

Potential revisions to the UNC Post-Emergency Arrangements

example

Daily imbalance cashout and post emergency claims

1. Daily Energy Imbalances for Gas Day 1st December (End of Day)

Table 1

Total System Daily Imbalance

Shippers' Daily Imbalances

| | | System | shipper1 | shipper2 | shipper3 | shipper4 | shipper5 | shipper6 | shipper7 |
|----------------|-------------------------------|---------------|---|-----------------|---|-----------------|-----------------|-----------------|-----------------|
| Inputs | Physical | 5500 | 900 | 500 | 400 | 1500 | 400 | 1800 | 0 |
| | NBP Buys | | | | | | | | 1800 |
| | Sub-total | 5500 | 900 | 500 | 400 | 1500 | 400 | 1800 | 1800 |
| Outputs | Physical | 5700 | 250 | 250 | 750 | 1900 | 750 | 0 | 1800 |
| | NBP Sells | | 0 | 0 | 0 | 0 | 0 | 1800 | 0 |
| | Sub-total | 5700 | 250 | 250 | 750 | 1900 | 750 | 1800 | 1800 |
| Net | | -200 | 650 | 250 | -350 | -400 | -350 | 0 | 0 |
| | <i>Imbalance cashed-out @</i> | | 123.5 | 47.50 | -69.96 | -79.96 | -69.96 | 0 | 0 |
| | Note: Daily Imbalance | | +900 kWh surplus (posted as OCM offers) | | -1100 kWh short (sum of shippers' deficit imbalances) | | | | |

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2. Daily Cashout Price(s)

Table 2

| | Stage 1 | Stages 2-5 (frozen) |
|----------------|---------------|------------------------|
| SAP | 0.1800 | 0.1900 |
| SMP Buy | 0.1900 | 0.1999 |

A Gas Deficit Emergency (GDE) occurred on 1st December. The cashout prices remain dynamic until a GDE Stage 2+ is declared at which point, the 'emergency' cashout prices are frozen. The shippers' daily energy imbalances are cashed-out at the frozen price i.e. at SAP for those shippers with a long position and at SMP Buy for those with a short position.

3. OCM Physical Market Offers

Shippers 1 and 2 posted offers to sell their additional over-supply on the OCM with a price-range of 0.2000 to 2.4500 p/kWh; these offer prices were above the frozen SMP Buy price of 0.1999 p/kWh.

Table 3

| OCM Offers | kWh | p/kWh | Cost | |
|----------------|------------|--------|-----------------|-------------------|
| <i>Offer 1</i> | 250 | 0.2000 | 50.0000 | <i>(Shipper2)</i> |
| <i>Offer 2</i> | 150 | 0.3000 | 45.0000 | <i>(Shipper1)</i> |
| <i>Offer 3</i> | 300 | 0.2200 | 66.0000 | <i>(Shipper1)</i> |
| <i>Offer 4</i> | 150 | 1.1010 | 165.1500 | <i>(Shipper1)</i> |
| <i>Offer 5</i> | 50 | 2.4500 | 122.5000 | <i>(Shipper1)</i> |
| Totals | 900 | | 448.6500 | |

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4. Post-Emergency Claims

Whilst those offers posted by the shippers remained on the OCM, the oversupplies did physically flow (in accordance with GSMR obligations to maximise supplies) and thus those particular shippers' daily imbalances would be allocated as long and cashed-out at SAP (0.1900 p/kWh).

The shippers will now be able to submit these OCM offers as the basis for recovering their costs via the revised post-emergency claims process e.g. through the existing Balancing Neutrality process. It should be noted that under the prevailing UNC post-emergency arrangements, 'long' shippers are able to claim for the quantities of surplus gas above their demand.

Only valid post-emergency claims will be processed.

The costs of the post-emergency claims will be recovered from those shippers that incurred a short imbalance position.

Calculation of the costs and weighted average price of the post-emergency claims:

- a) Calculate the cost of each claim = claim quantity (kWh) * claim price (p/kWh)
- b) Calculate the sum total quantity (kWh) of the claims
- c) Calculate the sum total cost (p/kWh) of the claims
- d) Calculate the weighted average price (p/kWh) =

$$\frac{\text{Sum total cost (p/kWh) of claims}}{\text{Sum total quantity (kWh) of claims}}$$

In this example, the weighted average price of the emergency claims:

$$\frac{448.6500}{900} = 0.4985 \text{ p/kWh}$$

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5. Payment of claims/recovery of costs

To preserve the integrity of Balancing Neutrality, it will be necessary for xoserve to process the payments of the claims and, the recovery of the associated costs simultaneously in the same billing period. It is anticipated that this will be no later than [3] months post GDE/Gas Day(s).

Payment of the emergency claims will be based on the quantity and price of the OCM offers (See Table 3) resulting in Shipper1 receiving 398.65 and shipper2 receiving 50.00.

Table 4

UNC Claims – Emergency Neutrality Charges

| | Deficit Imbalance kWh | Charge |
|---------------|--------------------------|---------------|
| Shipper1 | 0 | 0.00 |
| Shipper2 | 0 | 0.00 |
| Shipper3 | 350 | 174.47 |
| Shipper4 | 400 | 199.41 |
| Shipper5 | 350 | 174.47 |
| Shipper6 | 0 | 0.0000 |
| Shipper7 | 0 | 0.0000 |
| Totals | 1100 | 548.35 |

The costs of the emergency claims will be recovered from those shippers with deficit imbalances e.g. imbalance * weighted average price of emergency claims (0.4985p/kWh).

Any over-under recovery of the emergency claims costs will be apportioned across all shippers based on throughput (UDQI/UDQO). In this example, the total costs of the emergency claims was 448.65 (see Table 3) however, the emergency neutrality charges recovered 548.35 (Table 4). Therefore, the over-recovery of 99.70 will be apportioned (credited) to all shippers via Balancing Neutrality.

6. Shipper cash-flows

Table 5

| | Imbalance Cashout | Emergency Claims (paid) | Emergency Claims (charges) | Neutrality Smear | Total |
|---------------|----------------------|----------------------------|-------------------------------|---------------------|-------------|
| Shipper1 | 123.50 | 398.65 | 0.00 | 15.26 | 537.41 |
| Shipper2 | 47.50 | 50.00 | 0.00 | 9.95 | 107.45 |
| Shipper3 | -69.96 | 0.00 | -174.47 | 15.26 | -229.17 |
| Shipper4 | -79.96 | 0.00 | -199.41 | 45.11 | -234.26 |
| Shipper5 | -69.96 | 0.00 | -174.47 | 15.26 | -229.17 |
| Shipper6 | 0.00 | 0.00 | 0.00 | 23.87 | 23.87 |
| Shipper7 | 0.00 | 0.00 | 0.00 | 23.87 | 23.87 |
| Totals | -48.88 | 448.65 | -548.35 | 148.58 | 0.00 |