Understanding **ELECTRICITY INFORMATION EXCHANGE PROTOCOLS (EIEPs)**

Trader and Distributor Forum

9 February 2017

Overview

- EIEPs originally provided a set of standardised formats for regular exchange of information between distributors and traders
- Expanded to include EIEPs associated with “Retail Data Project” for exchange of information with consumers and their authorised agents, and third party service providers
- EIEPs1-3 and 12 are regulated and must be used unless trader and distributor opt out in their UoSA
- Standing Data Formats Group (SDFG) advises the Authority on changes to existing EIEPs and new EIEPs
- Can be transmitted by any means but registry EIEP hub transmits them automatically and securely

Regulated EIEPs

- EIEP1-3 NHH and HHR information supports billing and reconciliation of network charges (1/11/14)
- EIEP12 Pricing information to accompany network price change notifications (1/12/11)
- EIEP13A-13C Request and provision of detailed and/or summary consumer's consumption information (1/2/16)

Non-regulated EIEPs (to be used if agreed)

- EIEP4 - Customer information, snapshot or incremental, network management purposes only
- EIEP5 Service interruption information by ICP
  - EIEP5A – planned service interruption ICP list, proposal to regulate soon to be consulted on
  - EIEP5B – unplanned service interruption ICP list
- EIEP6 faults and retail service work initiation, status update and closure
  - EIEP6A – faults (retailer-distributor)
  - EIEP6B – retail service work requests (retailer-third party which may be distributor)
- EIEP7 – Installation connection status changes
  - primarily of value for status changes not reflected on registry (e.g. temporary disconnections where distributors take fault calls)
- EIEP8 – Price category and tariff changes
  - limitation is reliance on NOT file for 'handshake' to confirm change accepted and registry updated
  - nothing in protocol for distributor to advise of any changes it wishes to reject (and reason) or query (and what information it is seeking), typical response is non-standard email or spreadsheet or worse still not actioned when retailer follows up
  - some distributors update registry only where they have initiated change (e.g. upgrade/downgrade where distributor involved) and fail to send EIEP8
- EIEP9 – Installation physical location address changes
- EIEP11 – New connections
  - SDFG has proposed removal as not used
- EIEP14 - Generally available retail tariff plan information which retailer may use when responding to a request from a third party service provider

EIEP1 NHH reporting methodologies

- As billed
- Incremental normalised
- Replacement normalised
- Incremental replacement normalised

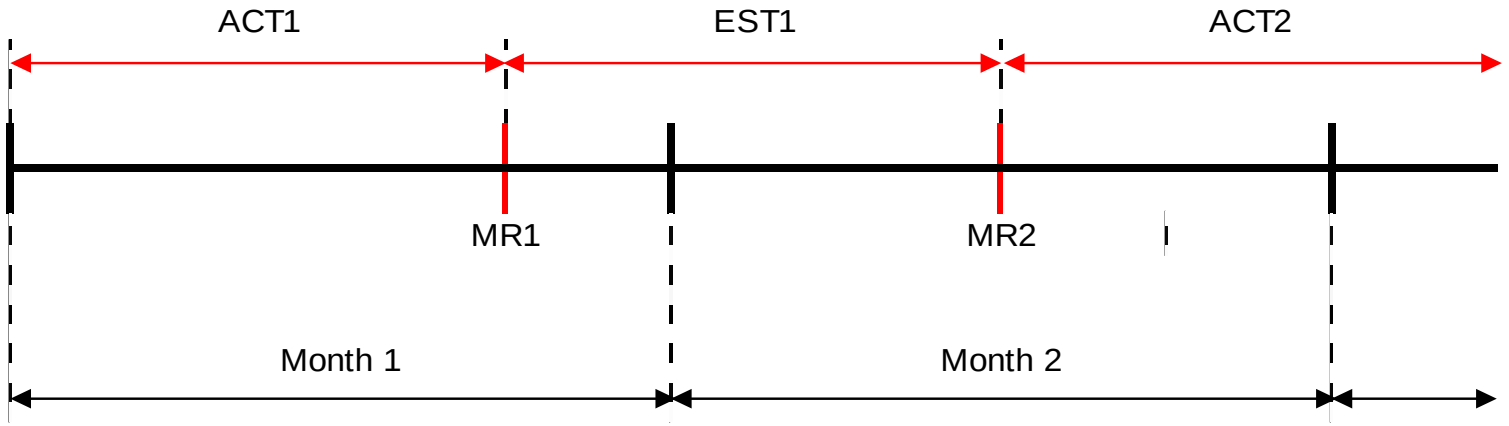
EIEP1 NHH reporting methodologies

- Reporting methodology must be agreed and specified in the UoSA
- Incremental normalised preferred by most smaller distributors, replacement normalised preferred by most larger distributors
- Mixing methodologies problematic, particularly if data used to monitor losses or for ‘scaling’
- Transition from one methodology to another can be complex, pragmatic solution may be required
- Case may be emerging for single normalised methodology (replacement normalised)
- Distributors typically use registry for fixed charges, and EIEP1 or GR-250 (from RM) for variable charges
- Retailers must provide EIEP1 files compliant with agreed methodology where required for billing of network charges
  - Network prices will be repackaged if not predictable and billable
  - Most distributors with GXP pricing require EIEP1 in addition to GR-250 to calculate low user variable charges
  - Billing methodology that includes ‘scaling’ will require GR-050 (from RM) in addition to EIEP1
- Distributors must provide EIEP1 files (EIEP2 for variable charges if GXP pricing) for retailers to reconcile network charges at detailed level, EIEP1/2 $ total must align with network invoice $ total

As Billed

- Settlement of fixed and variable network charges based on what retailer has billed customers, whether network charges have been billed explicitly (unbundled on bills) or implicitly (bundled on bills)
- Only option for conveyance arrangements where retailer is billing as agent
- Network prices must be billable without requiring repackaging or wash-ups
- Network price schedule must include prices before and after PPD, settlement based on prices after PPD
- Unbilled ICPs with an ‘Active’ registry status for any part of the report period are represented by a single detail record per ICP, with UB (unbilled) as the ‘meter read status’ and all other mandatory fields left blank
- Where an ICP has been vacant but has an ‘Active’ status on the registry, the ‘start date’ reported in an as billed file must be the start date of the new customer contract
- All under or over-estimates and prior period events are corrected in future reporting periods by reflecting the corresponding correction applied to the customer’s bill

As Billed



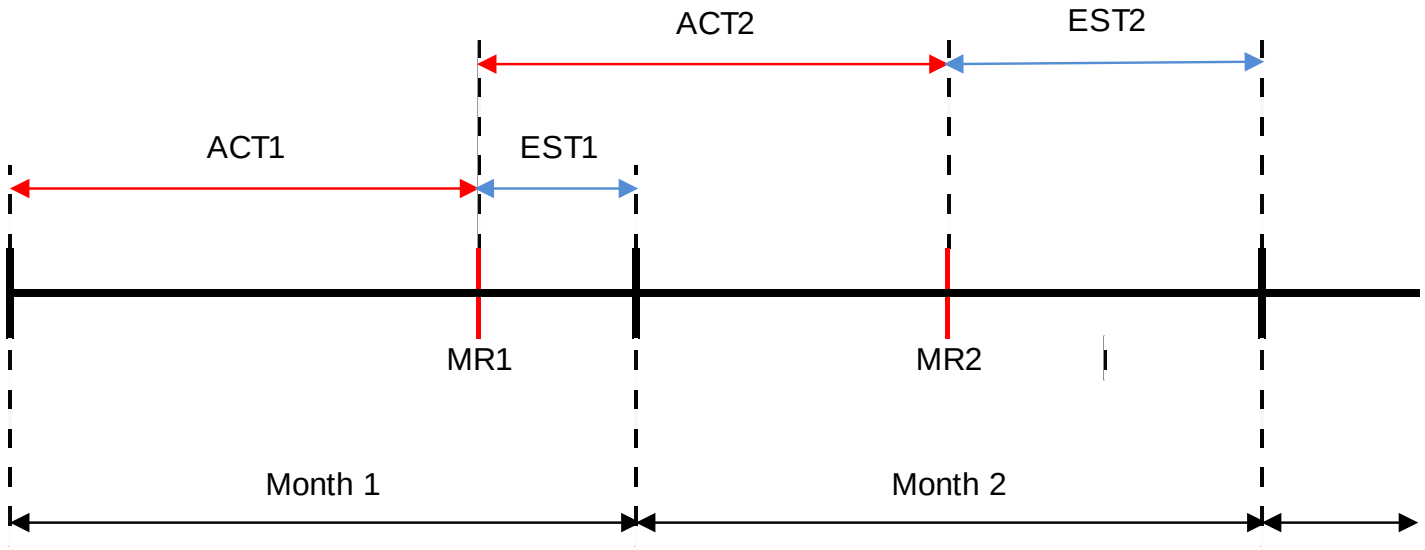
- Settlement of fixed and variable network charges based on what retailer has billed customers with a bill date in the report month, whether network charges have been billed explicitly (unbundled on bills) or implicitly (bundled on bills)
- Report month 1 = ACT1 billed quantities, with MR1 actual or estimate billed read
- Report month 2 = EST1 billed quantities, with MR2 actual or estimate billed read…….and so on

Incremental Normalised

- Settlement of variable network charges based on the retailer's estimate of consumption for the report month
- Incremental (previously 'as billed normalised') design results in some seasonal misalignment with actual consumption over shoulder periods
- Single reporting, invoicing and settlement process for each month
- Corrections for under/over-estimates of consumption and prior period events captured in subsequent report months
- Most appropriate option for interposed arrangements
- Estimated consumption reflects:

  actual billed consumption plus an estimate of unbilled consumption to the end of the report month less the estimate of unbilled consumption used in the previous report month
- Must provide data for all vacant, billed or unbilled ICPs and ICP-days that have had the registry status of 'Active' against the trader at any time in the report month irrespective of whether or not the ICP was billed
- Corrections for prior period events included in current report month, but with correct start/end dates for transparency

Incremental Normalised

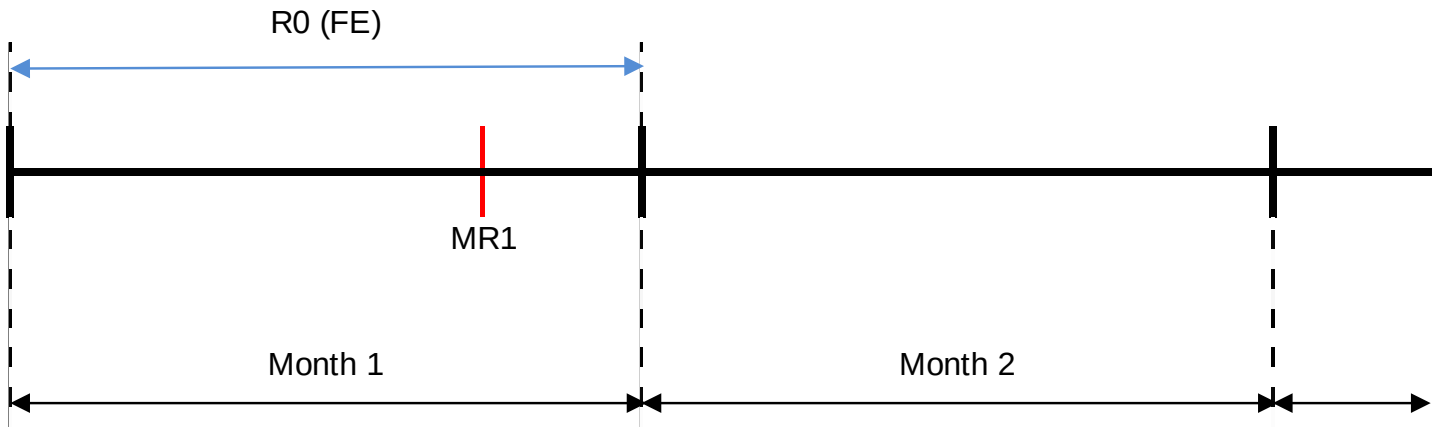


- Settlement of variable network charges based on retailer's estimated consumption for calendar month, all over/under- estimates self correct going forward (hence 'incremental')
- Report month 1 = ACT1 (with MR1 actual or estimate billed read) + EST1 (unbilled accrual for month 1)
- Report month 2 = ACT2 (with MR2 actual or estimate billed read) + EST2 (unbilled accrual for month 2) – EST1 (unbilled accrual for month 1)….and so on

Replacement Normalised

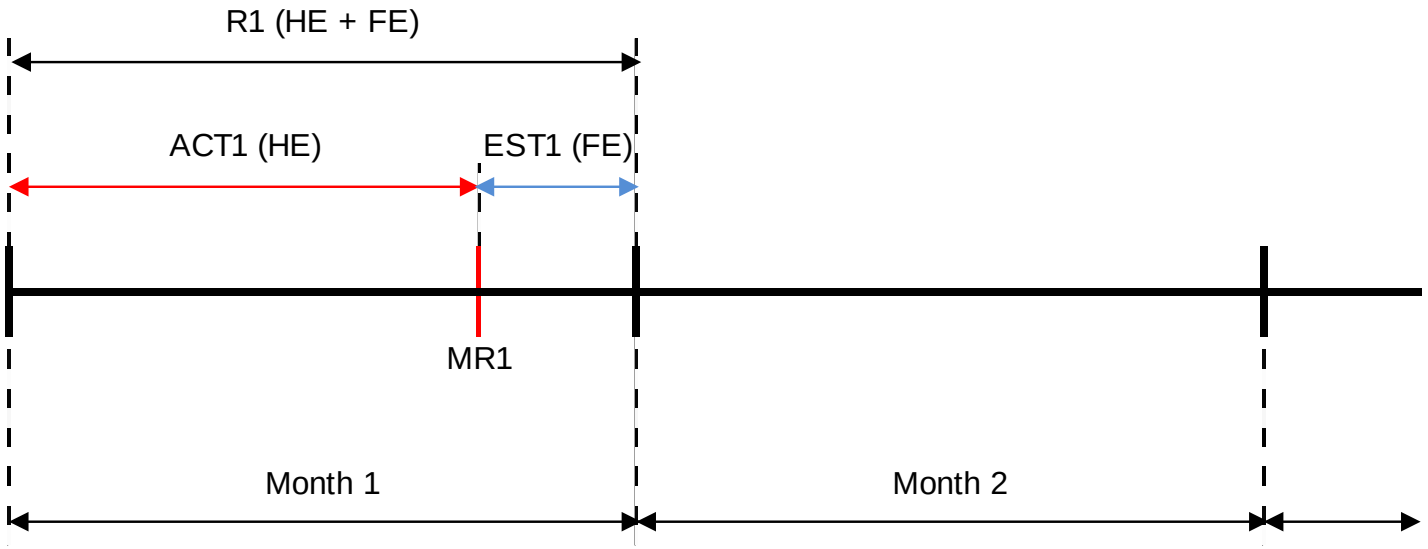
- Settlement of variable network charges based on the retailer's estimated or actual consumption for the report month, aligned with consumption submitted to the reconciliation manager (RM) for the same ICP in AV-080 and AV-090
- Replacement (previously 'RM normalised') design ensures consumption submitted for each report period gets progressively more accurate as forward estimates (FE) replaced by historic estimates (HE)
- Multiple reporting, invoicing and settlement processes required for each month
  - initial (month 0)
  - revisions (months 1, 3, 7, 14)
  - any other special reconciliations that may be required under the Code
  - retailers may agree with distributor not to process all revisions, however final settlement for a report month should always use the EIEP1 data aligned with final reconciliation revision cycle (normally month 14)
- For replacement normalised to be effective both retailer and distributor must align with RM revision cycle unless otherwise agreed
- Must provide data for all ICPs and ICP-days that have had the registry status of Active against the trader at any time in the report month, consistent with Code requirements in Part 15
- Replacement means that, consistent with the RM reconciliation process, the distributor's billing system/process must ensure each revision file for a particular report month completely replaces 100% of the data processed from the previous file for the same report month
- Corrections for prior period events will only wash-up for last 14 months

Replacement Normalised (initial for Month 1, R0)



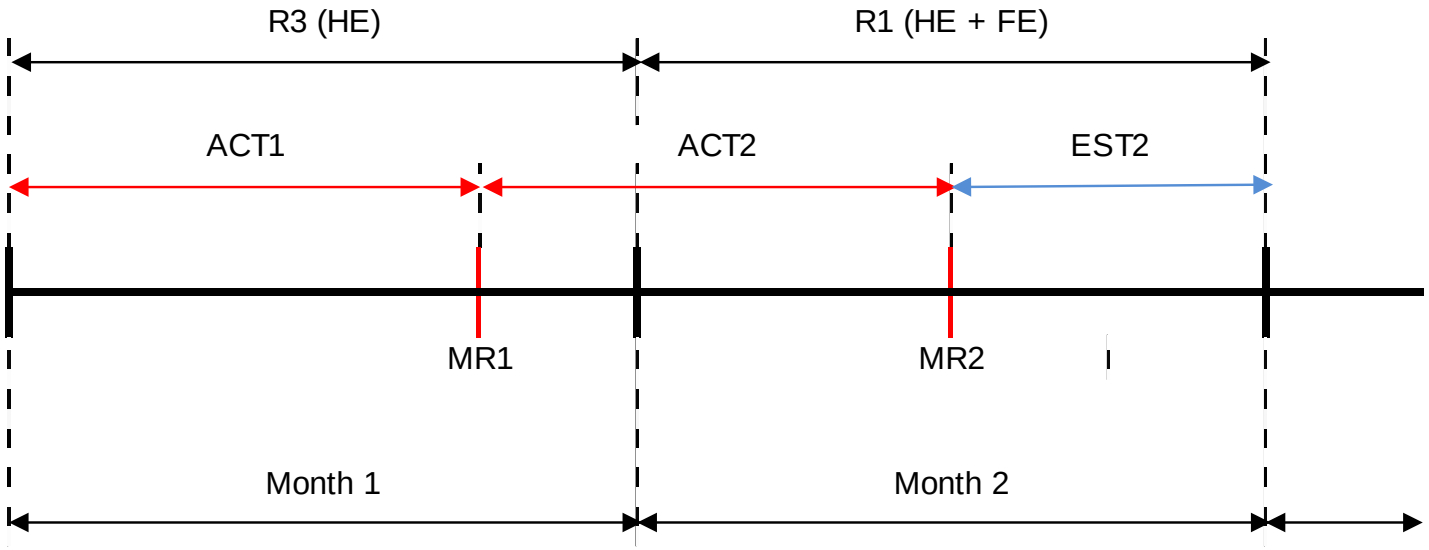
- Settlement of variable network charges reflects the quantities submitted to the RM and the reconciliation revision cycle
- Initial for Month 1 (R0) is 100% FE even though MR1 may be an actual read

Replacement Normalised (first revision for Month 1, R1)



- First revision for Month 1, R1 replaces R0

Replacement Normalised (second revision for Month 1, R3)



- Second revision for Month 1 (R3) replaces R1, ultimately R7 will replace R3, and R14 will replace R7
- Although retailers must submit all revision files, distributor may not process intermediate revision files if agreed with retailers
- Revisions will continue to improve in accuracy as
  - meter readings are obtained and FE is replaced by HE
  - reconciliation manager seasonal adjustment shapes change

Incremental Replacement Normalised

- Same as replacement normalised except that the net impact of changes affecting prior months' volumes is reflected on the volume being reported in the current month
- Initially introduced by one retailer who preferred replacement normalised but where distributors preferred/required incremental normalised