eMeter response to ERGEG Public Consultation on Draft Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas

The Consultation seeks comments from Smart Metering stakeholders to ERGEG's specific recommendations and any other comments they might have regarding the rest of the document.

eMeter's response provides comments, first, on the three specific recommendations that ERGEG has specified. The second part of eMeter's response expresses our views on the rest of the consultation document.

eMeter is a global smart meter enterprise software company with several major projects underway in Europe. In all, eMeter's projects cover over 25 million meters. eMeter has participated actively with regulators in the UK and EU in evaluating smart meter issues and has extensive experience with meters, data management, IT systems, and smart meter pilot programs. For example, eMeter managed the successful California, Ontario (Canada), and Washington DC pilot programs. This background gives eMeter strong insights into consumer education, response to dynamic prices, ¹ and response to energy information feedback.²

A) Comments on ERGEG's specific recommendations

Recommendation 4, regarding offers reflecting actual consumption.

eMeter agrees with providing actual consumption monthly. Numerous industry studies have shown consumers will save from 5 to 15% on their energy consumption when provided with good energy feedback information.³

eMeter notes that there is space for a clarification on whether different TOU pricing plans are to be dynamic or fixed (as the Economy 7 scheme in UK). Assuming the relevant TOU plans are fixed - otherwise ERGER would have said differently-, eMeter strongly believes that one hour readings (option 3 of the Question 4a) would help customers (as households) better understand and manage their consumption during the day. Regarding ERGEG's question, "What would be an appropriate

¹ - King, Chris and Dan Delurey. *Efficiency and Demand Response: Twins, Siblings, or Cousins?* Public Utilities Fortnightly, March 2005.

² - King, Chris. *Where's the Beef? What Do Customers Get From AMI Investments?* Public Utilities Fortnightly, September 2007.

³ - Darby, Sarah. *The Effectiveness of Feedback on Energy Consumption, A Review for DEFRA of the Literature on Metering, Billing, and Direct Displays.* April 2006.

number of registers, understood as prices?" eMeter considers that it would be best to a variety of options, , enabling three different time bands, such as peak, middle level and off-peak. eMeter has also found that some consumers, likely not the majority, like hourly pricing, because they can save the most on such plans.⁴ Of course, automated controls are the best and most convenient means of shifting load from higher to lower cost times. For electric vehicles, either hourly pricing or a super off-peak rate during the middle of the night will result in the lowest prices and highest adoption of electric vehicles.

Recommendation 13, regarding optional services that could be offered to electricity consumers to allow them to be aware and active actors in the smart grid.

eMeter recommends to offer the consumer tools to budget their energy bills. Offering these tools would include a web site application provided to the consumers by the supplier at no extra charge. The most effective means of enabling optional services is through adopting standard data protocols in two places: 1) between the smart meters and the home via the home area network and 2) between the meter data collector's head end system and third parties authorized by the customer to access data on the customer's behalf. For item 1, ZigBee has emerged as the de facto wireless standard, with over 40 million ZigBee-enabled smart meters now installed or being installed globally.

Recommendation 20, regarding gas and interval metering offered to customers.

eMeter acknowledges gas meters limitations as per their battery lives. Therefore intervals initially should be less often than those of electricity (note that the intervals may be recorded hourly with the data sent only once daily to preserve battery life). eMeter recommends intervals of one hour as the benefit would compensate the greater use of the battery. (Option 1 of the Question 20a). What would be an appropriate number of registers, understood as prices? eMeter considers that it would be at least two, enabling two different bands, one for peak and another one for off-peak. The greatest benefit is likely the ability of consumers, through more detailed information access via the Internet and via HAN devices, to manage their consumption better and thus reduce energy use and carbon emissions.

⁴ - SMPPI, Inc. *Briefing to White House Officials, July 1, 2010.*

B) Comments on the on the rest of the document

The GGP would be a great platform to discuss dynamic ToU.

eMeter notes a good opportunity in the GGP to develop ToU further providing directions on how to implement and coordinate real time prices and critical peak prices.

Access to Price as a minimum customer services for both Electricity and Gas, and not only consumption data.

eMeter recognizes access to Price Data among the minimum service that smart metering should offer to both electricity and gas consumers price data, and not only usage data. Consumers regularly report that the most important energy information is the price and cost of consumption. Therefore, entries 8 and 21 of the Table 1 (Page 9) should say:

"Access on customer demand to information on consumption and PRICE data." (It should be also mentioned in the conclusions of the document.)

Implementation of Gas Metering

eMeter recognizes that the GGP would be a great opportunity to highlight that by September 2012 economic assessment for gas must be completed. Despite no legal deadline for mandatory roll out other than "within a reasonable period of time", countries like the UK are currently designing the mandatory roll out. There are synergies and benefits from implementing both electricity and gas metering in parallel, , and that could be at least acknowledged and highlighted. It would promote and accelerate consumer awareness about energy consumption, enabling reductions in energy usage and carbon emissions.

MDI- Directive of Measuring Instruments functions shortage

ERGEG notes that the MID does not envisage the following functions:

- 1. Measurement of active power;
- 2. Interval metering and recording of active energy;
- 3. Remote reading;
- 4. Time of use consumption registers;
- 5. Consumption registers copies, used for billing purposes, switching, change of
- price scheme, deactivation of supply;
- 6. Clock calendar; and
- 7. Measurement of reactive power and recording of reactive energy.

eMeter believes it is a tremendous mistake not to include items 1, 2, 3, and 6. These functions are needed for providing detailed energy usage feedback, supporting dynamic pricing, enabling demand response, and creating operating efficiencies and savings. Installing new meters without these items is like buying computers without any Internet access or optical disc drives.

These functions may be covered by national legislation as an option. However, their absence in EU legislation could have an impact in Member States where, despite the MID equivalence, the institutions responsible for metrological verifications and auditing on measuring instruments could hinder the use of smart meters containing the above functions, because they are not foreseen by MID, thus risking decelerating or stopping roll-outs. This could lead to obstacles in competition and increases in costs for manufacturers and/or system providers, which would in turn have a negative impact on customers.

eMeter appreciates the opportunity to comment.