



The DSO as Facilitator of the new Electricity Customer

Plug & Play: Charged for the Future?

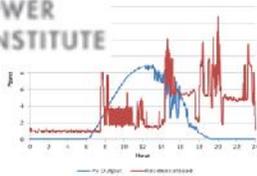
EURELECTRIC Annual Convention and Conference

Julio Castro, EVP Regulation, Iberdrola Group

Estoril, 19 June 2017

Some lessons from leading studies on DSO and networks

Leading academics confirm the value of the network and the key contribution of DSO for the energy transition



Grids provide energy, but also **short circuit power, voltage, frequency, availability and in/out connectivity**

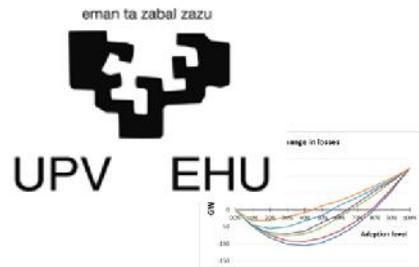
Connected self-consumers use the grid for dynamic and static balance

Off-grid solution oversize solar panels and batteries

If PV sized to **serve the whole customer's load**, facilities export significant power and **losses increase** up to 25%

Centralised and distributed resources are **complementary** but centralised are much **cheaper**.

Size Matters: small is not always better (**PV**)



DSO require efficient remuneration for operations and the right incentives for innovation

EPRI – The Value of the Grid

EPRI | ELECTRIC POWER
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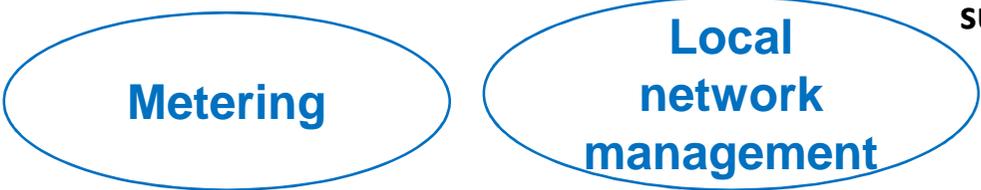
The DSO position in the Electricity System: a reliable hub

DSO link consumers, market providers and TSO through data management and ensuring security and quality of supply in local networks

- Customer service



- Data Management
- Market facilitation (suppliers, aggregators, etc.)



- Quality-security of supply
 - ✓ Investment planning
 - ✓ Active system management (flexibility)

- Coordination with System Operators



Priorities for the future DSO Committee leadership

In the light of the green energy transition and the Clean Package, Eurelectric DSO Committee will focus in three main areas over the next years

Enhance the value of the grids

- Unveil the value of *connectivity*
- Create value upon distributed resources

Support a more active consumer

- Smart grids and smart meters deployment
- Data management and TSO-DSO cooperation
- Stable framework for investment and innovation

Support climate action

- Integration of renewable from different sources, keeping the lights on

DSOs are facing a huge opportunity!

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