

Review of System Alerts & Firm Monitor

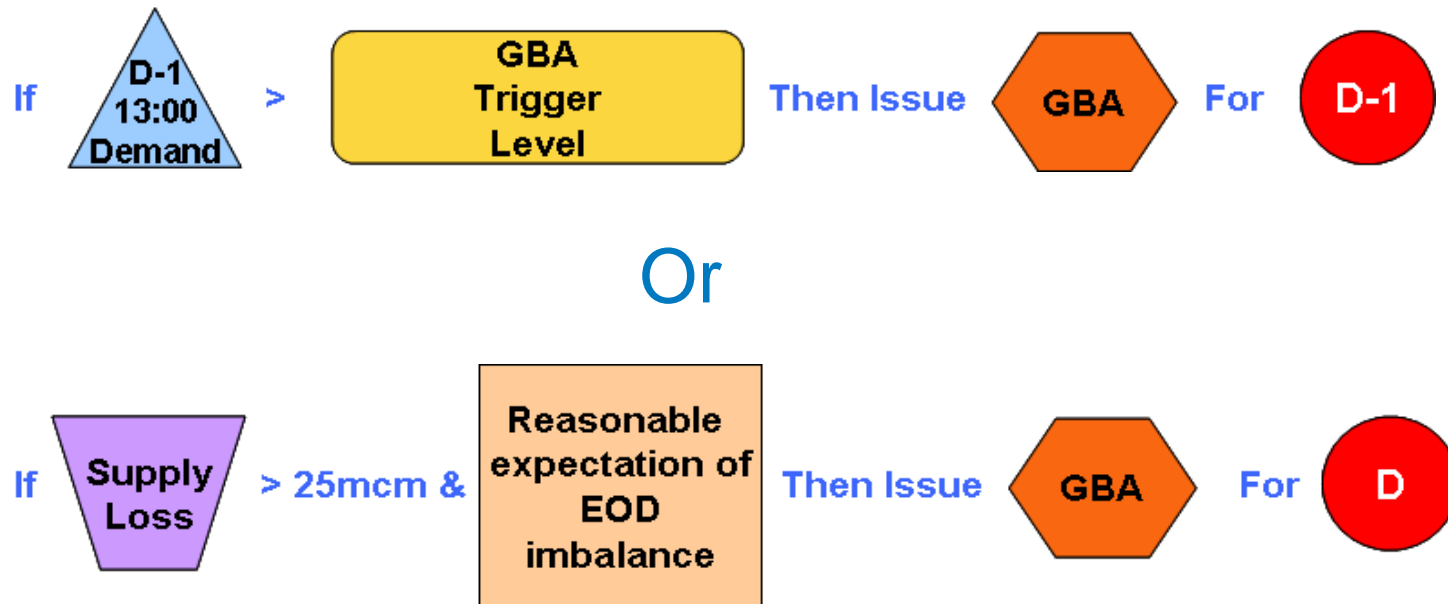


Demand Side Working Group – 23rd September 2011

What Is a Gas Balancing Alert (GBA)

National Grid have a UNC obligation (V 5.9) to alert system users to a EOD supply/demand imbalance via a Gas Balancing Alert (GBA)

A GBA has two triggers, day ahead (no discretion) or within day (discretion)



Expectation on the market to respond by increasing supply or initiating a demand side reduction.

Background

- GBA has been in place for 5 years
- The GBA sought to provide a signal to the Industry that a significant end of day NTS system imbalance is forecast.
- GBA principally implemented to provide the industry with a signal for demand side response, where a significant gas flow deficit was forecasted either day ahead or within day.
- Recent user feedback indicates that some aspects of the GBA signal may no longer be as effective as when initially introduced.
- Timely review fits with SCR focus on Gas Deficit Emergency arrangements.
- Intent of review is to focus is on preventative measures, alerting the market to respond.

Background

- GBA has been in place for 5 years
- The GBA sought to provide a signal to the Industry that a significant end of day NTS system imbalance is forecast.
- GBA principally implemented to provide the industry with a signal for demand side response, where a significant gas flow deficit was forecasted either day ahead or within day.
- Recent user feedback indicates that some aspects of the GBA signal may no longer be as effective as when initially introduced.
- Timely review fits with SCR focus on Gas Deficit Emergency arrangements.
- Intent of review is to focus is on preventative measures, alerting the market to respond.

GBA Review



General Issues

National Grid perceived areas for review:

How should the market response?

- **Refining prevailing UNC GBA provisions;**
 - Renaming and splitting of the reference 'GBA' to separately defined within day and day ahead signals;
 - Aligning UNC with the calculation methodology undertaken by National Grid NTS during the GBA;
 - Introducing the ability for National Grid NTS to recall a GBA notice.
- **Improve understanding and monitoring of how National Grid NTS and the market responds to a GBA;**
 - National Grid NTS – consider what information would help the market to initiate timely response;
 - Industry information – consider what information would aid system operation in times of high system stress.

Any concerns in addition to the issues described?

D-1 and Within Day GBA specific issues

Issues to be addressed in respect of specific GBA type :

■ **Day Ahead GBA;**

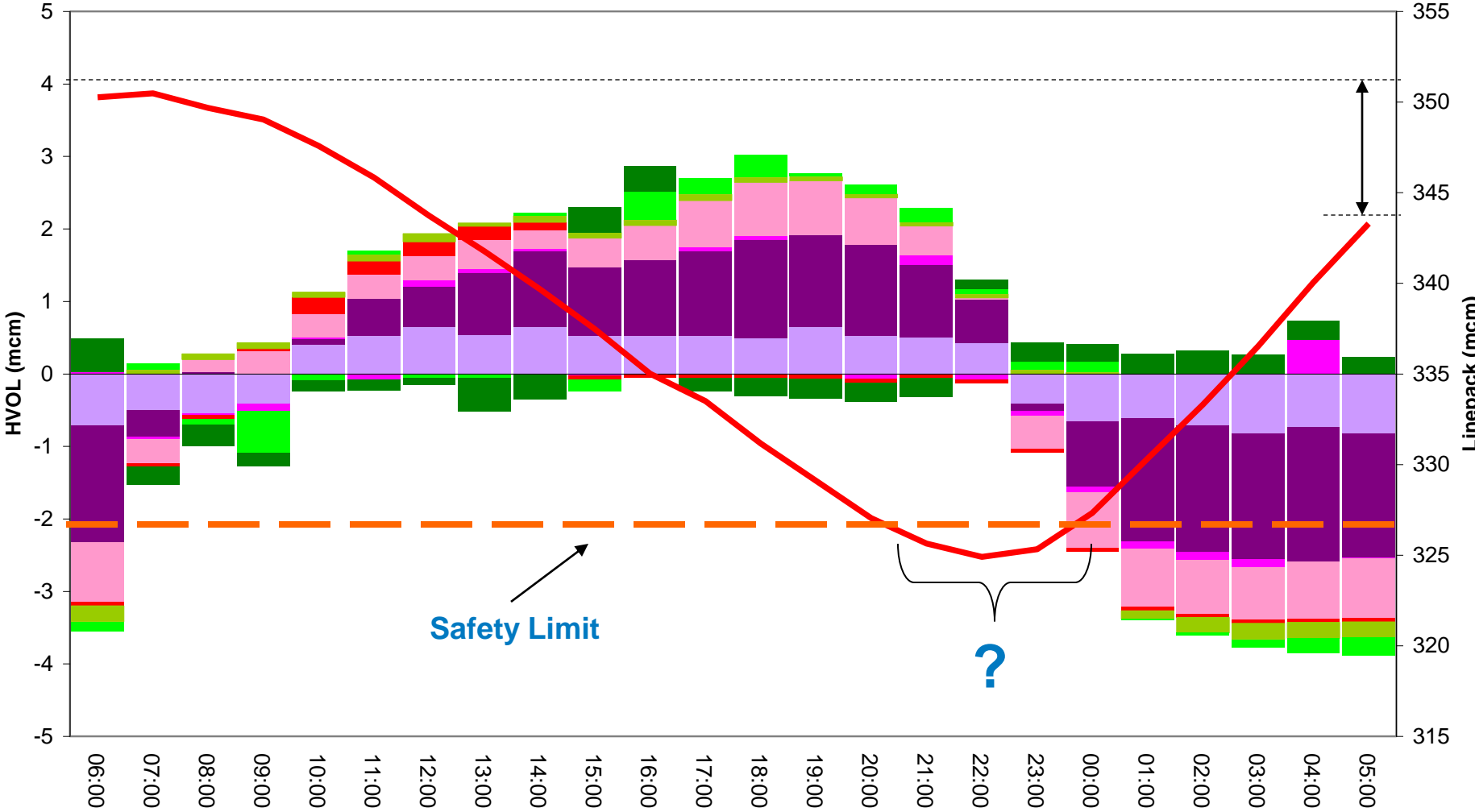
- aligning UNC with the calculation methodology undertaken by National Grid NTS during the GBA;
- ability for National Grid NTS to recall a GBA notice.

■ **Within Day GBA;**

- aligning UNC with the calculation methodology undertaken by National Grid NTS during the GBA;
- ability for NGG to signal a within day issue;
- ability for National Grid NTS to recall a GBA notice.

Any other issues we need to consider?

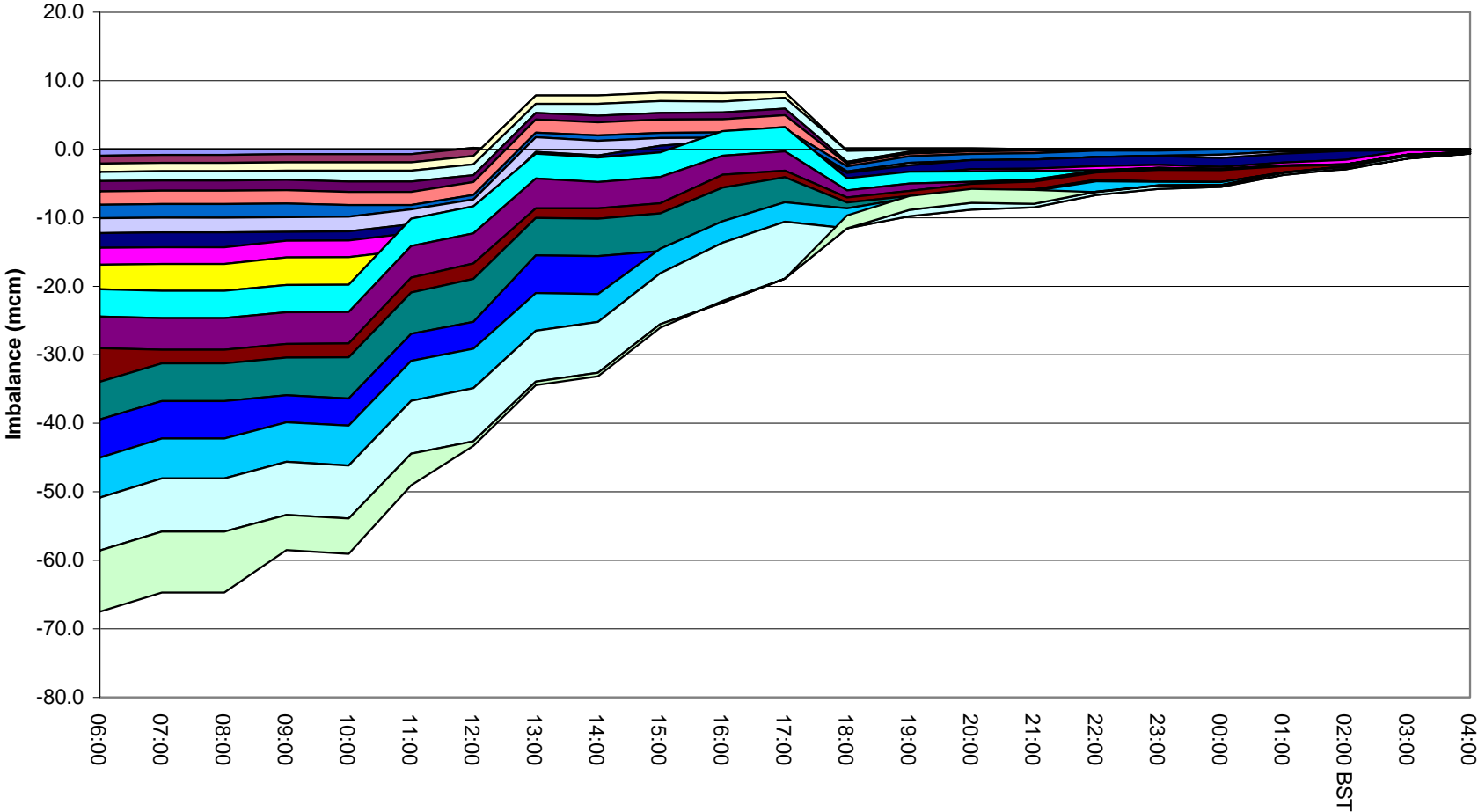
Within Day Issues



Interconnector Exports	ldzofftake	ntsindustrial
ntspowerstation	Storage injection	Interconnector Imports
Storage Withdrawal	Terminal supplies	Actual Linepack

Accuracy of Information – Nominations

Shipper negative nomination imbalances 8th August 2011 (imbalances >1 mcm at 06:00)



GBA Information Provision

Each day the Gas National Control Centre (GNCC) calculates a day ahead GBA trigger level. Upon completion of this process the day ahead GBA trigger level and alert status will be published on the National Grid website.

Day ahead GBA trigger level

<http://marketinformation.natgrid.co.uk/gas/frmPrevalingView.aspx>

If a GBA is declared the Alert will display as “ALERT”. If a GBA is not declared the alert will display as “NONE”.

Alert Status		
	Today	Tomorrow
	01/08/2011	02/08/2011
GBA	NONE	
Trigger (mscm)	486.70	

A GBA report is published daily which gives a 5 day view of supply and demand relative to the GBA trigger level, along with information relating to the Safety Monitor position.

Daily GBA and Storage Monitor Position Report

<http://www.nationalgrid.com/uk/Gas/Data/GBA/>

Next Steps...

- Further develop ideas
- Present draft strawman proposal(s) to the industry
- Raise Modification Proposal(s)
- Develop any other changes (such as information provision changes)
- Hoping to have proposals in place by winter 2012
 - Requires proposals to be raised end of this year

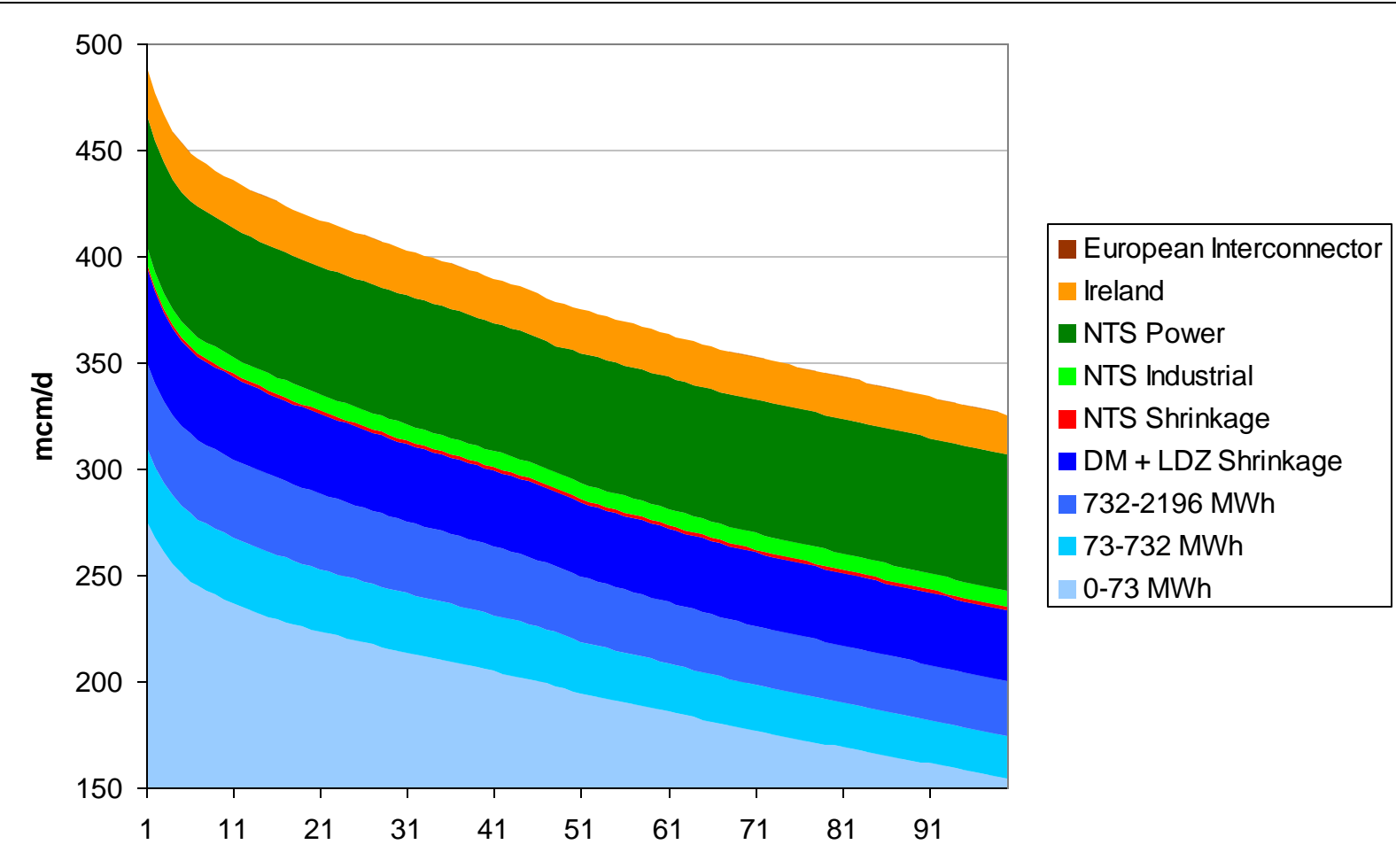
Firm Monitor



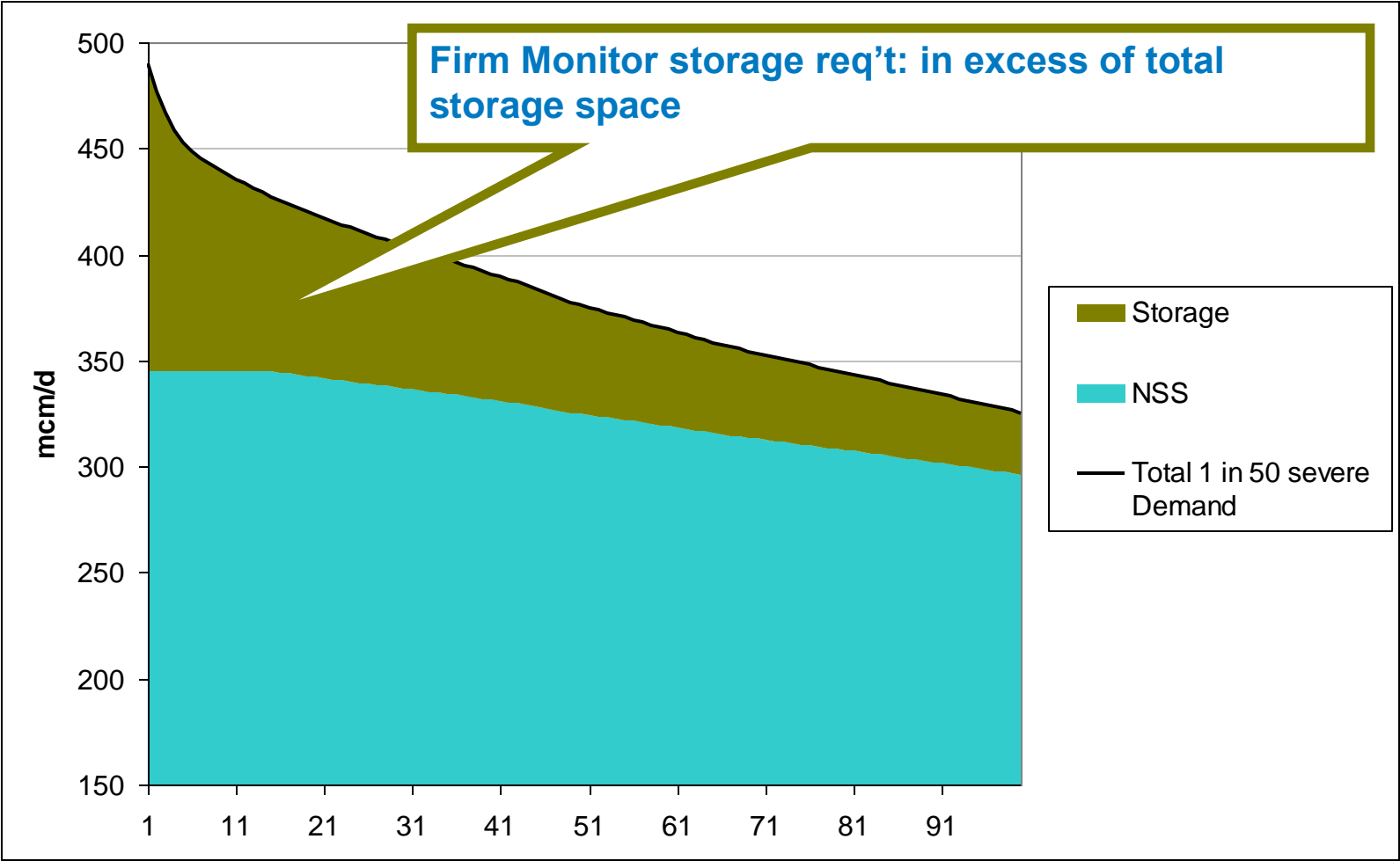
Firm Monitor

- The Firm Monitor represents the level of storage required to support all “firm” demand in a severe (1 in 50) winter
- It is published for information only
- UNC section Q, 5.2.8 - National Grid shall notify all Users of potential or actual breaches of a Safety Monitor or a Firm Gas Monitor

Days 1 to 100 of severe ldc



Firm Monitor



Note: NOT from Preliminary & Firm Monitor Requirements 2011/12 note released 6th June 2011

Safety Monitor



Safety Monitor

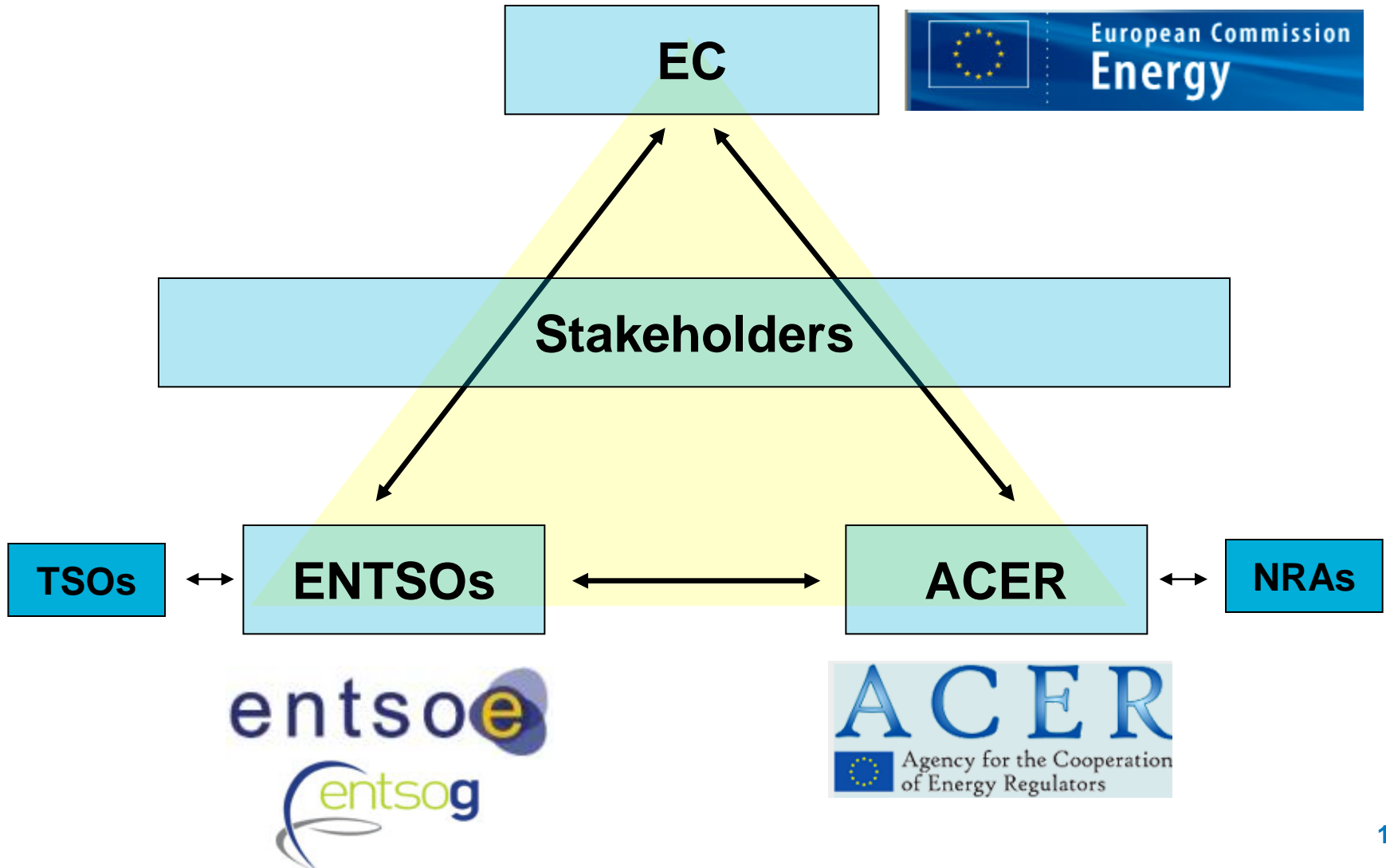
- The Safety Monitor focus is on public safety not security of supply
- Provides a trigger mechanism for taking direct action to avoid a potential gas supply emergency
- Consumer is either:
 - **Protected by Monitor**
 - Gas is held in storage to facilitate continuity of supply to these loads even in a 1 in 50 winter
 - Gas requirement assessed using a severe load duration curve and assumed Non Storage Supply (NSS) levels
 - **Protected by Isolation**
 - Network safety is maintained if necessary by isolating these customers from the network
 - Gas requirement assessed for isolating 'protected by isolation' loads on any day throughout the winter
- Safety Monitor output is a storage **space** and **deliverability** requirement for every day of the winter
- A breach of the safety monitor could potentially lead to a Stage 1 emergency

There is no change to the safety monitor?

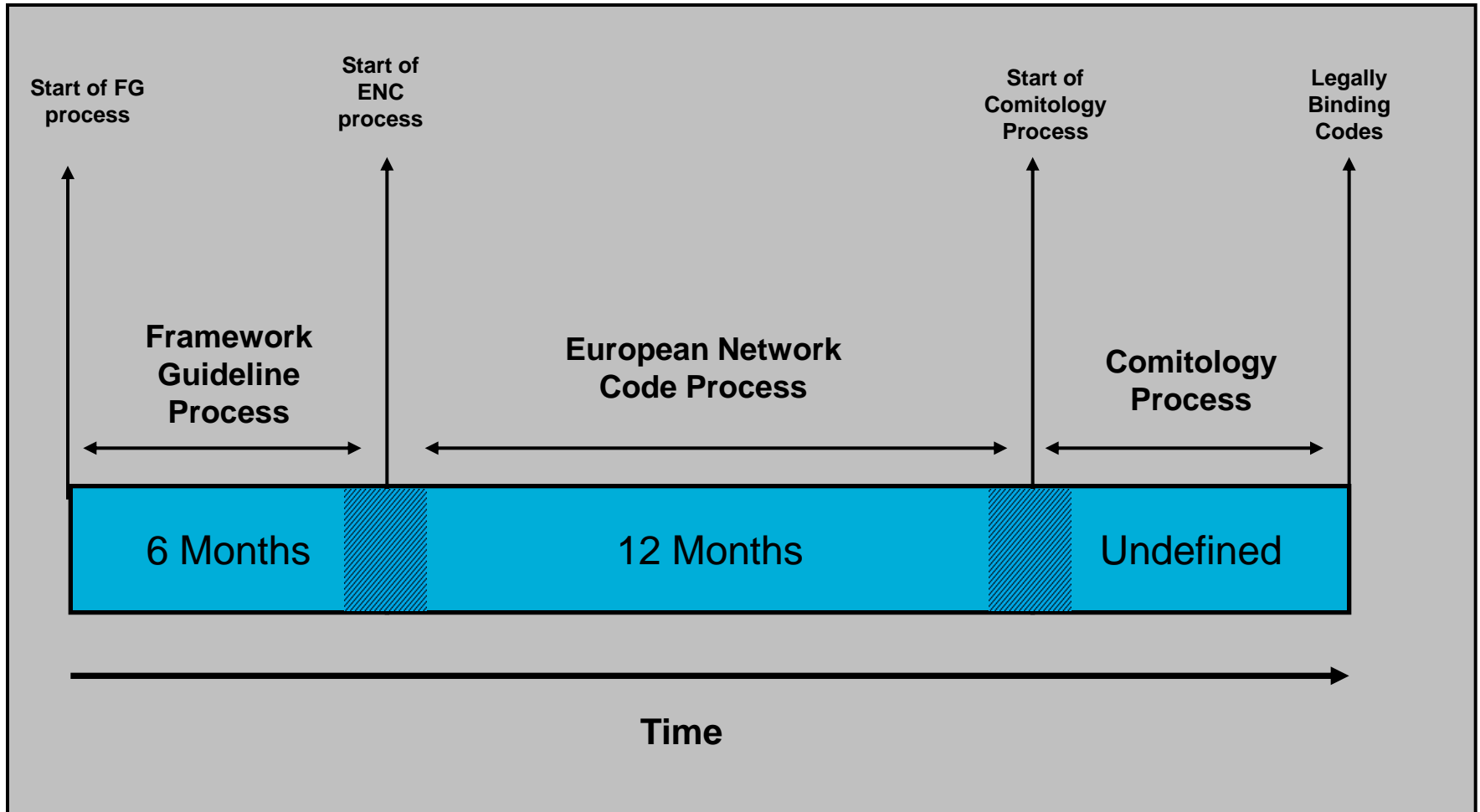
European Developments Overview



European Network Code: Key Organisations



European Network Codes: Timeline



Priority Network Codes

■ Electricity Codes

- Capacity Allocation Congestion Management
- Balancing
- Generator Connection
- Demand Connection
- Operational Security
- Operational Planning and Scheduling
- Load Frequency Control and Reserves

■ Gas

- Capacity Allocation Management
- Balancing
- Tariffs
- Interoperability

Electricity proposals

- Joint European Standing Group (JESG)
 - Monthly industry forum with open attendance
 - Next meeting 12th October 2011 in London (Elexon)
 - Established under CUSC, BSC and Grid Code Panels
- Code modifications proposed
 - BSC, CUSC and Grid Code

Information sharing on European issues

Gas proposals

- Agreed with the UNC Panel members
 - Utilising existing Gas Transmission Workgroup monthly meetings
 - European update is already a standing agenda item
 - No requirement for code modification proposals