater than 260,000MWh and less than or equal to 1,500,000MWh.
- LDM 3: Any LDM Offtake which has an Annual Consumption less than or equal to 260,000MWh.

The NGEM has identified a further three tranches of firm load shedding for the DM and NDM sectors, after all the LDM load has been reduced to zero:

- Any DM Offtake.
- NDM 1: NDM supply points at which gas is off-taken from the Distribution network for consumption by non-domestic customers.
- NDM 2: NDM supply points at which gas is off-taken from the Distribution network for consumption by household customers and priority customers.

The following (Figure 7) shows the order of demand reduction in the event of a Natural Gas Emergency.

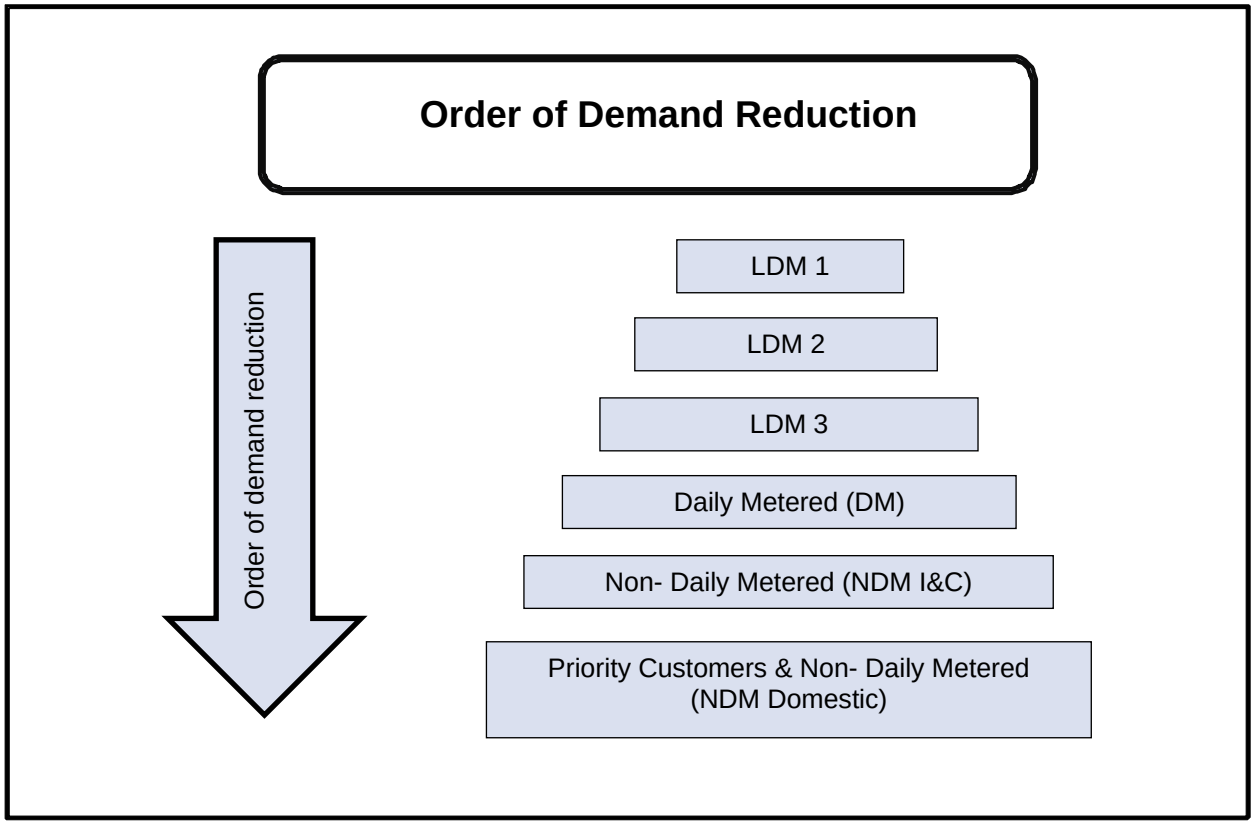

Figure 7 Order of Demand Reduction

8.3.3 LDM Load Shedding

The Transporter will initiate LDM load shedding on behalf of the NGEM by issuing the following emergency instructions:

a) Instruction to EirGrid specifying the reduced gas demand figure for the gas-fired power generation sector. EirGrid will manage the electricity generation network to achieve this demand reduction by deciding which power stations will be fuel switched or load shed.

b) Instruction to Manx Utilities (Isle of Man) and PTL (Northern Ireland) specifying the reduced gas demand figure for their respective systems.

c) Instruction to Shippers with gas-fired power generation end users to re-nominate based on power station requirements as coordinated by EirGrid.

If the supply/demand balance is deteriorating the Transporter will then initiate load shedding of non-power generation LDM end users. LDM load shedding will normally be in the order of load size with the largest users of gas first, however, there may be circumstances where this is not desirable. This may be through the requirement of maintaining supplies to large priority customers or under direction from the GERT to maintain supplies to specific consumers e.g. to maintain supplies to some electricity producers.

The Transporter will contact each LDM end user on behalf of the NGEM and instruct them to cease consuming gas. The relevant Shippers will be instructed to renominate against those LDMs which have been identified for load shedding. This instruction will specify the reduced gas demand figure for the end user. If the LDM end user fails to take action to cooperate with the direction of the NGEM to cease using gas the Transporter may take action to physically isolate gas supply to the end user.

8.3.4 DM Load Shedding

If necessary, the Transporter will initiate load shedding in the Daily Metering (DM) sector by issuing the following emergency instructions. In the event of DM load shedding, all DM sites will be shed.

a) Instruction to DM end users affected by the DM load shedding, to cease gas consumption as a matter of priority.

b) Instruction to Shippers to renominate against their DM portfolio and make appropriate re-nominations based on specific gas demand reduction figure.

If the DM end user fails to take action to cooperate with the direction of the NGEM to cease using gas the Transporter may take action to physically isolate gas supply to the end user.

The NGEM and the Transporter monitors the effect of the measures taken. If the supply/demand imbalance is improving the NGEM will authorise the progression of the emergency to Restoration stage.

8.3.5 NDM Load Shedding

If necessary, the Transporter will initiate load shedding of the NDM industrial and commercial sector. This notice will be issued to Shippers, (who in turn will be obliged to contact their NDM I/C end users).

The NGEM and the Transporter monitors the effects of the measures taken. If the supply/demand imbalance is improving the NGEM will authorise the progression of the emergency to Restoration stage.

If the supply/demand imbalance is deteriorating the NGEM will escalate the emergency to Allocation and Isolation stage of the crisis level Emergency.

8.3.6 Contact Arrangements

The Transporter holds a register of the emergency contact details of all Shippers and their respective LDM and DM end users. It is the responsibility of all Shippers to ensure that that the contact details of their LDM and DM end users are regularly updated and provided to the Transporter in accordance with Part H of the Code of Operations.

Shippers have the responsibility of ensuring that the Transporter is aware of any priority customers in their portfolio (e.g. hospitals).

If it is necessary to implement firm load shedding of the NDM domestic sector this will be done using public appeals as per 8.3.1, including radio or television broadcasts, loud hailer vans and leaflet drop as appropriate.

It is the responsibility of all Shippers to regularly advise the Transporter of the breakdown of NDM domestic and NDM non-domestic end users.

8.4 Allocation and Isolation

If the firm load shedding actions available to the Transporter are insufficient to address the supply/demand imbalance or the transportation constraint, the NGEM will consider authorising isolation of specific network sectors when there is no other action available to the Transporter that could be taken in the time available to rebalance the network

In the event that insufficient supplies are available to the system, the Transporter in consultation with the NGEM will allocate gas to specific network sectors and isolation of specific network sectors may be required.

To support this process the NGEM may make a request to the GERT to provide additional resources to the Transporter in the event of individual domestic customers requiring isolation from the network.

8.4.1 Allocation

If insufficient gas is available to supply the network or parts of the network as applicable, even with firm load shedding, the NGEM will allocate the available gas and may instruct the Transporter to physically restrict the offtake of gas where necessary. The NGEM's arrangements for allocation of gas gives priority to maintaining gas supplies to priority customers and domestic customers.

The GERT may interface with the NGEM and Transporter on the action to take in the event that the continuation of supply to priority customers would result in the loss of supply to domestic customers.

The Transporter in consultation with the NGEM will issue gas allocations to the Connected System Operators (CSO's) in Northern Ireland and Isle of Man (MEL and Manx Utilities respectively). The CSO's are responsible for maintaining the supply/demand imbalance within their own networks.

The Transporters criteria for allocating gas are:

a) All non-priority and non-domestic end users are directed to stop using gas completely as directed by the NGEM and copied to Shippers. These offtakes may be physically isolated if required.

b) Available gas is allocated to each Distribution network to supply domestic end users so that system pressures can be maintained for as long as possible.

c) The Transporter will authorise the allocation of gas to the Distribution network.

d) The Transporter is responsible for maintaining the supply/demand balance within the Distribution networks.

e) The NGEM and the Transporter will monitor the results of the actions taken through the allocation process. If a specific section of the Distribution network is experiencing difficulty in maintaining

pressures, the NGEM may review the allocation of gas so the supply/demand imbalance can be redressed.

8.4.2 Isolation

If a Distribution network has not been allocated sufficient gas the Transporter will take steps to isolate parts of the network to match demand with available supply. The Transporter will use its own operational procedures for system isolation.

The NGEM and the Transporter will monitor the effects of the actions taken and may authorise further reductions in gas allocation until a supply/demand balance is achieved on the network.

If the supply/demand balance is deteriorating, the NGEM will direct the Transporter to reduce gas allocation until the Transporters Transmission system can maintain a supply/demand balance. This may require all Distribution networks to be isolated.

If the supply/demand balance is improving the NGEM must authorise the Transporter to progress to Restoration.

8.5 Restoration

When sufficient gas supplies are available to restore pressure to isolated systems or revoke emergency actions taken, including gas quality incidents the NGEM must initiate the restoration process and on completion, declare the end of the Natural Gas Emergency.

When the supply/demand balance has returned to normal the NGEM will notify all affected Shippers, Connected System Operators and EirGrid of the revocation of the emergency. The market will be reinstated at the start of the next gas day and in accordance with the Code of Operations.

The following principles will be applied to the process of restoration after isolation:

a) No restoration of supply to end users will take place until and unless the security of the network is assured.

b) Restoration of supply to end users will be matched to available network supply.

c) Restoration of supply to the Distribution network will be coordinated by the Transporter in consultation with the NGEM. Restoration of supply to the Distribution network may take a long time due to the complexity of the system and the large number of customers involved. Where there is sufficient quantity of gas available, the supplies to industrial/commercial customers supplied from the Transmission network may be restored before domestic customers.

9 AUTHORISED OFFICERS

The CRU shall appoint persons nominated by Gas Networks Ireland to be Authorised Officers for the purposes of taking any action necessary to ensure compliance with a direction given by the NGEM in accordance with Statutory Instrument S.I. No. 336 of 2013

Any person who obstructs or impedes an Authorised Officer in the exercise of his or her duties commits an offence which may lead to fine or imprisonment

An Authorised Officer may be accompanied and assisted in the exercise of his or her powers, by a member of the Garda Síochána.

The Authorised Officer shall hold a certificate of appointment which he or she shall produce when exercising his or her powers.

The CRU shall be informed in the event of the NGEM issuing an instruction to an Authorised Officer to carry out any of the actions listed below.

For the purposes of the NGEP, an Authorised Officer may take any or all of the following actions to ensure compliance of natural gas undertakings and customers with the instructions of the NGEM:

a) At any time, enter land or premises in order to take any action necessary to ensure compliance with the instruction.

b) Require any person on the land or premises to do all such things as are in his or her opinion necessary or expedient for the purpose of ensuring compliance with the instruction.

c) Require the person in charge of the land or premises to give the Authorised Officer such assistance and facilities within the person's power or control as are reasonably necessary to enable the Authorised Officer to exercise any of his or her powers.

d) Require the person in charge of the land or premises to give the Authorised Officer such information as may be reasonably required for the purpose of his or her powers.

e) Require a person on the land or premises to follow any procedure for the purposes of any action necessary to ensure compliance with the instruction.

10 SUPPLEMENTARY INFORMATION

10.1 Emergency Arrangements for Distribution

The arrangements for Distribution with respect to gas supplies during the course of an emergency are set out separately in the Transporters procedure 'Distribution Emergency Response Plan'.

10.2 Availability of Personnel

It is the responsibility of the NGEM to ensure that there are an adequate numbers of personnel (resources) available should an emergency event be extended over a prolonged period.

10.3 Arrangements for Obtaining Emergency Powers

It may be necessary for the NGEM to seek government support to assist with the management of a Natural Gas Emergency; examples are described below:

a) To compel organisations or individuals to carry out the directions of the NGEM given in accordance with the NGEP.

b) To seek the support of other government departments and agencies, including the civil and military authorities, to assist with the management of the emergency.

c) To interface with external governments and agencies; including the Northern Ireland Office, UK Government and the EU Gas Coordination Group, as required.

In the event that the above support is required the NGEM makes the request to the CRU (in writing where time permits) and will detail the support required indicating specific requirements and desired timescales for delivery. The CRU will liaise with the lead government department (DECC) and other government departments and/or agencies as necessary. Requests for support will be discussed at the GERT.

11 CAPABILITY REQUIREMENTS

In order to ensure that the NGEP is fit for purpose and that all participants in the emergency response have the capability to effectively deliver the plan the following requirements will apply.

11.1 National Gas Emergency Manager (Personnel Specification)

The NGEM will be an experienced gas engineer meeting the following criteria:

a) A minimum of 10 years operational experience of gas engineering.

b) Experience of planning for, and operational management of gas emergencies.

c) Have successfully completed an annual NGEM competence assessment.

It should be noted that the above criteria will also apply to personnel designated to undertaking the tasks of the NGEM.

It is the responsibility of the NGEM to ensure that there are an adequate number of personnel meeting the above requirements to ensure 24/7 availability.

The names of the personnel fulfilling the role of the NGEM will be proposed by the Transporter to the CRU for its approval.

11.2 Crisis Manager

The Crisis Manager is appointed by the CRU and should be of a position and experience to effectively provide technical updated and press briefing in the event of the NGEP being activated.

11.3 Training

All members of the GNI Support Team will receive initial training and as a minimum annual update training and briefing as required. If the NGEP has been subject to major amendments, then the NGEM may require that additional training is provided for participants in the operational response.

It is the responsibility of the NGEM to ensure that adequate training has taken place to ensure the effectiveness of the NGEP. Participation in the annual exercise (as below) is considered to meet the annual update training requirement.

11.4 Testing

The Natural Gas Emergency Plan (NGEP) will be subject to annual testing through an emergency exercise against a credible scenario arranged by the National Gas Emergency Manager (NGEM). As a minimum the test will establish the Gas Emergency Response Team (GERT) and check communications with all participants in the emergency response. This requirement may be relaxed if the GERT has been established to respond to a real emergency during the year.

Following an emergency exercise or an actual incident the NGEM will arrange for a report to be prepared for the GERT, identifying lessons learnt and making recommendations on improvement to the NGEP and the emergency response arrangements.

It is the responsibility of the NGEM to ensure that the NGEP has been subject to test and that it is fit for purpose. It is also the responsibility of the NGEM to ensure that any recommended improvements to the NGEP are implemented.

11.5 Review

The National Gas Emergency Manager (NGEM) will ensure that the Natural Gas Emergency Plan (NGEP) is subject to annual review and with the approval of the CRU capture any changes to industry or market structure that may impact on the effectiveness of the plan.

12 ADMINISTRATION

12.1 Publication

The Natural Gas Emergency Plan (NGEP) will be published by the National Gas Emergency Manager (NGEM) with the approval of the CRU. A public version of the NGEP will be made available on the GNI website (www.gasnetworks.ie). Users of the NGEP must ensure that they are in possession of the latest edition.

12.2 Amendment

The National Gas Emergency Manager (NGEM) is responsible for agreeing any amendments to the plan for the approval by CRU. There are two categories of amendment, specifically material and non-material.

Material

A material change is one which changes the structure and/or operation of the plan and requires immediate approval before it can be implemented.

Non-Material

A non-material change is one which does not change the structure and/or operation of the plan and does not require immediate approval but can be incorporated in a routine update of the documents. An example would be the change in the name of an organisation involved in the emergency response.

13 APPENDIX A

Contact	Type	Primary Contact	Secondary Contact
Gas Networks Ireland Grid Control Centre	Telephone	+353 (0)21 429 8999	+353 (0)21 429 8957
	Fax	+353 (0)21 431 2513	+353 (0)21 431 1862
	Email	gnigridcontrol@gasnetworks.ie	
	Freephone emergency telephone number (Ireland only)	**1800 545 545**	

Contact Information

Notes:

a) The GNI Grid Control Centre operates on a 24hr x 7-day week basis.

b) GNI maintain a list of contact details for GERT members and will review on a regular basis.

c) GNI Grid Control keeps the contact details of personnel on the emergency standby rota.

14 APPENDIX B

GNI Network overview. [pipeline-map]

15 REFERENCED DOCUMENTS

Document Title	Document Number
Transmission Response and Repair Manual	AO/MN/005
Distribution Emergency Response Team Plan	AO/PR/151
Code of Operations	Uncontrolled
UK Gas Safety (Management) Regulations (GS(M)R) 1996	Uncontrolled
Great Britain Natural Gas Supply Emergency Procedure	T/PM/E/1(uncontrolled)
Crisis Management Plan	HSQE/PR/081
National Gas Supply Emergency Plan 2018 – 2022 Ireland	Uncontrolled
Joint Procedure for Emergency Use of the South North Pipeline	AO/PR/180
GNI/EirGrid Joint Procedure for the Control of Emergencies	V:2 2020
Sub Sea - Pipeline Emergency Repair Procedures and Emergency Repairs in Shallow Water	GNI/Wood Group 2015

16 GLOSSARY OF TERMS AND ABBREVIATIONS

CM	Crisis Manager
CRU	Commission for Regulation of Utilities
CSOs	Connected System Operators
DCCAE	Department of Communications, Climate Action and Environment
DECC	Department of the Environment, Climate and Communications
DM	Daily metered (Customers)
EPON	Energy Press Officers Network
ESB	Electric Supply Board
EU	European Union
GERT	Gas Emergency Response Team
HSA	Health and Safety Authority
LDM	Large Daily Metered (Customers)
MEL	Mutual Energy Limited
NEC	Network Emergency Co-ordinator
NGEM	National Gas Emergency Manager
NGEP	National Gas Emergency Plan
NIE	Northern Ireland Electricity
NINIC	Northern Ireland Network Emergency Co-ordinator
SITREP	Situation Report
SONI	System Operator Northern Ireland
TSO	Transmission System Operator

17 GENERATED RECORDS

Record	Location
Situation Report	Grid Control NetPoint Site
Action Report	Grid Control NetPoint Site
Report of Annual Exercise	Grid Control NetPoint Site
Complete Emergency Declaration Form	Grid Control NetPoint Site