XServe

SWOT Analysis

Captured in UIG – High Level Impact Assessment Workshop 22nd November 2017

OPTION 1A – Code Fix

- Change in frequency In order for Gemini to accept multiple changes (ALPs, DAFs or SNCWV) for the same gas year, a code fix is required
- EUC Change The EUC bands are received in Gemini via the internal S03 file, Gemini will be able to load the new EUC bands, however, may need a code change to modify the cut-off values for the existing EUC bands
- Changes to UKLINK Introduction of new WAR BAND and EUC's in system, revisit EUC allocation, winter consumption and EUC. File formats
 need to be validated in terms of ranges allocated.
- A code change is needed to display effective start date and end date

Strengths

- Repeatable
- UIG is visible/transparent
- Can reduce UIG
- Relatively quick
- Improves nominations
- Addresses underlying cause
- Can do other things as well

Opportunities

- Allows future changes as well
- Could do retrospection
- Need to do anyway
- Works for nominations too
- Need to define success criteria
- Get more engagement at DESC
- Proposer suggests 2%

Weaknesses

- Detracts from other solutions e.g Resources, Demand Estimation stream, and other streams.
 - Demand Estimation stream mainly involved in the analysis work behind option 1.
- There could still be volatility
- Very weather focused
 - Could be made into an opportunity to include non-weather sensitive factors
- No answers yet not certain
 - Can be modelled through offline tools and applied retrospectively
- Not enough data 5 months

Threats

- No dry run or parallel testing
 - Can do offline modelling allocations to show how/ what is being changed by using established tools
- Will it work?
- Needs governance
 - There are industry processes in place could see this as an opportunity for a wider audience.
- · Won't be ready before the end of winter
- Analysis going to DESC in mid Dec
- Acceptance criteria?
- A need for Test environment
 - Availability of test environment and funding of environment agreed this applied to all solutions requiring industry testing.
- Risk to AQ allocation by changing ALPs and DAFs

OPTION 1B

- Change in frequency In order for Gemini to accept multiple changes (ALPs, DAFs or SNCWV) for the same gas year, a data fix is required
- EUC Change The EUC bands are received in Gemini via the internal S03 file, Gemini will be able to load the new EUC bands, however, may need a data fix to modify the cut-off values for the existing EUC bands
- Changes to UKLINK Introduction of new WAR BAND and EUC's in system, revisit EUC allocation, winter consumption and EUC. File formats
 need to be validated in terms of ranges allocated.

Strengths

- UIG is visible/transparent
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Opportunities

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OPTION 2A

- New mechanism to parameterise the fixed UIG percentage which is calculated as a fixed percentage of throughput
- Calculate WCF using the pre-Nexus calculation, this may require the internal S04 file which was de-commissioned as part of Nexus
- The existing interfaces on CWV and SNCWV and SNCWV data flow from Gemini to Data warehouse will have to be de-commissioned
- Changes to charge calculation to put a flag at MPRN level if read or not
- Changes to smearing process post reconciliation process in UKLINK to smear the unallocated gas volumes against unread meter points
- UIG % to be re-assessed by the Expert each year
- Equal and Opposite of all individual reconciliations is shared to all meter points which have not had a meter reconciliation [in that Billing Month] in line with latest actual throughput and UIG Weighting Factors
- Loading a meter read in the month (i.e. read passes validation tolerances) exempts the site from a share of UIG Rec (whether positive or negative)
- Additional performance testing required to determine whether there is an impact to reconciliation processes

 Strengths UIG is stable and consistent with AUGE model Well-developed solution Focused UIG on NDM market if that is where the issues are Reduce up front volatility Incentivises read submission Polluter pays i.e. those organisations adding to the estimation error 	 Weaknesses Benefit not guaranteed/quantified Particularly on how allocation will be different. Agreed that this applied to all solutions across the board that more work was required on all. Doesn't address underlying causes of volatility [Anti-competitive] Clarification sought from the room – but no comments were forthcoming. Uncertain smear values – can read meters to mitigate risk DM sites rec once a year, business rules need to be understood, how many times in a month read comes in to qualify needs to be defined. Riskier + longer lead time than opt 1 UIG is less visible Could be argued to be more clear currently mixed up with estimate error.
 Opportunities Assurance on the AUGE values – robust Question can we link to solution 1A Incentivises smart rollout Incentivises better read performance 	 Threats Impact on existing releases of UKlink –prioritisation needed from industry Governance UNC MOD timescales options to expedite Can we revert if it doesn't work? Rollback possible as a design option but will make solution more expensive Change required to AUGE scope?* Viewed as an extra deliverable instead Last man standing approach to UIG Mitigated by 98% threshold/ annual revisit - should prevent the situation of a small number being allocated a large amount of error. Risk of challenges to rec share due to read errors Build into solution Disincentive to take on NDM sites* Alternatively can be seen as a disincentive to not read meters.

OPTION 2B

- New mechanism to parameterise the fixed UIG percentage
- Calculate the daily UIG as a fixed percentage of throughput
- NDM nomination and allocation to follow top down approach
- Calculate WCF using the pre-Nexus calculation, this may require the internal S04 file which was de-commissioned as part of Nexus
- The existing interfaces on CWV and SNCWV will have to be de-commissioned
- The CWV and SNCWV data flow from Gemini to Data warehouse will have to be de-commissioned
- Changes to charge calculation to put a flag at MPRN level if read or not
- Changes to smearing process post reconciliation process in UKLINK to smear the unallocated gas volumes against unread meter points
- UIG % to be re-assessed by the Expert each year (once [98%] of meters had been reconciled)
- Equal and Opposite of all individual reconciliations is shared to all meter points in line with latest actual throughput and UIG Weighting Factors

 Strengths UIG is stable and consistent with AUGE model Well-developed solution Focused UIG on NDM market if that is where the issues are Reduce up front volatility Easier to understand Straight forward 	 Weaknesses Benefit not guaranteed/quantified Particularly on how allocation will be different. Agreed that this applied to all solutions across the board that more work was required on all. Doesn't address underlying causes of volatility [Anti-competitive] Clarification sought from the room – but no comments were forthcoming. Uncertain smear values – can read meters to mitigate risk DM sites rec once a year, business rules need to be understood, how many times in a month read comes in to qualify needs to be defined.
Opportunities Assurance on the AUGE values* - Robust 	 Threats Impact on existing releases of UKlink –prioritisation needed from industry Governance UNC MOD timescales options to expedite Can we revert if it doesn't work? Rollback possible as a design option but will make solution more expensive Change required to AUGE scope?* Viewed as an extra deliverable instead

OPTION 4A

- An industry body or new 3rd party becomes the central balancer (they take all UIG volumes and then balance the market through wholesale transactions).
- Setup Central Body as a Shipper with all UIG rec happening outside system
- The central body can participate in OTC trades and view its own position, no change required to Gemini
- Using an existing prohibits the Central body from viewing the Shippers balances, unless they are set up as a User Agent.
- No change to current UIG billing process UIG rec is billed to Shippers those who use the central body make an equal payment/credit to the central body.

Strengths

- Stabilise UIG improve cash flow
- Limited Gemini changes
- Can opt out
- Certainty rather than cost reduction
- Helps those who are struggling at their cost
- If whole market -quick, efficient, fair*
 - Only makes sense if whole market no value in a part solution

Weaknesses

- Not whole market
- Unknown cost to industry
- Doesn't address underlying issues moves the problem
- Not cost reflective i.e. not polluter pays
- What are opt out rules
- No meter read incentive
- What if no-one participates?
- Compliance with remit
 - Needs to be addressed during regulatory/commercial analysis.
- Time to setup central balancer
- What if no-one wants to be the central body
- What if they go bust?
- Uncertain solution need more detail
- Adds costs into the market which will be recovered from customers
- · Would need to be positive financial benefits compared to operational cost vs exposure
- How can this work without the central body seeing shipper UIG
 - Can be mitigated through design

Threats

- Unknown take up
- Time to setup/ produce body
- Impact on credit process not clear
- How is it paid for?*
 - Uniform pence per kwh running costs, start up costs different if experienced party responsible already for this/someone new.
- Needs to be a 24/7 service *
 - Relates to costs of service cost/benefit
- How do they trade on OCM? *
 - · Business rules need to be clear
- What about shipper costs?
 - Pay for something you need less each time
 - When people opt out as position is improved it is dearer for the remainder

Opportunities

- Mandate for whole market
- Still needs testing
- Could link to system operator
- Only users need to pay
- Combined national position
- Look for parallels in power industry

OPTION 4B

- An industry body or new 3rd party becomes the central balancer (they take all UIG volumes and then balance the market through wholesale transactions).
- Setup Central Body as a new role
- The central body in addition to participating in OTC trades and viewing its own positions, can also view the Shippers balances who have opted in for this service.
- There will be a new security role required in Gemini each time a Shipper opts in or out of this service.
- UIG Rec energy for Shippers who use the central body is billed to the Shipper via Amendment invoice but then credited & rebilled to the central body by Xoserve via an off-line process.

Strengths

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- Limited Gemini changes
- Can opt out
- Certainty rather than cost reduction
- Helps those who are struggling at their cost

Weaknesses

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- Compliance with remit
 - Needs to be addressed during regulatory/commercial analysis.
 - Time to setup central balancer
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- Uncertain solution need more detail
- Adds costs into the market which will be recovered from customers
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Threats

- Unknown take up
- Time to setup/ produce body
- Impact on credit process not clear
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Opportunities

- Mandate for whole market
- Still needs testing
- Could link to system operator
- Only users need to pay
- Combined national position
- Look for parallels in power industry

OPTION 5

- An industry body or new 3rd party becomes the central balancer (they take all UIG volumes and then balance the market through wholesale transactions).
- Gemini Setup from 4a/4b selected as required
- Participation is mandatoryfor all shippers

Strengths

- Stabilise UIG improve cash flow
- Limited Gemini changes
- Certainty rather than cost reduction
- Quick, efficient, fair

Opportunities

- Mandate for whole market
- Still needs testing
- Could link to system operator
- Only users need to pay
- Combined national position
- Look for parallels in power industry

Weaknesses

- Unknown cost to industry
- Doesn't address underlying issues moves the problem
- Not cost reflective i.e. not polluter pays
- No meter read incentive
- Compliance with remit
 - Needs to be addressed during regulatory/commercial analysis.
- Time to setup central balancer
- What if no-one wants to be the central body
- What if they go bust?
- Uncertain solution need more detail
- Adds costs into the market which will be recovered from customers
- · Would need to be positive financial benefits compared to operational cost vs exposure
- What is the benefit to bigger player already able to mitigate risk for themselves?

Threats

- Time to setup/ produce body
- Impact on credit process not clear
- How is it paid for?*
 - Uniform pence per kwh running costs, start up costs different if experienced party responsible already for this/someone new.
- Needs to be a 24/7 service *
 - Relates to costs of service cost/benefit
- How do they trade on OCM? *
 - Business rules need to be clear -
- What about shipper costs