Supply & Markets Development Committee

Smart Metering – a retail perspective

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THE EUROPEAN UNION OF THE NATURAL GAS INDUSTRY

Introduction

- Smart metering is often seen from the point of view of the distribution company
    - o distribution companies in most MS are responsible for metering

- This presentation focuses on the interests of suppliers and their customers

- From the gas supplier's perspective, smart metering:
    - o offers prospect of radically changing the customer-supplier relationship
    - o transforms metering & billing (& can improve other business processes too)
    - o makes customers more aware of their consumption, so encouraging energy conservation (Note: in gas, limited scope for dynamic pricing)

- It is in the customer-supplier relationship that the most obvious impact of smart metering occurs

Economic assessment of smart metering

- The financial justification for smart metering will vary significantly between MS.

- An assessment depends on:
  - the nature & cost of present meter reading arrangements
  - the age of the current stock of meters
  - the nature & speed of the roll-out programme being considered
  - the cost of installation – the typical location of the meter & ease of access for its replacement
  - the amount of energy consumed & the extent of energy saving among different customer groups, as a result of greater energy awareness

- Gas meters are more expensive than electricity meters so their business cases will not be the same

- Some costs may be saved if gas can be rolled out at the same time as electricity BUT
  - MS vary greatly in terms of their gas coverage
  - the distribution companies for gas & electricity may be different
  - the distribution areas may not be the same

- MS have to take great care in considering smart meter roll-out & evaluating the costs/benefits

Typical functionalities for gas smart meters

- Remote index reading
  - provision of periodic meter reading information on request by authorised market participant(s)
  - storage of most recent readings in the smart meter memory

- Communication of information to the customer, to assist the customer to manage energy consumption & cost
  - on-demand consumption & other information for customers

- Additional features to support improved customer management
  - remote meter management (meter status, activation/de-activation capability, error messaging, fraud detection)
  - remote changes of tariff
  - in some cases, a pay-as-you-go or prepayment facility (capable of being introduced/activated remotely)

Interoperability

- Necessary to support interface with existing operational and information systems managed by DSOs and suppliers

- From a customer perspective, interoperability means
  - customers who move around the country can still continue to receive the same or similar level of service
  - customers who switch suppliers do not have to have their meters changed

- From a supplier perspective, it means
  - the supplier receives consistent dataflows, regardless of which company is operating the smart metering system

- Key consideration is therefore how metering data and other messages are communicated between the meter and the meter operator
  - suppliers should not face technical barriers in interfacing with meters installed by another company or competitor
  - some standardisation of communications/interfaces necessary to avoid adversely impacting customer service or supply competition

- The challenge of 'future-proofing'
  - preference to open & flexible systems

Specifying smart meters

- A national framework is desirable at the outset, supported by suppliers and DSOs

- Need to strike a balance between functionality & cost, standardisation & innovation

- Aim to ensure a common minimum functionality at MS level and provide the necessary interoperability

- However functionalities & interoperability are defined, suppliers are key stakeholders and must be involved in their development

Challenges for regulation

- In their smart meter position paper (Oct 2007) ERGEG urged NRAs to
  - use their existing powers to the full to support the introduction of smart meters (assuming the business case supports this),
  - to act to remove barriers and
  - to assist in standardisation work

- NRAs thus have a major role in overseeing the introduction of smart meters
  - to ensure industry agreement to appropriate (minimum) levels of functionality & interoperability
  - to ensure the right regulatory framework for industry players (including addressing stranding costs associated with accelerated roll-out)
  - to ensure the proper management of operational aspects such as smart meter roll-out programmes & changes to industry dataflows

- Standardisation
  - contributing to the current standardisation work being undertaken in response to Mandate M/441

- Data protection
  - ensuring minimum requirements for digital security & privacy of consumers' information

Thank you