

Stage 03: Attachment A: Additional Information for P272 Consultation, July 2012 on Costs

P272 Mandatory Half Hourly Settlement for Profile Classes 5-8

What stage is this document in the process?

01 Initial Written Assessment

02 Definition Procedure

03 Assessment Procedure

04 Report Phase

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About this document:

This is Attachment A to the P272 Assessment Consultation Document on costs. It provides a description of the requirements for proposed and alternative solutions for P272. It also details the counterfactual scenarios and the cost categories to help respondents answer the costs consultation questions.

1 Proposed Solution

For the purpose of understanding the cost impacts this section summarises the P272 Proposed Modification, which the Proposer has developed with the Workgroup's assistance. It also captures the detailed requirements of the solution.

Summary

P272 proposes that as of 06 April 2014 all SVA Metering Systems for the current Profile Classes 5-8 shall be required to be settled using Half-Hourly meter data (where relevant metering has been installed).

It would be left to individual Suppliers to choose how they implement the new requirement prior to 06 April 2014. However, Suppliers would be required to submit a high level transition plan to the Performance Assurance Board by 31 May 2013 (3 months after the approval date of the Modification). This would allow the PAB to make Suppliers aware of any potential timetable clashes where a bulk Change of Measurement Class might take place.

Profiles would remain for those in Profile Class 5-8 who are unable to install an advanced meter. However, the regression equations for these Profiles would be 'frozen'.

Detailed Requirements

Requirement 1 – All HH capable metering systems in Profile Classes 5-8 Settled HH by 06 April 2014

With effect from 06 April 2014, customers in Profile Class 5-8 with HH capable metering installed must be settled on a Half Hourly basis.

Suppliers would have to update metering system registration data through the Change Of Measurement Class (CoMC) process to define the profile class as "00" rather than '05' to '08' at present. This would change the customer's MPAN.

Requirement 2 – Supplier plan for Transition to HH

It would be left to individual Suppliers to choose how they phase in the new requirement for 06 April 2014. For example, some Suppliers might choose to switch customers to HH Settlement as soon as they install Advanced metering; others might choose to perform a bulk Change of Measurement Class on or just before 06 April 2014.

However, Suppliers would be required to produce a high level plan on how they intend to complete their transition for the Performance Assurance Board (PAB) to ensure an efficient transition from NHH to HH. This would enable the PAB to obtain a better view of the impacts of the transition and better liaise / advise Suppliers who, based upon previous Impact Assessment responses, wish to avoid any problems with bulk COMC.

Supplier transition plans would have to be submitted to the PAB by 31 May 2013.

Requirement 3 – Current HH Elective Transition

Those metering systems under the 100kW limit that would otherwise be within PC 5-8 but for which their Supplier has elected to be settled Half-Hourly, will not be able to switch back to being settled as NHH (unless they leave Profile Classes 5-8 for Classes 1-4) after the approved implementation date of either the Proposed or Alternative solution for the Modification.

For avoidance of doubt, assuming that the Modification is approved, until the approved implementation date, any HH elective customers would still have the option of reverting to being settled as NHH.

Requirement 4 – 99% actual HH data at R1 (SP08c)

Suppliers would be required to achieve 99% of energy settled on actual data by the First Reconciliation Run (R1) for Measurement Class 'E', instead of currently being 99% at the Final Reconciliation Run (RF). The existing Performance Serial SP08c would be amended accordingly.

Requirement 5 – DTC flows: Increased resolution for HH meter data to 0.001kWh from 0.1kWh

The DTC flows (D0003, D0022, D0036, and D0275) that contain HH meter data will need increased resolution to ensure low half-hourly volumes are accurately processed. Currently the format is 7,1 resulting in 0.1kWh resolution. It is proposed that this is changed to 9,3 to avoid rounding issues. Increased resolution is required to avoid energy being inaccurately accounted for in Settlement.

The following data flows/items would be amended to increase the format for HH meter readings from 1 to 3 decimal places of kWh/half-hour (0.1 kWh/HH to 0.001 kWh/HH):

Data Item	Data Flow
J0177 (Period Meter Consumption)	D0036 (Validated Half Hourly Advances for Inclusion in Aggregated Supplier Matrix) and D0275 (Validated Half Hourly Advances)
J0021 (Meter Period Value)	D0003 (Half Hourly Advances)
J0281 (Total kWh (and kVArh) of Estimated Periods)	D0022 (Estimated Half Hourly Data Report)

The P272 Workgroup decided against including D0010 (Meter Readings) in this requirement as the D0010 flow is used in both HH and NHH markets. The data it holds is an advance (over many HH periods), not a HH value, so it is not so susceptible to rounding issues.

Requirement 6 – Profiles 5-8 'frozen'

The Profile Administrator would discontinue load research for Profile Classes 5 to 8. The regression equations for BSC Year 2014/15 would therefore be 'frozen' and apply to all subsequent years. These 'frozen' profiles would be used for those customers who do not have an Advanced Meter installed and for other types of customer currently settled on these profiles, for example NHH Unmetered Supply and Micro-generation profiling. It might also be used for estimation of missing data by Half-hourly Data Collectors.

Although the regression profiles would be frozen, the Default Period Profile Coefficients would still need to be determined annually as they are based on the calendar for each year. ELEXON would develop a process (likely as part of annual refresh) for this to occur.

For clarification the intention is to freeze the regression coefficients for Profile Classes 5 to 8. This means that for these Profile Classes the Profile Administrator will no longer collect sample data for customers and no new regression coefficients will be created. The regression data in Market Domain Data and the SVAA systems will then be used to create the out-turn profile coefficients for these Profile Classes by selecting the regression coefficients for the appropriate season and day-type and evaluating them at out-turn temperature and sunset variable (as they would normally do).

The regression data would also be used with long run temperatures to calculate date specific 'default profile coefficients' for the HH market. Again this is no change from normal practice it is just that the underlying data has not been updated.

Requirement 7 – Expanding PARMS Serial SP04

Profile Class 5-8 metering systems with an Advanced Meter that are being settled on a NHH basis after 06 April 2014 will be included within the scope of PARMS Serial SP04.

Serial SP04 – 'Installation of HH Metering' – relates to the obligation to install Half Hourly (HH) Metering at a site which has qualified for mandatory HH Metering. Currently the standards include –

- Number of Days for which a HH Meter should have been installed;
- Number of Days for which HH Meter was not installed, when it should have been; and
- Percentage of Days for which a HH Meter was not installed, when it should have been.

For the avoidance of doubt, this means that the Supplier Charge associated with Supplier Serial SP04 would be payable in respect of any Metering System that is subject to the Licence condition requiring an Advanced Meter, has an Advanced Meter installed, but is not being settled Half Hourly (for Settlement Dates on or after 06 April 2014).

Requirement 8 – New PARMS Serial

For Profile Class 5-8 metering systems that do not have an Advanced Meter (e.g. those where the Supplier has been unable to install one, despite taking all reasonable steps to do so, as required by the Licence Condition) will have a new PARMS serial. This Serial is for monitoring purposes only and does not have an associated Supplier Charge like the performance serial above. This will enable the Performance Assurance Board (PAB) to understand the number (and hence the impact on Settlement) of residual NHH-metered customers.

2 Alternative Solution

The implementation date of 06 April 2014 is an integral part of the Proposers solution. They believe that the obligation to settle Profile Classes 5-8 should coincide with the go-live date of the Supply Licence obligation for 'advanced' meters to be installed at these sites.

Some of the workgroup believed that mandating P272 from the 06 April 2014 would not provide enough time for Suppliers to resolve a number of complex issues, and that a 'transitional period' should be introduced. This 'transitional period' would ensure that Suppliers had enough time to deal with any contractual issues of moving customers from NHH to HH, make necessary changes to data flows and consider issues with Meter maintenance.

In addition some of the Group also felt that Industry would not be able to cope with a 'big bang' approach and that providing a transitional period would help avoid the risks associated with a large Change of Measurement Class process.

The Group therefore developed an Alternative solution which would delay the mandating of HH Settlement for Profile Classes 5-8, and the requirements described in section 3 above, until **06 April 2015**.

Suppliers would have until 31 May 2014 to submit their transition to the PAB.

To further understand the associated cost impact of P272 and to truly weigh the cost of the P272 Solution, the Group will conduct analysis on the development of the HH market should P272 not be implemented. Essentially the analysis will measure or estimate the impact over a given period of time with P272 being implemented, and calculating the difference from what would otherwise be expected if P272 did not occur.

Therefore we will be asking for costs across a number of different scenarios to identify where costs are prohibitive and whether there would be a specific point in time in which the cost of moving x amount of customers would necessitate the need that all customers within those Profile Classes should be moved to Half Hourly Settlement.

To do this the Group attempted to estimate realistic scenarios to facilitate both the consultation and analysis. The Group knew the current size of the elective market; the number of customers currently in Profile Classes 5 to 8; the current annual increase in HH MSIDs. The unknown factor was the likely increase in new HH customers over the next 20 years and whether that be mainly new builds or customers electively switching due to market changes. For example, if P280 was implemented and there was a resultant lowering of HH DUoS charges.

The Group agreed three projections of the market over the next 20 years to ensure that they were able to compare results and make reasonable estimates.

The three scenarios that this consultation seeks costs for are:

- Scenario 1: P272 is implemented as of the 1 April 2014;
- Scenario 2: P272 is not implemented and the HH market for elective remains at the same level (as of July 2012);
- Scenario 3: All PC5-8 customers move elective Half Hourly by 2020; and
- Scenario 4: 50% of PC5-8 customers move elective Half Hourly by 2020.
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Impact of P280 upon P272 costs

The Group believe that the current DUoS charges for Half Hourly settled (site specific) customers are higher on average than for NHH and could be a potential barrier to P272 being implemented. With this in mind the Group need to assess what if any impact the potential introduction of Modification P280 ([Introduction of new Measurement Classes](#)) would have upon the cost associated with P272.

The P280 solution proposes to introduce 3 new Measurement Classes and associated Consumption Component Classes so that Suppliers of sub 100kW HH Settled customers may be invoiced for DUoS charges on an aggregated basis.

The P280 and P272 Groups both believe that the net result of this aggregation would be to substantially reduce the HH DUoS charge. This consultation aims to understand the impact if any on the cost of P272 if P280 is approved. P280 is now in the Report phase and gained both unanimous approval by the workgroup and unanimous initial support from the Panel.

4 Cost Categories

The Group has examined specific costs that may arise as a result of P272. In conducting this work the Group has determined that the best way forward would be to define specific cost categories which will facilitate clear and accurate responses.

Some costs categories were identified from the original PSRG CBA which prompted this Modification; others have been developed by the P272 Group. Crucially when we speak of costs we are keen to emphasise that by costs we mean specifically all additional costs for HH Settlement above and beyond the licence requirement. For example the cost of the actual meter itself and any installation costs would not be applicable as these costs are sunk within the Supply licence requirement.

The consultation will request information on One-off and On-going costs split between market participants.

One-off costs are incurred in establishing the systems and processes necessary to settle sites in the half-hourly market, for example a site visit to enable communications on the meter.

On-going costs are incurred in day-to-day management of sites in the half-hourly market, for example the costs of retrieving data remotely. When responding the consultation please provide either cost per MSID or Total cost for each category.

Cost Categories by market participant

Below are the defined cost categories that the Group have identified to aid response to this consultation. When answering the consultation questions please refer to these definitions. The cost categories are split between Supplier and Distribution Business and One-off and On-going.

Supplier One-off

1) Change of Measurement Class (COMC):

Please provide the one-off cost of undertaking the Change of Measurement Class process. Please include any costs associated with a change of Agent.

2) Internal process:

Please provide the one-off cost to change internal processes (e.g. billing or settlement processes) to facilitate the increase HH settled customers. Include process changes but do not include settlement or billing system costs. Please provide a breakdown and rationale.

3) Internal Systems – Billing and Settlement:

Include costs to update or change billing or settlement systems to facilitate the increase in HH settlement. Include software development costs do not include hardware costs. Include a statement of the level of increase in HH settlement required to trigger this cost.

4) Hardware / Servers (Hosting and Security):

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Please supply any one off costs associated with the provision, hosting and security of any additional IT infrastructure. Include a statement of the level of increase in HH settlement required to trigger this cost.

5) Supplier Agency Costs:

Please supply any costs in provision or development of Supplier Agency roles. Include any procurement, contractual or qualification costs do not include the contractual arrangements with existing agents.

6) Other Costs:

Please include any other costs not identified above. Please provide a breakdown and rationale.

Supplier Ongoing

7) Data Collection and Data Aggregation Costs:

Include any additional costs incurred in supporting the meter for HH Settlement and any additional data collection costs incurred (e.g. Airtime contracts, dial-up costs). Please provide breakdown and rationale.

8) Meter Maintenance (meter + comms. rather than meter):

Include the additional cost of maintenance for meters with communications suitable to collect HH data for settlement based on your experience from existing HH Portfolio. Note these costs should not be based on costs for existing large HH metering systems (mandatory) but on costs for the AMR metering systems for Profile Classes 5 to 8. Please provide rationale.

9) Meter Rental:

Include any additional MAP costs incurred by using the meter for HH settlement. Please provide examples or identify if you believe that there is no differential in rental costs for HH Settled meters.

10) Data Transfer Network (DTN) Costs:

Please identify the additional DTN cost associated with the settlement of HH data.

11) Other Costs

Please identify and other additional costs not identified in the other operational cost categories. Please provide a breakdown and rationale.

12) Internal Systems (Billing):

Include costs to update or change billing systems to facilitate the increase in HH settlement.
Include software development costs do not include hardware costs. Include a statement of the level of increase in HH settlement required to trigger this cost.

13) Internal Systems (Other):

Include costs to update or change any other systems to facilitate the increase in HH settlement.
Include software development costs do not include hardware costs. Include a statement of the level of increase in HH settlement required to trigger this cost.

14) Registration system:

Include costs to update or change the registration systems to facilitate the increase in HH settlement. Include software development costs do not include hardware costs. Include Change of Measurement Class costs. Please provide a breakdown and rationale.

15) Process changes:

Please provide a one-off cost to implement process changes driven by the increase in HH Settlement. Include a statement of the level of increase in HH settlement required to trigger this cost

16) Hardware / Servers (Hosting and Security):

Please supply any one off costs associated with the provision, hosting and security of any additional IT infrastructure. Include a statement of the level of increase in HH settlement required to trigger this cost.

Distribution Business Ongoing

17) Data processing (operational):

Please identify any additional costs associated with processing the increased volumes of HH data do not include billing costs. Include any additional resource costs (e.g. Full Time Employees). Please provide a breakdown of these costs and rationale.

18) Invoicing:

Please identify the additional costs associated with the increase in billing activity associated with the increase in HH settled customers.

19) DTN Costs:

Please identify the additional DTN cost associated with the settlement of HH data.

20) Other On-going costs:

Please include any other costs not identified above. Please provide a breakdown and rationale.