

## **Market-wide Half Hourly Settlement – what does that mean for unmetered customers?**

### **1. Purpose**

This document provides background about the Ofgem Significant Code Review and the main impacts of implementing market-wide half hourly settlement of all electricity supplies.

### **2. Why is this being considered?**

Electricity is an energy source which is not easy to store in great volume, as a result the cost of electricity is very dependent on the balance of supply and demand. As in any market, the price of electricity rises during periods of high demand. Since privatisation of the GB electricity industry in 1990 there has been movement to make the cost paid by customers as reflective as possible. This started with the fewer but larger energy consuming customers and progressively extended to 350,000 metering systems settling on a half hourly basis, which accounts for about half the electricity used in the country. The other half of the energy is consumed by the 30 million domestic and small business customers. For many years now the government has been requiring energy Suppliers to use ‘reasonable steps’ to install smart meters into all 30 million customers’ premises. The specification for smart meters requires that they can record half hourly data and have communications to transfer that data.

The country is moving towards a point where all metering, large and small, has the capability to capture half hourly consumption data. The data could be used in the electricity settlement arrangements to ensure energy Suppliers pay for the energy their customers have actually used within each half hour. This enables cost reflective charging – if the Suppliers’ customers use more at the expensive times, then they pay more, conversely if the Suppliers’ customer use electricity at the cheaper times, then they pay less. This also contributes to the country’s move to Net Zero as higher carbon generators generate at peak times.

It will encourage Suppliers to incentivise customers to use electricity at different times of the day. There are now energy Suppliers offering customers with smart meters four hours cheap electricity in the middle of the night to charge their Electric Vehicle (EV), demonstrating that the approach does work.

### **3. Ofgem Significant Code Review**

Back in 2017 Ofgem initiated what is known as a Significant Code Review<sup>1</sup>. This is a mechanism for Ofgem to formally review aspects of the energy industry and initiate change where there is found to be sufficient evidence to justify a change. The Ofgem review considered:

- ▶ Competition – enable Suppliers to compete fairly for customers
- ▶ Cost reflection – pay for what is used when it is used
- ▶ Flexibility – recognised supplier/demand challenge
- ▶ Efficiency – keep industry costs low

The Review was focused on examining the industry roles and processes to determine if they could be revised to fully utilise the 30+million sets of half hourly data available through the smart meter roll-out. Ofgem established the Design Working Group<sup>2</sup>, chaired by Elexon to perform this review. Tom Chevalier of Power Data Associates was selected to be a member of this

---

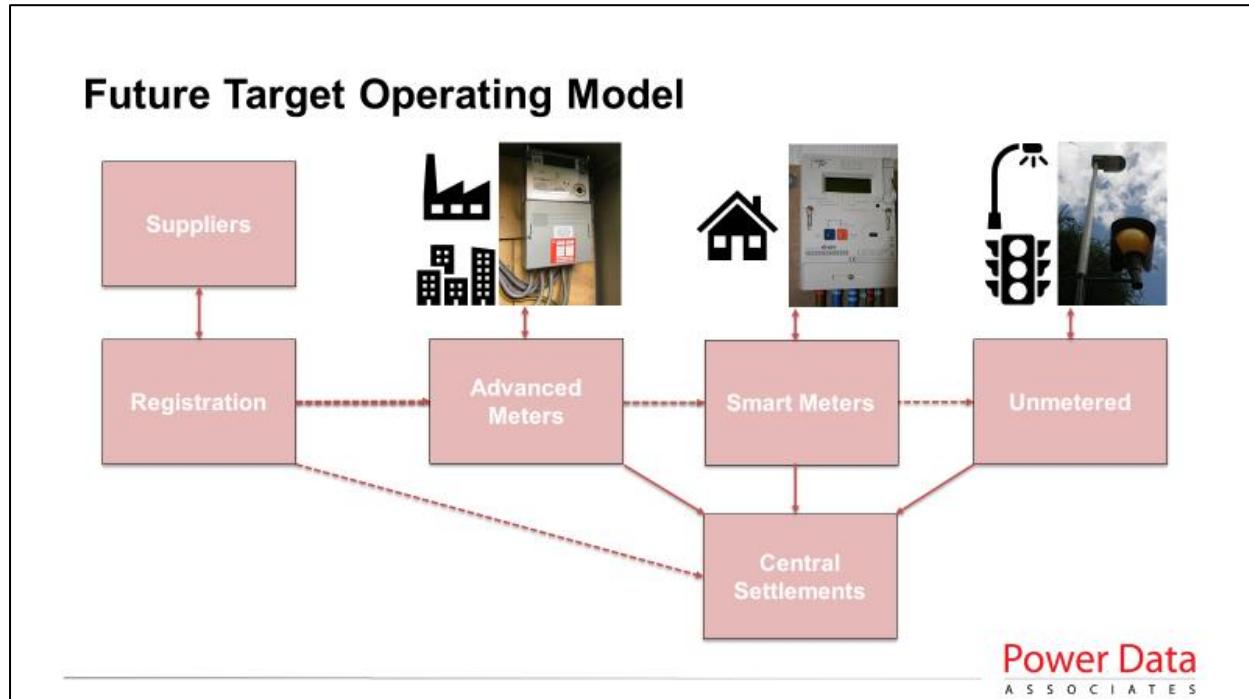
<sup>1</sup> [www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement](http://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement)

<sup>2</sup> [www.elexon.co.uk/group/design-working-group/](http://www.elexon.co.uk/group/design-working-group/)

working group. From October 2017 to 2019 the group considered various aspects of the electricity settlement arrangements and developed a Target Operating Model, which splits the customers into three segments:

- Advanced Meters – the 350k larger energy consuming sites, offices, factories, etc.
- Smart Meters – the 30 million domestic and small business smart meters
- Unmetered – the unmetered lights, signs, signals and telecoms equipment

Each of these sectors will be dealt with separately but using the common registration systems and all passing half hourly consumption data into the central settlement systems.



From 2019 to Oct 2021, a group the Code Change and Delivery Group<sup>3</sup> was established, Tom Chevalier continued as a key member of this group. This group continued to develop the operational framework with a consultation in December 2020, which received positive feedback from industry. Meanwhile Ofgem were considering the full business case for the imposition of the changes to deliver market-wide half hourly electricity settlement. In April 2021 they published their final business case and timeline<sup>4</sup>. The timeline has all customers, including unmetered, moving to half hourly settlement from 2024 onwards with completion by end of 2025. From Oct 2021 Ofgem appointed Elexon to lead the Market-wide Half Hourly Settlement (MHHS) Programme<sup>5</sup> which has continued the design and transition planning to enable the significant industry changes. All aspects of the electricity industry are now developing and testing new IT systems to implement the changes in 2025.

<sup>3</sup> [www.elexon.co.uk/group/code-change-and-development-group-ccdg/](http://www.elexon.co.uk/group/code-change-and-development-group-ccdg/)

<sup>4</sup> [www.ofgem.gov.uk/publications-and-updates/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case](http://www.ofgem.gov.uk/publications-and-updates/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case)

<sup>5</sup> [www.mhhsprogramme.co.uk](http://www.mhhsprogramme.co.uk)

## 4. So, what does this mean for unmetered customers?

It means that all unmetered supplies energy consumption will be settled on a half hourly basis. This can be broken into two further groups:

### 4.1. Existing half hourly unmetered customers

There is no real impact, with the role of the Meter Administrator being renamed the Unmetered Supplies Data Service (UMSDS).

There are some changes that PDA have proposed through UMSUG<sup>6</sup> to make the electricity industry processes more robust:

- Formal dataflow between Meter Administrator and Half Hourly Data Collector (HHDC) for half hourly data,
- Revisions to the National Terms of Connection<sup>7</sup> to reflect the unmetered convergence, and,
- Formal dataflow between Unmetered Supplies Operator (UMSO) & Meter Administrator (MA) for summary/control file.

Although these changes will make the activity more robust, they will have no direct impact on customers. The first of these changes was implemented in Feb 2021, the second was implemented in Feb 2022 and the third was implemented in June 2022.

### 4.2. Existing non-half hourly unmetered customers

These customers will be migrated from the current Estimated Annual Consumption (EAC) calculation arrangements to half hourly calculations. The impact on customers should be negligible, the main impact will be within the electricity industry, although some aspects will become apparent to customers.

#### ➤ Inventories

The wording of the inventory submission timescales has been adjusted as part of the revisions to the National Terms of Connection to make them consistent for all unmetered customers. The requirement is to update the inventory in the next calendar month following any changes, so larger customers already submitting regular monthly inventories will see no change.

The importance of maintaining and submitting an accurate inventory to the UMSO on a regular basis cannot be understated. These new arrangements are designed to ensure that accurate representation of half hourly energy consumption is achieved with a reduced need for recalculation of bills due to late submission of revised inventory data.

#### ➤ UMS Certificate

A non-half hourly customer currently receives a UMS certificate that provides an Estimated Annual Consumption (EAC). The energy Supplier usually uses the certificate to bill an even proportion of the EAC each month/quarter/day. Going forward the Supplier will have actual half hourly consumption data to determine the bill as they would any other half hourly customer. Consequently, for a typical lighting customer the consumption will be higher in the winter when the lights are lit longer, and lower in the summer when the lights are not used so much. This is part of making the costs reflective of when the actual usage occurs.

#### ➤ MPANs

Non-half hourly customers generally have more than one MPAN to support the non-half hourly settlement arrangements for a single non-half hourly inventory. There are up to four MPANs to

---

<sup>6</sup> [www.elexon.co.uk/group/unmetered-supplies-user-group-umsug/](http://www.elexon.co.uk/group/unmetered-supplies-user-group-umsug/)

<sup>7</sup> [www.energynetworks.org/industry-hub/statutory-information](http://www.energynetworks.org/industry-hub/statutory-information)

support the settlement arrangements which split the energy consumption into four profiles, continuous, dusk-dawn, dawn-dusk and part night equipment. This will no longer be necessary as a single MPAN will be used going forward which will have a single set of half hourly consumption data.

Customers who have multiple inventories and non-half hourly MPANs should review whether they are still required, or whether the equipment can be consolidated into a single half hourly inventory and MPAN for all the customers unmetered equipment. This has the advantage of reducing the administrative effort of managing multiple MPANs and ensures there is less opportunity for double counting of equipment. It is expected that the cleansing exercise will reveal non-half hourly MPANs which are no longer active or required, such as parking meters which have been converted to solar power. Sorting this out before the industry led migration process will make it easier for everyone involved and should save money for unmetered customers.

#### ► **Unmetered Supplies Data Service (UMSDS)**

The approach in the current half hourly unmetered arrangements is for the customer to select a Meter Administrator on a competitive basis. This has resulted in cost effective services which deliver additional information not necessarily required by the settlement arrangements. It is anticipated that for the smallest customers, like a parish council with five lights, the energy Supplier will pay the Meter Administrator for a basic settlement compliant service, with the charges part of the standing charge payable by the parish council. The standing charge is not anticipated to change noticeably as a reduction in the costs of the current non-half hourly arrangements will offset the additional costs of the half hourly service.

#### ► **Frequently Asked Questions**

The industry has considered and developed a series of FAQs which are published on the P434 Implementation website.<sup>8</sup>

## 5. Roadmap

Changes have been happening for some time already:

- Advanced and Smart meters are being fitted into existing metered supplies, over 50% of premises now have a Smart or Advanced meter
- Ofgem have published the formal cost/benefit justification for mandating changes
- Agreed a phased transition for smart meters, advanced meters and unmetered
- All over 100kW unmetered customers were required to settle on a half hourly basis from April 2021
- Ofgem have appointed Elexon to deliver Market-wide Half Hourly Settlement to the timescale defined by Ofgem. More details are available on the MHHS website<sup>9</sup>.

### 5.1. Development of industry transition plan

A transition plan was developed by industry and Ofgem, it requires:

- Initiate some cleansing of data and establishing commercial arrangements between Oct 2023 and March 2024
- Determine a deadline for non-half hourly unmetered customers to migrate to half hourly commencing in April 2024 to March 2025<sup>10</sup>

---

<sup>8</sup> [www.elexon.co.uk/groups/p434-iwg/p434-implementation-working-group-faqs/](http://www.elexon.co.uk/groups/p434-iwg/p434-implementation-working-group-faqs/)

<sup>9</sup> [www.mhhsprogramme.co.uk](http://www.mhhsprogramme.co.uk)

<sup>10</sup> Dates subject to change under the MHHS Programme

- Determine that all new unmetered connections from April 2024 will be traded on a half-hourly basis
- This change was formally progressed as Modification P434<sup>11</sup> under the BSC, summarised as:

*This Modification will require a period of mandatory Change of Measurement Class (CoMC) activity for all Non-Half Hourly (NHH) Unmetered Supplies (UMS) Metering Systems to complete before the Market-wide Half Hourly Settlement (MHHS) migration to the Target Operating Model (Milestone 11 (M11) in the MHHS Timetable). At the time of writing, this would need to complete by March 2025. It will also require all new UMS connections to be settled Half Hourly (HH) from 12 months prior to M11, currently April 2024.*

- Ofgem formally confirmed the change in Dec 2022<sup>12</sup> highlighting the benefits as:
  - *the significant benefits that we expect for energy consumers and wider society as a result of the increased competition that MHHS will bring*
  - *will promote and bring forward the smooth transition of NHH UMS MSIDs to HH settlement. It will therefore deliver earlier MHHS benefits realisation for Unmetered Supplies*
  - *the modification reduces the risks associated with the transition to the MHHS TOM and that early migration will allow parties to address any risks or issues that may arise*
  - *The Authority further notes that this modification will increase settlement accuracy. The HH settlement of UMS will be more accurate, efficient and robust than the NHH processes*

## 5.2. Action for customers

It is recommended that all customers currently purchasing unmetered electricity on a non-half hourly arrangement take the following action to prepare for this change to the settlement processes:

- Review all existing small non-half hourly MPANs
  - Are they still active?
  - Does the equipment in the inventory still exist?
  - Can they be consolidated with an existing half hourly MPAN?
  - Can several smaller non-half hourly MPANs be consolidated together?
- Work with PDA and their Supplier to agree a timescale for migration during 2024

Power Data Associates will continue to monitor the progress and implementation of Marketwide Half Hourly Settlement. If you would like further advice or information, please contact us via email [UMS@PowerDataAssociates.com](mailto:UMS@PowerDataAssociates.com) or by phone 01525 601201.

Last update: 17<sup>th</sup> January 2024

---

<sup>11</sup> [www.elexon.co.uk/mod-proposal/p434/](http://www.elexon.co.uk/mod-proposal/p434/)

<sup>12</sup> [www.ofgem.gov.uk/publications/decision-approve-bsc-modification-p434-half-hourly-settlement-ums-metering-systems](http://www.ofgem.gov.uk/publications/decision-approve-bsc-modification-p434-half-hourly-settlement-ums-metering-systems)

---