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Project Nexus Workgroup

Reconciliation Meeting 1



Contents

- Background and Context
- Objectives of the Workgroup
- Objectives of this meeting
- Recap on High-level Principles
- Initial areas for discussion

Background

- PN UNC Workgroup April meeting agreed to commence work on gathering requirements for remaining topics following SMIP announcement
- Reconciliation is next logical topic, now that Settlement rules are well-developed

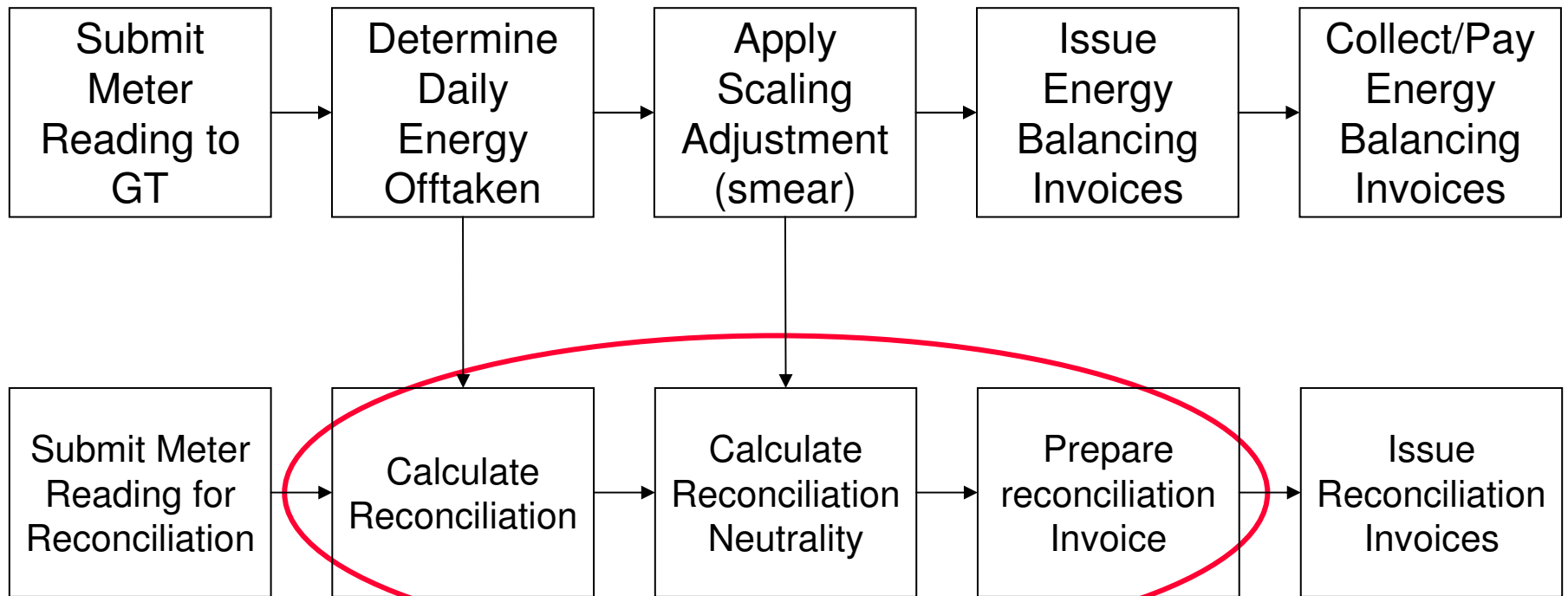
Objectives of the Workgroup

- Determine detailed business requirements for future Reconciliation of all Supply Points
- Consider the comments raised in the Initial Requirements Register and either include in future requirements or agree to close
- Provide sufficient definition around business rules to:
 - Enable the proposed requirements to be incorporated in xoserve's investment decisions, and
 - Support the raising of any UNC Modification Proposals, if required

Approach to Workgroup

- High level principles already defined under “Reconciliation” topic
- Need to revisit/validate the principles as first step
- Ensure interactions with Settlement are correct and complete
- Need to continue to monitor and align with Smart outcomes

Scope of “Reconciliation”



Scope of “Reconciliation”

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Recap on High-Level Principles

- Preferred option was for daily settlement with reconciliation as an exception process
 - This is still a longer term aspiration for some participants
- Alternative was for daily or periodic rec
- Aspiration to reduce/remove Filter Failures
- Proposal to apply rollover tolerance to reconciliations

Current Scope of Reconciliation

- Daily Metered sites
 - Correction of energy apportionment after a period of estimates
 - Apportionment of Drift identified at a resynch
- Non Daily Metered
 - Apportionment of Actual Energy following receipt of periodic read

Separate discussions required on Drift

Focus of this presentation

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NDM Reconciliation – What Scenarios

- Where Periodic Reads are the Norm
 - Reconcile back to last read received – against allocated energy for a number of days
- Where Daily Reads are the Norm
 - Scenario 1 – all daily reads are received
 - Scenario 2 – reads are received with gaps – within or between batches

Initial Areas for Discussion

- Periodic reconciliation
- Roll-over tolerances
- Daily reconciliation
- Filter Failures
- Reconciliation Neutrality

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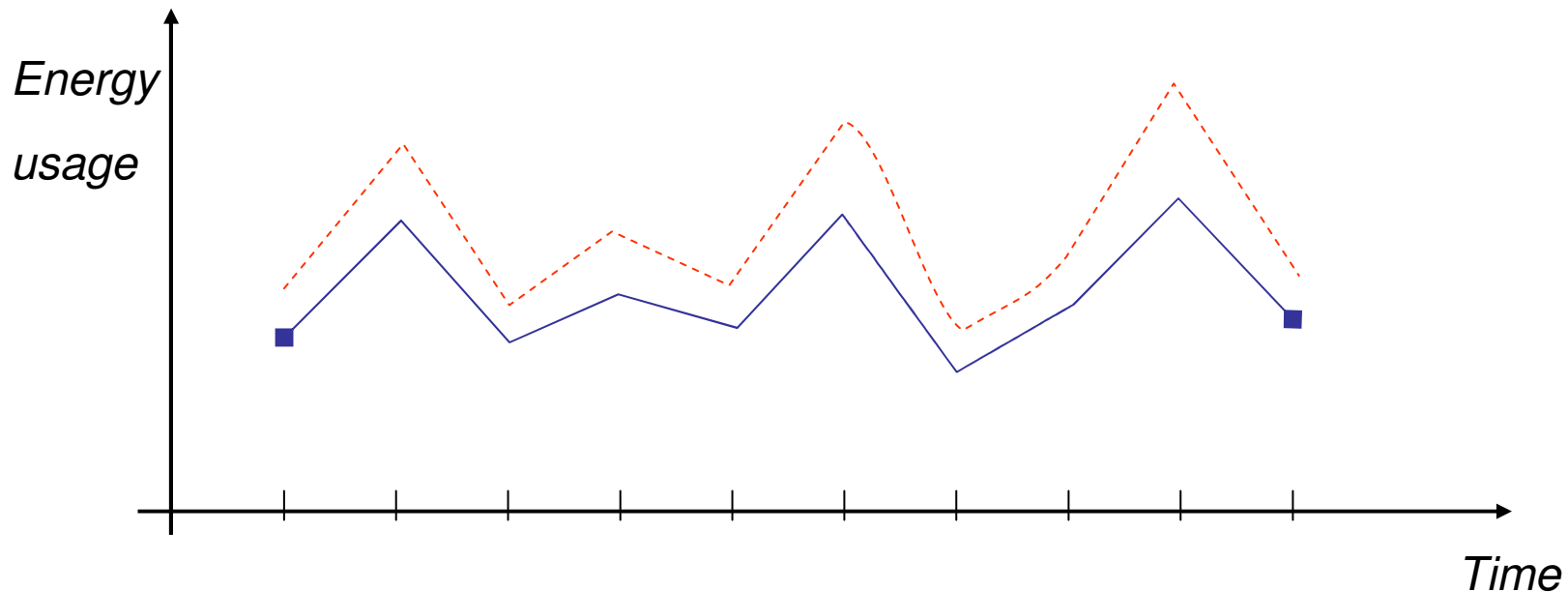
Periodic Reconciliation



Current Principles of NDM Reconciliation

- Reconciliation Energy must be attributed to individual days, although reads cover a number of days
- Why?
 - Know what daily SAP rates to apply
 - Know what transportation rates to apply
- How?
 - Using the NDM (LPA Factors) reconciliation energy is apportioned in same “shape” as original allocation
 - Daily estimated reads are **not** required

Apportionment of Actual Energy for a Period

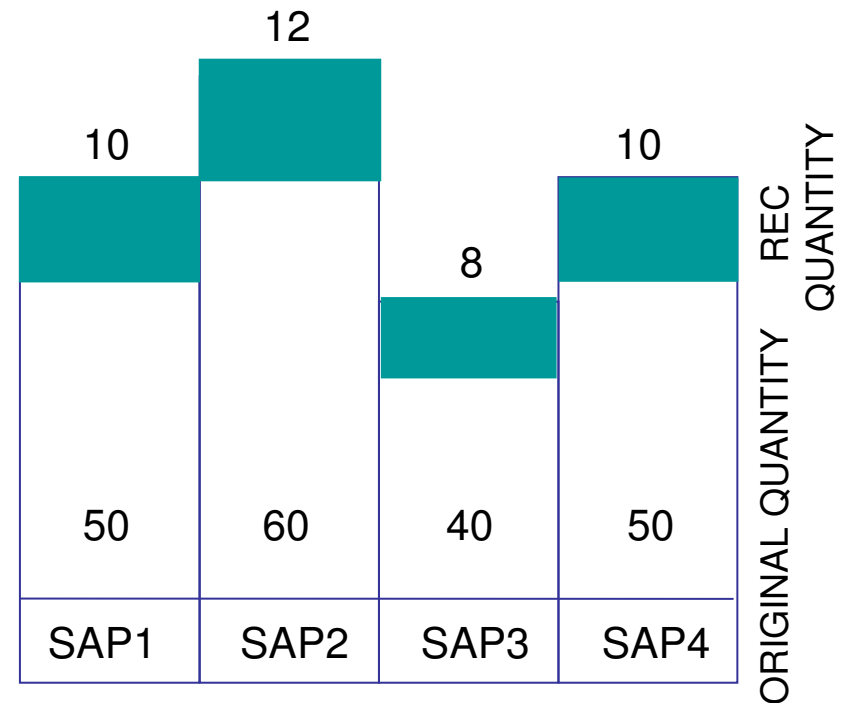


- Use of factors apportions energy in same daily “shape” as original allocation
- More Rec energy on higher allocation days
- Factors are specific to LDZ and End User Category

- *Actual reads*
- *Original Allocation*
- - - *Reconciliation Energy*

Treatment of Reconciliation Energy

- Higher allocation days receive higher reconciliation energy
- Individual daily read estimates are not required for this approach
- Achieved through use of Reconciliation Factor and LPA Factors



REC QUANTITY = 40

ORIGINAL QUANTITY = 200

REC FACTOR = 0.2

DAILY REC QUANTITY = $40/200 * \text{ORIGINAL DAILY QUANTITY}$

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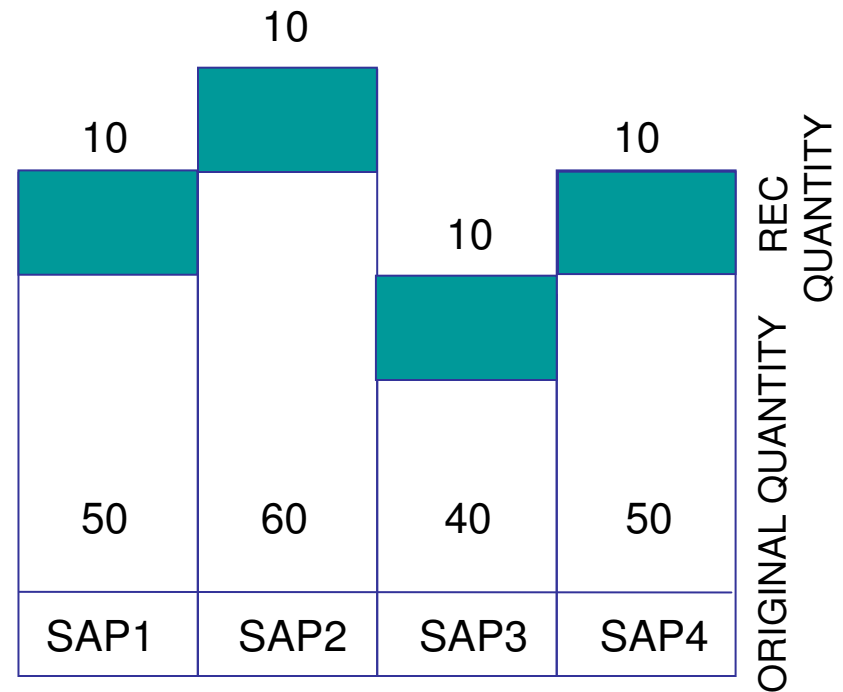
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Options for Reconciliation

- Are there any alternative approaches required for periodic reconciliation?

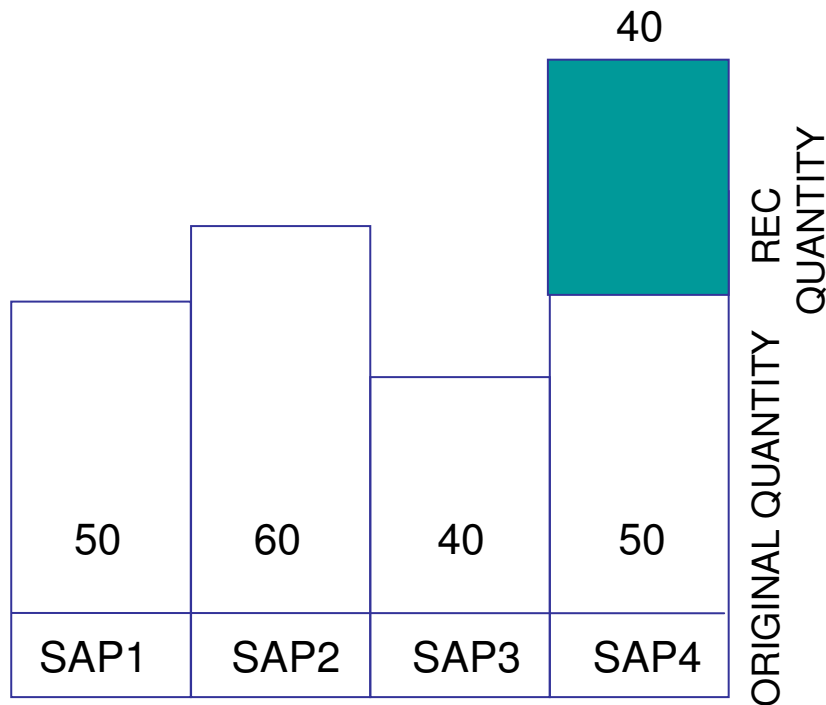
Treatment of Reconciliation – Other Options

- **ALTERNATIVE 1 –**
Straight line method –
additional energy
divided across days in
period
 - Simpler to calculate
and understand
 - Takes no account of
usage
patterns/allocations



REC QUANTITY = 40
DAYS IN PERIOD = 4
DAILY REC QUANTITY = 40/4

Treatment of Reconciliation – Other Options



REC QUANTITY = 40
ORIGINAL QUANTITY = 200
DAILY REC QUANTITY = 40 (final day)

- **ALTERNATIVE 2 – Last Day method – apply all energy to last day in rec period**
 - Simpler to calculate and understand
 - Takes no account of usage patterns/allocations

Treatment of Reconciliation – Other Options

- **ALTERNATIVE 3** (Could combine with other alternatives)
 - Only reconcile energy
 - Commodity element not reconciled – due to immateriality
 - Halves the number of transactions and invoices

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Reconciliation - Rollover Tolerances

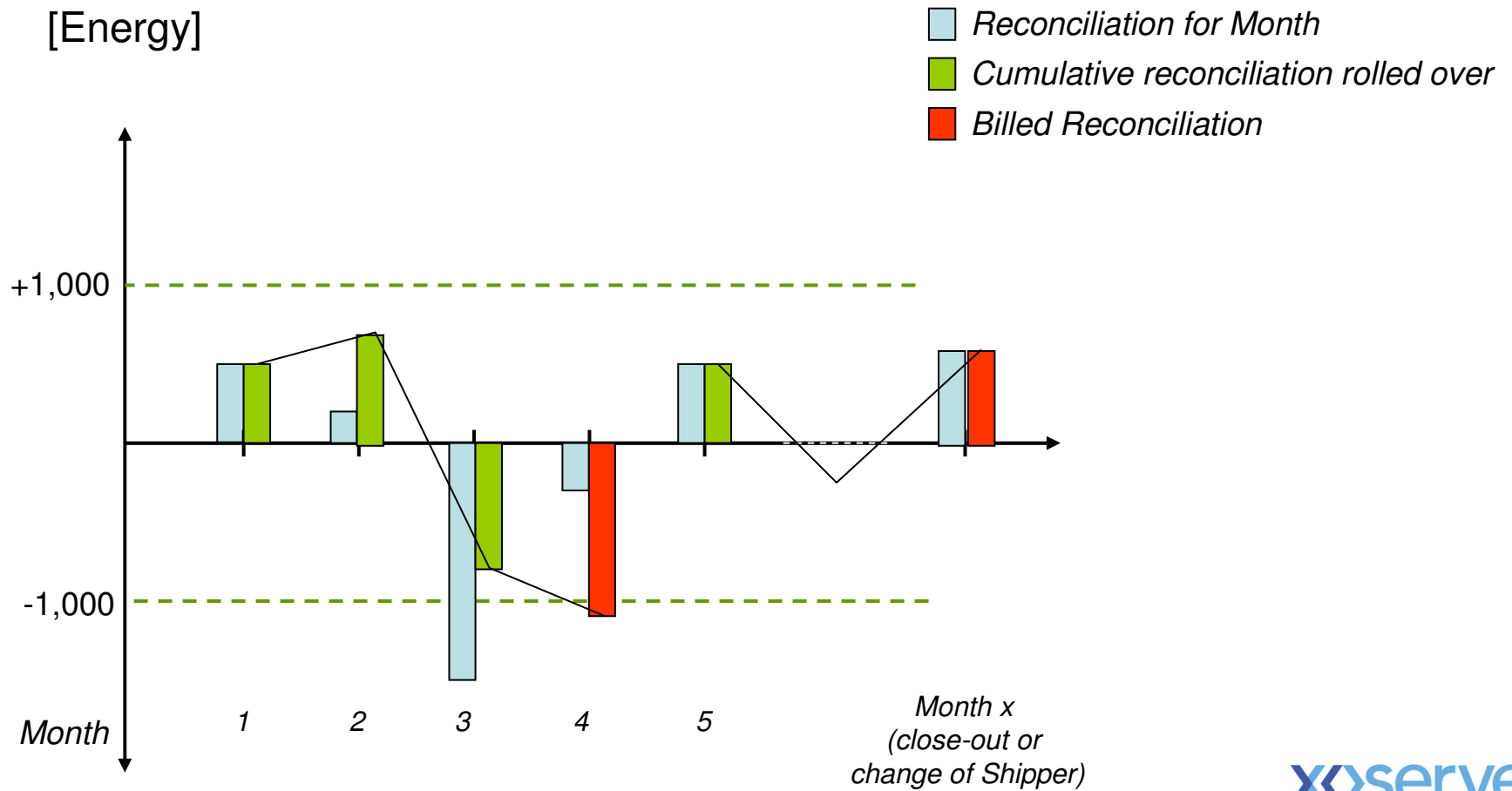


Rollover Tolerances

- Proposal to apply rollover tolerance to reconciliations in High-Level Principles
- Low value reconciliations are not invoiced but rolled over until total balance exceeds a tolerance
- Reduces number of low-values invoices/charges

Application of Tolerances - Example

Reconciliation
[Energy]



Example of a 1,000 kWh roll-over tolerance for invoicing
Values based on worked example in High Level Principles document

Tolerances – Business Rules Required

- Selection of Parameters
 - £ energy/transportation/combined
 - kWh value
- Setting of parameters
 - By AQ band?
 - By usage type?
- Treatment of any rolled over amounts at close-out

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Daily Reconciliation



Daily Reconciliation – Process 3

- Process 3 – daily estimation followed by batches of daily reads
- Scenario 1 – All daily reads received
 - What rules for tolerances?
 - Any simplification options to reduce complexity?

Daily Reconciliation – Process 3

- Scenario 2 – Gaps between batches or within batches
 - Any difference from Process 4 reconciliations
 - periodic reads?
 - Any simplifications to apply?
 - What rules for tolerances?

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Reconciliation Filter Failure Regime



Current Filter Failure Regime

- NDM Reconciliations currently subject to tolerance check and possible suppression prior to release
 - User Suppressed Reconciliation Values - USRVs
- Current tolerances applied to LDZ Commodity charges per day
 - E.g. 47p per day debit or credit in Bands 1 & 2
- Shipper must investigate and correct/ approve prior to invoicing

Filter Failure Regime – Pros and Cons

- **Benefits**

- Individual Shippers protected from large erroneous values
- Industry protected from opposite impacts of erroneous values
- Current Commodity based regime easily understood
- Fallback to GT after 30 months

- **Drawbacks**

- Delay to processing of reconciliation while suppressed
- Time required to investigate and correct
- Incentives required to ensure timely investigation
- Need to review limits every time transportation rates change

Current Tolerance Levels

Supply Point AQ Band (kWh)	Daily LDZ Commodity charge from 1/10/08 (debit or credit - £)
73,200 -292,999	0.47
293,000 -731,999	0.47
732,000 -2,195,999	0.91
2,196,000 -5,859,999	1.32
5,860,000 -14,649,999	1.75
14,650,000 -29,299,999	1.75
29,300,000 -58,599,999	1.75
58,600,000 +	1.75

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Filter Failures – Areas for Consideration

- Is a suppression mechanism still required prior to invoicing? (*Recommendation – yes*)
- What basis for suppression - £/ kWh
- Any changes to incentives
- Any changes to fallback arrangements?
- Need to define framework and nature of parameters – *actual values not required yet?*

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Treatment of Reconciliation Neutrality

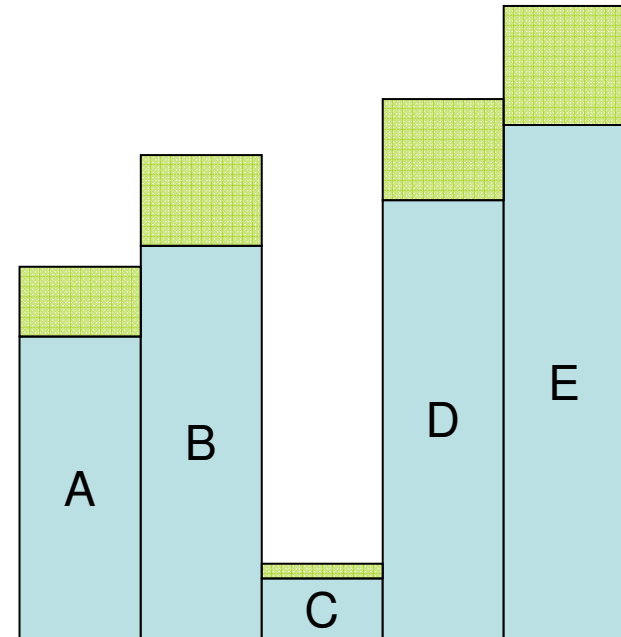


Reconciliation Neutrality

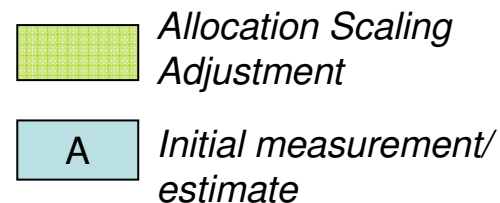
- Principles included aspiration to move away from RbD
- Energy must still be kept whole following each reconciliation
- Allocation Scaling Adjustment shares out unidentified gas each day
- Reconciliation changes the amount of unidentified gas – “Reconciliation Neutrality”

Initial Energy Allocation

- Unidentified energy shared out at Shipper level – not site level
- Shared in proportion to initial measurements/allocations

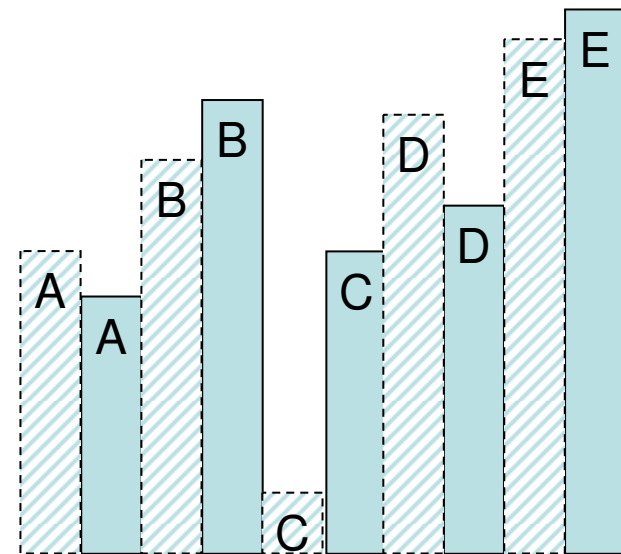


Shippers A to E



Reconciliation Energy

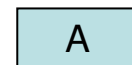
- Reconciliation may be +ve or -ve
- Changes the unidentified energy position
- Need to change each Shipper's Scaling position following any reconciliation



Shippers A to E



Original Allocation



Reconciled Energy

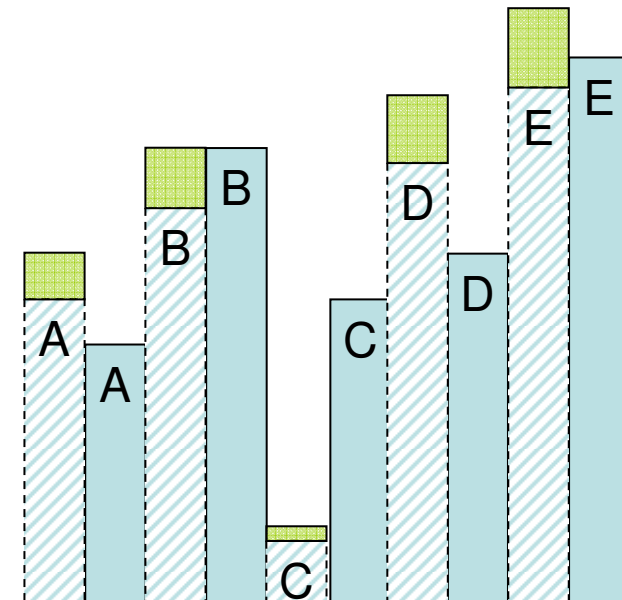
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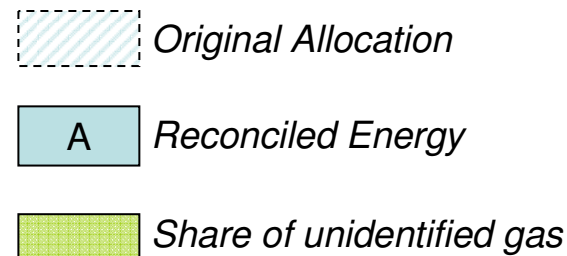
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Treatment of Scaling after Reconciliation

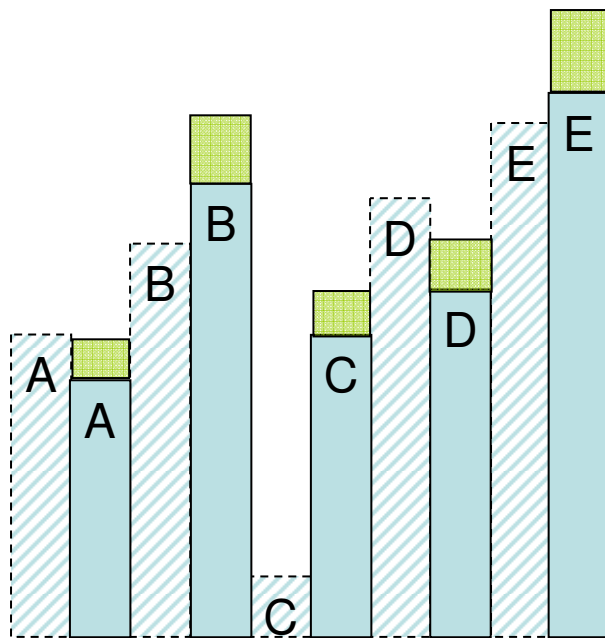
- OPTION 1 – recalculate share of unidentified gas based on original proportions
- Minimal change in amounts from first allocation
- Takes no account of erroneous initial measurements



Shippers A to E

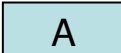


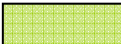
Treatment of Scaling after Reconciliation



Shippers A to E

 *Original Allocation*

 *Reconciled Energy*

 *Share of unidentified gas*

- OPTION 2 - recalculate share of unidentified gas based on latest measurements/ estimates proportions
- Corrects for errors in initial measurements
- Share of unidentified gas may be more volatile

Treatment of Scaling after Reconciliation

- Xoserve recommendation
 - Base the share of unidentified gas on latest measurements (Option 2)
 - More complex calculation
 - More volatility
 - **But** removes any “incentive” to understate initial measurement/estimates
- Billed at Shipper level – what rate of transportation is applied?