The challenges of the new European market design

Fulvio Fontini

Europe is the place where ...

IN THEORY: You are invited to a party. You're welcomed by an Englishman. Food is prepared by a Frenchman; An Italian puts you in the mood; everything is organized by a German

IN PRACTICE: You are invited to a party. You're welcomed by a Frenchman. Food is prepared by an Englishman; A German puts you in the mood; everything is organized by an Italian

The evolution of European market design: from short-run optimization ...

1^{st,} 2^{nd,} 3rd European packages:

- Focus on short-run effiiciency
- need to foster physical and regulatory integration on transmission infrastructures
- ➤ Need of creating room for wholesale and retail competition



- Liberalization of generation (and creation of DA markets);
- progressive liberalization of retail markets;
- removal of (targeted) incentives.
- Focus was on generation (and retail) competition

The evolution of European market design: ... to long-run planning

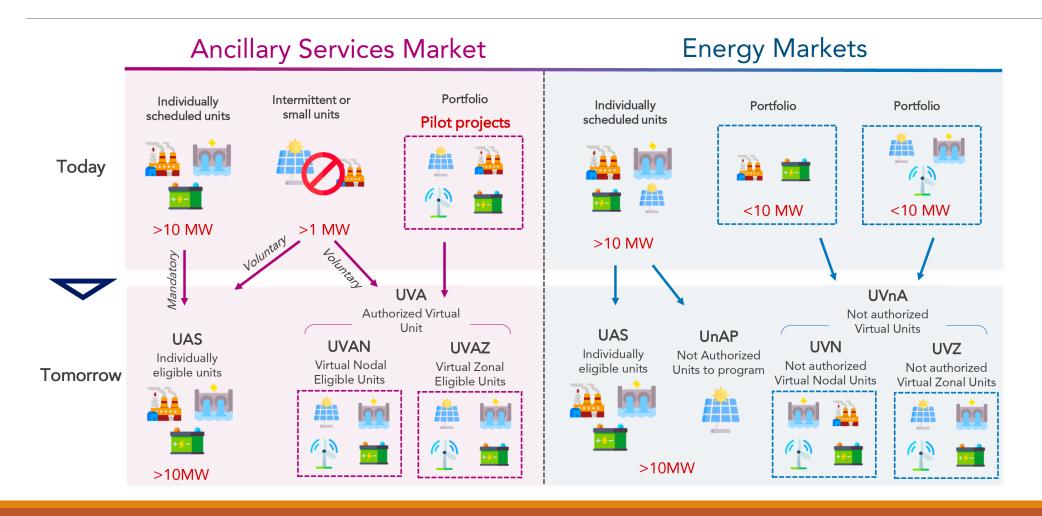
New Next Gen EU, Fit-for 55 packages

- Need to foster energy transition
- Enhance energy security
- Protect customers from price volatility
- ➤ Increasing room for competition in AS markets



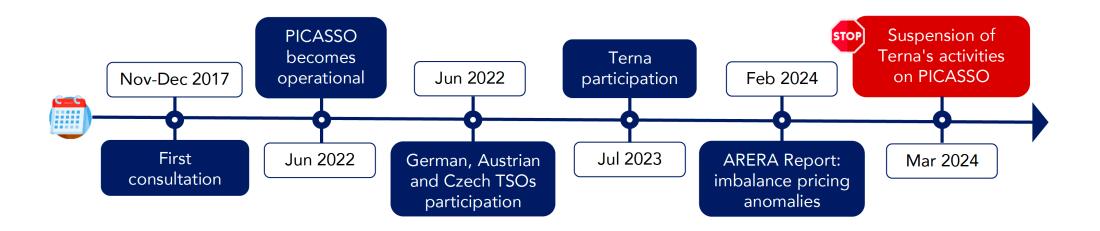
- Push towards CfD and PPA
- Shift from short run to long run pricing
- Speeding up interconnection procedures
- New approach to capacity markets
- More price responsibilities to En. Providers
- Integration of DSR (and BSP) into Balancing services 'markets

Example: new design of Italian power markets

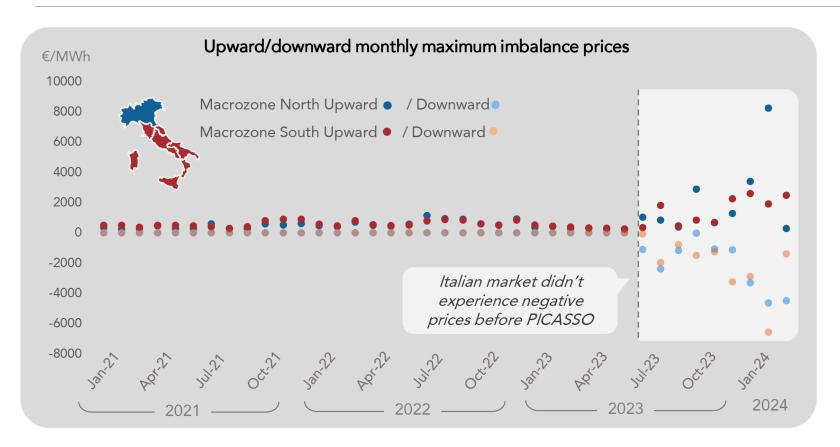


Issues: competiton and price volatility?

The example of PICASSO (the European aFRR Platform for exchanging balancing energy from Frequency Restoration Reserves with automatic activation)



Why?



Huge price spikes due to small changes in bid (and small unavailability of cross border connections) = problem of «small numbers» (unconvexities in constrained optimization)

Lessons (to be) learned:

- ❖ Beware of market segmentation: There is a trade-off between technical and market efficiency: less homogeneous products are more difficult to regulate, but imply larger market efficiency
- ❖ Beware of regulated prices (2w CfD)
- ❖ Piecewise integration is no solution: need to an overall market approach
- This is particularly so for "prosumers" activities (generation + storage, at distribution level)
- Leave room the pricing of the "commodity": i.e., the energy conversion of primary energy into power

Thank you!

Fulvio Fontini

Department of Law Studies University of Salento (Lecce, Italy) fulvio.fontini@unisalento.it