UNC Modification Proposal 0090: Revised DN Interruption Arrangements

**Potential Impact on Emergency Arrangements** 

Mark Freeman

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#### **Emergency Procedures**

- E1 Network Gas Supply Emergency (NGSE)
  - Managing gas supply emergencies on the primary system (NTS)
- E2 Local Gas Supply Emergency (LGSE)
  - Managing gas supply emergencies on the secondary system (DN)
- E3 Operational Procedures



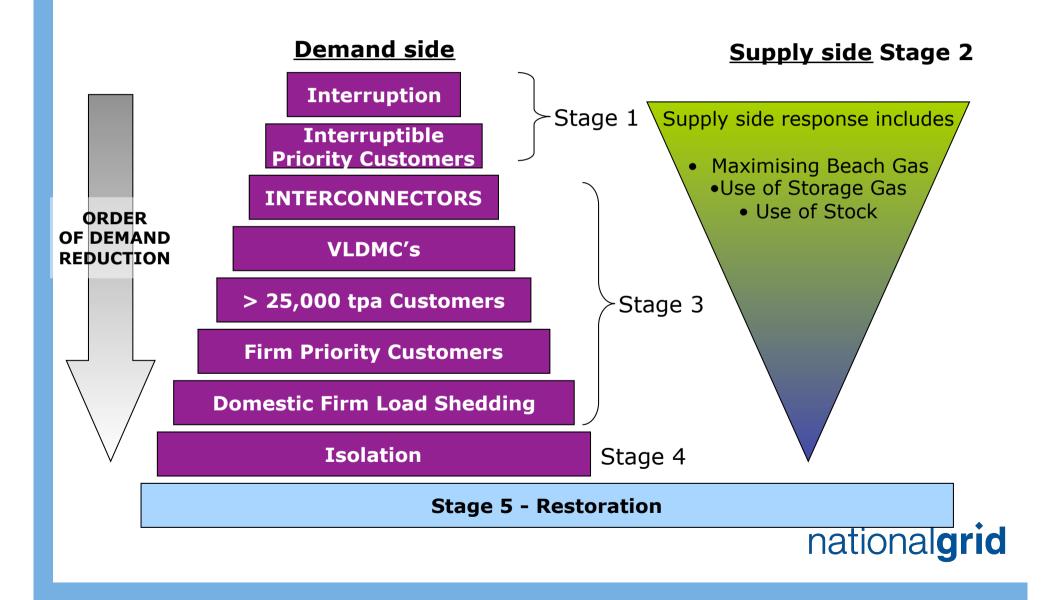
# NGSE – E1

- Two types of emergency that occur on the primary system
  - 1. Insufficient supplies to the primary system
    - 1. Gas deficit (insufficient supply to meet demand)
    - 2. GSMR Safety Monitor Breach (insufficient gas storage available to meet winter demand conditions)
  - 2. Critical Transportation Constraint (in the NTS)
    - Gas supply available but lack of transportation capability



		NGSE GDE	NGSE GS(M)R	NGSE CTC	
	Emergency Spec Gas	$\checkmark$	×	$\checkmark$	
STAGE 1 Potential	Primary System Linepack	$\checkmark$	×	$\checkmark$	
	Secondary System Storage	$\checkmark$	x	$\checkmark$	
	Emergency Interruption	$\checkmark$	$\checkmark$	$\checkmark$	
	Public Appeal 1 & 2	$\checkmark$	$\checkmark$	$\checkmark$	
	Amend Storage Delivery	×	$\checkmark$	×	
	Maximise Beach Gas	$\checkmark$	$\checkmark$	x	
STAGE 2	Maximise Storage	$\checkmark$	$\checkmark$	$\checkmark$	
Declaration	Suspension of OCM	$\checkmark$	$\checkmark$	x	
	Public Appeal 1 & 2	$\checkmark$	$\checkmark$	$\checkmark$	
STAGE 3 Firm Load Shedding	VLDMCs inc Interconnector	$\checkmark$	×	$\checkmark$	
	Protected by Isolation customers	×	$\checkmark$	x	
	Public Appeal 1	$\checkmark$	$\checkmark$	$\checkmark$	
	Flow GSMR Storage Gas	×	$\checkmark$	x	
	Consumers >25,000 tpa	$\checkmark$	×	$\checkmark$	
	Sites protected by monitor	x	$\checkmark$	x	
	Public Appeal 2	$\checkmark$	$\checkmark$	$\checkmark$	
STAGE 4	Allocation	$\checkmark$	$\checkmark$	$\checkmark$	
Isolation	Isolation	$\checkmark$	$\checkmark$	$\checkmark$	
			/		
STAGE 5 Restoration	Restoration of supply	V	V /	V	
Restoration	Revocation of previous stages	V			•
		national <b>grid</b>			

#### **Emergency Actions**



### NGSE – E2

- Gas supply emergencies affecting the secondary systems (Distribution Networks)
- Tools available:
  - Supply management
  - Demand management
    - Interruption
    - Firm Load shedding
    - Use of Public Appeal
  - Isolation
  - Emergency log keeping
  - Resource Management
  - Restoration



## NGSE – E2

• Four different types of emergency

Minor	<ul> <li>Small number of consumers (&lt;250)</li> <li>Managed by local resource</li> </ul>		
Large	<ul> <li>Significant number of consumers</li> <li>Requires resource across DN</li> <li>DN determines max no. of affected consumers in this category</li> </ul>		
Major	<ul> <li>Affects more consumers than upper limit than can be managed in the DN</li> <li>DN needs arrangements in place to call on additional resource</li> </ul>		
Severe	<ul> <li>Affects more than 50,000 consumers</li> <li>Requires formation of Joint Response Team</li> </ul>		
national <b>gri</b>			

## **DN Interruption Reform**

- DN determines interruption requirements
  - Therefore potentially less interruption and/or interruptibles available
- Supply points with varying interruptible terms
  - Contract duration (number of years)
  - Interruptible allowance (number of days per year)
  - Compensation payments (option, exercise, price)



### **DN Interruption Reform**

- Potential impact on emergency arrangements
  - NGSE E1
    - Less interruption available in Stage 1
    - Stage 2 and Stage 3 more likely ?
    - But more demand side response ?
    - Storage monitors increased because more firm load between 200,000th and 2Mth – more likely to breach ?
  - LGSE E2
    - Less interruption available



#### Issues

- E1 potentially discriminates against those LDZs with the most interruption available ?
- DNs contract for interruption for emergency purposes ?
- Access to commercial interruption to defer emergency ?
- Presently better response from interruptible customers than firm
- Changes required to E1 and E2 ?

