

0504 -Development of a Demand Side Response Methodology - WG3



0504 Work Group Schedules

Time / Date	Venue	Workgroup Programme
10:30 Wednesday 13 August 2014	31 Homer Road, Solihull B91 3LT	(I6) - Option Fees (KA1&I2)- Eligibility rules (KA3) - Timescales of Service -process flow- interactions between three parties (KA5) - DSR Offer posting and Acceptance processes
10:30 Wednesday 10 September 2014	31 Homer Road, Solihull, B91 3LT	(KA4 & I3) - Contractual Arrangements - (KA6) Service Fees – pricing offer (K9) – Payment, Cost, liabilities for failing to interrupt (KA8) Payment and settlement arrangements – including timescale between three parties
10:30 Monday 13 October 2014	31 Homer Road, Solihull, B91 3LT	(I4) DSR Trial (I5)OCM Platform (KA1 & I2)- Eligibility rules
10:30 Tuesday 11 November 2014	31 Homer Road, Solihull, B91 3LT	(KA7)DSR offer price feed into Cashout Review Draft Methodology and Business Rules
10:30 Wednesday 10 December 2014	31 Homer Road, Solihull, B91 3LT	Outstanding issues Review and sign off Workgroup report ?

AGENDA

Development of a DSR Methodology

- Payment and Settlement Arrangements
 - Product Design
 - Payment Duration terms
 - Settlement timescales

- Contractual Arrangements

- Service Fees – pricing offers (inc. potential shipper contract fees)

- Payment, Cost, Liabilities for failing to deliver

Payment and Settlement Arrangements



Background - Duration DSR trade is exercised

Over what period should an accepted DSR trade be exercised?

- Single Day
- Multi-day
- Duration - Once DSR offer accepted then trade is automatically re-exercised for each day until NG instruct customer can come back on

Duration of Payment at DSR Offer Price

Single Day

Paid at DSR Offer price for day

Multi-day

Paid at Offer price for each day in specified Duration (cashout effect includes a pro-ration)

Duration

Paid at DSR Offer price upto FLS, then at 30 day average SAP

or

Paid at DSR Offer price for each day for duration of curtailment

Duration of payments at the accepted DSR Offer Price

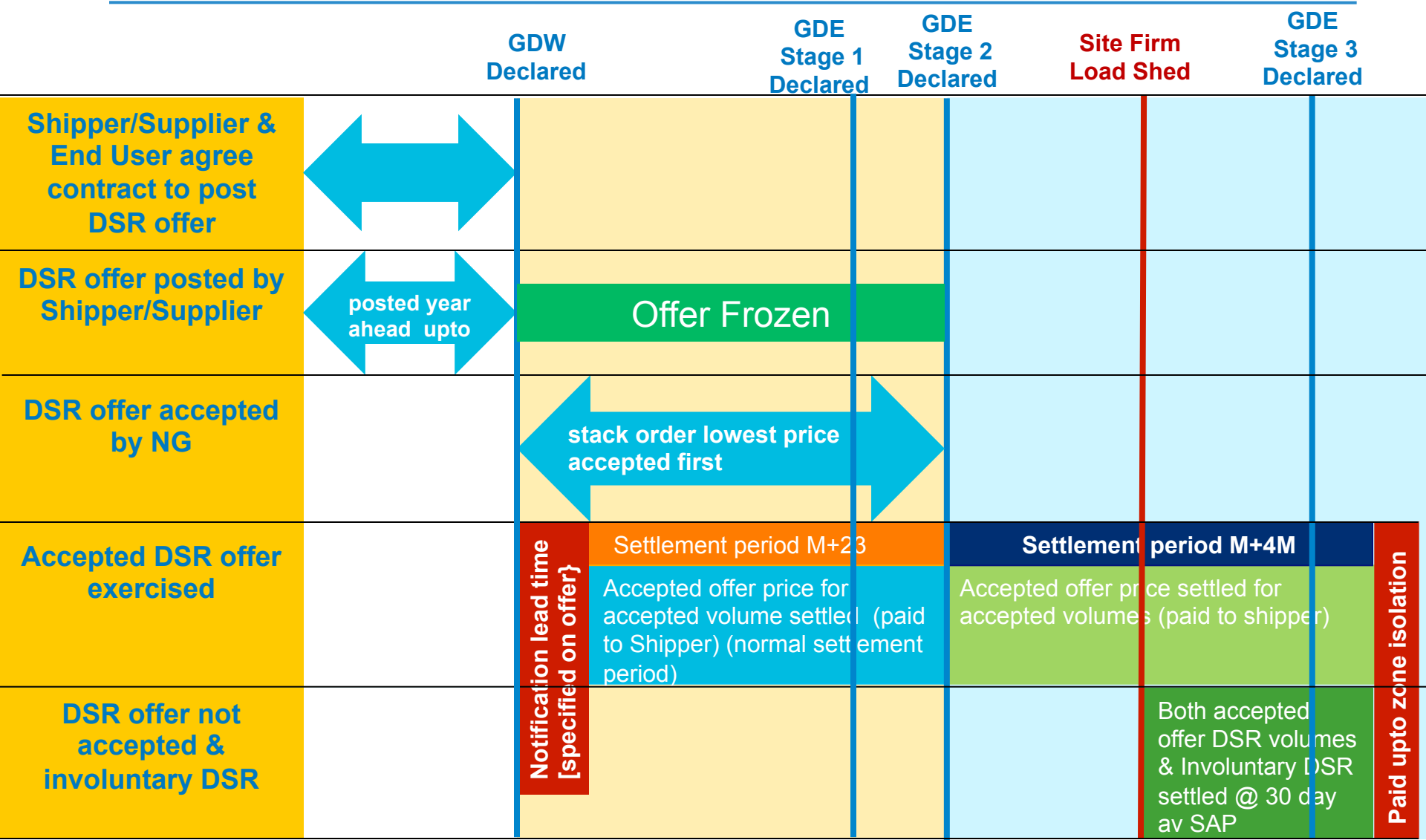
This issue applies to the 'Duration' product only:

- It does not apply to a daily offered DSR product, as there will be no accepted DSR Offers beyond Stage 2, as NG ceases taking Market Balancing Actions.
- The duration of payment DSR service fees at the DSR Offer price is an issue associated with 'Duration', or possibly 'Multi-day' products, as exercising such Offers can continue into and through out GDE stage 2.

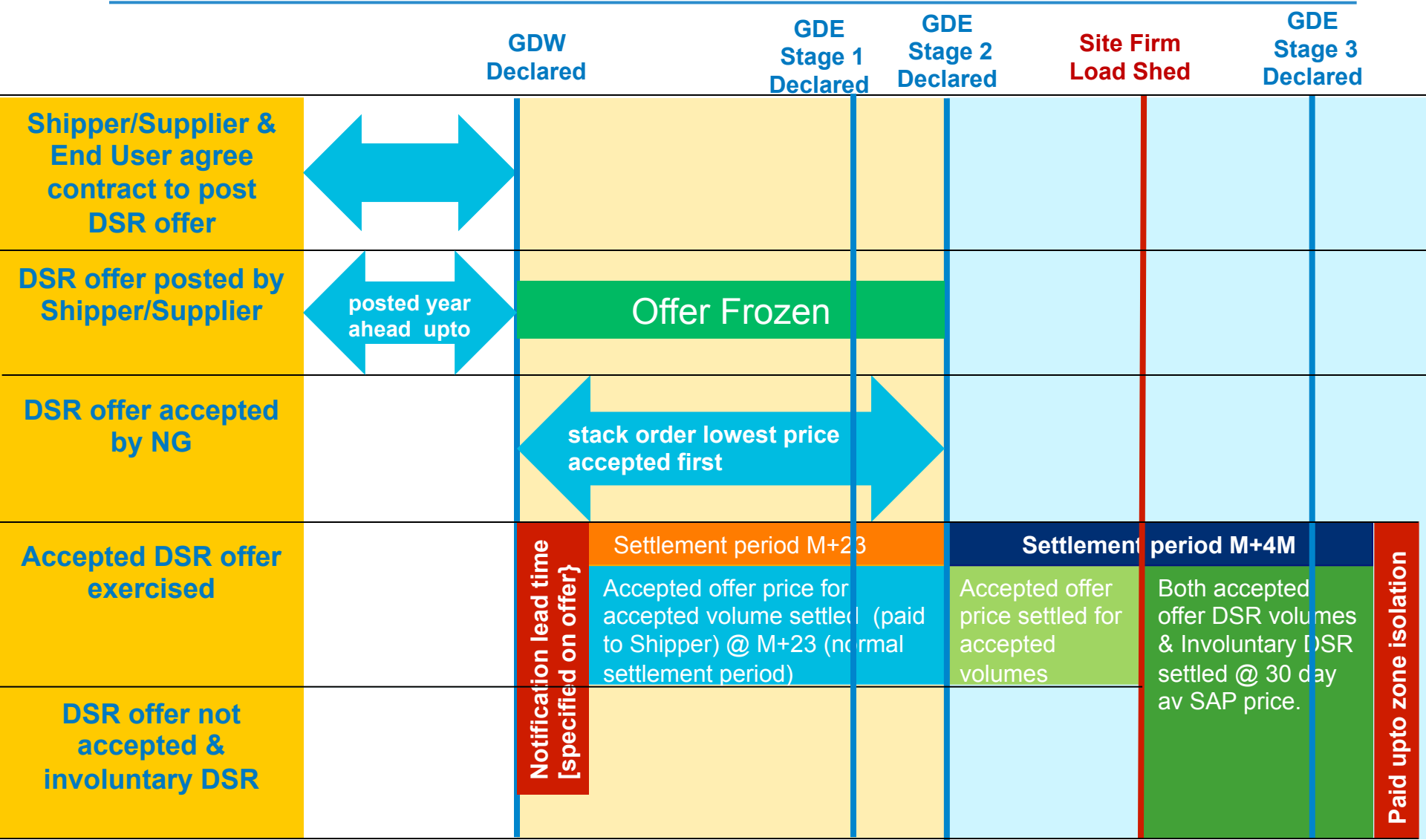
DSR Mechanism Process Flow:

Duration

(offer price paid throughout or up to zone isolation)



DSR Mechanism Process Flow: Duration (offer price paid upto FLS)



Duration of DSR Trade Exercise: Pros and Cons

	Pros	Cons
<p>Day – Offer posted and accepted and exercised on a daily basis. Daily DSR Offer will not be accepted by NG once entered into GDE stage 2 as NG ceases taking Market Balancing Actions at this point.</p>	Aligned with other OCM platforms	Uncertainty associated with resumption of offtake on D+1, day after DSR trade accepted, particularly in respect of managing system.
		Increased workload to process offers of a daily basis through the three parties.
		Increased risk of shipper uncertainty of balance position
<p>Multi-day – Offer Posted accepted and exercised for a specified number of days, not greater than 7 days (existing functionality)</p>	Existing functionality available on OCM post GDW	Uncertainty associated with offtake reductions increasing on the day after multiday trade has lapsed .
		Complexity in managing various Multi-day durations and probability calculations
<p>Duration – Offer posted, accepted and exercised for the day, and continues to be exercised for every day up to NG instruction that trade contract has ceased and the site may continue offtaking.</p> <p>Best Fit Option</p>	Certainty and clarity that DSR volume made available to NG for the duration that the system is in stress.	
	Simple communication between NG, shipper/ supplier and Consumer to turn down until further notice.	Uncertainty as to when consumer may resume offtake

Duration of payment for DSR trade at DSR Offer price: Approaches to consider

	Initial views measured against the DSR Licence Principles
<p>Approach 1: Pay consumer at the accepted DSR offer price x accepted volume for the duration upto NG instructing that they may resume offtake</p>	<p>Could be viewed as appropriate way of treating DSR offers as eligible balancing actions (DSR principle 4)</p> <p>May encourage consumer to participate, facilitating a route to market (DSR principle 5)</p>
<p>Approach 2: Pay consumer at the accepted DSR offer price x DSR volume upto Firm Load Shedding of site</p> <p>Best Fit Option</p>	<p>Presents greater consistency with existing market arrangements , limiting distortion and unintended consequences (DSR principle 3)</p> <p>Introduces the DSR mechanism as an alternative route to market ,that does not compromise the development of other DSR commercial arrangement or existing route to market (DSR principle 6)</p> <p>Paying each site until they are Firm Load Shed, i.e. when the remainder of that sites volume is curtailed, effectively mitigates the impact of the FLS on others. In GDE Stage 2 a relevant site that has DSR Offer Volumes exercised may potentially substitute for other sites, (e.g. ‘super firm’ or larger loads) up until the point the remainder of the relevant sites volume is FLS.</p>
<p>Multi-day trade – Pay consumer for accepted DSR multi day trade price x volume (existing functionality)</p>	<p>May retain some benefits with Approach 2: consistency with existing markets arrangements , whilst encouraging participation and treating offers as balancing actions of Approach 1.</p>

Settlement to End Consumer

- Two payment timescales;
 - Pre entry into GDE Stage 2
 - Post entry into GDE Stage 2

Settlement to End Consumer

- Pre GDE stage 2 – NG settlement of payment for accepted DSR Offers will be in accordance with existing Market Balancing Action settlement timescales:
 - M+23 payment to shipper
- Post GDE Stage 2 settlement of payment for accepted DSR Offers / Firm Load Shedding:
 - M+4M (in accordance with timescales and provisions prescribed in the SCR SoS Legal text section 6.4 - DSR Payments) to Shipper

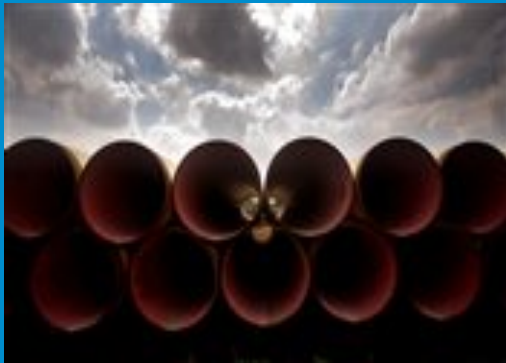
Passing on of involuntary DSR Payments to End Consumer will be in accordance with the provisions set out in the proposed modification to the Shipper Licence Condition 15A and the Gas Supply Licence 19D. These proposed Licence modifications may require further revisions to include payment arrangements for voluntary as well as involuntary DSR Payments.

DSR Exercise Fee settlement arrangements

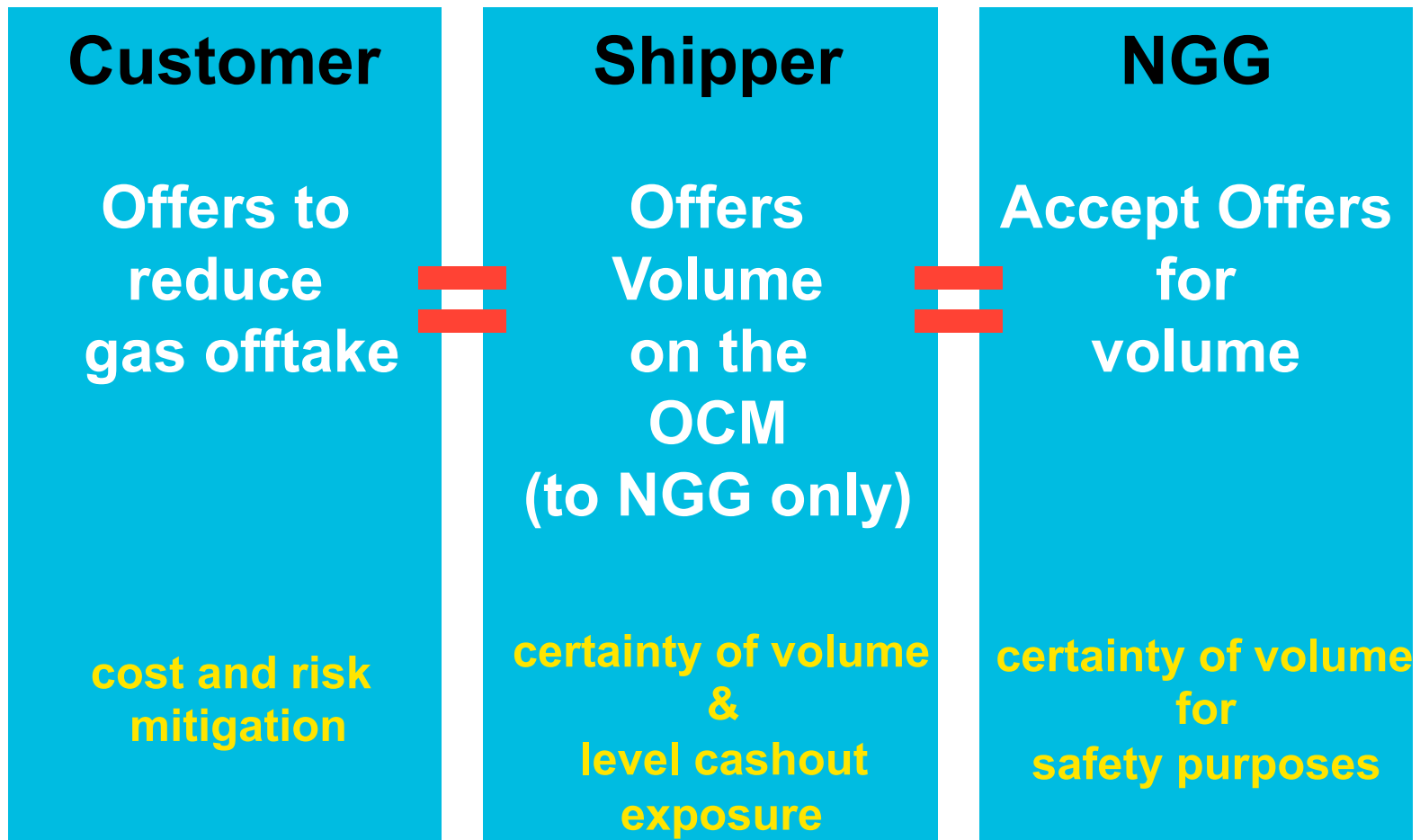
- In respect of National Grid NTS to the Shipper; the settlement of DSR trades fees shall be:
 1. For each day, prior to the end of GDE stage 1, where the DSR Offer has been exercised, the DSR exercise will be regarded as a Market Balancing Action (MBA) taken by National Grid NTS. Settlement of DSR exercise fees associated with such days will be undertaken in accordance with normal operation settlement arrangements for MBAs.
 2. For each day, following declaration that the GDE has entered stage 2, all settlement of DSR exercise fees will be undertaken in accordance with the provisions and timescales prescribed within the DSR Methodology.

- In respect of the Shipper/Supplier to the Customer; the passing on of DSR exercised trades Payments will be:
 1. settled in accordance with this DSR Contract: and
 2. in accordance with the provisions set out in the proposed modification to the Shipper Licence Condition 15A and the Gas Supply Licence 19D. [These proposed License modifications may require further revisions to include payment arrangements for voluntary as well as involuntary DSR Payments].

Contractual Arrangements – Shipper/Supplier & Customer



DSR mechanism three way party interaction



Accepted DSR Trade price feeds into Cash-out price thereby impacting **all** industry participants

DSR Governance Overview

	Sets out obligations for:	Parties	Governed under Contract :
DSR Methodology	Processes associated with the operation and design of the DSR arrangement	National Grid	National Grid Transmission Transporter Licence
DSR arrangements – UNC TPD provisions	participating in the On The Day Commodity Market (OCM) based DSR Mechanism that is operated in accordance with the DSR Methodology	UNC signatories (NG, Shippers, Suppliers and the OCM Market Operator)	UNC TPD
Shipper Licence condition 15A & Gas Supply Licence condition 19D	Shipper/Supplier requirement to pass on DSR payment the End Consumer	Shippers & Gas Suppliers	Shipper and Supplier Licence
DSR Service contract and DSR Offer Notice contract provisions	Shipper/Suppliers & Customer to participate in the DSR mechanism in accordance with the DSR Methodology	Shipper/Supplier & Customer	Standardised Contract provisions either within the Shipper/Supplier and Customer Contract or an annexed contract

DSR Service Contract - Suggested Standardised Heads Of Terms

1.	DSR Service	
2.	DSR Offer Notice Arrangements	a. Preparing each DSR Offer Notice - specify volume, duration etc.
		b. Service Fees – [VoLL price + Gas price + Admin Fee]
		c. Exercise Lead-times
3.	Operational arrangements	a. Communication and Response Timescales
		b. Submitting/Amending/Revising DSR Offers
		c. Site Maintenance Notifications
		d. Notification of accepted DSR offer and response to exercise
		e. Contact information etc.
4.	Liabilities	a. Failing to reduce offtake
		b. Errors submitting DSR Offers
5.	Payment Settlement Arrangements	

DSR Offer Notice

DSR Offer Notice will be a contractual agreement signed by the Shipper/ Supplier and Customer for each DSR tranche of volume offered in respect of a relevant site. Suggested items to be included in the DSR Offer Notice:

Volume specified agreed	Daily Volume
Lead-times for exercising DSR Offers	Lead-time for DSR plus time to notify customer
Service fee agreed	VoLL + Gas cost+ [admin fee]
Day Volume/or reducing volume over 24 hrs	
DSR Contact Details	Provide 24 hour contact
Site details	meter, location etc.
Notification of revision/amending of Offer agreed timescales	Minutes. Hours, Days?
Maintenance Notification advise on scheduled maintenance	Advise

Summary of Governance for the DSR Offer

- DSR Methodology governed by the GT Transmission Licence
- Shipper / Supplier & Customer Contract
- The DSR Offers Notice

DSR Service Fees



DSR Service Fees

- Consensus from previous meetings that DSR Offers will comprise of an Exercise fee only.
- In respect of the contracted volume, DSR exercise fees will be paid where DSR Service Provider has had a DSR Offer accepted.
- DSR Service Fees will be funded through existing clearing mechanisms i.e. treated as a Market Balancing Action*.

* = Existing UNC Defined term

What are the components of the DSR Service Fee?

Customer	Shipper/Supplier		
VoLL price	Price for Gas	Admin Fee	Service Fee
VoLL Price p/kWh	30 Day Av SAP p/kWh	Agreed Payment on exercise	
	Contractually agreed Gas Price p/kWh	Price p/kWh	
		Zero	

DSR Offer Price

DSR Service - Liabilities



DSR Service - Liabilities

1. Errors submitting DSR Offers
2. Failing to reduce Offtake

Errors submitting DSR Offers

- The Shipper / Supplier (the Service Provider) will ensure that the DSR Offer is properly completed, satisfy and verify all matters in relation to the DSR Offer. The Service Provider will be solely responsible and liable for any error or omission in its DSR Offer, when registering onto the OCM DSR Platform, these liabilities will manifest themselves as cash-out costs and Physical Re-nomination Incentive (PRI) Charges.

Failing to reduce offtake

Current Assumptions:

- Exercising a DSR trade will result in an output trade on the shipper balance account
- The current “PRI” process shall apply to DSR trades, same as all other “physical” trades today.
- If the Customer’s gas offtake for the day does not reflect the DSR trade then Shipper will have a “shorter” balancing position:
 - Assume contractual rules apply between Customer and Shipper regarding not delivering demand reduction?
 - Pass through of cashout exposure?
 - Other sanction?

Example – pre-emergency

Example assumptions:

- Normal Day
- Shipper balanced
 - No cashout exposure
 - DM's allocation match nomination
- Shipper has mix of physical gas and title trades
- Small portfolio of DM users

Shipper A	Pre Emergency
INPUTS	
Beach	100
Trades	50
Total	150
OUTPUTS	
DM Nom site 1	50
DM Nom site 2	30
DM Nom site 3	20
Trades	50
DSR	0
Total	150
Imbalance	0

Example – post DSR exercise – user reduces

Example assumptions:

- DSR exercised
 - DM reflects DSR in Nomination / Allocation
 - No cashout exposure
- Shipper has mix of physical gas and trades
- Small portfolio of DM users

Shipper A	Post DSR exercise (user does reduce)
INPUTS	
Beach	100
Trades	50
Total	150
OUTPUTS	
DM Nom site 1	40
DM Nom site 2	30
DM Nom site 3	20
Trades	50
DSR	10
Total	150
Imbalance	0

Example – post DSR exercise – User doesn't reduce

- Example assumptions:
 - DSR exercised
 - No cashout exposure
 - DM allocation matches nomination
 - Shipper has mix of physical gas and trades
 - Small portfolio of DM users

Shipper A	Post DSR exercise (user doesn't reduce)
INPUTS	
Beach	100
Trades	50
Total	150
OUTPUTS	
DM Nom site 1	50
DM Nom site 2	30
DM Nom site 3	20
Trades	50
DSR	10
Total	160
Imbalance	-10

Summary

- If Customer gas demand reduces by the DSR trade volume then no impact on Shipper cashout exposure
 - Customer has met DSR trade requirements
- If Customer gas demand does not turn down to **at least** reflect the DSR trade then the Shipper is exposed to cashout for the shortfall quantity
 - Customer has therefore not met DSR trade requirements.
- **Question** – Is the potential pass-through of cashout exposure suitable incentive on the customer to deliver on the DSR trade?
 - Are any additional incentives needed / warranted?

Next Steps



Next Steps

- DSR expressions of interest Feedback Survey to be published to End Consumers September.
- Draft Business Rules to be issued this September
- October agenda:
 - (I4) DSR Trial
 - (I5) OCM Platform
 - (KA1 & I2) Eligibility rules
- (Any further views/issues/concerns you may wish to discuss further please get in touch:

Key areas of the DSR Methodology

1. Eligibility rules for Participation in the DSR Tender Process
2. Definition of DSR product and service
3. Timescales of the DSR service
4. DSR Process - contractual arrangements
5. DSR Mechanism submission process and operational arrangements:
 - DSR Offer posting process
 - DSR Offer acceptance process
6. DSR Service Fees
7. DSR offer price feed into daily Cashout price
8. Payment and Settlement arrangements;
 - Pre Stage 2
 - Post Stage 2 (including settlement process for DSR offers not that were not accepted through the DSR mechanism)
9. Payments, Costs, Expenses and Liabilities for failing to interrupt

Development of key areas must comply with key principles set out the DSR Licence Condition

Key Issues identified by the Industry

I1	DSR product	Turn down to / Turn down by
I2	Eligibility rules	Gas Fired Generation eligibility and interaction with Electricity Market Reform
I3	Contractual Relationships	Define contractual arrangements between Shipper/ Supplier and end consumers facilitating transactions, contractual relationships, liabilities and how contracts should be reported on under existing regulatory requirements
I4	DSR Trial	Define trial success criteria, volumetrics will need to be established to ensure viability of mechanism
I5	OCM platform	Need to understand the costs associated with OCM development and implementation
I6	Option Fees	
I7	Week/weekend Offtakes	Understand impact of managing Offtake variances between week day and weekend when placing a DSR Bid