

Significant Code Review Modification Proposal – Business Rules

Option 1 – ‘Near Time’ Option

Assumptions

- For each day within a Gas Deficit Emergency (GDE) where the GDE has progressed to Stage 2 but Firm Load Shedding has not occurred the cashout price for short shippers (System Marginal Buy Price (SMP Buy)) will be equal to the frozen cashout price set on the day the GDE entered Stage 2
- For each day within a GDE where Firm Load Shedding has occurred the SMP Buy will be at the Value Of Lost Load and included in M+23 Energy Balancing Invoice
- Funds recovered via the above will flow into a new account and used to fund **Demand Side Response (DSR) Payments**. Funds will not be smeared back to Users before these payments have been made
- Demand Side Response Payments will be paid in a later Energy Balancing Invoice or in an Energy Balancing Adjustment
- Payment for Market Balancing Actions (Balancing Neutrality Charges) will remain as is
- Shippers will pass DSR Payments onto relevant suppliers who will then in turn pass this on to consumers (assumes licence changes to facilitate this)
- Post Oct 2012 GDE stages (as proposed in Modification 0412 – ‘Changes to the Stages of Emergency Resulting from Changes introduced by Exit Reform’) are used to reference GDE stages within these business rules.
- Daily Metered (DM) and Large Non Daily Metered (NDM) sites will receive DSR Payments where instructed to interrupt during GDE Stage 2 firm load shed. Such sites will receive DSR payment for each day they are interrupted. Unless they are within the area of a Local Distribution Zone (LDZ) that is subject to network isolation
- Small NDMs (Annual Quantity <73,200kWh p.a) will receive fixed payment based on a fixed assumed interruption volume (currently 1.6 Therms)
- Network isolation = NDM <73,200kWh p.a interruption
- Emergency Curtailment Quantity (ECQ) process remains in place
- Where Network Isolation has occurred sites will receive DSR payments only for 1st day of Network Isolation.
- DSR Payments will continue to be made for each day where a relevant site is NOT within the area of an LDZ that is subject to Network Isolation.
- Overall timescales of process will match the Post Emergency Claims (PEC) process to ensure process is completed within a defined timescale

Business Rules

These business rules explain the proposed changes to the Uniform Network Code as stated within Ofgem's Draft Policy Decision on the Gas Security of Supply – Significant Code Review.

1. Overview

In the event of a GDE (stage 2 and above) being declared by the National Emergency Coordinator (NEC) the following shall apply;

- 1.1. Prior to Firm Load Shedding the SMP Buy for the day will be the frozen cashout prices as set on the first day that GDE entered Stage 2 (in line with current UNC Q 4.2)
- 1.2. Once the GDE has progressed to Firm Load Shedding within Stage 2 (and above) the following shall apply;
 - 1.2.1. SMP Buy for the day will be equivalent to or greater than Value of Lost Load (VOLL)
 - 1.2.2. Imbalance Charges paid by Users to [National Grid] will flow into a separate new Emergency Neutrality Account and not into neutrality or smeared to Users until after the payment of the Demand Side Response Payments
 - 1.2.3. Payment of Balancing Neutrality Charges from Users to [National Grid] for Market Balancing Actions etc will remain as is
 - 1.2.4. Should the GDE progress to Network isolation Stage 3, a post event process will amend each User's Users Daily Quantity Output (UDQO) (where that User has Supply Points within the affected LDZ) and identify which NDM Supply Points should receive a Demand Side Response Payment by calculating the affect of Network isolation
 - 1.2.5. Where a User's Supply Point has been interrupted during Stage 2 or Stage 3 within a GDE, [National Grid] will pay each User a Demand Side Response Payment in relation to each relevant Supply Point.
 - 1.2.6. The Demand Side Reduction Payments shall be paid for by the Emergency Neutrality Account
 - 1.2.7. Any over recovery within the Emergency Neutrality following the payment of the Demand Side Response Payments will be smeared back through neutrality, any under recovery will be smeared to short shippers
- 1.3. For the purposes of these business rules VOLL is equivalent to 68.2428 pence per kWh [£20/Therm]

2. Imbalance Charges applicable in the event of a GDE

- 2.1. Where the NEC has declared that a GDE has existed at Stage 2 but Firm Load Shedding has not yet occurred, the SMP Buy shall be the 'frozen' SMP Buy as set on the first day of the GDE entering Stage 2 and as defined within UNC Section Q Paragraph 4.2
- 2.2. Where the NEC has declared that a GDE has escalated to Firm Load Shedding within Stage 2 (and above), the SMP Buy for that day shall be the greater of;
 - 2.2.1. The price as described in paragraph 2.1 above, or

2.2.2. VOLL as described in paragraph 1.2 above

2.3. For the avoidance of doubt, these business rules do not seek to amend the determination of the System Marginal Sell Price in a GDE as per UNC Section Q 4.2.4 (e.g. SAP).

3. Demand Side Response Payments

3.1. [National Grid] will pay each User a Demand Side Response Payment for each Supply Point interrupted during Stage 2 and 3 of a GDE in line with the following;

3.1.1. For each day within Stage 2 and above of a GDE, where a User's [Firm] Supply Point is interrupted as part of Firm Load Shedding, the User will receive a Demand Side Response Payment for each relevant Supply Point equivalent to the relevant Emergency Interruption Volume for that Supply Point multiplied by VOLL

3.1.2. For the avoidance of doubt the applicable Supply Points described in paragraph 3.1.1 are [Interruptible sites,] DM Supply Points which include VLDMC Supply Point Components and Large NDM Firm Supply Points, other than Priority Supply Points [*Section Q wording*]

3.1.3. for each [Firm] Supply Point interrupted within stage 3 of a GDE, as part of Network isolation, a User will receive a Demand Side Response Payment for each relevant Supply Point equivalent to the Emergency Interruption Volume for that Supply Point for one day multiplied by VOLL

3.1.4. Sites interrupted within stage 3 of a GDE (Network isolation) other than those identified in paragraph 3.1.2 will be identified in line with the process described in Section 7 of these business rules

3.1.5. No Demand Side Response Payment shall be paid to User's for Interruption or isolation of its Supply Points where Network isolation has occurred for more than one day.

3.1.6. For the avoidance of doubt;

a) Demand Side Response Payments calculated in accordance with paragraph 3.1.1 shall continue to apply until such time as the relevant site is subject to LDZ Network isolation or until gas supply is restored to the relevant site. Where Network Isolation has occurred 3.1.5 shall apply.

b) For the purpose of sites which are not affected by Network isolation DSR payments will continue to apply in accordance with paragraph 3.1.1.

3.1.7. The Emergency Interruption Volume for a Supply Point Component shall be the relevant volume of gas in kWh determined by [National Grid] as having being interrupted during a day within stage 2 or 3 of a GDE as follows;

3.2. the Emergency Interruption Volume for [Interruptible sites and] DM Supply Points, which include VLDMC Supply Point Components, Large NDM Firm Supply Points other than Priority Supply Points will be calculated in line with the 'Emergency Interruption Volume Methodology' [*this could be added to UNC Section V12 -GENERAL PROVISIONS RELATING TO UNC RELATED DOCUMENTS with calculation in line with the Emergency Curtailment*

Quantity process] for each day [assumes Large NDM volume calculation will be included within Emergency Interruption Volume Methodology]

- 3.3. the Emergency Interruption Volume for NDM Firm Supply Points Large NDM Firm Supply Points and including for the avoidance of doubt Supply Points whose Annual Quantities do not exceed 73,200 kWh (2,500 therms) and Priority Supply Points [shall be 47kWh (1.6 therms)] for each day
 - 3.4. National Grid will determine each User's aggregate Emergency Interruption Volume for all Supply Points across all days of the GDE within [25 business days – see PEC process] following the day on which the NEC notifies the cessation of the GDE
4. Managing an imbalance within Emergency Neutrality Account between monies recovered by Imbalance Charges & Demand Side Response Payments;
 - 4.1. [National Grid] will remain neutral to all Balancing Neutrality Charges and accordingly the Emergency Neutrality Account Imbalance will be managed as per the following;
 - 4.2. An “**Emergency Neutrality Account Imbalance**” is calculated as the aggregate Demand Side Response Payments payable by [National Grid] to all Users for a day as calculated in line with paragraphs 3 and 7 less the Imbalance Charges payable to [National Grid] by Users calculated in line with paragraph 2
 - 4.3. The “**Unit Emergency Neutrality Account Imbalance**” shall be calculated in line with the following;
 - 4.3.1. Where the Emergency Neutrality Account Imbalance is positive the Unit Emergency Neutrality Account Imbalance is the sum of the Unit Emergency Neutrality Account Imbalance divided by the aggregate of all relevant Users Daily Quantity Input (UDQI) and relevant Users Daily Quantity Output (UDQO) [revised by Users Emergency Daily Imbalance] for all Users, or
 - 4.3.2. Where the Emergency Neutrality Account Imbalance is negative the Unit Emergency Neutrality Account Imbalance is the sum of the Emergency Neutrality Account Imbalance divided by the aggregate of all of all relevant UDQIs and relevant UDQOs [revised by Users Emergency Daily Imbalance] for all Users that have a negative Emergency Daily Imbalance
 - 4.4. For each relevant User the Emergency Neutrality Account Imbalance Charge will be calculated in line with the following;
 - 4.4.1. Where the Emergency Neutrality Account Imbalance is positive, [National Grid] shall pay Users an **Emergency Neutrality Account Imbalance Charge** calculated as the Unit Emergency Neutrality Account Imbalance, as calculated in line with paragraph 5.3.1 above, multiplied by the sum of the User's relevant UDQI and relevant UDQO
 - 4.4.2. Where the Emergency Neutrality Account Imbalance is negative, Users with a negative Emergency Daily Imbalance will pay [National Grid] an **Emergency Neutrality Account Imbalance Charge** calculated as the Unit Emergency Neutrality Account Imbalance, as calculated in line with paragraph 5.3.2 above multiplied by the sum of the User's relevant UDQI and relevant UDQO

5. Settlement Timing (as part of Balancing Neutrality and invoiced as such)
 - 5.1.1. The Imbalance Charges calculated in paragraph 2 will be invoiced to Users as part of the proceeding Energy Balancing Invoice (issued in M+23)
 - 5.1.2. Due to the time required for [National Grid] to determine the supply points that are due a Demand Side Response Payment, the Demand Side Response Payments shall be included within an Energy Balancing Invoice submitted after the Energy Balancing Invoice which will include the Imbalance Charges for the relevant day.
 - 5.1.3. For the avoidance of doubt, there will be a delay of [approximately 3-4 months as per PEC timescales] between [National Grid] submitting an Energy Balancing Invoice to recover the Imbalance Charges and submitting a further Energy Balancing Invoice to pay the Demand Side Response Payments. The length of this delay will be based on the number of NDM sites interrupted during the GDE and the subsequent level of calculation required to be undertaken by [National Grid] in line with paragraph 7.

6. Post Emergency Process
 - 6.1. As described in paragraph 3 this paragraph explains the process to identify each smaller NDM site interrupted in the event of a GDE escalating to Network isolation as part of stage 3
 - 6.2. In the event of a Network isolation occurring within an LDZ as part of a GDE the relevant Gas Transporter shall determine each NDM property affected by the Network isolation for each day of the GDE and identify for each property;
 - 6.2.1. Meter Point Reference Number
 - 6.2.2. Postcode
 - 6.2.3. Supply Offtake Quantity
 - 6.2.4. Annual Quantity
 - 6.3. No later than [x] business days following the day on which the NEC declared the end of a GDE all Gas Transporters will confirm to [National Grid] whether or not Network isolation occurred within one or more of its Local Distribution Zones and provide the accompanying Network isolation information as stated in section 7.2 above

7. Recalculation of User Daily Imbalance following escalation to stage 3
 - 7.1. Upon the receipt of the information described in section 7.3 and 7.4, [National Grid] will [recalculate] each Users Daily Imbalance for each day of the GDE taking into account the Network isolation information stated in 7.3
 - 7.2. Upon the [recalculation] of each Users Daily Imbalance, [National Grid] will issue a Balancing Neutrality adjustment including amended Imbalance Charges and amended Demand Side Response Payments for each day of the GDE
 - 7.3. The amended Imbalance Charges is defined as the Daily Imbalance as calculated in line Section F less the Daily Imbalance as calculated in line with this paragraph 7.5 multiplied by the relevant System Marginal Buy Price for the day as defined under paragraph 1.3

- 7.3.1. If the amended Daily Imbalance Charge is positive, [National Grid] will pay Users the amended Daily Imbalance Charge
 - 7.3.2. If the amended Daily Imbalance Charge is negative, Users will pay [National Grid] the amended Daily Imbalance Charge
8. (Optional) Interaction with Post Emergency Claims process
 - 8.1. Subject to Network isolation occurring within the GDE, the Post Emergency Claims process will use each Users Daily Imbalance as calculated in line with paragraph 7.5
9. [Hold for process for interruptible sites interrupted as part of Firm Load Shedding and / or Network isolation]