Impacts of LDZ Meter Errors on Settlement and Corrections

Offtake Arrangements Workgroup 29 September 2021



Provided by:



Contents

- Background to LDZ Metering Errors
- Impact of Offtake Meter Errors on LDZ Allocation and Settlement
- UIG Impacts and Corrections
- Pricing and UIG Sharing
- Treatment of Amounts owed by failed Shippers
- Indicative Timeline for EM009 (Alrewas error)



Background

- Each of the 13 large Local Distribution Zones (LDZs) has multiple input points for resilience from (e.g.)
 - The National Transmission System (NTS)
 - Biomethane sources
 - Embedded Storage
- LDZ input measurements are much more complex than a domestic or small industrial meter – there is often computation involved
- The downstream transporter (i.e. the LDZ Network Operator) is responsible for the metering equipment from the NTS to the LDZ
- Business processes exist for notifying and correcting measurement errors larger ones are discussed at UNC Offtake Arrangements Workgroup
- https://www.gasgovernance.co.uk/MER
- https://www.gasgovernance.co.uk/OA

Daily Energy Allocation in an LDZ

Total LDZ

UIG (

Non-Daily
Metered
Energy
(NDM) =
stand-alone
calculation

Daily Metered (DM) Energy

LDZ Shrinkage

UIG = daily Balancing Figure

> UIG is shared across market using UIG Weighting Factors

- DM = Class 1 and 2 allocated on actuals or estimates based on site usage
- NDM = Class 3 and 4 allocated using NDM Algorithm: uses AQ, End User Category Profiles and actual weather
- Post-Nexus arrangements: UIG is the daily Balancing Figure in each LDZ
- UIG shared on basis of daily Throughput and Weighting Factors
- AUGE determines Weighting Factors each year for sharing UIG

Next: Impacts of LDZ Offtake Errors

Impact of an LDZ Measurement Error

Total LDZ

UIG

Non-Daily
Metered
Energy
(NDM) =
stand-alone
calculation

Daily Metered (DM) Energy

LDZ Shrinkage

Additional inputs = additional UIG

Revised
UIG is
shared
across
market
using UIG
Weighting
Factors

- Identifying extra input energy means extra UIG for the LDZ for those gas days
- DM and NDM usage are not affected

 they are not dependent on the
 total LDZ energy
- AQs are not affected as they are derived from individual site meter readings
- There is no Commodity charge on UIG so DN Commodity revenue does not change

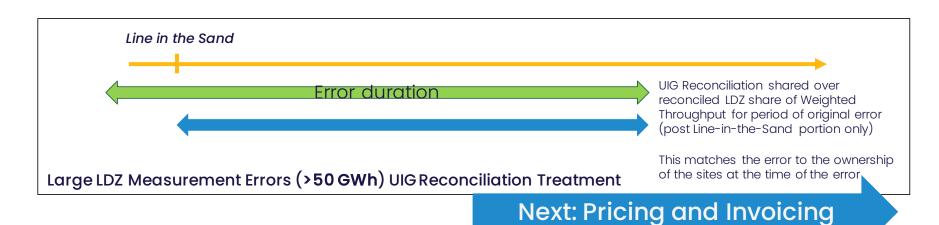
Next: UIG Impacts and Correction

UIG Impacts and Correction

Error type	National Grid terminology	Impacts and correction	
Input meter has under- recorded – extra un-registered gas flowed into the LDZ (e.g. EM009 – Alrewas)	Meter has "over- delivered" - extra un- recorded gas flowed into the LDZ	UIG was too low – correction will increase UIG in the LDZ = debit to Shippers	
Input meter has over - recorded – less gas flowed into the LDZ than was reported (e.g. SE007 – Isle of Grain)	Meter has "under- delivered" – less gas flowed into the LDZ than was registered	UIG was too high – correction will decrease UIG = credit to Shippers	
	Next: UIG Sharing		

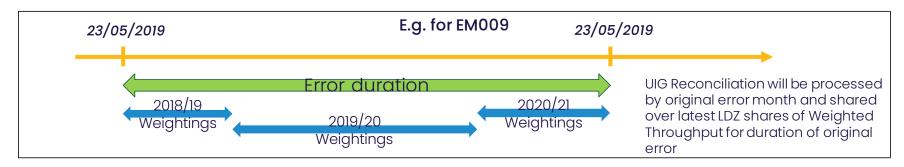
UIG Sharing for LDZ Measurement Errors





Pricing and Sharing of Large LDZ Measurement Errors

- Correction is applied to the LDZ of the error only
- NG will use the original daily SAP (System Average Price) for each error day applied to the error quantity for the day
- National Grid will aggregate into monthly energy quantities and financial values for Xoserve
- For large errors (>50 GWh) the error will be shared over the latest (i.e. Post-Reconciliation) monthly Shipper market shares for the effective months of the error
 - E.g. for EM009 (Alrewas) reconciliation period will be 23/05/2019 to 23/02/2021
- The original set(s) of UIG Weighting Factors for the period of the error will be applied to weight the updated throughput



Invoicing of Large LDZ Measurement Errors

- LDZ measurement error corrections appear on the "next available" Amendment Invoice as UIG Reconciliation
- Energy and financial values appear in the K91 record, separate lines for each original billing period and End User Category combination
- Xoserve/Correla are unable to provide indicative values until we have received the monthly breakdown from National Grid
- We have committed to provide those indicative values for EM009 prior to invoice issue timing is dependent on completion of the Independent Technical Expert process

Treatment of Failed Shippers:

- Pre-failure portion will be billed to the Administrator of the failed Shipper any uncollected amounts are recovered through Energy Balancing Neutrality process
- Failed Suppliers if Shipper is still live, billing will follow normal process to the Shipper(s) at the time of the error

Next: Revised Alrewas timeline

Alrewas Meter Error – Revised Indicative timeline

- Timeline presented at August 2021 meeting is now superseded
- Requirement for a second Independent Technical Expert (ITE) will add c. 4 months delay – depending on scope of the ITE's work, availability etc
- Correla/Xoserve can provide indicative values – once we have the final energy and financial values
- Revised timeline based on a four-month delay
- Amendment invoice issued on 18th Business Day of each month

Task	Original end date	Indicative end date with second ITE	Owner
Appointment of second ITE	N/A	29/09/2021	Cadent
Meter Error Report creation	27/09/2021	27/01/2022	Cadent
Workgroup meeting with ITE to present final report.	27/09/2021	09/02/2022	Cadent
Any minor amendments required following presentation of report.	01/10/2021	16/02/2022	Cadent
Preparation of reconciliation request	12/10/2021	24/02/2022	National Grid
DoA Sign Off for reconciliation	15/10/2021	26/02/2022	National Grid
Analysis of final data to provide indicative charges for shippers	05/11/2021	07/03/2022	Correla/ Xoserve
Indicative charges provided to shippers	08/11/2021	10/03/2022	Correla/ Xoserve
Amendment Invoice issued containing the Alrewas SMER UGR Charges	24/11/2021	24/03/2022	Correla/ Xoserve

Thank you



