



Unidentified Gas

Solution Options Meeting

13th November 2017

- Meeting follows a number of industry discussions on level and volatility of UIG
- Review Group 0631 is looking at longer term changes to the NDM Algorithm – target date of report May 2018 although this does not preclude agreed improvements being made as soon as is practical
- Some parties feel that a quicker solution is needed to address the urgency of UIG issues
- A number of parties have suggested alternative approaches to UIG allocation
- More information/clarity is needed for Xoserve to assess the impact on systems/processes

Objective

- To consider all proposed solution options to change the current UIG Allocation proposals
- For each proposer to present their solution
- All parties to gain a common understanding of the proposals by raising questions and obtaining clarifications
- To ensure each solution is coherent and comprehensive
- To obtain sufficient information and clarity for Xoserve to undertake high level impact assessment
- To summarise proposed solutions and determine whether any can be de-scoped following the detailed discussion
- To identify any possible quick wins/workarounds
- To agree next steps

Ground Rules

- Keep the pace of the day to ensure that all proposals are given sufficient time for discussion
- Aim is to determine the requirements and not to pass judgement on the merits of the proposed solution
- No question is a “stupid” question
- Each proposed solution will be time boxed to a maximum of 45 minutes
- Xoserve will move the discussion on and capture any contentious questions or issues to ensure the pace of the day is maintained

Out of Scope for today

- Funding of the proposed solutions
- Benefits/business case for the proposed solutions
- Congestion within the UKLink SAP platform or Gemini change programmes
- Consequential impacts on other industry parties' systems

Workshop Approach

- The proposer of Option 1 will present the detailed requirements (5 mins)
- Each table will work together to form questions on the proposal (10 mins)
- Questions are put to the proposer from each table and clarification of the requirements is ascertained (25 mins)
- Summary of the changes to original option agreed (5 mins)
- Move onto the next Option and repeat the above steps (45 mins per Option in total)
- Xoserve to play back their understanding of the options at the end of the workshop and gain baseline agreement
- Further questions required during Impact Assessment will be directed at the proposer and then the answers published for all parties for information

Summary of Alternative Proposals

No.	Brief Description	Raised by
1	Modification of parameters used in the existing algorithm	E.on
2	UIG is fixed at the level identified by the AUGE in its latest statement and allocation error is smeared using scaling factors.	ICoSS
3	Roll back the allocation model to the old method. "Real UIG" transferred from SSP to LSP market	ICoSS
4	An existing industry body (or new 3rd party) becomes the balancer for the industry (they take all UIG volumes and then balance the market through wholesale transactions).	ICoSS

- 4 proposals have been submitted to date – are there any further proposals for consideration?

Option 1 Description

- We see an significant concern over the UIG costs and volatility for purchasing
- What should change:
 - Clarity on balancing requirements for Shippers
 - Improvement of volatility and how this is charged/reconciled
 - Improved ability for some parties to forecast the requirements
- We can resolve some of this by looking at the parameters used within the algorithm, ALP/DAF/WCF/EUC, which is possible without a UNC modification

Option 1 – Initial clarifications for Xoserve

1. What possible changes might be made to the Weather Correction Factor - WCF (any change to calculation rather than parameters)?
2. What changes might be made to End User Categories (EUCs) – number/thresholds/definitions?
3. Is a mid-year change to ALPs/DAFs (Annual Load Profiles/Daily Adjustment Factors) proposed?
4. What additional data, if any, would be required for this option?
5. What industry consultation is proposed?

Fix UIG by re-introducing the use scaling factors

Based on the proposal set out by the AUGE on 11 November 2017 to the Performance Assurance Committee, it is proposed that UIG is fixed at the level identified by the AUGE in its latest statement and allocation error is smeared using scaling factors until a high level of settlement accuracy is achieved.

1. Calculate daily UIG as a fixed percentage of throughput, based on the most recent figure available. This is 1.1%, which comes from the 2017/18 AUG Statement.
2. Put SF back into the allocation algorithm. SF should scale the allocations to “LDZ total - metered load - shrinkage - UIG”, with UIG calculated as per step #1.
3. Create a threshold point for the percentage of meter reads that have been received, at which point UIG will be recalculated using Mod 432 principles and reconciliation carried out. This threshold will have to be very high (e.g. 98%) and be in terms of both number of meters and AQ. Only when both conditions are satisfied should UIG be recalculated. Reconciliation will therefore only occur a considerable time after Day D, but the initial UIG figure will be more accurate meaning this delay will not cause any issues – reconciliation will only involve minor changes to the final value.
4. Unwind the existing incorrect cash position. Xoserve run allocation ‘method A’ from 1st June to the date of change-over. Xoserve then calculate the difference in charges between old model and new, and issue invoices or credits as appropriate to all shippers. This true up of positions is essential as shippers typically each have between £1m and £10m of misallocated gas costs from just the first 5 months of the new regime.

Option 2 – Initial clarifications for Xoserve

1. How is the Weather Correction Factor calculated – still using actual weather or revert to Pre-Nexus approach – top-down based on NDM Seasonal Normal demand?
2. How is the fixed UIG % shared out? Throughput/AQ/other? Are weighting factors still used?
3. What is the process for setting/reviewing the fixed UIG % - what is the frequency?
4. Does meter point reconciliation still apply to all MPRs – or just LSP?
5. What treatment for the opposite side of meter point recs prior to the final settlement – applied to whole LDZ/total NDM/just SSP? How does energy remain whole?
6. How is the threshold point for final reconciliation determined – how often might it change?
7. What if the threshold point is not reached before Line in the Sand – what happens?

Note: Please also see later slide for generic questions on the “unwinding” of charges for the period since June 2017

Solution B: Roll back

Roll back the allocation model to the old method. The current post Nexus allocation method was based on a sample of less than 0.1% of meters, with no live parallel running vs the old model and so the older process should not be discounted

1. *Allocation algorithm* - Xoserve re-instate old allocation method as soon as possible.
2. *Real UIG allocation* the independent expert (the AUGE) calculate real UIG at 1.11% across the market. As before this charge should be levied against meters not in the reconciliation by difference category against as a flat rate against each kwh supplied. As before once a year, this number can be verified and the charge increased or decreased accordingly. This increase or decrease can be published in line with other industry cost changes, and can be calibrated to pick up any under/ over charge from the previous period.
3. *Unwind the existing incorrect cash position* - Xoserve run old model from 1st June to the date of the roll back They can then calculate the difference in charges between old model and new, and issue invoices or credits as appropriate to all shippers. This true up of positions is essential as shippers typically have between £1m and £10m of misallocated gas costs from just the first 5 months of the new regime.

If the industry still wishes to implement a new model in the future, once analysis, data cleansing and system bedding in is complete, then any of these solutions would not prevent this.

Option 3 – Initial clarifications for Xoserve

1. How is the Weather Correction Factor calculated – still using actual weather or revert to Pre-Nexus approach – top-down based on NDM Seasonal Normal demand?
2. How is the fixed UIG charge shared out to LSPs? Throughput/AQ/other? What energy price?
3. How is the opposite entry shared out to SSPs? Throughput/AQ/other? What energy price?
4. What is the process for setting/reviewing the fixed UIG charge - what is the frequency of change?
5. How does the annual reconciliation of UIG get applied – retrospectively to the previous year or prospectively to a future year?
6. Does meter point reconciliation still apply to all MPRs – or just LSP?
7. What treatment for the opposite side of meter point recs – applied to whole LDZ/total NDM/just SSP? How does energy remain whole?

Note: Please also see later slide for generic questions on the “unwinding” of charges for the period since June 2017

Option 4 Description

Solution C: Amend new process

An existing industry body (or new 3rd party) becomes the balancer for the industry (they take all UIG volumes and then balance the market through wholesale transactions).

1. A central body is appointed (either via licence or through a tender) who is then allocated all energy offtake at an LDZ that is not allocated via the shrinkage, DM or NDM allocation processes.
2. This central body then balances its position in the wholesale market.
3. Central body estimates and then publishes annual costs
4. Costs based on this estimate are recovered from shippers, to reduce volatility done through a monthly payment to the central body.
5. Any under or over allocation from one year is rolled into next published annual costs
6. *Unwind the existing incorrect cash position.* Central body cash settles outstanding balances between annual estimate and historic allocations by Xoserve from 1st June to the date of change-over. This true up of positions is essential as shippers typically have between £1m and £10m of misallocated gas costs from just the first 5 months of the new regime.

Option 4 – Initial clarifications for Xoserve

1. How is NDM Allocation calculated – is the post-Nexus calculation retained or amended?
2. How will the central balancer be selected/appointed? What is the relationship to the System Operator and Market Operator?
3. Will the central balancer be subject to the current Energy Balancing Credit regime, e.g. provision of security, exposure monitoring?
4. What is the contingency plan in case of business failure of the central balancer?
5. Will the central balancer be part of the energy balancing regime, e.g. could they be short or long for a day?
6. How are the central balancer's costs shared out to the industry – what is the sharing mechanism; what is the billing mechanism and timeframe?
7. Does meter point reconciliation still apply to all MPRs – or just LSP?
8. How does the central balancer share out ongoing reconciliations – based on current or historic market shares? Who determines the sharing mechanism – are DMs included?
9. What data will Xoserve need to provide to the central balancer?

Note: Please also see later slide for generic questions on the “unwinding” of charges for the period since June 2017

Questions on “Unwinding” of previous charges₁₆

- Options 2 to 4 all include an “Unwinding” of previous charges
- What is the basis of calculation of these charges?
- Are the DM estimates also corrected through this process?
- Are there any changes to energy balancing charges?
- How do these corrections interact with meter point reconciliations that have/will happen?
- Is a freeze required to all subsequent meter point reconciliations?
- What payment terms apply to these unwinding invoices and what impact on indebtedness/security?
- Does this have to be agreed/delivered at the same time as the chosen prospective option?

**Are there any quick
wins/workarounds?**

**Do we want to de-scope any of the
solutions now we know more
detail?**

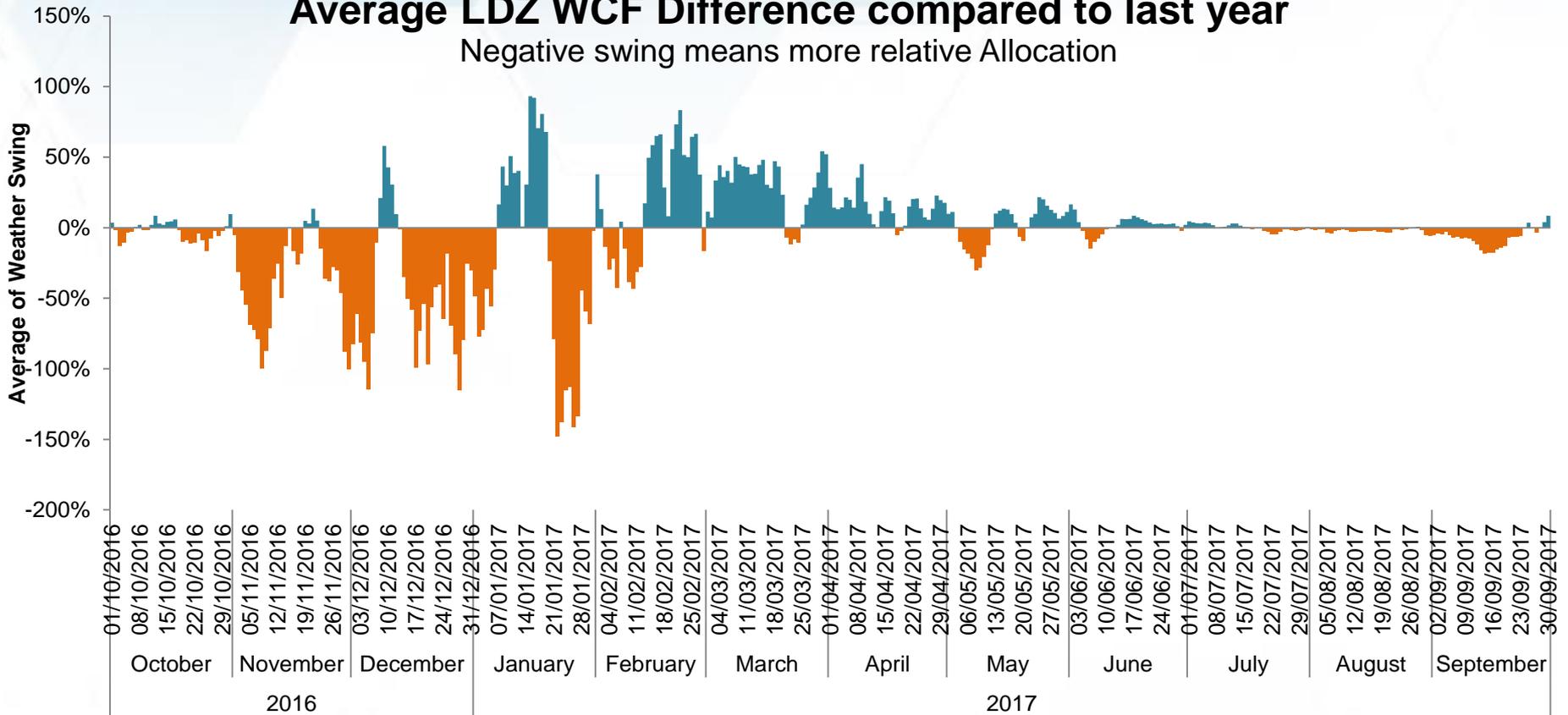
- Meeting to be arranged for Xoserve to feedback high level impact assessments week commencing 20 November
- Discussion on pros/cons of each proposal in order to obtain a preferred option to move forward with
- What Governance process should be followed?

- Contents:
 - Comparison of weather for gas years 2015/16 and 2016/17
 - Comparison of September weather for both gas years
 - Graph of total national allocation comparing 2016/17 Gas Year to previous
 - This analysis excludes NTS sites.
 - The key drivers for large differences to the previous year are differences in weather.
 - UIG apportionment is seasonal. UIG share is based on throughput and the LSP market is typically less weather sensitive than the SSP market, so the LSP sites attract a larger proportion of their annual throughput - and therefore a larger proportion of their annual UIG - over the summer. This trend will likely reverse over winter.
 - Monthly trend analysis – value and percentage of throughput

Weather Difference to Last Year

Average LDZ WCF Difference compared to last year

Negative swing means more relative Allocation

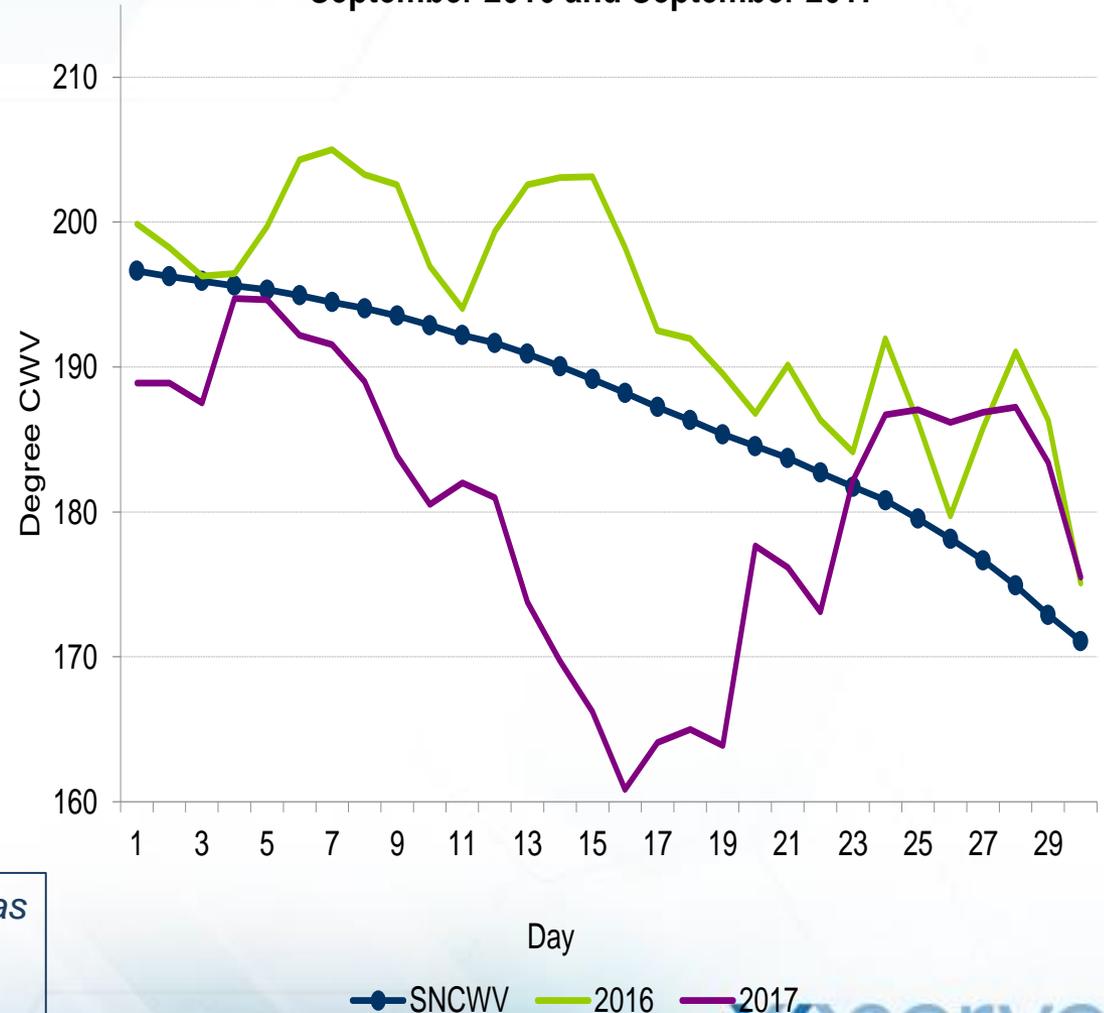


Below 0, i.e. brown = 16/17 is colder than previous year, more gas consumed
Above 0, i.e. blue = 16/17 is warmer than previous year, less gas consumed

September Weather Difference from Y-1

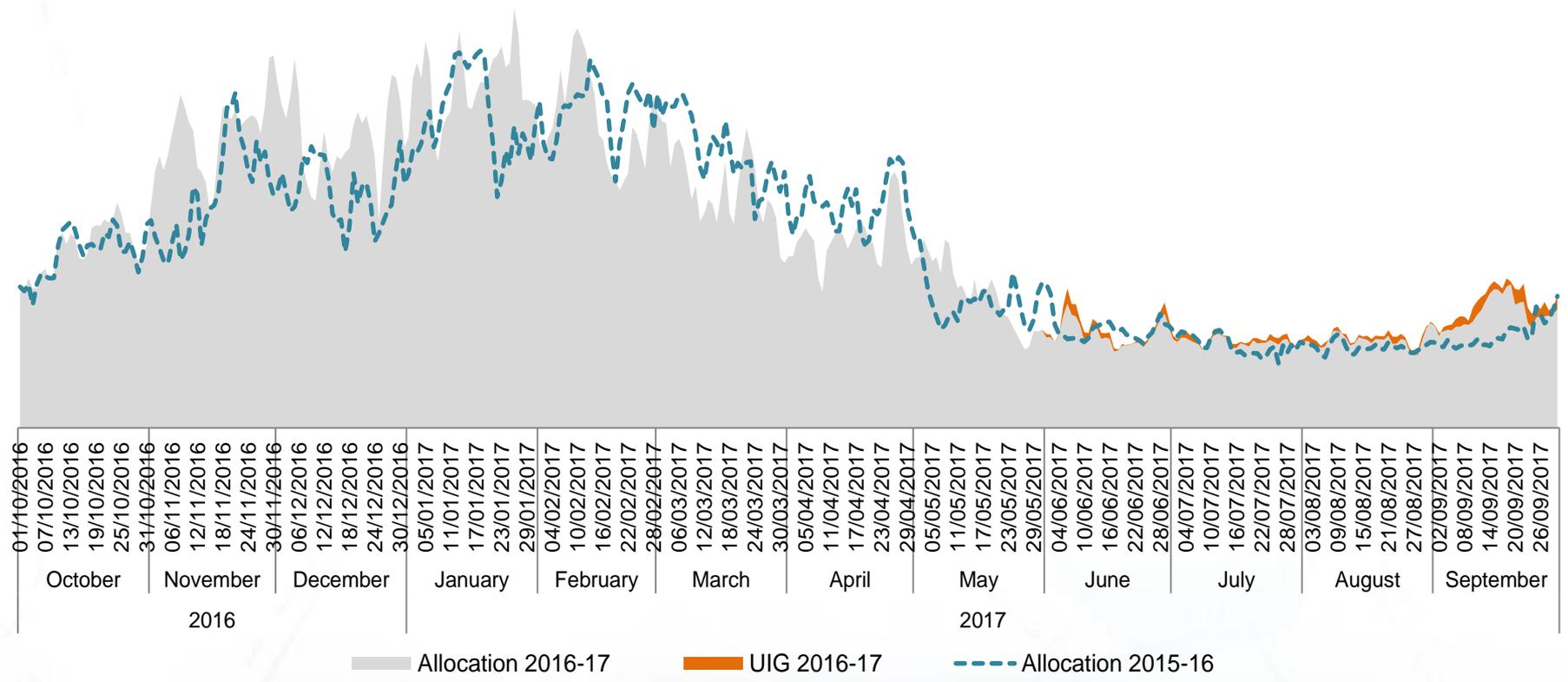
- The following slides show a material allocation increase in September 2017 compared to 2016.
- September 2016 was around 9% warmer than seasonal normal, but September 2017 was around 9% colder.
- Between September 12th and 20th 2017 it was, on average, 41% colder than the previous year.
- A large swing in weather in a seasonal transition month can result in a step change in consumer behaviour and therefore a sharp increase in allocation.

Comparison of SNCWV and CWV for September 2016 and September 2017

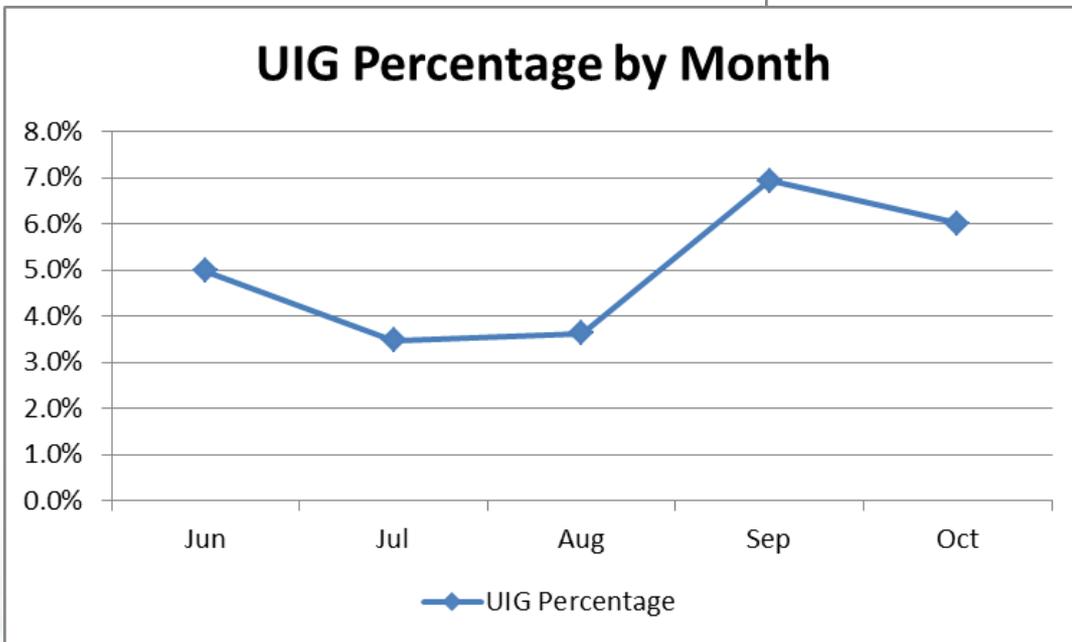
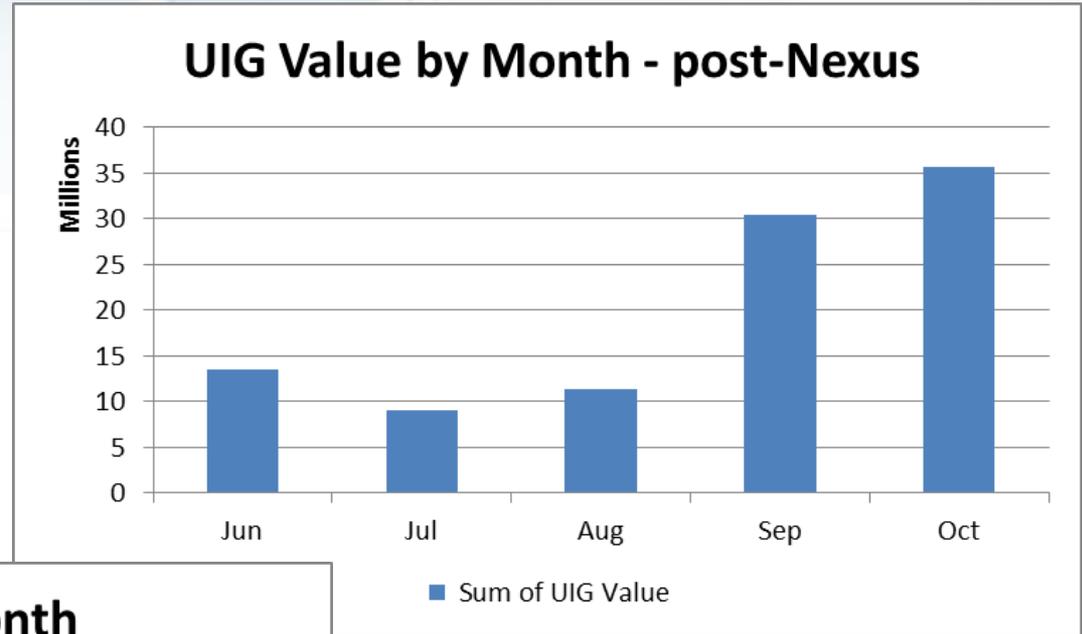


CWV = Composite Weather Variable (gas industry weather measure)
SNCWV = Seasonal Normal CWV

Allocation Compared to Last Year with UIG - Market



- *Note: UIG is NOT additional gas in the LDZs but gas which would previously have been allocated to DM or NDM sites under pre-Nexus rules*



- *Average for the five full months to date:*
 - *UIG £19.9m per month*
 - *UIG 5.2% of throughput (volume)*
- *Overall throughputs are consistent with prior year, when adjusted for weather*