Horstmann Controls Ltd

To Arthur Cooke, OFGEM [arthur.cooke@ofgem.gov.uk]

Response to Ofgem's Consultation on the regulatory implications of domestic-scale microgeneration.

As a leading UK electricity metering and heating controls manufacturer we welcome this opportunity to make the following comments on OFGEM's Consultation on the regulatory implications of domestic-scale microgeneration – April 2005.

1. Overall Approach

In our view and from an overall perspective the basic principles to be adopted are as follows:

- Whenever microgeneration is connected (or plugged in) there is the need to ensure that both the DNO and the current supplier must be notified in advance and any relevant conditions obtained and agreed, as with any normal contract,
- Upon actual installation of microgeneration this must be confirmed to the DNO, Supplier, and notified on to the MPAS service,
- The appropriate metering arrangements are also to be confirmed (i.e. either to change to a meter with a backstop function but no reverse energy alarm flag if this is permitted, or always changed to import-export metering),
- The metering arrangements may need clarification with the current meter operator and/or any incoming meter operator,
- Subsequently all relevant suppliers (old or new) should be able to determine the current status of the site correctly,
- The settlements and reconciliation and DUoS functions can also be carried out correctly.

At first site this seems to be essentially the same as the Change of Tariff process, thus involving a change to the Meter and Time Switch Code for the site (MTC), and hence the Supply number printed on the bills. Accordingly changes to the MTC are then needed to identify each microgeneration site. If a range of metering arrangements and tariff structures for microgeneration are foreseen then this might be achieved by a single MTC code indicating "microgeneration" that points to an auxiliary set of microgeneration site codes.
[Ref: OFGEM Clause 8.10]

However, the best way to implement these principles is then to introduce a separate class of Supplier for microgeneration sites. We therefore fully support Recommendation 10 of DGCG WS4 P02a (as copied below), which deals with a SEMS licence - for both Domestic and Non-Domestic sites. Also in the domestic metering context we believe that it is essential to permit all the site metering arrangements to be provided by one set of metering agents and one set of metering equipment (either integrated or separate units), rather than by two separate organisations, each acting for different parties. In our view this is also most likely to result in the evolution of the most practical and cost-effective metering and settlements arrangements for the customer-microgenerator.
[Ref: OFGEM Clause 7.30 and 7.33]

2. The 7 Key Questions in OFGEM's Summary

Our response to the 7 bullet points is as follows:

• *The fact that there is currently no obligation on the householder or the installer to notify the supplier of the installation of microgeneration;*

In practice there is perhaps only a virtual obligation on the Domestic Customer to inform the DNO of the installation of microgeneration, for it is currently hidden in small print in the Standard Contract Terms, in the second part on the DNO Connection Agreement. Also those customers who have not

changed supplier or moved home since 1999 do not appear to have received such contract terms yet.

• *Purchase or 'spill to the network' of exported units*;

It appears that large-scale spill of microgeneration energy would distort both import and export energy markets, have significant effects on DNO's finances and price controls unless more recovery is made by higher standing charges, create additional conflicts between OFGEM's Social Action Plan, Environmental Action Plan, and the requirement not to discriminate unduly between classes of customer, and introduce what would amount to hidden cross-subsidies against the spirit of better regulation.

• *Some 10 million meters that may run backwards when a microgenerator exports to the low voltage network*;

We would point out that it is not only the 10 million existing meters with no backstops that are not appropriate for microgeneration, but also a similar number of electronic meters of most types that respond to any reverse (export) energy by setting a tamper alarm flag for investigation by revenue protection specialists. This is an existing widely-used security measure, the value of which would then be marginalised with any significant uptake of microgeneration. This existing meter facility would also result in significant customer complaints and disputes if the uncontrolled plugging-in of microgeneration equipment were freely permitted. In addition the large majority of normal customers would become more and more disadvantaged if uncontrolled introduction of microgeneration equipment were to be permitted and these tamper flags then had to be ignored.
[Ref: OFGEM Clause 7.16]

• *Arrangements for meter change in various scenarios of microgeneration installation*;

We fully support Recommendation 2 from the DGCG WS4 P02a in February 2005 on use of import-export metering at all microgeneration sites (as copied below).

It is also noted that the scope of the EU Measuring Instruments Directive extends to measurement tasks for reasons of protection of the environment and the levying of taxes and duties and fair trading, so would have wider implications for meter type testing and individual verification than just the measurement of import energy at a microgeneration site.

• *The contractual issues raised by microgeneration*;

In our view the basis for this should follow from the overall approach that we have stated in (1) above and in Recommendation 10 from the DGCG WS4 P02a in February 2005.

• *Any desirable modifications to the Electricity Supply Licence*;

This is proposed in (1) above.

• *Any perceived inadequacy of consumer information*.

It appears important to print a box outlining basic microgeneration options and contacts on the back of all suppliers' bills, from a date that could be a year or two ahead. At the same time the new SEMS supplier licences should be introduced, along with the introduction of microgeneration site MPANs and the printing on bills of appropriate microgeneration Supply numbers. In the meantime an OFGEM/energywatch leaflet with do's and don'ts should be sent out with all bills on a one-time basis, once the overall arrangements have been determined.

Because microgeneration customers could have a particular interest in environmental and energy efficiency aspects it has to be important to make better information available to them, using smart metering or advanced AMR methods. This information should be regularly updated and available either on the meter, or on the bill, or on a web site.

3. Issues not directly addressed by the Consultation Document

This includes the potential for tampering with metering arrangements at microgeneration sites.

These sites are very different in their metering arrangements compared to larger sites with measurement-transformer-connected metering, and the potential for tampering is much greater. The potential is also much greater than with normal import-only metering arrangements. While details of tampering and prevention methods should not be the subject of public documents there are significant issues involved that must be taken into consideration when deciding the policy on metering requirements. In our view meter manufacturers, meter operators, and revenue protection specialists should be consulted separately and confidentially on this issue.

Horstmann Controls Ltd. BL/LW - 15th July 2005.

Recommendation 2 from the DGCG WS4 P02a Recommendations – February 2005:

The mandatory metering standard for micro generation should be a non half hour (NHH) metering arrangement that uses simple import export metering.

All the analysis we have undertaken including the cost benefit study shows this to be the optimum solution in the current regulatory environment. The basic standard should be the minimum acceptable metering for all micro generation installations.

Recommendation 10 from the DGCG WS4 P02a Recommendations – February 2005:

A new category of electricity supply licence should be created which would involve a licence as a Supplier for both import and export Electricity at micro generation sites (SEMS).

As a new class of party to the BSC there should also be a separate set of BSC procedures and rules for SEMS. The aim of these licence conditions and BSC rules should be to separate out the combined import and micro generation export related aspects and requirements as far as possible from the normal import only supplier arrangements, and to keep them as simple and relevant as possible. It should also give existing suppliers the option to avoid significant change to systems and processes for import only customers and ring-fence existing investments. The scope of the SEMS licence could be limited to micro generation sites up to a maximum of say 50 kW, and would include both domestic/residential and commercial business sites. The SEMS could be a relatively-small stand-alone operation, or a suitably separate part of a large electricity supplier. In the latter case it is important that any customer queries for micro generation sites can be recognised straight away and switched to a small SEMS office facility, with its own bespoke billing and payments system.

