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Comments on: "An ERGEG Public Consultation Paper on Draft Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas", E10-RMF-23-03 10 June 2010.

From: SP Technical Research Institute of Sweden

We have studied the consultation paper as referred above and have some comments regarding technological aspects of meters that can influence regulation or must be handled by regulations:

1) **Frequency of measurement, accuracy and resolution:** On page 15 second bullet point it is stated that: "Billing on the basis of actual consumption shall be performed frequently enough to enable customers to regulate their own energy consumption". On page 20, recommendation 4 second section it is stated "To enable this service, the metering interval needs to be divided into periods that would be less than monthly, i.e. through interval metering." Further, on page 22, first section it is stated "On demand, the customer should be able to access information on his/her up to date consumption data."

Our comment: It should be noted that there is a de facto standard for (household)meters to have a resolution either of 1 kWh or 0,1 kWh. This is enough for all yearly and most monthly readings/billings, but it is not enough for hourly billing and for giving feedback on consumption to customers, since many households have a base consumption in the order of 0,1 kWh per hour. A resolution of at least 0.01 kWh is needed for hourly values to give household accurate hourly values. We think that not only the frequency of data but also the accuracy and resolution should be handled by the recommendations.

2) **Injected energy and meter choice:** On page 20, recommendation 7 it is stated "The possibility to register injected as well as consumed energy with only one metering device should be offered to all customers that both generate and consume electricity. The decision on the specific metering equipment needed, if varying from case to case, should be left to the customers that both generate and consume electricity".

Our comment: It should be noted that the ability to measure and register injected energy is most often a matter of changing parameters within the meter which sometimes even can be done remotely. The customer or a third party can most often not verify by looking at the meter if it is suitable or not. Therefore it might not be a good idea to put the responsibility to choose the correct metering function on the customer.

3) **General comment on the change of meter configuration:** Both the question about resolution and the handling of injected energy from customers are important matters that could be controlled and changed by the owner of the meter by remote control, maybe without the knowledge of the end customer of the energy. The question of regulating, or not, the change of important metering features by remote control should be brought into the discussion. It should also be regarded whether the state of some of these changeable configuration features must be identifiable without special means or not.

Best Regards,
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