



ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA – ICAI

Network regulation under climate policy review Comment

Pedro Linares

Academic Roundtable, FSR

Florence, May 7th, 2010



What climate policies?

- Carbon prices
- RES development
 - Large scale
 - DG
- Energy efficiency
 - Not only DR





Setting the stage

- What is the starting point?
 - Good regulation, or bad regulation. What should be our priority?
- Are we talking about grid policies
 - that allow things to happen (no barriers)?
 - Or that are pro-active?
- We are dealing with expansion issues, efficiency
- And we generally go for second-best solutions, not optima.





No-barrier policies

- If DG or DR provide benefits for the grid, they will be undertaken by the DSO
 - Unless there are innovation issues
- If the benefits come from the generation / retail system, then customers will pay for it
- The only requirement is a regulation of the grid that does not penalize DG or DR compared to grid investments or to other generators





Pro-active policies

- Just removing barriers may not be enough
 - Pervasive externalities (not only direct)
 - Innovation effects
- So we may be interested in additional incentives
- But we should be aware of the costs and benefits
 - Can we be distorting the output? (Orkney case)





Agrell's paper

- Climate policies
 - Higher asymmetry of information
 - Higher capital intensity
- Focuses on asymmetric information
- Looks at how should the regulator deal with DSOs and DERs
- Very interesting contribution for coordination





Agrell's conclusions

- Under a second-best setting, there is rationing in the investments
- Substitute or complementary investments
 - Centralized, integrated solution
 - There are large advantages in DSOs merging with DER
- When there is unbundling
 - De-centralized solution





My issues with the paper

- Are we assuming that the DER will be regulated agent? Or rather more like an aggregator, free in the market?
- In that case, what is the share of investments to be done by the DSO and the aggregator? Because one of them is regulated but the other not...





Additional issues(I)

- For RES
 - Connection procedures, cost-reflective charges
 - Interactions: e.g. locational signals vs RPS
- Specifically for DR:
 - Behavioral response (e.g. flat tariffs)
 - Access to ancillary markets
 - Coordination between TSO & DSO
 - Coordination between DSO & retailer/aggregator (Agrell)
 - How to buy DR?
 - Smart meters as potential barriers for entry





Additional issues (II)

- Energy efficiency (not DR)
 - Unbundling and decoupling
- Innovation
 - Should it be handled by grid regulation?





A minor question

- Why are feed-in tariffs philosophically inconsistent with the market?



Thanks for your attention!

www.upcomillas.es/personal/pedrol

