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Perspectives d'évolution du financement des réseaux de distribution français

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CRE MISSIONS

- CRE was set up in 2000 to regulate electricity. Its role was extended to gas in 2003.
- It contributes to the good functioning of energy markets **to the benefit of consumers**
- Its main missions consist in :
 - **regulating electricity and gas networks**, such as :
 - guaranteeing the right of access to public electricity grids and natural gas networks and facilities, especially by setting the transmission, distribution and LNG terminals access tariffs ;
 - ensuring the independence of network operators ;
 - contributing to building the European Internal Market for electricity and gas.
 - **monitoring electricity and gas markets**, such as :
 - monitoring transactions on electricity, natural gas and CO2 wholesale markets ;
 - ensuring the proper functioning of retail markets.
- CRE settles the disputes linked to infrastructure access (dedicated board to dispute settlement : CoRDIS)

TURPE 5: THE 5TH ELECTRICITY GRIDS TARIFFS REGULATION PERIOD

- TURPE 5 (*“Tarifs d’utilisation des réseaux publics d’électricité 5”*), the fifth network access tariff regulation period, will come into force in August 2017.
- These tariffs encompass both the transmission grid (Very High Voltage – VHV) and distribution grids (High Voltage – HV – and Low Voltage – LV).
- **TURPE 5 reinforces and refines economic signals passed on to consumers and generators**, in order to foster efficient grid usage and energy efficiency :
 - It introduces a demand response peak load tariff for High Voltage (HV) grid (20 kV)
 - It takes advantage of smart meters rollout in France on Low Voltage (LV) grid: a 4 periods tariff is set up (winter / summer, peak / off-peak)
- **TURPE 5 takes into account self-generation** of electricity.

TURPE 5: GREATER TIME DIFFERENTIATION

- Due to the large penetration of electric heating in France, demand seasonality is high and **peak demand is a critical dimensioning factor** of electricity grids (~2.4 GW of demand per °C).
- **The sum of all connection points subscribed capacity is much higher than the grid capacity** at every level (LV feeder, transformers, HV feeders, ...), because the synchronicity of grid usage by end users is only partial.
- Grid costs would then be much higher if all users were to use all their subscribed capacity simultaneously.
- As a consequence, **load curtailment provides great value to the system**, especially during peak demand periods.
- Thus, **time differentiation of the tariffs is an efficient tool** to value the ability of grid users to curtail their electricity demand during peak load.
- Finer time periods allow refining the signals passed on to end users.

TURPE 5: SELF GENERATION

- As after-taxes retail electricity prices rise and generation costs from renewable energy sources drop, **self-generation of electricity becomes an option chosen by more and more consumers.**
- TURPE 5 takes into account self-generation of electricity :
 1. The better time differentiation introduced by TURPE 5 will give a higher value to self-generation during peak load periods. Therefore it will encourage the **development of self-generation with storage**
 2. Self-generators, who act both as consumers and generators, used to pay double fees for administrative management. TURPE 5 introduces a specific, lower fee for self-generators.
 3. In the next months, CRE will conduct broader analysis and a public consultation to take into account self-generation to a wider extent in the network tariffs

LINKY (1/2)

- Modernization of electricity meters is a legal obligation imposed by the European Commission
- The linky program consists in the **deployment of 35 million electricity smart meters** between end-2015 and end-2021
- Linky will offer many benefits to residential consumers, small companies as well as to professionals of the sector (DSOs, suppliers,...) :
 - **better control of the energy consumption** through easy access to information about actual consumption
 - bills based on **actual consumption**
 - **optimized management of the grid** and reduced network losses thanks to a better knowledge of energy flows
 - innovation in suppliers' commercial offers and **development of new services**



LINKY (2/2) : REGULATORY FRAMEWORK

- Given the size and high stakes of the project, CRE has set up in 2014 a **dedicated regulatory framework for Linky**.
- This framework encourages Enedis to :
 - control **investment costs** ;
 - meet the **roll-out schedule** ;
 - guarantee the expected **performance level** along the entire meter-reading process.
- Given the benefits to the system, **a premium is granted to Enedis** regarding remuneration of the smart meter assets compared to other assets.
- Any underperformance of the DSO (schedule, investment costs, quality of service) will reduce this premium.

ADDITIONAL SERVICES

- Additional services are services on which the DSO has a monopoly, and that it must offer to every user, at a price fixed by the regulator. They have been revised in 2016, to **enable network users to benefit from Linky:**
 - **access to a large set of data** has been added to the list of mandatory services that the DSO must provide free of charge. This includes access to :
 - daily consumption ;
 - daily highest used capacity ;
 - half-hourly consumption
 - the **tariff of some basic additional services has been lowered**, since Linky enables the DSO to operate remotely, and therefore at a lower cost. This applies for instance to:
 - change in subscribed capacity
 - activation of a connection point
- Additionally, a « *consumption breakdown* » service was added. It consists in counting separately the consumption of two users, one of which being connected indirectly to the grid through the private network of the other
- This will **enable users of electric vehicle** who charge them in the car-park of their building to **have a separate invoice from that of the building, without costly work to connect to the distribution network**

SMART GRIDS

- CRE is very mindful of the development of *smart grids*
- Several initiatives have been launched by CRE to enrich the collective discussion with stakeholders
- CRE's deliberation of 12/06/2014 proposed **41 recommendations** regarding the evolution of legal, technical and economical frameworks in order to foster the development of *smart grids*
- TURPE 5 gives TSOs and DSOs the possibility **to ask for the covering by the tariff of costs related to new *smart grids* projects** that may be deployed during the next tariff period
- A cost-benefit analysis will be required

WORKING GROUP « DIGITAL DATA »

- Digital data will be a major stake in the energy sector in the near future.
- Network operators face **new challenges** regarding digital data :
 - nature and volume of data collected (especially in the context of the deployment of smart metering solutions) ;
 - new legal / regulatory obligations regarding data processing and transmission.
- To address these issues, CRE created on the 31/05/16 a working group (« *comité d'étude des données* »)
- This working group aims to feed the discussion about these issues in order to implement key recommendation based on auditions of all stakeholders
- **A report will be released in the beginning of 2017**