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DESC: NDM Negative Allocations

13th November 2013



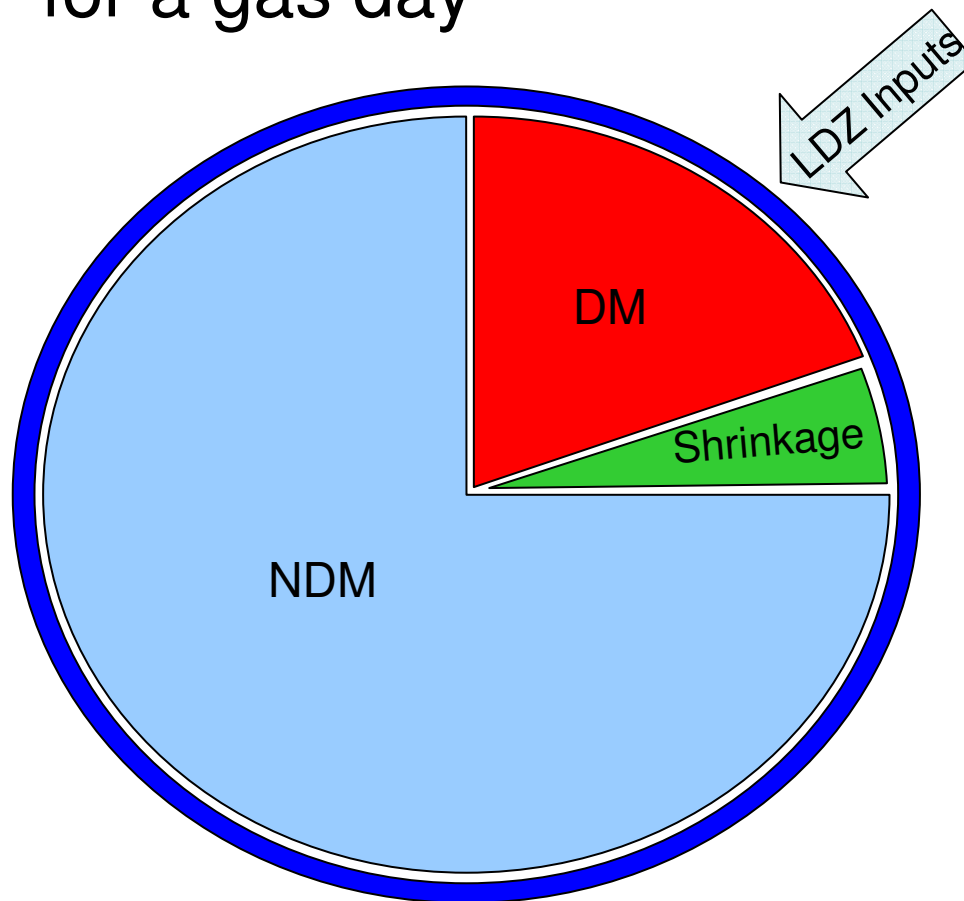
Allocation processes – why are they needed?

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- Allocation rules are needed to share out all energy in an LDZ
 - Before the day – “Gas Nominations” (Forecasting) process
 - After the day – Energy balancing and commodity billing processes
- Need to measure or estimate all inputs and outputs
- Currently do not have daily reading equipment on all 21+ million meter points – <2,000 submit daily reads
- So, need some means of estimating demand for non-daily metered (NDM) meter points

NDM Allocation – what drives it?

- NDM Energy is the balancing figure in an LDZ for a gas day



(1) Total consumption measured 'entering' the LDZ

(2) Daily Metered Sites (DM) Consumption known by daily meter readings

(3) Shrinkage - Network defined value for gas 'lost' in the system

(4) Non Daily Metered Sites (NDM) consumption

$$= 1 - (2 + 3)$$

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Factors which influence NDM Gas Usage

- Actual consumption at NDM Meter Points is influenced by (amongst others):
 - The consumers' reactions to weather
 - Size of the connected NDM Portfolio
 - Meter points moving between DM and NDM
 - Socio-economic factors, e.g. gas prices, productivity, unemployment
- Actual consumption will always be positive

Factors which influence NDM Energy as calculated

- NDM Energy is the balancing factor each day in each LDZ and is influenced by:
 - Actual NDM usage (see previous slide)
 - LDZ input measurements (from the NTS or from other LDZs)
 - DM daily measurements
 - DM estimates where actual measurements are missing
- Errors in measurements can send NDM energy negative – in rare cases

Safeguards in place

- NDM Energy is the balancing factor and will fluctuate each day, due to weather, day of the week, holidays etc
- National Grid Transmission monitor input data prior to Exit Close-Out (D+5)
 - Negative consumptions will be identified by D+2 at the latest
- Energy must remain whole – root cause must be corrected to remove a negative
- NGT liaise with upstream data providers
 - E.g. DNs, DM service providers

New communication process

- With effect from November 2013
- NG Transmission will notify Xoserve of Negative NDM Energy as soon as identified
- Xoserve Customer Team will write out to an operational distribution list confirming
 - LDZ
 - Date of negative NDM Energy
 - Summary of root cause
 - Planned date of correction (whether pre/post D+5)
- Xoserve will write out again to confirm correction and resolution

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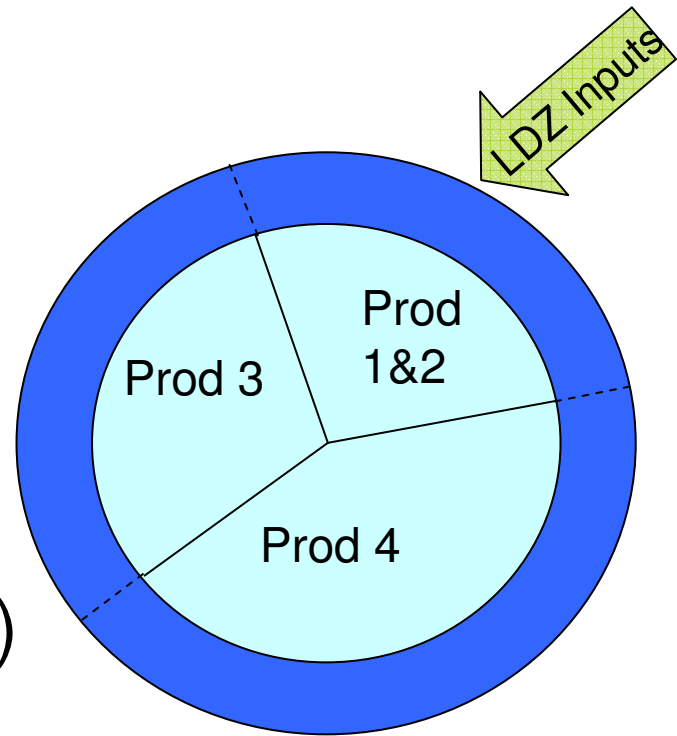
How will Negative Allocations change after UKLink Replacement?

Overview of Project Nexus impacts



Project Nexus – Treatment of Unidentified Energy

- Sum up total Prod 1&2 measurements (~DM)
- Sum up total Prod 3&4 estimates (~NDM – new bottom-up estimation methodology)
- Compare to net LDZ consumption (after Shrinkage)
- Difference is **Unidentified Gas**
 - Shared in proportion to daily measurements
 - Separate allocation pot of UG – not a scaling factor



Initial Allocation – not to scale

Negative energy – Project Nexus Impacts

- Unidentified Gas is the balancing figure under future arrangements
- NDM Energy will always be positive – bottom-up calculation
- Calculated UG could be negative
 - Scale of UG depends on accuracy of measurements/ estimates
 - Could still be negative at D+5
- UG subject to reconciliation after Close-Out until Line-in-the Sand