Dear Colleagues,

**Smart and advanced electricity meters: Two-year meter inspection obligation and consumer access to data**

The government has introduced licence requirements on suppliers to roll out smart meters and advanced meters to electricity and gas consumers. Generally, smart meters will be provided to domestic and smaller non-domestic consumers and advanced meters will be provided to medium and larger non-domestic consumers. Although there are technical differences between smart and advanced meters, they have some key similarities, in particular, the ability to measure consumption in half hourly intervals and the ability for remote communications with the meter.

This letter examines two separate issues relating to how existing electricity supply licence conditions apply to consumers with smart and advanced meters:

A. When configured for half-hourly consumption, the licence obligation to inspect meters every two years does not apply to smart and advanced electricity meters. This letter:
   - **Sets out suppliers responsibilities and our expectations of them, when this specific obligation does not apply**
   - **Reminds suppliers of our intention to carry out a review of meter inspection arrangements, which will begin in the coming weeks.**

B. There is an obligation to provide ‘timely access to data’ to consumers in Profile Classes 5-8 with advanced meters. It does not apply when the supplier moves the consumer from Profile Classes 5-8 to half-hourly settlement:
   - This letter **seeks views** on the potential impact on consumers when this obligation does not apply and whether this is an issue. We would welcome any feedback on this by **15 January**. Please send your responses to Smartermarkets@ofgem.gov.uk.

**Part A – Two-year meter inspection obligation**

Suppliers are required by Standard Licence Condition (SLC) 12.14 of the electricity supply licence to take ‘all reasonable steps’ to inspect their Non-Half-Hourly electricity meters at

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1. Advanced meters can be provided to smaller non-domestic consumers instead of smart under certain circumstances. Government is currently consulting on changing these circumstances [link]. Also, consumers with current transformer meters may receive an advanced meter instead of a smart meter.
2. An advanced meter is defined in the electricity supply licence as a meter that measures consumption in half-hourly increments and can provide the supplier with remote access to that data. Smart meters must comply with the Smart Metering Equipment Technical Specifications (SMETS). SMETS prescribes additional functionality to what advanced meters provide but for the purposes of this letter, this additional functionality is not relevant.
3. A complete explanation of profile classes is provided in Part B.
least once every two years. The purpose of this inspection is to obtain a physical meter read, check for signs of theft and to perform a visual safety check of the meter installation.

Non-Half-Hourly meters have traditionally been provided to all but the largest consumers, whose consumption is measured on a half-hourly basis. However, domestic and non-domestic smart and advanced electricity meters can also be, and mostly are, configured to record consumption on a half-hourly basis. On the basis of the current licence drafting, the two-year meter inspection licence condition does not apply to these meters when configured for half-hourly consumption.

In 2012, Ofgem granted consent to British Gas to operate its alternative risk-based meter inspection arrangements for its traditional gas and electricity meters, subject to certain consumer protection measures. We also signalled that we would review and, if appropriate, reform the inspection arrangements more generally, including for smart and advanced meters, by summer 2015. We will begin this review in the coming weeks by issuing an open letter and call for participation.

We have carried out some analysis on the potential implications of the two-year meter inspection obligation not applying to smart and advanced electricity meters between now and summer 2015. It shows that the non-application of the licence condition to smart and advanced electricity meters is not likely to have a material impact on consumers during this interim period. On that basis, we consider that it is not necessary to amend the licence conditions at this time. However, we will keep this under review during this interim period.

During this interim period, suppliers should pay regards to the following:

**Safety**

In conducting our analysis, we have consulted with the Health and Safety Executive (HSE) regarding suppliers’ obligations under existing health and safety legislation. We remind suppliers that:

- Regardless of whether the licence condition to inspect meters every two years applies, suppliers have wider obligations in respect of the safety of their customers under health and safety legislation
- It is incumbent on suppliers to manage any risks associated with all of their meter points and maintain them in a safe condition, under the legislation.

Indeed, where suppliers inspect meters every two years, HSE has previously advised that this may not in all circumstances fulfil their responsibilities under health and safety legislation. HSE has also previously given advice to Ofgem on the factors that should be considered for a risk-based approach to inspecting meters. Should suppliers move away from the existing two-yearly interval, they would need to ensure that any new arrangements continue to follow a risk-based approach to inspection and maintenance of meter points.

**Accurate billing**

One of the main benefits of smart and advanced meters is the ability to obtain a remote meter read. We expect suppliers to use this capability to provide bills based on actual meter reads. Given the importance of accurate billing to consumers, we intend to keep consumer experience of billing with smart and meters under close consideration. We also

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4 Non-Half-Hourly meter is defined in the licence as an electricity meter that is not configured to record the quantity of electricity supplied to premises during each half-hour period of supply. Half-hourly meters are not defined in the licence.
5 See our decision paper on granting this derogation.
6 Traditional, as well as advanced and smart meters.
7 See Annex 2 of our consultation on issuing the derogation to British Gas.
8 These factors are set out in Annex 2 of our consultation on issuing the derogation to British Gas.
remind suppliers that they continue to be required to provide non-estimated meter reads once a year under the Balancing and Settlement Code (BSC)\(^9\).

**Theft**

Ofgem has consulted on replacing current electricity theft arrangements with new arrangements that are not underpinned by the obligation to inspect meters every two years\(^{10}\). These new arrangements would instead place new obligations on suppliers to detect, investigate and prevent theft, as well as provide Ofgem with the power to direct the creation of a centralised, industry led, theft assessment service. It is intended that the obligations associated with these new arrangements will be in place early in 2014.

**Part B – Timely access to data from advanced meters**

In the electricity market, suppliers are incentivised to match the quantity of electricity that they purchase with the quantity used by their customers. This is done through the settlement process, which is set out in, and governed through, the BSC. As part of the settlement process, it is necessary to allocate the energy usage of each supplier (i.e. the quantity of electricity used by their customers) for each settlement period (defined as a period of 30 minutes). This is done in two different ways:

- **Half-hourly settlement:** The energy usage of the largest consumers\(^{11}\) is required to be measured in half-hourly intervals. This half-hourly consumption data is used for settlement purposes. Suppliers can also elect to move any consumer with appropriate metering equipment to half-hourly settlement, though historically take up has been low.

- **Non-half-hourly settlement:** Energy consumption for most consumers has historically been measured by meters which are not capable of recording half-hourly consumption. To enable settlement in the absence of half hourly consumption data for these customers, they are allocated to one of eight Profile Classes. Using sample data, ‘load profiles’ are created that estimate the proportion of energy used by the average consumer in the Profile Class for each half-hourly settlement period. These average load profiles are used to estimate the half-hourly consumption of all consumers in the Profile Class.

Since April 2009, suppliers have been rolling out advanced meters to consumers who are settled in Profile Classes 5-8 (generally medium to large non-domestic consumers), under a government mandate. Promoting energy saving by providing these consumers with detailed information about their energy use is a key driver of the advanced meter roll-out. Therefore, SLC 12.20 of the electricity supply licence requires that consumers with advanced meters in Profile Classes 5-8 be given, on request, ‘timely access’ to the half-hourly consumption data held on their meter. Suppliers are allowed to charge for access to this data.

**The issue**

Provided a consumer has appropriate metering equipment, a supplier can elect to move them from non-half-hourly to half-hourly settlement. While historically, suppliers have moved few consumers in this way, transferring consumers from non-half-hourly to half-hourly settlement could enable suppliers to realise cost savings that may be passed on to the consumer. For example, if a non-half-hourly consumer uses less energy at peak periods than is assumed by the Profile Class to which they are assigned, the supplier can reduce their energy costs. The roll-out of advanced meters – and indeed smart meters for

\(^9\) See BSC Annex S-1, paragraph 2 as further explained in Elexon’s response to our consultation on issuing the derogation to British Gas [link].

\(^{10}\) See our consultation on tackling electricity theft [link].

\(^{11}\) Consumers whose maximum demand exceeds 100kW in circumstances defined by the BSC.
domestic customers - provides an opportunity to realise these benefits, through the installation of the necessary metering equipment to support half-hourly settlement.

However, as set out in the BSC, when a meter point with an advanced meter is moved from Profile Classes 5-8 to half-hourly settlement, they are re-assigned to ‘Profile Class 00’. As a result, under the current electricity supply licence drafting, the ‘timely access to data’ obligation no longer applies.

Furthermore, a modification to the BSC, called ‘P272’, has been raised that would mandate moving all consumers in Profile Classes 5-8 to half-hourly settlement, i.e. to Profile Class 00. In our draft Impact Assessment on P272, we committed to seeking views on the impact of the ‘timely access to data’ obligation falling away when a consumer is moved to half-hourly settlement.12

Our analysis

We have considered whether a consumer that is being settled on a half-hourly basis would get detailed information about their energy use in the absence of the ‘timely access to data’ obligation.

Providing this information to the consumer should be in the interest of suppliers, as a part of delivering high quality service to their customers. Indeed, the existing obligation is likely to have created an expectation among consumers that they are entitled to this data. Half-hourly settlement requires suppliers to collect half-hourly consumption data for settlement purposes. Therefore, the cost of providing this already available data to the consumer should be low. Moreover, suppliers could choose to recover this cost from the consumer, as is currently the case.

On this basis, where the obligation does not apply because a meter point is moved to half-hourly settlement, we consider it unlikely that suppliers will choose to withdraw the provision of this information on request from the consumer. This is because: it is in the supplier’s interest to provide it, they already provide it to consumers as part of their existing customer offer, and it can be delivered at a low cost. However, we would welcome feedback on this assessment.

We are committed to ensuring that consumers continue to get timely access to their data, on request. Should evidence arise that indicates this is not happening, we will take appropriate action to address the situation.

Question for consultation

Do you agree with Ofgem’s initial view that, given suppliers’ commercial incentives, a move from Profile Classes 5-8 to half-hourly settlement should not adversely affect a consumer’s ability to get timely access to their data?

We would welcome any feedback on this question by 15 January. Please send your responses to Smartermarkets@ofgem.gov.uk.

Please contact Paul.Fuller@ofgem.gov.uk with any further questions.

Kind regards,

Rob Church
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12 See Page 42 of our draft Impact Assessment for Balancing and Settlement Code Modification Proposal 272 [link].