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Ms Margaret Coaster
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28 September 2010

Dear Ms Coaster

**RE: SMART METERING IMPLEMENTATION PROGRAMME: PROSPECTUS
CONSULTATION RESPONSE AND QUESTIONS**

Please find attached responses compiled by Macquarie Corporate and Asset Finance ("**MCAF**"), on behalf of Capital Meters Limited ("**CML**") and Macquarie Leasing Limited ("**MLL**"), in response to the questions posted in Appendix 1 on the Smart Metering Implementation Program: Prospectus as published by Ofgem on 27 July 2010.

MCAF is an operating group of Macquarie Group Limited ("**Macquarie**"). Macquarie has been involved in the UK competitive metering market as a financial adviser since 2002 and MCAF has been an investor in the market since 2003. MLL and CML, both subsidiaries of Macquarie Bank Limited, currently have a substantial portfolio of domestic and non-domestic traditional and smart gas and electricity meters which are rented to more than 20 energy suppliers across the UK. These meters are part of over GBP 8 billion of funded assets that MCAF holds on its balance sheet.

We look forward to continuing to be a part of this process.

Kind regards



Introduction

Macquarie has been extensively involved in the traditional and smart metering market in the UK as both an adviser and investor since 2003. As a result, we believe we provide an alternative view to many of the more conventional positions on the proposed smart metering network rollout in the UK. For example, there is no doubt that funding in the market for this mandated rollout of smart meters is readily available if the industry is prepared to work constructively with funders such as Macquarie and adopt a risk sharing framework where the respective parties involved are prepared to accept those risks that they are best placed to manage. This will ensure a timely and cost effective rollout of smart meters. Macquarie is currently funding (and finalising further funding) for a number of large smart residential meter projects that will ensure that customers and energy suppliers will start benefiting from an early exposure to smart meters, and learning what works in the marketplace and what does not. Macquarie remains committed to this market and is keen to contribute to the consultation process where we believe our knowledge and experience can add value..

We believe the best way to accelerate the smart meter rollout would be to accelerate the appointment of the central communications network provider (“DCC”) rather than following the interim solution path. We would also respectfully suggest that the DCC should act as a “selection and supervisory body”, and be responsible for appointing and managing a single point supplier who would manage DCC integration and implementation risks. Setting the DCC up to act as an implementer and integrator of multiple sub-contractors is a higher risk approach, which we believe is likely to lead to delays.

Question 3*: Do you have any comments on the proposed approach to ensuring customers have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?

To ensure an efficient and seamless commercial market for investment in smart meter assets and associated equipment, we believe it is critical that a standardised regime is mandated across the whole market with respect to upfront charging versus recovering upfront costs over the life of the smart meter and associated equipment. In a competitive environment, it would seem sensible to recover the upfront charges over the life of the smart meter and associated equipment so that the incumbent energy supplier servicing the customer at the time incurs matching costs.

Question 6*: Do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?

We have no further comments to add in this area except to make the observation that the statement below is not sufficiently robust to ensure that the uncertainty of a stranded smart meter and/or WAN communications module will be removed from pricing assumptions.

“The WAN communications module must be capable of being separated from the meter to enable the module to be upgraded without exchanging the meter.”

While a WAN communications module may be capable of being separated from the smart meter to enable the module to be upgraded without the smart meter being exchanged, the energy supplier may still choose not to do so for a smart meter installed by another energy supplier in the property of a customer that they have won. Arguments for this behaviour include:-

- The meter manufacturer has designed the meter to the point where it is difficult for another manufacturer to produce modules that can be attached to the meter.
- The energy company has no relationship with the manufacturer of the meter (or the manufacturer is no longer active in the UK) and they are unable to source a module that it physically compatible with the meter.

- The required replacement of a WAN communications module could lead to the replacement of the smart meter as well, as smart meter pricing or functionality may have evolved to the point where it is more cost effective (price and life cycle) to replace the smart meter at the same time rather than facilitate an upgrade.

There appears to be further clarification required here to determine what the price and risk objectives are in this area, particularly in the formative stages of a developing competitive smart metering market before interoperability standards are agreed and adopted. The possible clarifications could include:-

- Specifying whether the WAN unit is required to be physically separate to the meter in order to lessen the likelihood of stranded smart meter risk as a result of a WAN module change.
- An obligation (or not) on the supplier to upgrade the existing smart meter if required with a new WAN module in the event of failure or redundancy, or pay a termination payment for a fit for purpose smart meter that they choose to remove.
- The level of requirement on the DCC to support “legacy systems” installed by energy suppliers in the pre-DCC period (with obvious cost implications for the DCC with respect to its level of requirement to assimilate legacy systems selected by energy suppliers in the proposed interim period).

Question 7*: Do you see any issues with the proposed approach to developing technical specifications for the smart metering system?

Nil response.

Question 16*: Do you have any comments on the proposals for requiring suppliers to deliver the rollout of smart meters (including the use of targets and potential future obligations on local coordination)?

We are in agreement with the principle that this should be an energy supplier-led initiative in line with the supplier hub market framework. We also agree that targets should not be required for the non-domestic sector.

However, we would suggest that, due to the complexity and long term nature of the project, any targets for the residential rollout should either:

- (a) Be defined in terms of flexible guidelines; or
- (b) There is some form of review and feedback mechanism to allow targets to be adjusted for legitimate commercial reasons.

As the Prospectus notes, this is a complex project, and we believe it would be inappropriate to force energy suppliers into a position of compromise by potentially shortcutting minimum best practice industry standards (systems design, smart meter specification, smart meter procurement and installation, etc.). This could cause significant problems in the future in terms of cost-effective delivery if there are legitimate reasons why a timeline or milestone should be adjusted to ensure an efficient rollout. Under a competitive supplier hub market framework, energy supply companies should retain some flexibility, rather than sub-optimal implementation due to concerns about their licence obligations.

Question 17*: Do you have any comments on our implementation strategy? In particular, do you have any comments on the staged approach, with rollout starting before DCC services are available?

As the Prospectus correctly points out, this is a highly complex project over a long period of time, with the DCC at the heart of the program and critically placed to deliver cost effective and efficient smart metering services.

As a result, there are significant risks in initiating a mandate to roll out large numbers of smart meters before the DCC is in place. Clearly the risks are that without the DCC in place (as the Prospectus points out), there is the strong likelihood of either:

- Substantial sunk and stranded investment/costs on smart meter assets and associated system changes, if the DCC selected is not compatible with or prepared to support the energy supplier decisions to that time; or
- A significant cost imposed on the selected DCC in time, resources and money with respect to the integration and support of multiple legacy systems, the cost of which will inevitably and eventually flow through to the consumer.

There is also a concern that the DCC will be selected to minimise short term cost redundancy based on the investments that one or more energy suppliers have made by mid-2013, as opposed to selecting a DCC that is optimal for the long term requirements of the UK. Any decision that the DCC should support multiple legacy communications systems should be done with the full realisation that this is effectively imposing competitively sourced communications systems on the DCC selected during the interim period by suppliers, when it was made clear during the consultation process that competitively sourced communication systems in smart metering would result in an inefficient smart meter roll out.

That being said, the rewards of energy suppliers commencing a circumspect rollout while the DCC is put in place would include:

- Energy suppliers being able to optimise their customer engagement strategies and identify any issues early in the process
- Government and energy suppliers being able to determine the best way to maximise the delivery of the business case assumptions and make changes as required to optimise the project for UK plc.

Our supplier-independent view of the various smart metering trials undertaken to date by the energy suppliers is that they are operating completely independently from each other, with no obvious mechanism for the sharing of results/experience between the various organisations. For example, energy companies are currently installing smart meters which other suppliers have no ability to utilise in smart meter mode. A typical example of this is that several suppliers are installing an identical smart residential gas meter in substantially the same technical configuration/functionality with (currently) zero interoperability post supplier churn. In other words Supplier A is incapable of operating a Supplier B smart gas meter in smart mode and vice versa, despite both suppliers having installed the same base meter model. We believe that while energy suppliers should be encouraged to overcome these issues as quickly as possible, any forced mandate to rapidly install large numbers of smart residential meters that could either increase the DCC's costs or result in the write-off of large investments in redundant assets and systems will inevitably lead to increased costs for consumers and undermine the business case assumptions. Energy suppliers should be allowed to make these decisions based on their own view of their position in the market and where they see their own risks and rewards with respect to their projected investments in the smart meter network rollout.

Question 18*: Do you have any other suggestions on how the rollout could be brought forward? If so, do you have any evidence on how such measures would impact on the time, cost and risk associated with the programme?

Considering our experience in large projects, while we believe there are some benefits to commencing the program sooner as discussed above, we believe that over-committing to a large scale rollout before the DCC is in place would significantly increase risk and cost on this project, and force energy companies and the regulated authorities to make decisions where

some of the critical parts of the program and associated information are not yet available. We believe a controlled market start up that accelerates over time will deliver the optimal result. The best way to accelerate the rollout would appear to be to try and accelerate the appointment of the DCC. We would also respectfully suggest that the DCC should act as a “selection and supervisory body” and appoint a single point supplier and allow this supplier to manage integration and implementation risks. Setting the DCC up to effectively act as an implementer and integrator of multiple sub-contractors is, we believe, a higher risk strategy which could lead to delays.

Clearly, the early resolution of some simple commercial inter-operability issues such as the visibility and transferability of dial-up numbers, novation of telecommunications contracts, password disclosures, ‘trusted numbers’, etc., will help to minimise potential stranding costs and maximise customer choice.

Question 19*: The proposed timeline set out for agreement of the technical specifications is very dependent on industry expertise. Do you think that the technical specifications can be agreed more quickly than the plan currently assumes and, if so, how?

Our only comment is that based on experience to date, it is essential to get this process correct in the initial stages. Shaving some time off getting the technical specifications right up front could be a false economy if it results in extensive rework and extra cost if errors are found during the implementation and rollout process. Care should be taken within the technical specification stage to ensure that the desire to future proof the design does not either prevent the timetable being achieved, or worse still actually brings progress to a halt as the specification tries to accommodate a growing number of specialist/exotic requirements.

Question 20*: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

As the Prospectus points out, every country is different with respect to reasons and methodology for implementing large smart metering rollout programmes. The main governance point we would emphasise is that many of the assumptions in the business case and associated papers are simply that – assumptions with critical decisions being made on these assumptions. We would strongly encourage the regulator to set up an objective review process that is able to process real feedback quickly on many of the critical delivery areas (smart meter specifications, customer engagement, changing consumer behaviour etc.) to ensure that an optimal result is achieved over time. As it is a complex project implemented over a long period of time, it is extremely unlikely that the assumptions and decisions in place and made today will hold true for the next 10 years. This is particularly so in our energy supplier hub market which by its nature is fragmented and silo driven from an information sharing perspective.

We believe our suggestion of establishing the DCC as a selection and supervisory body will also support this governance principle as it will then be above the day-to-day integration and implementation issues and can objectively assess feedback on what is going well and what needs further improvement.