Distribution challenges and opportunities in the new energy paradigm

Conclusions

Gian Carlo Scarsi (EURELECTRIC)

Joint DSO Conference

Brussels, 12 April 2016

Summary

- Critical issues
- What DSOs need from EU and national legislators/regulators
- Most DSOs are still regional/local operators
- The Distribution/Transmission and Distribution/Distribution interface

Critical issues (1)

- ✓ Investment in smart grids/meters within an increasingly decentralised and decarbonised system context
- ✓ Correct regulatory remuneration (WACC, output-based), especially for pilot and closer-to-market SG projects (innovation competitions), including active network management (ANM)
- ✓ Effective asset management (new and existing assets)
- ✓ Maximising quality and security of supply under fair regulatory incentives

Critical issues (2)

- ✓ Retraining of crucial staff to enable smarter grid management/real-time monitoring
- ✓ Interface with the telecommunications sector in the fields of smarter grids and big data/ICT: make sure that data is managed correctly, efficiently, and that customer privacy and cyber security are taken into account
- ✓ Determine (with legal and regulatory clarity) which areas of flexibility and storage can be accessed by modern DSOs and which ones are reserved for pure market players
- ✓ Cost-reflective network charges (volumes v capacity) which provide the right incentives to consume electricity efficiently (peak shave, time-varying) and without discriminating in favour/against prosumers and new market entrants

eurelectric

What DSOs need from the EU, regulators and national lawmakers (Winter Package 2016 + national legislation/regulation) (1)

- ✓ A clearer and fairer regulatory environment (incentives) for DSOs to act as neutral market enablers and to deliver innovation where and when needed
- ✓ A clearer legal framework to minimise any grey areas between distribution and retail market (including aggregation) activities (ancillary services, flexibility, storage)
- ✓ A well-balanced (and clarified ex ante) approach between EC intervention and subsidiarity, with the EC not supposed to intervene in national regulatory matters

eurelectric

What DSOs need from the EU, regulators and national lawmakers (Winter Package 2016 + national legislation/regulation) (2)

- ✓ Better legislation/regulation in terms of network charging, efficient data handling (technical v commercial), and the distribution/retail/demand response aggregation relationship
- ✓ Clearer regulation of the TSO/DSO interface in terms of joint network and operational development/planning, data management, active/reactive power management, balancing markets, congestion management, and system risk preparedness

eurelectric

Most DSOs remain regional/local operators

- ✓ Less than **200** DSOs in Europe (out of around 2,400) exceed **100,000** connection points
- ✓ Still the **main customer contact point on grid issues** (connection, use or system, interruptions, disconnection, safety)
- ✓ **Providing connection points** to TSOs and other DSOs
- ✓ Must **ensure data security and privacy at local level**
- ✓ Must **integrate renewables and self-generation at local - sometimes individual - level** (local market facilitation)
- ✓ Responsible for **rolling out smart(er) meters** in most EU Member States

eurelectric

The Distribution/Transmission and Distribution/Distribution interface

- ✓ How to support and foster the evolving role of DSOs in the future energy landscape? Do more with less, optimise regulatory structures, incentivise innovation through the right regulatory instruments/incentives
- ✓ How do TSOs and DSOs currently forecast future system needs? How to develop a joint analysis of TSO/DSO system needs, and (possibly) coordinated grid planning? Optimise the T/D and D/D interface
- ✓ What are the regulatory and legal instruments needed to improve the T/D and D/D interface, both nationally and at EU level (e.g. in terms of reviewing/amending/monitoring EU-wide network codes)?

Thank you