Capacity mechanism in France

Florence School of Regulation
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Key steps

2009
- A parliamentary working group is set to provide recommendations concerning peakload management. The experts call for the development of a capacity obligation on suppliers as well as a capacity market.

End of 2010
- New (“NOME”) law to reform the organisation of electricity markets and tariffs.
  - It requires explicitly a capacity obligation on suppliers.
  - The energy minister commissions RTE to launch a consultation on the architecture of the mechanism.

End of 2011
- To satisfy a Ministry’s request, RTE delivers a detailed report with concrete recommendations.
  - The Ministry elaborates a decree on the basis if this proposal.

Early 2012
- CRE and the Competition Authority give their opinion on the drafted decree.
  - Final approval is suspended with presidential elections.

End of 2012
- The decree is approved and signed by the prime minister.

2013
- RTE launches a new consultation on the specifics of the design of the mechanism, more specifically the « set of rules » of the capacity mechanism.
Key objectives

- Deliver relevant market signals
- Suppliers to contribute in consistency with their portfolio
- Minimize total costs for final consumers
- Minimize distortions on energy markets
- Ensure compatibility with IEM achievement

Define a balanced mechanism

- Satisfy security criteria while accommodating intermittent generation
- Facilitate necessary investments
- Ensure availability during peak hours
- Sensitivize the stakeholders

Ensure long term security of supply

Incentivise peak load containment

- Mitigate the increase in peak demand
- Facilitate DSR solutions
- Facilitate Energy Efficiency

Key principles of the mechanism

- Decentralised capacity obligation mechanism
  ✓ The Ministry defines an adequacy criterion for a given period (about 4 years ahead);
  ✓ The capacity requirement on suppliers is a capacity margin under reference temperature conditions;
  ✓ Transfer responsibility to suppliers, with incentives to reduce consumption during peak periods.

SUPPLIERS

1. Must cover their obligation, based on the estimated peak power consumption of their customers and a security margin. They can use:
   - Certificates from their own capacities;
   - Bilateral contracts with capacity owners;
   - Capacity market sessions.
2. They can reduce their obligation with actions on consumers (energy efficiency, tariffs, DSR);
3. Pay balancing penalty if they do not satisfy their obligation.

CAPACITY OWNERS

1. TSO delivers certificates, to the extent the capacity contributes to reducing blackouts;
2. Capacity owners make commitments to be actually available during peak hours
   - Certification requirement
   - Monitoring and control
3. They can use the market before real time to get more/less certificates;
4. Pay penalties if effective availability is below planned availability.
Roles and responsibility

1. Obligations based on adequacy criterion
2. Certification
3. Exchanges of certificates
4. Penalty application
5. Prove they have capacity certificates
6. Accounts the certificates, calculates the imbalances
7. Sanctions

KEY MISSIONS OF NRA
- Opinion on certification and control methodology
- Imbalance settlement monitoring based on TSO data
- Approval of capacity imbalance settlement methodology
- Defining the methodology for penalties on suppliers
- Capacity market monitoring

Mechanism timetable: from the supplier’s side

- Adequacy criteria published
- Delivery period 3 - 4 years
- Bilateral contracts with capacity owners
- Self-procurement of certificates
- Capacity market
  - Organized market sessions

RTE closes capacity certificate register and notifies the supplier his imbalance
RTE computes the ex post capacity obligation
Capacity imbalance settlement

- RTE computes the ex post capacity obligation
- Capacity imbalance settlement

- Suppliers improve their peakload forecast
- CRE imposes sanctions in case balancing settlement not implemented
Mechanism timetable: from the capacity owner’s side

Delivery period
- ~ 6 years
- 3 - 4 years

Certification process
Some capacities will be able to be certified closer to the delivery period

Monitoring and control by RTE
Capacity owners honor their availability commitment

Balancing of capacity owners
RTE controls capacities are actually available

Certification period
Certification deadline depends on technology
Operators improve their availability forecast

Power imbalance settlement
Earlier balancing taken into account to ensure best availability forecast

RTE computes the effective availability

Market design

The « product »: the capacity certificate
- Every existing and planned capacity must be certified
- One standard product: generic capacity certificates
  ➢ A capacity receives an amount of certificates equal to its contribution to the reduction of the blackout risk
  ➢ The uniqueness of the product increases the liquidity of the market
- Only capacities located on French territory can participate in the market: the interconnection is taken into account implicitly

The market:
- Bilateral transactions
- An trading platform may be created to set up organized trading sessions

Regulation:
- RTE keeps a register of all the certificates delivered, along with all information concerning various transactions
- CRE monitors the market, and has full access to the register and all relevant information
- CRE regularly publishes reports on the well-functioning of the market

Market drivers:
- The imbalance settlement prices for capacity owners and suppliers
- Regular reports by RTE of the status of electricity supply and demand
Additionnal safeguard mechanisms

- Emergency call for tenders:
  - In case a critical situation is observed regarding the electricity supply and demand 3 years in advance, the government can organize a call for tenders to secure the necessary capacities.
  - The conditions to trigger the call for tenders, as well as its terms, are very restrictive, to ensure the capacity market remains the preferred driver of investments.

- Initial call for tenders:
  - The first delivery period of the mechanism is expected to be winter 2016-2017, whereas the NOME law states that suppliers must contribute to the national security of supply starting in winter 2015-2016.
  - A call for tenders will be organized early 2013 to secure the necessary capacity for this period.

Thank you

- Question?