Gas Transporters Forum

12 July 2005

Welcome

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UK Transmission

Agenda

- Welcome and Introductions
- Purpose and Scope of Forum
- Overview of Gas NTS Operation
- Overview of Industry Framework Governance
- UNC Update
- Operational Update
- Future Forums

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Purpose and Scope (1)

- Formation of a multi-transporter framework has created the need for the High Pressure Gas Transporter to fulfil communication and operational duties with all Distribution Network Operators in an open and equitable manner.
- Key driver is evolution of Network Code to the Unified Network Code.
  - Specifically the new Operator Arrangements Document (OAD) which prescribes the physical aspects of the interface and associated information flows required between all gas transporters.
- Pivotal role for UKT is to ensure all DNs are treated openly and fairly on gas transmission matters to promote a mutually cooperative operating environment where all parties are able to share and understand the demands and challenges the new industry framework brings.
- New Gas Transporter Forum inaugurated as a key vehicle to fulfil this objective.

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Purpose and Scope (2)

- Emphasis very much on:-
  - NTS – DN physical operation and associated information flows
  - Serving all DNs in a non-discriminatory manner
  - Relationship establishment and reinforcement
  - Providing assurance of “a safe and trusting pair of hands”
  - Demonstration of fairness

  ...which of course is all part and parcel of our Licence obligations
- We also recognise that some of you may wish to communicate on a one to one basis
- This we will support, honouring any confidentiality issues as appropriate
  - where information is of a shared nature we will of course disseminate to all as appropriate via this forum.

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Purpose and Scope (3)

Target Audience:

- Independent Distribution Operators:-
  - Wales and West Utilities
  - Northern Gas Networks
  - Scotia Gas Networks
- NGT retained Distribution Networks
- Ofgem

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Purpose and Scope (4)
Specifics:

- An open opportunity for transporters to raise questions and share their views
- Provide clarity on operational / physical transmission capability issues
- Specifics to include:
  - Transporter Interface – Beach to meter transportation service (OAD focus).
  - Operational Flows and performance
  - Capacity planning
  - Asset maintenance plan coordination
  - Telemetry equipment and Site sharing
  - Supply / Demand Interface – Seasonal reviews and outlook
  - Relevant commercial issues associated with above
    - NTS Exit Capacity
    - Emergency planning
    - UNC Modification implementation

Purpose and Scope (5)

and finally…..

- If you have any concerns please do share them with us.
- This can be openly here as we go through this afternoon, or direct via your normal NGT contact.
- Alternatively our Business Seperation Compliance Officer (BSCO) is here today and happy to take questions afterwards.
- Contact can also be made to the BCO via a confidential e-mail box at:

  bsco@ngtuk.com

UKT Gas Operations

Paul Green

July 2005

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Gas Operations – Accountabilities

- National Gas Control functions
- UK Supply / demand balance
  - Capacity Management
- UK Network Emergency Coordinator (NEC) role
- UK Gas Quality
- Shrinkage Management
  - CV Management
  - Compressor

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GNCC Accountabilities

- Accountable for:
  - The safe and efficient control and operation of the UK Gas Transmission System
  - Maintaining UK gas quality
  - Provision of Storage Security Monitors, Operating Margin and Transmission Support gas
  - Network Emergency Coordination (NEC)
- In addition responsible for:
  - Facilitation of Commercial Daily Trading arrangements
  - Management of Capacity on the Network
  - Safe and efficient operation of gas supply to the 12 Network Code Local Distribution Zones and Direct Connects, including:

    Forecasting National Total System demand

    Alarm management

    Non-routine operations

    Diurnal storage

    Flow control/scheduling

    Supply incident management

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The Gas National Control Centre
Operations & Staffing

- 24 hour x 365 days a year
- 100 staff in total
- 24 hour shift and day support
- Each shift comprises a team of 8, which includes Operations Engineers, Commercial Gas Traders and the Network Manager

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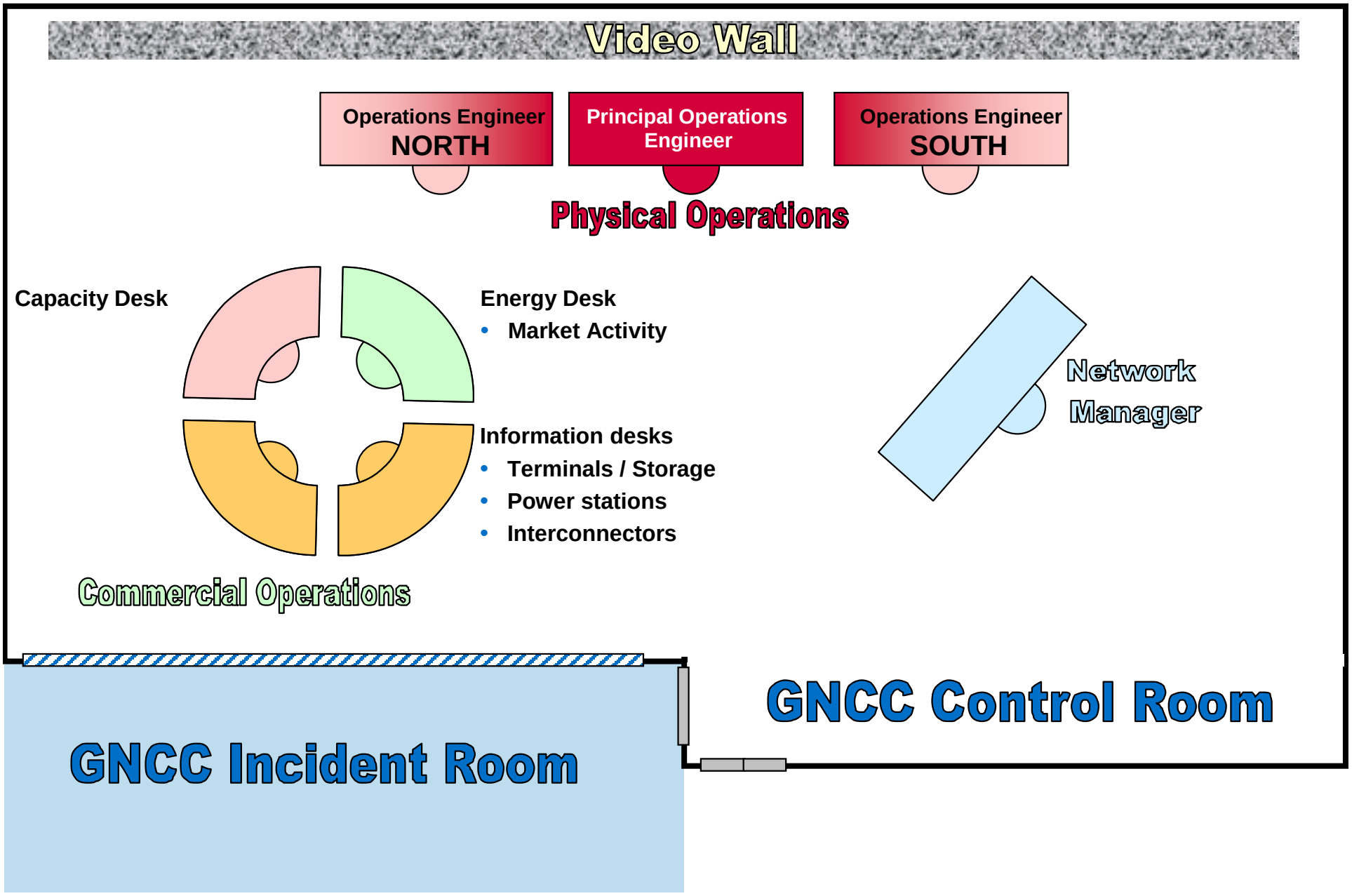

Video Wall
Operations Engineer NORTH
Principal Operations Engineer
Operations Engineer SOUTH
Physical Operations
Capacity Desk
Energy Desk
• Market Activity
Information desks
• Terminals / Storage
• Power stations
• Interconnectors
Commercial Operations
Network Manager
GNCC Incident Room
GNCC Control Room

National Transmission System - Throughput

8 Networks / 12 LDZs

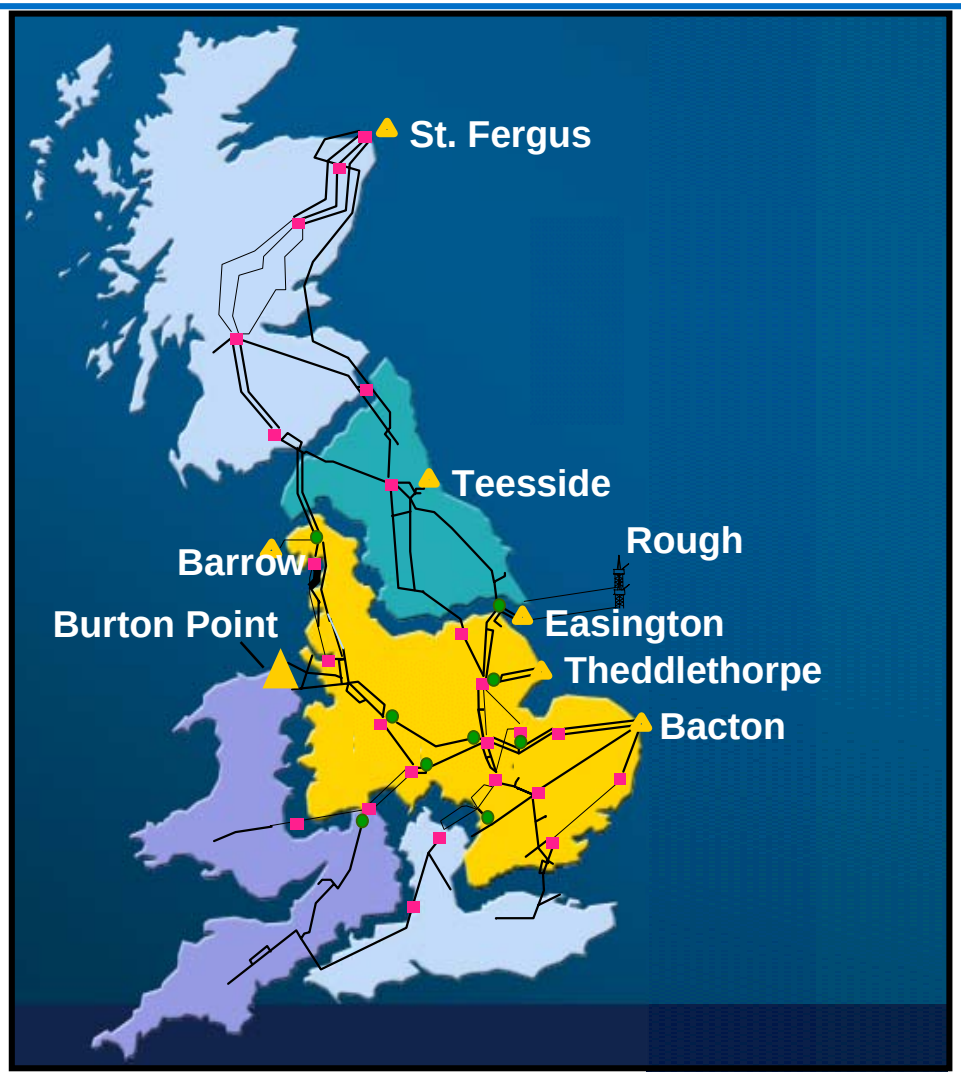
Forecast peak Day
515 mcm/d

Highest Demand Day 7 Jan 2003
450 mcm (4860GWh)

Lowest Demand Day 2004
162 mcm (2018GWh)

Annual Throughput
100,000 mcm (1,091,666GWh)

National Energy Requirement
circa 58%



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Incident – Loss of BP Kinneil Processing Facility

20th June 2005

- **Emergency Shutdown of Processing facility**
- **Shutdown of Forties Pipeline System**
- **87 mcmd total rate loss at affected terminals**
- **DTI involved**
- **GNCC undertook commercial actions to resolve the predicted national imbalance**

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Role of the NEC

Gas Safety (Management) Regulations

- Places an obligation on all transporters to describe their arrangements for safe management of network
  - continuity of supply
  - dealing with emergencies
- Arrangements enforceable in criminal law.
- Requirement for Network Emergency Coordinator
- Safety Cases (NEC and Network Operators)
- Defines requirements for content and characteristics of gas to be transported

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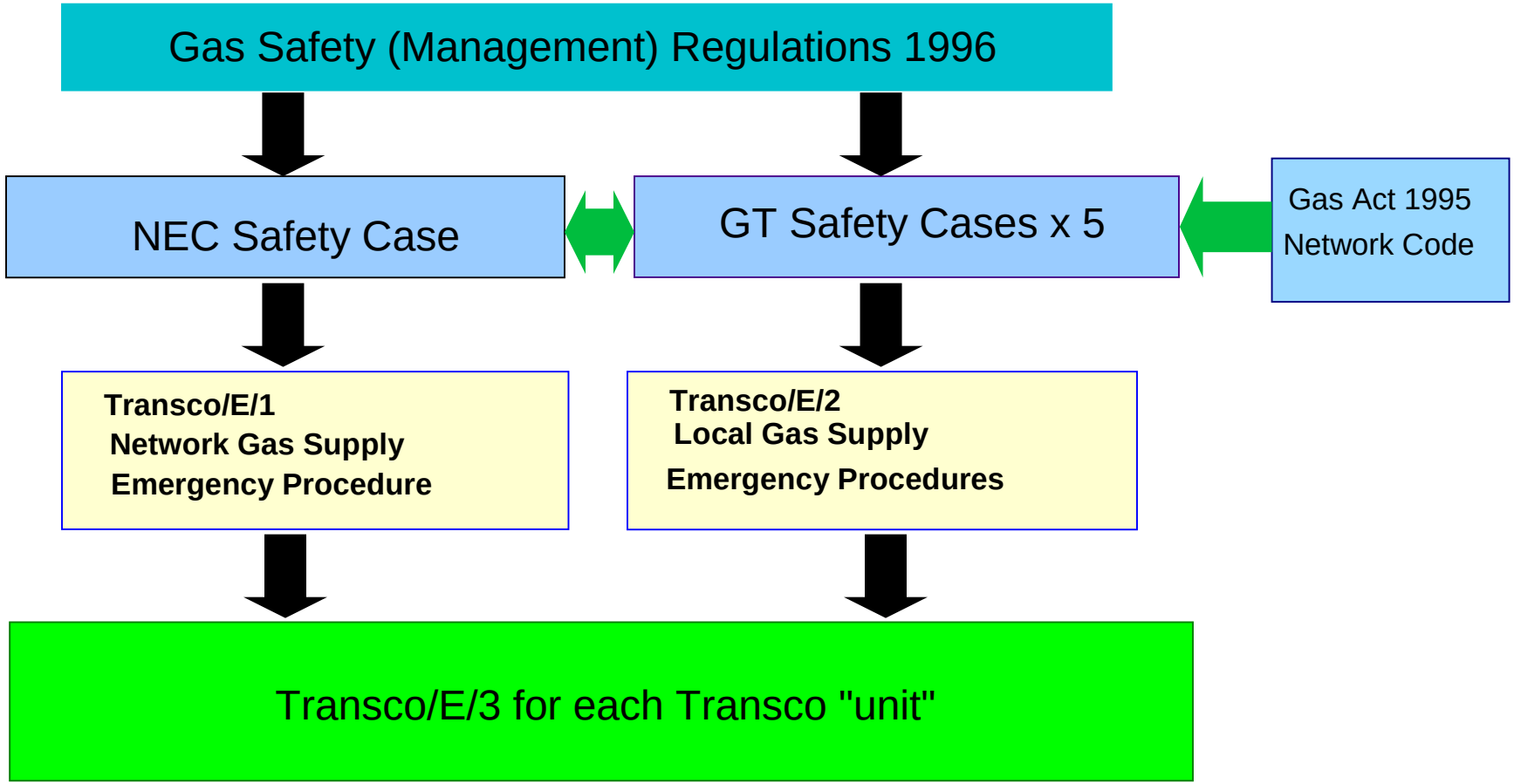
Role of the NEC

- Primary Responsibility
  - Coordinate of actions of Gas Transporters during a NGSE.
  - Return the primary system to a supply demand balance
  - Authorise each stage of a NGSE
  - Submit and maintain a safety case
- Secondary Responsibility
  - Authorise the admittance of Emergency Specification Gas
  - Test procedures as and when required
  - Produce reports on any NGSE
  - Authorise load reduction measures

“ ….. a gas supply emergency where the loss of pressure occurred, or could occur, in the PRIMARY SYSTEM”

Emergency Documentation



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Network Emergency Coordinator (NEC) Safety Case

- Demonstrates that the NEC has adequate arrangements in place for coordinating actions of all transporters to prevent a supply emergency.
- These arrangements are detailed in the Network gas supply emergency procedure (Transco/E/1).
- Does not specify individual transporters emergency arrangements
- Approved by HSE w/c 18th March 2005

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Responsibilities

- Primary Responsibility
  - Coordinate of actions of Gas Transporters during a NGSE.
  - Return the primary system to a supply demand balance
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- Secondary Responsibility
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DNCC Operations

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The Distribution National Control Centre Operations & Staffing

- 24 hour x 365 days a year
- 110 staff in total
- 24 hour shift and day support
- 6 "24x7" Shift Teams, comprising of:-
  - Network Manager
  - 2 x Principal Operating Engineers (North and South)
  - 6 x Operating Engineers (2 LDZ's Each)

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Discharges Control Operations to both Retained and Independent Networks

Operational Update

- Supply and Demand
- Interruption Process
- Shrinkage
- Maintenance Information Provision
- Forthcoming Emergency Exercise

Supply/Demand

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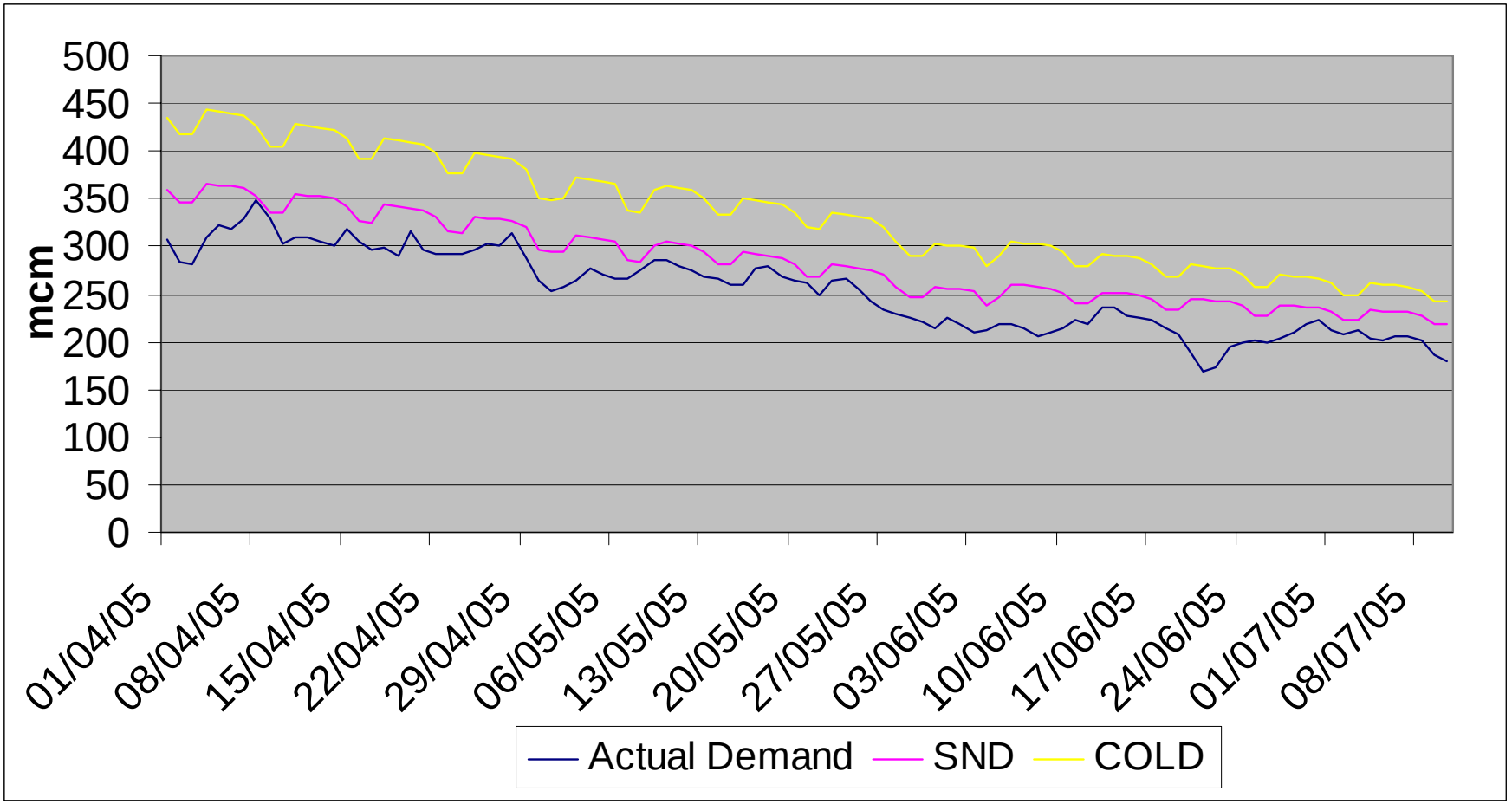
Demand



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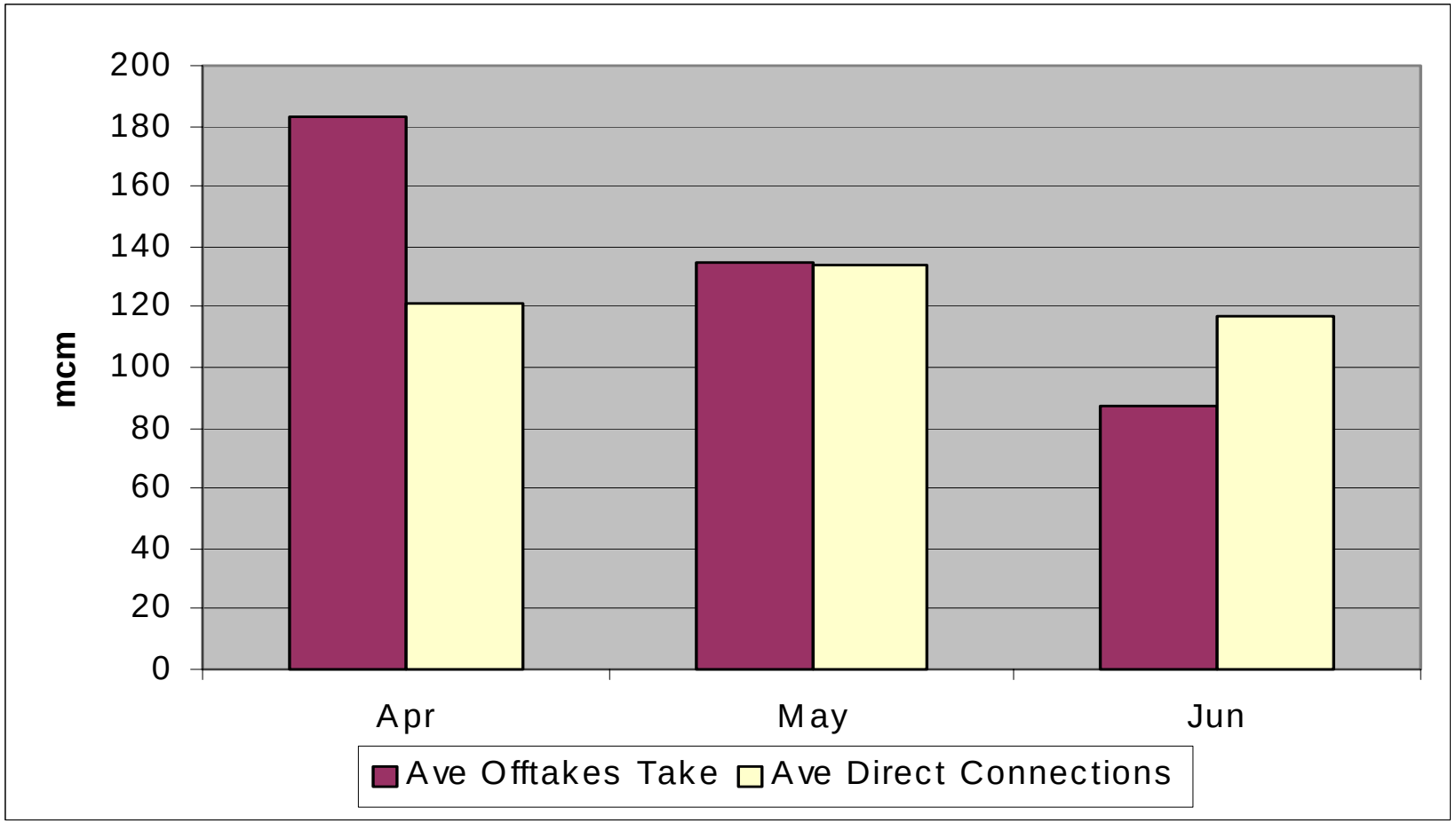
LDZ v Direct Connects (Ave Monthly Demands)



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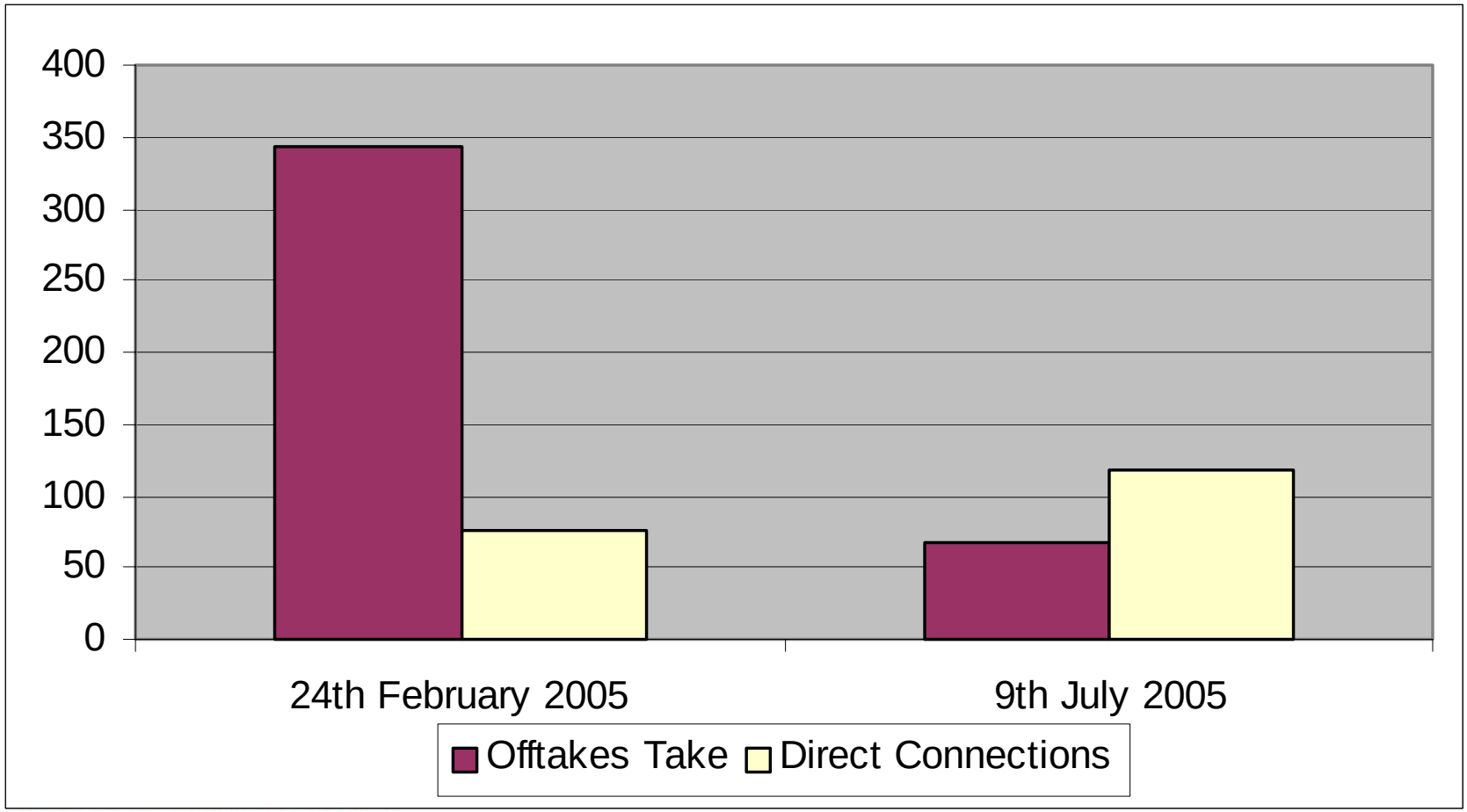
LDZ v Direct Connections
24/02 Winter / 09/07Summer 2005



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Shutdown of Kinniel NGL Facility 20th/21stJune 2005

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Shutdown of Kinneil NGL Facility

- Natural Gas Liquids (NGLs) from a number of UKCS fields are handled by the NGL facility at Kinneil.
- Loss of the NGL facility results in the shutdown of offshore gas/oil production in these fields.
- The shutdowns impact gas inputs into St Fergus, Teesside and Bacton terminals.
- On 21st June, as a result of a problem at Kinneil, gas inputs at these terminals reduced by ~85 mcmd

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Shutdown of Kinneil NGL Facility

- Demand at the start of Gas Day 21st June, was 189 mcmd and Opening Linepack was 278.2 mcm
- The system remained short for a large part of the day.
- Transco took a number of buy actions on the OCM (total volume 4.4 mcm) and set an SMPBuy of 41.25 p/therm.
- Balance on the day was achieved through a mix of Beach gas, Storage withdrawal (including some LNG), and demand side response(shutdown of storage injection, reduction in IUK export and some power station reduction).
- The end of day demand was 169 mcmd and the closing linepack was 276.5 mcm.

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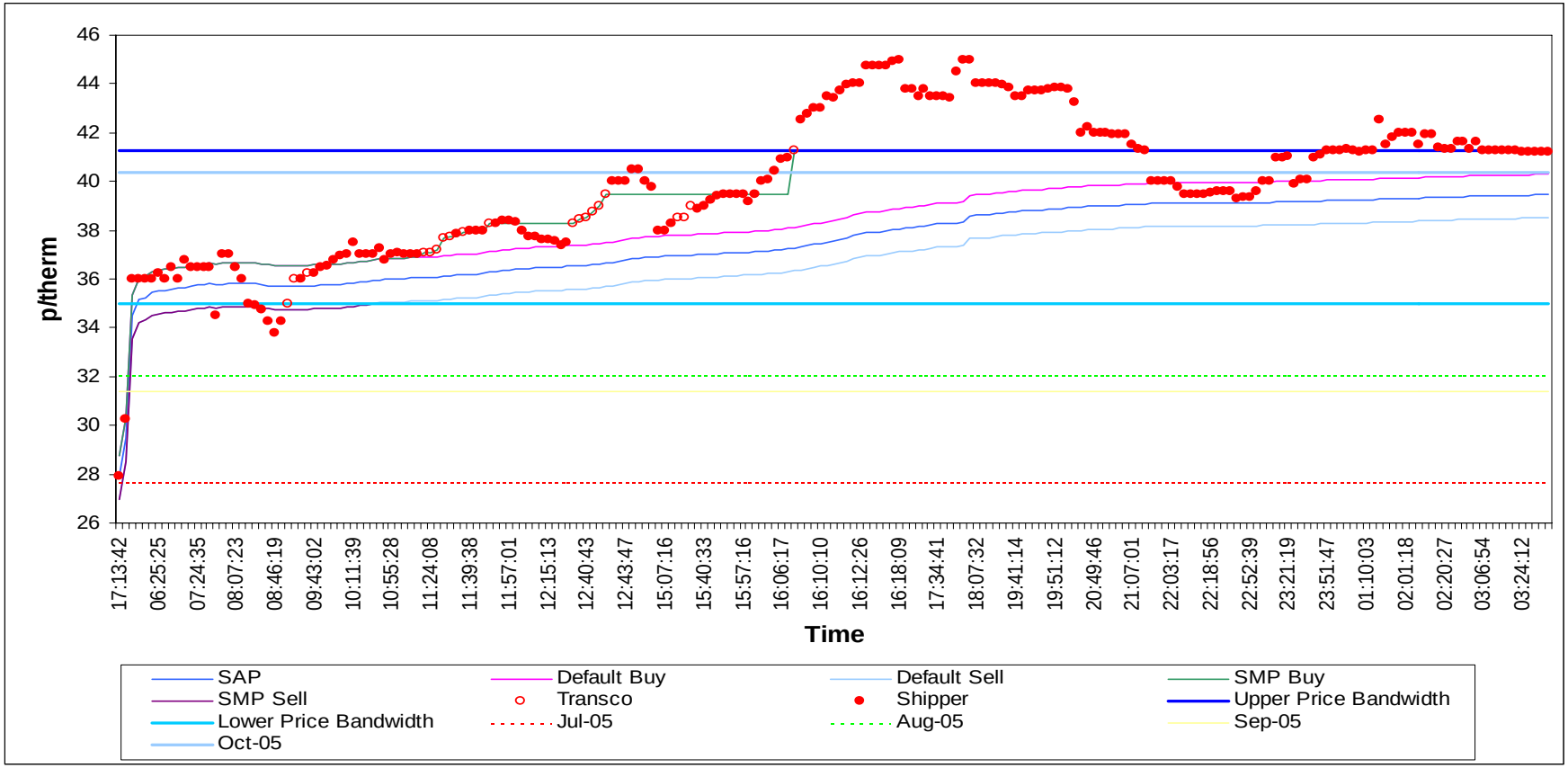
Shutdown of Kinneil NGL Facility



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Interruption Process

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NTS Transportation Constraint Interruption

- GNCC will identify a constraint on the NTS.
- GNCC will identify appropriate loads on the NTS.
- GNCC will determine required interruption of NTS directly connected sites and DN Exit Zones based on best fit to required volume.
- GNCC will notify DNCC of Exit Zones to be interrupted.
- DNCC will implement LDZ interruption and GNCC will implement NTS Site interruption.
- 5 hours Notice must be given to Shippers

NTS Transportation Constraint Equitability

- GNCC will choose sites for interruption based on ‘best fit’ to the required volume.
- If a site has been ‘hit’ for interruption then it will not be interrupted again until all other sites effected by the constraint have been interrupted.
- If interruption continues over a period of time then consideration will be given to ‘sharing’ the interruption across sites if operationally feasible.

NTS Emergency Interruption

- National Gas Supply Emergency (NGSE) called by GNCC.
- GNCC can call Emergency Interruption under Stage 1 of NGSE.
- GNCC will notify DNCC of required interruption in each LDZ by Exit Zone.
- DNCC will implement LDZ interruption and GNCC will implement NTS Site interruption.
- No Notice required in an Emergency.

INTERRUPTION EXERCISE 2005

- "Exercise Ostrich" will be held Week Commencing 5th September 2005.
- The exercise will test communications between NGT and Shippers. Both DNCC & GNCC Jointly.
- Test Interruption Procedures.
- To identify data quality or portfolio issues that will have an operational impact.

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Provision of Available Interruption Information

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Provision of Available Interruption information

- Transco NTS requires to know the level of interruption available to it for both Constraint and Emergency Interruption.
- The OAD(Section I 5.1)currently requires DNs to provide information on aggregate Supply Point Capacity in each Exit Zone.
- However… Aggregate Supply Point Capacity can be significantly different to what is actually available for interruption on the day.
- Therefore, Transco NTS proposes that, in addition to aggregate Supply Point Capacity, DNs also provide their best estimate of available interruption.
- Not having this information, will increase uncertainty and the risk of unnecessary or insufficient interruption being called, which could impact on system security.

Provision of Available Interruption information

- Prior to Network Sales, information on available interruption was available to Transco NTS – this information was based on ‘Flexi-SOQ’.

- The information would initially be required in September of the preceding Gas Year, with updates on a regular basis within the Gas Year.

- The information to be provided will include:
  - The number of Interruptible Supply Points in each LDZ
  - Best estimate of the aggregate amount of interruption available to the DNO in each Exit Zone

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Provision of Available Interruption information

- The provision of this information, in the required form, could be achieved by either:
  - A letter agreement or
  - A modification to the OAD
- We would welcome your views on this issue.

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Incorrect Allocation of LDZ Shrinkage

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Incorrect Allocation of LDZ Shrinkage

- Following the implementation of IGMS an error in the application of LDZ Shrinkage occurs for a period of 19 days.
- The LDZ Shrinkage Factors for 2003/04 were applied rather than those for 2004/05.
- This error has been corrected from Gas Day 23rd June 2005 onwards.
- The magnitude of the error in aggregate across all LDZ's is presented in Table 1.
- It is proposed that this error be corrected by undertaking an offline adjustment and reconciliation between the LDZ Shrinkage accounts and Users similar to that undertaken for an LDZ Offtake error.
- UNC does not cover such an event.However it neither mandates or precludes this approach.

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Incorrect Allocation of LDZ Shrinkage (cont)

- NGT and xoserve recommend that the proposed offline adjustment and reconciliation would be the most prudent solution to correct for this error with Users and Networks agreement.
- The other option would be to leave this adjustment until the end of year LDZ Shrinkage Assessment and Adjustment process however NGT and xoserve note that User portfolios may well be different at the time of this process.
- NGT request that Users and Networks agree the proposed resolution of this error.

LDZ Shrinkage Difference Due to Incorrect Shrinkage Factors.

LDZ	Energy (kWh)		
	Incorrect	Correct	Difference
EA	11,003,305	7,752,329	3,250,976
EM	15,755,895	13,404,269	2,351,626
NE	11,334,933	10,141,782	1,193,151
NO	10,505,628	7,815,162	2,690,466
NT	6,492,304	10,063,071	-3,570,767
NW	18,050,265	15,643,563	2,406,702
SC	18,266,594	11,659,528	6,607,066
SE	9,718,436	13,767,784	-4,049,348
SO	10,326,869	9,970,770	356,099
SW	8,578,217	8,578,217	0
WM	9,395,105	11,009,889	-1,614,784
WN	2,120,865	1,718,169	402,696
WS	3,837,630	7,093,801	-3,256,171
TOTAL	135,386,046	128,618,334	6,767,712

Table 1

Data is for the period 05/06/05 to 23/06/05 inclusive.

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Maintenance Planning Update
UNC OAD, Section G

- Section G of OAD sets out the basis for maintenance planning and coordination between transporters.

- Maintenance programming timetable requires parties to update maintenance data for Summer maintenance plan in accordance with timetable. (30 June)

- NTS has completed this exercise and advised, where applicable, all affected DNs

- Awaiting feedback from those parties as to any consequential changes to their plans.

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Emergency Exercise

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Emergency Exercise

- Emergency Exercise planned for late September ’05
- In response to recent NEC Safety Case and E/1 changes
  - To ensure industry understanding of new arrangements
  - Test of the new GS(M)R Safety Monitor Breach classification
  - Prepare for the coming winter
- Players will include
  - Shippers
  - iDNs, and rDNs
  - Storage Facilities

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Emergency Exercise

- The scenario will be an offshore supply failure
- Scope will include Stages 1-5 of an NGSE
  - Interruption
  - Maximising Beach Gas
  - Firm Load Shedding
- Further details will follow in September Ops Forum

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Future Forums

Future meetings

- Proposed Standing Agenda:
  - Operational Update
  - Performance Reporting against UNC requirements
  - Supply / Demand update
  - Applicable Commercial Update (UNC / Planning)
  - Any other Transporter to Transporter issues. (Adhoc)

- Additional Items for next meeting:-
  - Winter 2005 Outlook Update
  - Winter 2005 Operational Position
  - Output of Emergency Exercise

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Feedback

- Your views on this Forum please
  - Feedback via e-mail…Nicola.j.Maughan@ngtuk.com
    - Content
    - Information provision
    - Communication / general admininistration
    - Location

- Future Forums
  - Frequency
  - Date of next meeting

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Close

Questions & Answers

Questions & Answers

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