Does Germany need an evolution or a revolution in electricity market design?

Introductory Statement for Panel Discussion: Texas and Germany: Energy Twins?

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Situation of German Electricity Market

From a general perspective market seems to be healthy

- > Restructuring in 1998
- > Liquid long-term and spot markets → highest liquidity among European electricity markets
- > Satisfying level of competition in wholesale and retail markets \rightarrow no major concerns on market power \rightarrow low level of regulatory intervention
- > High level of interconnection with European neighbors \rightarrow EU internal market
- > RES share has reached 25% \rightarrow at least partly integrated into markets
- > Cap-and-Trade scheme for controlling carbon emissions

But discussion on capacity payments for conventional generation

- > 40% price drop since 2008
 - » currently no incentives for new build of plant
 - » mothballing or retirement of existing plants due to economic reasons
- > Nuclear phase out until 2022 \rightarrow concerns on system adequacy
- > Do intermittent RES need a 1:1 fossil-fuel capacity backup?
 - » GenCos claim capacity payments necessary to guarantee adequacy
- > Capacity payments also introduced in other European countries

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Is there any evidence for a market failure?

Multiple reasons for price drop since 2008

- > Increasing share of RES generation only partly explains today's prices
- > Consequences of economic crisis in Southern Europe
 - » Closely interconnected European electricity system and market → crisis has major consequences also for German market
 - » Load growth much lower than expected (pre-crisis level not yet reached)
 - » Very low prices for carbon certificates → low incentives for new efficient plants (like CCGT) → instead increasing share of hard coal and lignite
- > Overcapacity in European generation system
 - » partly due to historic reasons, but also driven by inefficient investments during last years

But this does not mean a market failure

- > Current prices are a valid signal to indicate overcapacity
- > Typical causes for introduction of capacity payments not fulfilled
 - » Up to now no "missing money problem" due to regulatory price caps
 - » No significant risk of abuse of market power
 - » Efficient investment decisions do not need long-term contracts

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How should Germany proceed?

No economic need for capacity payments

- > Efficiency and generation adequacy not endangered
- > Main proponents pursue additional objectives, among others
 - » subsidies for power industry suffering from inefficient investments
 - » increasing the level of regulatory intervention
 - » more direct control of fuel mix for electricity generation

Nevertheless: Evolutionary steps could improve market performance

- > stability and foreseeability of political boundary conditions (e.g. binding targets for RES and CHP generation as well as long-term carbon reduction targets)
- > commitment of policy makers to accept (rare) price peaks in situations with exceptionally high load
- > optimization of regulatory boundary conditions for new entry of DSM
- > foster market integration of RES
- > full internalization of imbalance costs

> Optimized "energy-only" market preferential to capacity payments

> Will be able to deliver an efficient level of generation adequacy

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