Framework around capacity mechanisms

14 May 2019

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In focus

- Objective and challenges
- Missing money
- Capacity Mechanisms and framework around them
- Base-case framework
- Legal framework regarding capacity mechanisms … loading
The market we aiming for ...

Affordability?

Security of supply

Integrated & efficient market

Competitive

Sustainable
Objectives and challenges

- Security of supply
  - efficiency, reliability and adequacy

- Investments in low carbon technologies
  - More RES integration, phase out of coal and nuclear, aging of existing fleet

- Competitive markets
  - Efficient market mechanisms, scarcity resulting in price spikes, affordability

- Energy efficiency
  - Demand-side response, ‘smart’ technologies

…investments needed in every segment of the industry
Missing money problem

- Is caused as a result of an intervention in the market creating inadequate pricing dynamics – reducing the revenues of conventional generators.
- Such situation comes mainly due to price caps or in the EnC due to quasi-regulated prices – resulting with lack of investments in generation.
- Exacerbated by the increase share of RES, and
- For coal: carbon prices.
- General economic conditions:
  - financial conditions of potential investors,
  - Demand increase / decrease cycles, and
  - Dynamics of innovation and technological advances.
Capacity mechanisms

Result of: Security of supply concerns + challenges with energy transition

An indispensable need or just a safety net?

- In theory, energy-only market should be able to deliver adequate level of investments, but other views sound appealing too!
- Academic literature is very inconclusive
- Practical examples do not provide sufficient evidence neither …

If one is to be designed what are the key components?
Key framework governing CM

1. Competition / State aid rules – other presentation

   - An assessment by EC of capacity mechanisms designed and/or implemented in Europe
   - Recommendations for improvement of certain aspects

3. Clean Energy Package – coming soon
   - Binding rules
EC Sector Inquiry on Capacity Mechanisms

• Capacity mechanisms should not substitute the reforms which would make energy-only market more efficient

Three indicators based on which EC identified different types of capacity mechanisms

1. are generally initiated by or with the involvement of governments;
2. have the primary objective of contributing to security of supply; and
3. provide remuneration to capacity providers in addition to revenues they receive in the electricity market, or instead of revenues they could otherwise have received in the electricity market.
Design features

Key categories in assessing different designs in the EU

1. Eligibility
   • who gets to participate in the capacity mechanism?

2. Allocation
   • how does the selection process among the eligible parties work and how is the level of capacity remuneration determined?

3. Product design
   • what do participants in the scheme have to do, and what happens if they don't do it?
Types of capacity mechanism

CMs

Targeted
- Volume-based
  - Tenders for new
  - Strategic payment

- Price-based
  - Targeted payment

Market-wide
- Volume-based
  - Central buyer
  - De-central obligation
- Price-based
  - Market-wide
Core recommendations

• Need for rigorous adequacy assessment
• Competitive price setting
• Not distort electricity market prices (as less impact as possible)
• Penalty regime – a kind of ‘imbalance’
• Market-wide being the most appropriate – at least for long-term adequacy risks/issues
• A form of strategic reserve – as a transitional measure
• Cross-border participation
CEP - Legal framework … loading

- NRAs in charge of designating – identifying policies, measures
- CM as a last resort to address adequacy concerns
  - Still in line with State aid rules
- Before CM:
  - EU adequacy assessment – complemented with national assessments
  - MS shall conduct a comprehensive study of their possible effects on the neighbouring MS by consulting, at least, its electrically connected neighbouring MSs and the stakeholders of those MSs
  - Assess if strategic reserve can address adequacy concerns
  - EC to assess before implementation
  - CM should be a temporary measure – approved by EC for max 10 years
Design principles

Any capacity mechanism shall:

• be temporary.
• not create undue market distortions and not limit cross-zonal trade;
• not go beyond what is necessary to address the adequacy concern;
• select capacity providers by means of a transparent, non-discriminatory and competitive process;
• provide incentives for capacity providers to be available in times of expected system stress;
• ensure that the remuneration is determined through the competitive process;
• set out the required technical conditions for the participation of capacity providers in advance of the selection process;
• be open to participation of all resources, including storage and demand side management that are capable of providing the required technical performance;
• apply appropriate penalties to capacity providers when not available in the event of system stress;
Thank You!

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