Energy storage regulation
1. **Energy storage should be regulated? In what cases? What kind of regulation?**

- **Basic operation:** energy consumption to introduce (a smaller amount) in the system at a given time
- **Principle:** any energy that is consumed or injected in the market should follow market rules
- **Experience in the electric sector:** electricity sector has a long experience in storage systems such as reservoirs and pumping, that operate in the market regime
- **RES expansion:** it’s a new and great opportunity for storage
- **Need of delivering the appropriate market signals**
- **Storage affects the market to a greater or lesser extent** follow market rules: developed & operation managed by the agents following efficient economic criteria
2. Specific rules should be necessary? Is it justified to apply a different treatment?

- **Capacity assessment**
  - **Solution:**
    - Electricity storage should be paid in line with its contribution to the system’s peak
    - No discrimination regarding other plants

- **Power availability assessment**
  - **Solution:**
    - Adequate assessment of the real power availability
    - Pay the market price of the upward need (for balancing)

- **Small size:** difficult access to the market
  - **Solution:**
    - Allow generation & consumption balancing
    - More efficient access tariffs’ structure

- **Emerging development**
  - **Solution:**
    - Limited & directed support
    - Specific demonstration projects
3. Regulatory proposals

✓ **Market access on equal terms as other alternatives**
  - Development & operation of storage in the market
  - Adecuation of regulated tariffs to real costs

✓ **Market rules:** storage systems have to follow these rules as other market plants do; they have to be proportioned, non discriminatory & should provide efficient signals
  - Participation in capacity mechanisms, availability payments, upwards need (for balancing)
  - Increase upper limit in the electric market price

✓ **European internal market:**
  - Market integration at all levels (day, intraday & balancing)
  - Harmonized rules in Europe (access tariffs for pumping)

✓ **Clear & stable regulation**
✓ **R&D support for those technologies that are still far from being competitive**
Thank you

Jose Arceluz
je.arceluz@iberdrola.es