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EDISON'S COMMENTS ON ERGEG PUBLIC CONSULTATION PAPER ON DRAFT GUIDELINES OF GOOD PRACTICE ON REGULATORY ASPECTS OF SMART METERING FOR ELECTRICITY AND GAS

WHO WE ARE

Born in 1881, Edison is one of Europe's oldest energy companies. In 2009, it reported sales revenues of 8.867 mln €, and is carrying out an ambitious investment plan in the electricity and gas sectors. Edison had to diversify its business, when the national monopoly on electricity was established in Italy in 1963. Thanks to the first wave of EU Directives in 1996, it could re-focus its business on energy once again, this becoming the largest new entrant on the Italian market.

With 50,3 TWh produced in 2009, it is now Italy's second largest electricity generator. Thanks to 7.000 MW of new highly efficient and low emission plants (CCGT thermo plants, as well as hydro and wind power plants), the Company has now a total installed capacity of 12.500 MW. In the hydrocarbons business, Edison has an integrated presence in the natural gas chain, from production to importation, distribution and selling, with sales of 13.2 billion cubic meters in 2009.

In 2009 the new LNG terminal in Rovigo started to contribute to the diversification of Italy's supply sources with its regasification capacity of 8 bcm of natural gas a year, equal to 10% of Italy's demand for natural gas. The start up of Galsi and ITGI pipelines will further connect Italy to Algeria and Caspian Sea, two areas rich in hydrocarbons.



GENERAL REMARKS

Edison welcomes ERGEG's effort in drafting Guidelines on regulatory aspects for the deployment of smart metering systems as a tool to improve competition on electricity and gas retail markets. In our market, metering data on actual off-takes from the distribution networks are often available to gas and electricity suppliers with considerable time lag, forcing them to bill their customers with reference to estimated rather than actual consumption. Therefore, we acknowledge that one of the obstacles to the correct functioning and liberalization of retail gas and electricity markets is the lack of timely and accurate metering data which prevents the correct calculation of the commercial balance of distribution networks.

Thus, smart meters installed to a large share of final customers connected to the distribution network can enable gas and electricity suppliers to carry out additional operations (e.g. switching, transfers etc.) in a reasonable timeframe and at a reasonable price, while guaranteeing to final customers better information and the possibility to regulate their own gas consumption. Hence, the benefits of smart metering activity¹ for final customers envisaged by the Third Energy Package (i.e. information on actual consumption, active participation in the supply markets etc.) could be effectively addressed, bringing about several advantages also to gas and electricity suppliers (i.e. customer profiling, quality of billing data etc.), provided that possible costs are carefully taken into account. Furthermore, the exact allocation of gas and electricity ownership among network users would allow operators to attribute the costs of system inefficiencies to the responsible operators in a more accurate way, with a positive effect on market competition.

Being active in both gas and electricity markets, we are in a special position to identify the peculiarities of the roll-out of smart meters for both the sectors. For this reason, we wish to highlight that any parallelism between gas and electricity sector can be misleading, being the two markets characterized by different technologies, different security requirements and different legal metrology problems. Thus, we welcome the approach taken by ERGEG in this consultation paper, aimed at distinguishing recommendations on minimum and optional services for smart meters in the electricity and gas sectors. We also think that the roll-out processes should be clearly distinct for the two markets.

¹ I.e. both the installation of smart meters and the use of their functionalities.



Hence, it has to be highlighted that smart metering could be a promising technology able to contribute to an efficient grid management as well as to an improved accuracy and efficiency of data exchange among market actors. Nevertheless, when it comes to implement this kind of technology, it is of paramount importance to carefully balance cost-efficiency with specific needs of energy markets and their players.

Thus, in our opinion, a thorough Cost Benefit Analysis (CBA) must be a prerequisite in order to evaluate the cost recovery and the distribution of incentives consequent of both the rolling out of smart meters and the implementation of specific services. Moreover, we deem advisable to carry out in advance a close analysis on specific topics related to the roll-out of smart meters, both at national and EU level. Those issues, listed below, can have a great influence on the cost-effectiveness of the installation of smart meters:

- Available products and technologies
- Legal metrology rules across Member States
- Capital and operational costs
- Reasonable timeframe for a realistic implementation of smart meters.

Nevertheless, we wish to highlight that, once the roll out of smart meters has been kicked off, a wide range of the potentialities of these devices should be duly exploited in order to streamline the benefits of such an extensive effort.

Furthermore, even if the definition of responsibilities for the provision of services among different stakeholders is out of the scope of these Guidelines, being this defined at national level by NRAs, we think that a clear definition of the roles of market participants is important in order to guarantee the correct and smooth functioning of the market. In our opinion, a clear distinction should be made between metering services (e.g. provision of metering data etc.), often regulated, and post-metering services (e.g. home automation etc.) that should be in any case open to market competition. We also deem advisable that national NRAs take active action in order to compel metering data owners to implement an open communication protocol for metering data, being this a necessary condition to enable market players to offer post-metering services.

We finally want to stress that any requirement on smart metering shouldn't lead to an undue increase of burdens charged on market operators, thus requiring that tariffs fully reflect the costs incurred in the implementation of new intelligent metering systems. Therefore, an



accurate CBA should enable NRAs to detect whether the “grid tariff-financed” roll-out of smart meters can involve excessive costs for a specific category of market players, final customers included.

SPECIFIC RECOMMENDATION

1. MINIMUM SERVICES ELECTRICITY (Recommendations from n. 1 to 8)

The services listed in the **Recommendations from n. 1 to n. 8**² should be considered as the minimum functionalities linked to the roll out of smart meters in the electricity sector.

Regarding **Recommendation n. 4 on interval metering**, we think that the provision of hourly data can be the reference target at least for customer whose available power is over 55 KW, whereas at an initial stage hourly data for customers with available power below 55 KW could be aggregated in larger timeframe. Nevertheless the suitability of an extension of hourly metering to all customers, from big industrial to residential, has to be assessed after an accurate CBA aimed at detecting possible shortcomings linked to the large scale implementation of this functionality. In addition, hourly metering data could be initially made available by metering operators to final customers or electricity suppliers only on demand, while the necessary technological arrangements (e.g. communication protocols etc.) are implemented.

As far as Time of Use (ToU) registers are concerned, we think that 10 registers in a daily timeframe would enable market operators to better capture consumption patterns and, therefore, to make customized commercial offers.

2. OPTIONAL SERVICES ELECTRICITY (Recommendations from n. 17 to 21)

As mentioned in the general remarks, the functionalities of smart meters, once installed, should be exploited as far as possible in order to optimize the benefits of the roll out. For

² Rec. n. 1 information on actual consumption on a monthly basis; Rec. n. 2 accurate metering data to relevant market actors when switching suppliers or moving; Rec. n. 3 bills based on actual consumption; Rec. n. 4 offers reflecting actual consumption patterns; Rec. n. 5 power capacity reduction/increase; Rec. n. 6 Activation and de-activation of supply; Rec. n. 7 only one meter for those that both generate and consume electricity; Rec. n. 8 access on customer demand to information on consumption data.



this reason, the optional services listed in **Recommendations from n. 9 to n. 13**³ can be beneficial to the development of the electricity market both in terms of customer participation and market competition, provided that an accurate CBA has been carried out.

3. MINIMUM SERVICES GAS (Recommendations from n.17 to n.21)

The services listed in the **Recommendations from n. 17 to n. 21**⁴ should be considered as the minimum functionalities linked to the roll out of smart meters in the gas sector.

Regarding **Recommendation n. 20 on interval metering**, we think that the hourly timeframe can be the reference target since it would enable gas suppliers to make detailed customized offers based on actual consumption data. Yet the suitability of an extension of hourly metering to all final customers, from big industrial to residential, should be duly assessed after an accurate CBA, aimed at detecting possible shortcomings linked to the large scale implementation of this functionality. Therefore, we suggest to start the implementation of hourly metering for customers with large off-takes (e.g. over 200,000 smc/y) with a gradual extension of this obligation to other categories of customers only once the feasibility of the infrastructural upgrade required has been duly assessed. In addition, hourly metering data could be initially made available by metering operators to final customers or gas suppliers only on demand, while the necessary technological arrangements (e.g. communication protocols etc.) are implemented.

4. OPTIONAL SERVICES GAS (Recommendations from n. 22 to n. 25)

As mentioned in the general remarks, the functionalities of smart meters, once installed, should be exploited as far as possible in order to optimize the benefits of the roll out. For this reason, the optional services listed in **Recommendations from n. 22 to n. 25**⁵ can be beneficial to the development of the gas market both in terms of customer participation and market competition, provided that an accurate CBA has been carried out. However, as far as **Recommendation n. 23 (activation and de-activation of supply)** is concerned, we

³ Rec. n. 9 alert in case of non-notified interruption; Rec. n. 10 alert in case of high energy consumption; Rec. n. 11 Interface with the home; Rec. n. 12 information on voltage quality; Rec. n. 13 information on continuity of supply.

⁴ Rec. 17 information on actual consumption, on a monthly basis; Rec. 18 accurate metering data to relevant market actors when switching supplier or moving; Rec. 19 bills based on actual consumption; Rec. 20 offers reflecting actual consumption patterns; Rec. 21 access on customer demand to information on consumption data.

⁵ Rec. n. 22 hourly flow capacity reduction/increase; Rec. n. 23 activation and de-activation of supply; Rec. n. 24 alert in case of high energy consumption; Rec. n. 25 interface with the home.



suggest further and accurate investigations on security issues related to remote activation and de-activation of gas supply.

5. COST AND BENEFITS ANALYSIS ELECTRICITY AND GAS (Recommendations n.14 and n. 26)

We agree with ERGEG view that a CBA should take into account the extensive value chain (DSOs, suppliers, metering operations etc.), with particular regard to the costs and benefits for network operators acting under a regulated regime in order for NRAs to fix cost-reflective tariffs.

Furthermore, in our opinion, two more advantages should be included in the list of the benefits of smart metering for gas and electricity suppliers:

- Profiling and data aggregation. The availability of interval metering for customers connected to the distribution network would allow suppliers to considerably improve the load profiling of their customers. This activity is of utmost importance for suppliers in order to customize their commercial offers
- Balancing. Accurate data on customers off-takes would allow suppliers/shippers to accurately balance their positions.

6. DATA SECURITY AND INTEGRITY ELECTRICITY AND GAS (Recommendation n. 29)

We fully agree with ERGEG's **Recommendation n. 29** on customer control of metering data that provides for customers' responsibility in the choice of the way metering data are used and by whom.