

## Feed-in Tariffs Scheme: Use of automatic meter readers for biennial meter verification

### Consultation on proposed changes to guidance

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#### Overview:

This consultation seeks views and evidence from interested parties on how our guidance should be amended to reflect the use of automatic meter readers to verify meter reads at least once every two years by licensees. We are seeking opinion on how our proposed changes will affect scheme participants at an operational level and whether or not you think that there are additional changes that can be made to our guidance.

This consultation is for all Feed-in Tariff (FIT) licensees, FIT generators whose installations have automatic meter readers (regardless of installation size), companies providing services to those generators and any other interested party.

## Context

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On 1 April 2010 the government introduced the FIT Scheme. The scheme was created with the intention of encouraging the uptake of small scale renewable and low carbon technologies up to a Total Installed Capacity of 5 MW in GB. The scheme obliges certain licensed electricity suppliers to pay eligible installations for the generation and export of renewable and low carbon electricity.

Installations using solar photovoltaic (PV), wind, hydro and anaerobic digestion technologies up to 5 MW and fossil fuel-derived combined heat and power up to 2 kW can receive FIT payments, providing all eligibility requirements are met.

The FIT scheme, introduced by the Department of Energy and Climate Change (DECC), is administered by the Gas and Electricity Markets Authority (the Authority), which is assisted in its day-to-day functions by the Office of Gas and Electricity Markets (Ofgem).

The Standard Licence Conditions require FIT licensees to take all reasonable steps to verify meter readings at least once every two years. Our present guidance states that this verification should be a physical meter read. We have received representations suggesting that a physical inspection is not necessary for meters that are capable of being read remotely from the installation site, i.e. automatic meter readers (AMRs). In line with our policy to be open to new ideas for the way we administer environmental schemes, we are now seeking views on proposed changes to our guidance to reflect this.

## Associated documents

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Modifications to Conditions 33 and 34 of the Standard Conditions of Electricity Supply Licences:

<https://epr.ofgem.gov.uk/Content/Documents/Electricity%20Supply%20Standard%20Licence%20Conditions%20Consolidated%20-%20Current%20Version.pdf>

The Feed-in Tariffs Order 2012:

[http://www.legislation.gov.uk/uksi/2012/2782/pdfs/uksi\\_20122782\\_en.pdf](http://www.legislation.gov.uk/uksi/2012/2782/pdfs/uksi_20122782_en.pdf)

The Feed-in Tariffs (Amendment) Order 2013

[http://www.legislation.gov.uk/uksi/2013/1099/pdfs/uksi\\_20131099\\_en.pdf](http://www.legislation.gov.uk/uksi/2013/1099/pdfs/uksi_20131099_en.pdf)

The Feed-in Tariffs (Amendment) Order 2014

[http://www.legislation.gov.uk/uksi/2014/1601/pdfs/uksi\\_20141601\\_en.pdf](http://www.legislation.gov.uk/uksi/2014/1601/pdfs/uksi_20141601_en.pdf)

The Feed-in Tariffs (Amendment)(No2) Order 2014

[http://www.legislation.gov.uk/uksi/2014/2865/pdfs/uksi\\_20142865\\_en.pdf](http://www.legislation.gov.uk/uksi/2014/2865/pdfs/uksi_20142865_en.pdf)

Guidance for Licensed Electricity Suppliers (Version 6.0)

<https://www.ofgem.gov.uk/ofgem-publications/85460/fitsupplierguidanceversion6.0final1.pdf>

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## Executive summary

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Licensees are required by their Standard License Conditions to take all reasonable steps to verify generation and export meter readings at least once every two years. Our expectation has been that licensees would do this by physically reading meters. We have now received representation that meters that have the ability to be read automatically, consisting of a meter and a means of communicating the data (which are known as automatic meter readers (AMRs)), are sufficiently accurate that there is no need to physically read them to corroborate their data.

We are seeking opinion on whether or not meters that are capable of being remotely read automatically provide sufficient accuracy that their data can be used by licensees to verify submitted meter readings.

### Use of AMR data for FIT meter verification

We are proposing that the use of AMR data should be allowed for meter verification on the basis that AMRs are now sufficiently accurate that there is no need to physically read these meters.

AMRs are subject to data security protocols with little chance of data being hacked or corrupted. They are monitored remotely and any anomalies can be detected very quickly. AMRs are capable of storing large amounts of data both internally within the meter and externally off-site. This means that should there be a break in communications, for whatever reason, there is sufficient back-up that the accuracy of meter readings will not be affected.

As the cost of FIT payments are borne by all consumers it is important that we ensure sufficient counter fraud measures are in place to ensure no one is able to gain unfairly. Biennial meter verification is a licence condition and as such, reads submitted from AMRs are subject to verification.

When describing an AMR we mean a system where all of the components are intrinsically linked. As such, we consider that meters using impulse loggers, calibration LED pickups and other such sensors whose components are not intrinsically linked, do not reach the required levels of accuracy and should not be thought of as AMRs.

### Proposed means of verifying submitted AMR reads

We are proposing that licensees may verify submitted AMR meter data by one, or a combination of all three methods:

- Use of historical data sourced directly from the metering service provider to corroborate meter readings.
- Auditing generator's systems and processes to ensure they remain compliant.
- Physically reading AMRs.

We are proposing that the first two methods will allow licensees to accurately verify meter readings for less expense and resources than physically reading meters. There will be some cost involved in setting up these means of verification, and they may take some time, but we expect that the long term benefits for licensees will far outweigh any short term expenditure. For the third method, it may still be more advantageous for various commercial reasons for licensees to continue physically reading meters at this stage. We are proposing that this should be allowed to continue if the licensee so wishes.

Whilst we are proposing new means of verification, there is still a very small risk that in some cases installations may not actually exist and that meters are instead recording generation by some other means. Because of this we are proposing that at least 5% of all AMR fitted

installations be subject to a random site visit each year. This is proposed as a counter-fraud measure to protect consumers. The sample size is in line with international standards for audits which state that the sample size should be reflective of the potential for finding anomalies. As there have been less than 20 cases of incorrect data form 300,000 plus reads, we believe this is an acceptable risk.

## Proposed security measures

We need to ensure that AMRs being used are robust. We are therefore proposing that as a basic requirement all AMRs, and associated systems, be protected by at least a four-level password security system<sup>1</sup>. As the risk of hacking is generally considered to be minimal, this is the basic level required. We acknowledge though that many systems in use have higher levels of security in order to provide assurance to interested parties (e.g. multi-site generator's (MSG's) investors or local councils). This means that most systems will already exceed our proposed minimum requirement.

We are proposing that all AMRs should be fitted with tamperproof seals to prevent non authorised persons from making physical changes to an AMR's settings. This is considered by many MSGs as being a particular risk.

It is our opinion that AMR components should be easily identifiable so that if any physical changes need to occur (e.g. changing SIM cards), then any database can be easily updated. This will prevent the possibility of confusion associated with linking an AMR to a site.

## Installation and commissioning standardisation

We do not propose that AMR capable installations be installed to a standard higher than those currently required by the MCS or ROOFIT accreditation requirements. We understand that there may be some concern over technically complicated installations. However, it is our understanding that this is a very limited issue as it is in the generator's interest to ensure that meters are installed right first time in order that payments are not affected.

We are not proposing that there be any restrictions on the means of communicating data and that any means widely recognised as being suitable should be accepted. There are several standards for data modelling (the means by which data is recognised and packaged within an AMR system) in existence but there is no on definitive standard for the UK. The DLMS<sup>2</sup>/COSEM<sup>3</sup> standards are the standards to which most AMRs are manufactured. Because of this we are proposing that AMR's data models should meet the DLMS/COSEM standard.

## Anomaly detection and monitoring

We are not proposing to issue guidance on the minimum frequency and level of monitoring or anomaly detection. The levels in use by most meter service providers are generally of a high standard as generators often have a requirement to resolve any issues in as short a time as possible. We do not consider it appropriate to introduce a minimum standard, as this could be higher than generators use now; as such, requiring generators to put in place new systems may require some expense on their part. However, it remains the responsibility of licensees to ensure that meter reads are robust.

## Non-AMR meter verification

Physical meter reading for non-AMR meters remains in place. However, we remain open to suggestions for reducing the administrative burden for reading these meters.

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<sup>1</sup> This enables four different levels of access dependant on a user's role and authority

<sup>2</sup> Device Language Message Specification - a generalised concept for abstract modelling of communication entities.

<sup>3</sup> Companion Specification for Energy Metering - sets the rules, based on existing standards, for data exchange with energy meters. For further information see: <http://www.dlms.com/index2.php>

# 1. Introduction

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1.1 The Standard Licence Conditions (SLCs) require licensees to “take all reasonable steps to verify at least once every two years the generation meter readings and export meter readings provided by a FIT generator... taking due account of guidance from the Authority<sup>4</sup>”. This requirement has been part of scheme legislation since FITs was first introduced.

1.2 Our expectation has been that licensees would do this by physically reading meters. Early versions of our guidance indicated our willingness to consider whether alternative means of verification were sufficiently robust, but we received no suggestions.

1.3 As the industry regulator we constantly review our processes and take into account the interests of all parties and stakeholders when producing guidance. It has been suggested that the use of data from remotely read automatic meter readers<sup>5</sup> (AMRs) is a suitable alternative means of verifying meter reads. The basis for this is that the data transmitted by AMRs is reliable and accurate and as such physically reading the meter is no longer required.

1.4 In order to improve our understanding of the use of AMRs within the FIT scheme and the accuracy of the data they are able to transmit, we commissioned an independent technical report. We have reviewed the findings of this report, as well as speaking to industry representatives, and are now making proposals as to how our guidance may be changed to allow AMR data to be used for verifying meter reads.

1.5 FIT meters measure the amount of electricity generated and exported from an accredited FIT installation. It is these readings that are used to calculate payments made by licensees to generators. The majority of meters used in the FIT scheme are physically read by the generator, who then submits a meter reading to their licensee to receive payment. In the case of almost all multi-site generators, the meters are read remotely.

1.6 The requirement to verify meters at least once every two years ensures that payments accurately reflect the amount of electricity that has been generated and exported. It is also a counter-fraud measure. By verifying that the meter readings submitted by generators are accurate, the licensee has confidence that the payments they are making are accurate. The costs of FIT payments made by licensees are borne by all consumers, so it is therefore vitally important that all payments are accurate.

1.7 It is important to note that an AMR is not the same as a smart meter. Smart meter specifications are laid down by the Smart Metering Equipment Technical Specifications (SMETS)<sup>6</sup> and are very specific to smart metering technology.

1.8 None of the changes proposed in this consultation relieve the licensee or generator of their obligations contained within the FIT legislation and our guidance.

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<sup>4</sup> SLC 33, Schedule A, Part 1, paragraph 3.2.6(b)

<sup>5</sup> Remotely read meters come in many forms but for the most part will comprise a meter and a means of communicating that meter’s data, collectively they are known as automatic meter readers.

<sup>6</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/381535/SMIP\\_E2E\\_SMETS2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/381535/SMIP_E2E_SMETS2.pdf)

## 2. Use of automatic meter readers for biennial verification

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2.1 We are proposing to allow the use of AMR data for two year meter verification subject to the controls laid out elsewhere in this consultation.

2.2 Since the start of the scheme in excess of 300,000 FIT meters have been physically read, including a large number of AMRs. Of these, we are aware of less than 20 cases of suspected abuse and on further investigation it was discovered that no intentional fraud had taken place. This evidence suggests that meter readings submitted by generators are accurate. The reasons we consider that AMRs are sufficiently reliable are as follows:

- All AMR systems have levels of built in data security making them highly resilient to electronic corruption. So long as physical security measures are taken, they should also be resilient to tampering on-site.
- AMRs can be monitored remotely so any anomalies can be spotted at an early stage. This means that the readings submitted are highly accurate.
- There are generally accepted levels of standardisation already in use by industry for AMRs that have been adopted by industry. These standardisations mean that AMRs are reliable and robust.
- AMR systems and associated peripherals are capable of storing large amounts of data. This data can be used for independent corroboration at a later date.

2.3 An AMR contains a meter, means of communication and a data model as a bare minimum. All of these parts are intrinsically linked within the AMR. It is our opinion that meters using impulse loggers, calibration LED pickups and other such sensors, which do not have intrinsically linked components, do not reach the required level of accuracy to provide accurate sources of data. Because of this inability to achieve the required level of accuracy, we do not propose allowing these types of meter.

2.4 The changes we are proposing may have an impact on some licensee's current operations. We envisage that some licensees using AMRs may need to create new standard operating procedures, re-train their staff and potentially amend their IT systems. There may also be a need to amend resources to meet our revised guidance.

2.5 If our proposals are taken forward some licensees may not need to send meter readers to sites to conduct physical meter reads. Equally, generators may not need to make arrangements to facilitate access to properties to read the meter. There are large numbers of meters that are positioned in inaccessible locations, which has resulted in generators needing to move them so licensees can take meter reads. This will not be an issue if our proposed changes for AMRs are taken forward following consultation. Allowing the use of AMR data for biennial meter verification will result in substantial savings over the long term for both licensees and generators. These savings will outweigh any initial expense required to establish new systems of work.

**Question One: Do you agree with our proposal to allow the use of AMR data for biennial meter verification? Please provide evidence to support your answer.**

## 3. Verification of submitted meter reads

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3.1 We are proposing that licensees should be permitted to use one, or a combination of all, of the following methods to meet the requirement to verify meter readings:

- Method one: Use of historical data sourced directly from the metering service provider to corroborate meter readings.
- Method two: Auditing generator's systems and processes to ensure they remain compliant.
- Method three: Physically reading AMRs.

### Method one - use of data from meter service providers

3.2 Licensees will need to compare meter readings submitted by the generator against the meter reading data held by the service provider. The data should come directly from the meter service provider.

3.3 There is a risk that if the generator provides a list of historical meter readings then there is an opportunity for them to be tampered with. We propose that licensees only take data direct from the service provider. We understand that most meter service providers allow multiple account log-ins, so it is possible that one of these could be used by the licensee. Alternately, the service provider may be able to e-mail historical, uncorrected data to the licensee.

3.4 Corroborating one set of data against another is a relatively straightforward process. Compared to achieving a physical read, this method of verification will be much quicker and easier.

3.5 Licensees using AMRs will need to create methodologies and standard procedures in order to complete this process. There may be some cost involved in creating user accounts and establishing the required working relationships with service providers and this will vary from one company to the next.

3.6 This method will involve a cost and resource outlay by licensees and may take some time to set up. However, the long term benefits are likely to out-weigh any short term outlays.

### Method two - auditing of generator systems

3.7 In order to provide assurance that generators' systems are still meeting the required standards, where it has not been possible to source data from the meter service provider, we propose that licensees will be required to complete an audit of the generator's AMRs at least once every two years.

3.8 This proposal is formed on the basis that AMRs are highly accurate and therefore there is minimal risk of data being inaccurate. We expect that auditing of systems will take a similar format to the current requirement for generators to complete an annual declaration. The generator will be required to confirm that the specifications of their AMR have not changed, or if they have changed, what changes have been made.

3.9 This method will take more time than corroborating historical data, but will still be much quicker and far less costly than conducting physical meter readings.

3.10 Even if the AMR is robust in its set-up and installation, there is a risk that meter readings submitted by the generator may not be entirely accurate. Licensees are currently expected to conduct tolerance checks of submitted meter reads. Where they fall outside of the expected tolerance levels, they are investigated and corrected accordingly.



3.11 We are proposing that where a meter read from an AMR falls outside of the expected tolerance limits more than once within any two year period, the licensee should immediately call for further evidence in order to satisfy themselves of the AMR's robustness.

3.12 We acknowledge that there will be some cost and resource outlay for licensees to set up methodologies for this form of verification as well as taking some time to establish working practices. We expect that the long term benefits will out-weigh short term outlay.

### **Method three - physically reading AMRs**

3.13 We propose that licensees be allowed to continue to verify AMR reads by taking physical meter reads on the basis that it is a simple and straightforward means of achieving verification.

3.14 Sending a meter reader to a property is expensive for licensees, a cost which is ultimately borne by the consumer. As it requires the generator to be at the site at the time of the reading it is time consuming and potentially costly for the generator. There is also an issue with meters being located in inaccessible locations, so even if the meter reader is able to gain access to the site, they may still not be able to read the meter.

3.15 We realise however that several licensees have in place contracts with third parties for reading meters. Several licensees have spent time and money setting up their process around physical meter reading for all types of meter. Licensees that have a small proportion of AMR fitted installations may find it more cost-effective to send meter readers to all installations and have only one method of verification rather than run two or more.

3.16 Because of the reasons listed above, we propose that licensees should be allowed to physically read AMRs if they so wish.

### **Detection of potential fraudulent activity**

3.17 Two year meter verification is an essential counter fraud tool. There is a risk that generators could be claiming for generation that has not occurred, such as where PV panels have been removed and the inverter or generation meter has been connected to the property's main electricity supply. We propose that licensees should be required to (physically) visit at least 5% of all AMRs they have registered (i.e. similar to method three) once every two years. This represents around 30 site visits a week for licensees with the largest number of FIT installations; one a month for medium sized licensees; and roughly one a quarter for small licensees.

3.18 International standards for sampling state that the sample size should be inversely proportional to the accepted risk and/or expected chance of finding an anomaly. We believe, based on less than 20 cases of corrupt data out of 300,000 plus reads to date, that 5% is an acceptable sample size. We may review this if it is found that there are inversely high numbers of issues found as a result of the 5% sampling.

3.19 To date there have been no instances of meter readers finding that generating equipment is not in place, but this has occurred on FIT schemes in other European countries. As such, the risk cannot be entirely discounted.

3.20 Licensees will incur a cost for this activity; however, we consider it important as it provides a deterrent against fraud. This cost should be offset by the risk reduction of randomly checking sites.

**Question two: Do you agree with the methods of verification and sample size we have proposed? If not, what would you propose and for what reason?**

## 4. Security of AMR fitted installations

4.1. We propose that all AMR fitted installations that are subject to verification by means other than a physical read be subject to certain electronic and physical security requirements.

4.2. It should be noted that all national and MID approved meters are forbidden, by design, from allowing the modification of billing data i.e. generation meter reads.

### Communication security

4.3. We propose that given the minimal risk of hacking of systems that the minimal level of security required for AMRs, and all connected systems, is a four-level password system.

**Figure 4.1: Example of a four level password system**

Level	Application	Access
One	Read identification, basic metrology registers, clock and alarms	Read only
Two	Update time/date and billing reset (e.g. maximum demand)	Limited write
Three	General access to configuration and recording functions. Modification of password levels 1-3	Read/write
Four	Calibration, measurement transformer ratios and setting passwords	Write <sup>7</sup>

4.4. Standard meter and communication protocols support a number of security provisions, offering varying degrees of protection and complexity to manage. The simplest form of protection is a simple password system.

4.5. As there is minimal risk of hacking, it could be argued that there is no need for electronic security measures to be in place. However small the risk is though, it does exist and there have been numerous examples reported in the media of independent hackers hacking commercial systems purely for the sake of causing disruption to businesses.

4.6. Some complex systems developed by service providers and manufacturers use complex security protocols and encryption processes. Levels of security beyond the minimal available are often put in place to provide added confidence to investors, public bodies and other interested parties. Given that these systems are in place for most AMRs we do not envisage that there will be any impact on licensees or generators in ensuring that a requirement for a four-level password system is satisfied.

### Physical security

4.7. There is a risk of tampering with installations and AMRs which is considered by MSGs to be more prevalent within their market, where AMRs are far more common. In most cases AMRs will be manufactured as sealed composite units and impossible to open. Equally, a lot of AMRs have sensors built in that raise an alarm with the data monitor when anyone attempts to open them without authorisation.

4.8. Not all AMRs are sealed composite units so, to reduce the risk of tampering, we propose that all AMR fitted installations, which are not composite sealed units should have tamper proof seals in place. These tamper proof seals should mean that unauthorised parties will not be able to affect the operation of the meter in anyway.

### AMR component identification

4.7 We propose that licensees should require generators to demonstrate that they have a suitably robust means of identifying individual components of the AMR. The reason we are

<sup>7</sup> 'Write' means changing information that does not affect the accuracy of data. E.g. internal clocks when changing from BST to GMT, if not updated automatically.

suggesting this is so that if any parts need to be changed they can be easily identified and, where applicable, changes can be easily reflected on databases. We consider that this would be a requirement so as to prevent meter service providers misidentifying AMRs and so submitting invalid meter readings. This would be particularly relevant to SIM card management.

**Question three: Do you agree with the security measures proposed in this section? Are there any other security measures you think are required? If so, please provide reasoning and evidence to support your proposal**

## 5. Standardisation of AMR capable installations

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### Installation and commissioning

5.1 We do not propose introducing standardisation for the installation or commissioning of AMRs beyond those already required for all FIT installations. On the smaller scale the Micro-generation Certification Scheme (MCS) lays down the minimum requirements and training standards for installation engineers. On the larger scale, ROO-FIT generators are required to satisfy us that the necessary engineering standards have been met prior to commissioning.

5.2 There are various methods already in use for commissioning of AMRs. Means of installing and commissioning vary depending on the system in question, the company's own best practices and the training of the individuals concerned. Providing best-practice guidance for the commissioning of equipment may have a detrimental effect on many installers, necessitating the changing of current procedures that are already of an acceptable standard.

5.3 We have no evidence to suggest that the current standards in place in the market are not of a high enough standard. It is our understanding though that even the minimum standards of installation and commissioning exceed the required levels for the AMR data to be considered reliable. This is further borne out by the fact that of the 300,000 or so meters read by licensees to date, we have seen very few issues as a result of poor installation or commissioning.

5.5. We recognise that there may be concerns that installation technicians/engineers have to work with a variety of products and so may not always have the required expertise. This may be the case where standard wiring diagrams are not available, particularly if the meter is connected indirectly to generation equipment by current transformers. However, we have no evidence to suggest that this is the case and we consider that sufficient training and experience exists within the industry to overcome these issues.

5.6. We propose that licensees should continue to accept MCS/ROOFIT accreditation as proof that the installation has been installed correctly. The responsibility will lie with the licensee to ensure that AMRs have been commissioned in such a way as to allay any fears regarding accuracy of data.

### Methods of communication

5.7 We propose that the transmission of data in a secure manner by any widely recognised means (e.g. mobile telecommunication networks or ISDN lines) should be permitted for use within the FIT scheme. There are multiple methods by which data can be transmitted from the AMR to the generator. To specify particular means of communication would restrict the generator in acquiring the solution that best fits their requirements. There is a risk that the communications being used may fail for reasons beyond the generator's control (e.g. mobile data black outs). It is our recommendation that, where permissible, AMR systems should have primary and secondary means of communication.

### Data models

5.8 There is currently no one definitive standard for energy meter data models (the means by which data is recognised and packaged within an AMR system) in the UK. There are several standards that are in place and the standard that most AMRs are being manufactured to is the DLMS/COSEM standard. We are therefore proposing that all AMRs comply with this standard so as to provide licensees with sufficient assurance that the AMR is able to transmit data accurately and correctly.

**Question four: Do you agree with our proposals regarding standardisation of installation and commissioning, methods of communication and data models? If not, what alternatives would you suggest?**

## 6 System monitoring and fault finding

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6.1 We propose that a base level of monitoring and fault finding should be in place prior to using data from AMRs. The accuracy of meter readings can be optimised by detection of anomalies using automated systems to identify out of tolerance readings. By detecting anomalous readings early, this will provide an added level of assurance that any meter readings submitted to the licensee from AMRs are a true representation of the actual amount of electricity generated and/or exported.

6.2 It is our understanding that industry practise is sufficiently robust so that any faults will be rectified as soon as possible, meaning that there is minimal risk that any data will be incorrect due to meter faults. It is also our understanding that many generators have their own timelines in which any faults need to be rectified in order to provide assurances for their interested parties (e.g. investors).

6.3 We do not propose issuing specific guidance on the levels and frequency of monitoring or anomaly detection and associated alarming. The levels at which continuous monitoring and fault finding happens varies across the industry. To set down what the minimum requirement is may have a negative effect for generators by forcing them to introduce parallel procedures above and beyond those which they currently have in place.

6.4 It would be the responsibility of licensees to satisfy themselves that suitably appropriate levels of monitoring and anomaly detection are in place. By doing so they will be able to assure themselves that the data from the AMR is sufficiently accurate and thus be able to use the AMR data for verification of meter readings.

**Question five: Do you think that our proposals for monitoring and fault findings are suitable? If not, what further guidance would you suggest?**

## 7 Non-AMR installations

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7.1 We are seeking views on whether physically reading non-AMR meters is still appropriate and if not, how should non-AMR meters be verified. We would be keen to hear from stakeholders how they think licensees may be able to verify meter reads without needing to physically read meters.

7.2 Physically reading meters is expensive and time consuming for all concerned. As the FIT scheme continues to grow, the financial and time burden on licensees to physically read meters will increase proportionately. Because of this, we are of the opinion that it would be in everyone's interest to find an alternative means of verification.

**Question six: what methods would you propose as alternatives to physically reading non-AMR meters?**

# Appendix 1 - Consultation response and questions

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1.1 We would like to hear your views on any of the proposals in this document.

1.2 Please send us your responses by 12 February 2015 to:

Feed-in Tariff Compliance Manager  
Ofgem  
9 Millbank  
London. SW1P 3GE.

[fitcompliance@ofgem.gov.uk](mailto:fitcompliance@ofgem.gov.uk)

1.3 Unless marked confidential, all responses will be published in Ofgem's library and on our website, [www.ofgem.gov.uk](http://www.ofgem.gov.uk). You can ask for your response to be kept confidential, and we will respect this, (subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004).

1.4 If you want your response to be kept confidential, please clearly mark the document(s) to that effect and include your reasons for requesting confidentiality. It would be helpful if you could submit your responses electronically and in writing. Please put any confidential material in the appendices to your responses.

1.5 Next steps: Having considered the responses to this consultation, we intend to publish the final decision in spring 2015 about remotely read meters in the FIT scheme and will update our Guidance to Licensed Electricity Suppliers to reflect this. Please direct any questions you may have, or requests for further clarification about this consultation to the addresses given in paragraph 1.2.

## Appendix 2 - Feedback questionnaire

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1.1. We believe that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about how this consultation has been conducted. We are keen to get your views on the following:

1. Do you have any comments about the process adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand? Or could it have been better written?
4. To what extent did the report make reasoned recommendations for improvement?
5. Please add any further comments.

1.2. Please send your comments to:

**Andrew MacFaul**

Consultation Co-ordinator  
Ofgem  
9 Millbank  
London  
SW1P 3GE

[andrew.macfaul@ofgem.gov.uk](mailto:andrew.macfaul@ofgem.gov.uk)