NMO Consultation Response

By email to leanna.longo@nmo.gov.uk

Ref: UMSUG/NMO/Consult

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Leanna Longo
The National Measurement Office
Station Avenue
Teddington
Middlesex
TW11 OJZ

Dear Leanna

ELEXON and UMSUG response to: Informal Consultation on draft guidance in relation to the Electricity (Unmetered Supply) Regulations, 2001 (SI 2001/3263)

ELEXON and the Unmetered Supplies User Group (UMSUG) welcome the opportunity to comment on the draft guidance that you have presented in the consultation. ELEXON and the UMSUG have for many years used the Regulations defined in the Statutory Instrument (SI) to guide its recommendations on issues relating to unmetered supplies. We are pleased that the issues with the current drafting of the SI are being given consideration and recognise that clear guidance on the interpretation of the SI is essential for all parties to understand the circumstances in which an unmetered connection may be permitted by Distribution Businesses.

The UMSUG would not normally make recommendations on the provision of Charge Codes (a number that allows for an energy calculation for products connected without a meter) where it is clear that Distribution Businesses would not allow the product to be connected without a meter. Accurate interpretation of the 'Regulations' is therefore essential to the decision making process. We are therefore pleased to present some insight into the issues with interpretation of the SI that the UMSUG have had historically and with the advent of the new more dynamic products such as LEDs that are entering the unmetered supplies 'arena'.

General Comments

We recognise that the scope of this consultation only extends to the provision of guidance on the regulations. We would like the NMO to note however, that advances in technology since 2001 have been significant. Central Management Systems (CMS), LED equipment and some of the other apparatus now entering the market are far removed from the baseline around when the SI was conceived.

We note that you identify that 'amendment to the Regulations will take a considerable amount of time due to the legislative process'. The UMSUG note this but feel that work should be started now on defining exactly what those

amendments should be in light of significant changes in the electricity 'arena' that are likely to occur with the roll out of smart metering and smart grids. These are likely to present new opportunities to change the way energy information can be collected from 'street furniture'.

ELEXON, the UMSUG, and other industry/customer representatives are currently considering what changes can be made to the unmetered arrangements for electricity settlements through inter-active workshops with Manufacturers and unmetered supply customers. However, any changes have to be considered within the scope of the current rather than potential future arrangements.

If you would like to discuss any areas of our response, please contact me on 020 7380 4364, or by email at justin.andrews@elexon.co.uk.

Yours sincerely

Justin Andrews
UMSUG Chairman

Question 1)

Regulation 2 defines many of the terms used in the Regulations. In the draft guidance NMO have also defined other terms that we believe are important to an understanding of the Regulations. Do you agree with these definitions and are there any other terms in Regulations that need defining?

ELEXON believes that the definitions provided seem reasonable. The UMSUG have also reviewed the draft guidance on definitions of the terms in the Regulations and have provided the following comments:

1. The guidance uses supply point and load point, but these are not defined. It is suggested the following definition are used:
   "supply point" – means the point of connection to the authorised distributor's network.
   "load point" – means the point at which the load of the equipment consumes electrical energy.
   This covers the point made in the consultation about lights connected via private cable the aggregate load of which will exceed 500W at the connection point.
2. METERING COSTS – There seems to be an over-recognition of 'hidden costs'. The idea that reading a meter in a feeder pillar is somehow more expensive than reading a 'normal' meter is debatable. There are also suggestions that parking bays would have to be created and special training provided to meter readers. It is difficult to imagine where this would be necessary, (DNOs would not allow their services to be installed in highly dangerous and inaccessible locations) and such a widely-drawn definition could open almost any connection to challenge in terms of unmetered/metered adjudication.
3. TECHNICAL DIFFICULTIES – These include provision of a suitable housing but that is equally required for an unmetered service termination. If it is to be metered that does rule out the absolute smallest mini-pillar but a typical meter is only (mm) H80 X W125 X D36. A large cabinet is quite unnecessary. Earlier sections of the consultation document suggest that that DNOs have an obligation to ensure that meters can be accessed (e.g. locks) – it should be recognised that the pillar/cabinet is a customer asset.
4. 500W – The draft is still vague as to where this is measured. It must surely be the load at the Exit Point. Otherwise, it allows connections of tens of kilowatts on an unmetered basis as each individual item is below the limit – Highways Agency UMS pillars have been recorded at 180 kVA. Above 500W you are also reaching the level of consumption attributable to a domestic property so metering costs should not be higher than usual for the scale of load. For example, 750W (dusk to dawn) is 3,100 kWh p.a. and 750W (continuous) is 6,600 kWh p.a.

Question 2)

An unmetered supply may only be given where the electrical load is of a predictable nature. Do you agree with NMO's proposed definition of "predictable"?

ELEXON and the UMSUG feel that the definition of predictability needs careful consideration. The first issue is that there is no definition of to whom it should be predictable; the Distribution Business; the Customer; the Supplier; or the manufacturer. You could get very different answers depending on who you asked.

It would help if the predictability guidance should identify that the purpose of predictability relates to Customer billing and energy settlement and be clear if this relates to individual pieces of equipment or multiple pieces of the same equipment in aggregate. For example, one piece of equipment can be set up to operate in a certain way that would be predictable, e.g. a sign displaying an electronic message. When multiple installations of the sign displaying different messages are installed the level of certainty of the overall consumption becomes less clear (less predictable). The regulations appear to suggest that they are applied on a 'per connection' basis but are not specific on this issue.

The guidance is not specific on temperature dependent loads and whether there are circumstances in which these can be predictable. The guidance does not define a period of time over which the load has to be 'consistent or continuous'. Should this be hourly, daily, monthly or yearly?

Some LED Street lighting products now being manufactured can vary over the lifetime of the product. As such individually they are predictable on a daily basis, but would need tracking over time as the energy varies (as such the level of predictability varies with extended timescales). Collectively they 'would clearly result in difficulties in the calculation of the customer's bill and accuracy' as defined in the guidance. However, it is unlikely that the intention of the Regulations would be to not allow LED street lighting on the basis of predictability.

The guidance also defines a variance of +/-10% (50 Watts) where the load is less than 500 Watts. The guidance should be clear if this includes products over 450 Watts that would breach the 500 Watt rule if another 50 Watts of variation occurs.

We agree with the guidance on a 'pragmatic approach for small, unpredictable loads where the cost of metering would significantly outweigh the value of electricity consumed'. However, the guidance stops short on trying to define 'small' and 'significantly outweigh'. If these are left open to debate the guidance will do little in helping resolve the issue of predictability for these products. However, there is an issue that 'line the sand' type definitions which can give rise to other issues as has been seen with the 500

Watts rule. As such any considerations on the guidance should ensure they not give rise to new issues of interpretation.

Additional specific comments from the UMSUG are:

1. Currently Suppliers do not become involved in decisions about predictability and like other stakeholders rely on equipment load and switching hours being approved through application to ELEXON. The guidance may encourage a greater number of unmetered connections to be agreed outside this process, with different arrangements in each LDSO area. This could potentially result in unnecessary disputes between customers, Suppliers and distribution businesses.

Question 3)

An unmetered supply may be given where the load is predictable **and either** it is less than 500 W **or** it is not practical for the supply to be provided through an appropriate meter. Do you agree with the need for the guidance to make the words "and", "either" and "or" explicit?

ELEXON and the UMSUG agree that the guidance should make it clear if the 500 Watt rule is equipment or supply point specific. The common example provided in the guidance is one that often arises in discussion on the 500 Watt rule.

The draft guidance is silent on intermittent loads that breach the 500 W rule, e.g. Speed Camera 'Flashes' that would breach the rule but not result in significant additional consumption. The guidance should attempt to be specific on the treatment of such loads and if they also fit the definition of predictable.

Additional comments from the UMSUG:

1. The guidance makes it clear that the load is at the load point and not the supply point (exit point). However, the main issue is determining the calculation of metering costs, which may differ between Suppliers. Another consideration is administration charges applied by some Suppliers for unmetered MPANs. As we see it, each consideration for a predictable unmetered supply over 500 Watts will have to be agreed by the customer's Supplier, because only they know their metering cost and their administration charges for unmetered MPANs. This could result in customers in the same distribution area receiving different decisions, depending on the Supplier. Also, Suppliers will need to agree unmetered connections over 500 Watts before they register a new supply and the DNO will not know who the Supplier is until the MPAN is registered.

2. Conversely to the previous point, another view was given as follows. Section 3(2) of the guidance also says the connection to a network is at the discretion of the authorised distributor, following its licence conditions and internal policy. It would be much simpler and less onerous on other stakeholders if the guidance in this area was clearer, so the distributor could continue to agree unmetered connections without involving Suppliers. To involve the Supplier will inevitably prolong the decision making process and length of time taken to provide a supply. A clearer definition of a metering cost calculation would also reduce the number of disputes between stakeholders.
3. We understand it is difficult to arrive at a percentage calculation, or formula to determine whether a predictable load over 500 watts can be connected as an unmetered supply, but it would be much simpler for stakeholders if this were the case.
4. The NMO should reconsider putting a figure of 700 W in the guidance as it might create a new 700 W rule, many people will take it literally. Predictability is the key. If energy consumption can be calculated with a reasonable degree of accuracy, there is no reason why street furniture should not be unmetered. The BSC does say that unmetered supply consumption calculations shall be no worse than the degree of accuracy applied to meters.

Question 4)

Are there any other points you wish to raise in response to the proposed guidance?

ELEXON and the UMSUG believe that there are scenarios where the energy calculation for equipment is easier to make because there is feedback on the load or operation of the equipment, e.g. where there are central management systems or other tracking of hours of operation such as from Highways Agency databases. It would be useful if the guidance identified that considerations on predictability and load should be taken in conjunction with this sort of information and that just because an unmetered connection for the equipment is appropriate on certain parts of the network, that facilitate feedback, the same equipment may not be suitable elsewhere.

Additional comments from the UMSUG are:

1. Reference is made to unmetered arrangements being especially suitable for temporary connections. With the exception of festive lighting for which special arrangements are in place temporary requests are rarely suited to unmetered connection. The equipment is often large or unpredictable in nature. Where being connected via lighting columns the inventory owner is

very unlikely to be willing to pay for the load (and inventory trading arrangements make it very difficult regardless). Similarly, it is very difficult to incentivise get Suppliers to register new temporary supplies that may last just a few days even assuming that sufficient notice is provided. Current Industry mechanisms do not work well in these scenarios. Other available options include the installation of a metered feeder pillar (in areas where regular events take place), running supplies from adjacent metered premises and the use of hired generators. Plugging into a streetlight may be the 'easiest' approach but there are alternative approaches.

2. NMO make it clear that metering is the preferred option but also refers to where the provisions of the Regulations "can" rather than "should" be applied. The word "pragmatism" is also used often. Clearer guidance is a must as DNOs are coming under increasing pressure to grant UMS in many circumstances to satisfy the wishes of customers. This is will have an implication on the accuracy of Settlements.

Question 5)

Annex 1 includes lists of equipment that is generally accepted as being suitable for unmetered supply and equipment needing further clarification. NMO would welcome any comments on these lists.

The UMSUG note that much of this list is drawn from the Operational Information Document that is published on the BSC website:
http://www.elexon.co.uk/ELEXON%20Documents/Operational_Information_Documentv11.0.pdf

It should be noted that although equipment of these types have been allowed unmetered connections each piece of equipment is assessed on its own merit with reference to both the Regulations and other factors (such as feedback) and that just because a piece of equipment fits the description would not mean it qualifies for an unmetered connections. The guidance should be explicit on this point.

Additional comments from the UMSUG:

1. A number of these entries are outdated and rarely, if ever, declared (e.g. AA/RAC boxes, Gas Governor, Rain Gauge). Similarly, some newer equipment classes (e.g. outdoor Wi-Fi pods) are absent. Several entries are apparently duplicates – for example:
   - Ice Detector / Ice Monitoring Station
   - TV Aerial / TV Amplifier
   - Road Lighting Feeder Pillars / Highway Distribution Circuit
   - CCTV / Traffic Camera

For the latter three examples we have one entry in the 'normally unmetered' list and the other in the 'needing further clarification list'. This makes no sense for what is the same equipment.

Whilst each DNO will rightly have their own specific positions there are a few entries that might be switched between the two lists to best reflect the prevailing approach across most of the UK:

- Bus Information Displays are not absolutely predictable and may slip outside of the suggested 10% tolerance. However, they are typically less that 50W and connected to pre-existing UMS assets without DNO involvement or control. They are accepted by UMSUG as unmetered supplies and approved by SVG on a case-by-case basis. They might reasonably be switched to the 'normally UMS' list.

- Traffic Cameras are essentially CCTV but focused on traffic rather than people/security. There is unlikely to be any grounds to meter these except where they are metered by default as part of a large private network of streetlights and ancillary equipment fed from a common Exit Point. These too might reasonably be switched to the 'normally UMS' list.

- Trafficmaster Units have a flat, constant load below 100W. We are unaware of any DNO requiring these to be metered and they should be transferred to the appropriate list.

- A TV Amplifier is a small box with a constant 24/7 load in the region of 10-40W. These should appear in the 'normally UMS' list. They should not be confused with Cable Network Pillars serving Cable TV.

- Warden Call Equipment operates constantly at around 10-20W. Modern installations do not require UMS and this older equipment is gradually being phased out. It would be more appropriate to include this on the 'normally UMS' list.

- Vehicle-Activated Signs (VAS) are predictable in terms of the radar and unpredictable in terms of the LEDs lighting up. Average wattage assuming a typical setup (encompassing 98% of VAS nationwide) is around 10W. I think it unlikely that any DNO requires these to be metered.

- Cable Network Pillars were historically unmetered in the majority of cases. Because this equipment is unpredictable in load (a function of the number of connected customers and any sub-feeds to other cabinets) and can on occasion go as high as 5kW it's thought that most DNOs are requiring metering for new sites. This entry might be moved in the opposite direction to reside on the 'needing further clarification' list.

Question 6)
Are there any aspects of the Regulations that are causing a substantial burden on the industry? If so, we would be interested to hear of these and any suggestions for change.
We believe the responses above have covered off the main points with regards to the proposed guidance to the current SI. We would welcome a further discussion with the NMO on any of these points and any current issues we are experiencing in the UMS processes.
For more information on our response, please contact: *Justin Andrews UMSUG Chair* **T: 020 7380 4364** or email justin.andrews@elexon.co.uk