



COMMISSION  
DE RÉGULATION  
DE L'ÉNERGIE

## **PRESENTATION FOR OECD / NEA**

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# **International workshop on Advanced Reactors Systems and Future Energy Market Needs**

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# THE EU ELECTRICITY MARKET CONTRADICTIONARY TRENDS

## Demand-side

- ✧ Energy efficiency
- ✧ Economic trends / crisis
- ✧ Self-generation
- ✧ Heating / cooling
- ✧ Transportation
- ✧ Digitalization

## Improved markets

*Large variety of products  
from long term  
to very short term*

*EU Market coupling  
at all time frame*

*Improved interconnection  
management*

## Offer

- ✧ Aging conventional generation
- ✧ Massive non market-driven investment (RES)
- ✧ Variability
- ✧ Storage solutions
- ✧ Commodity markets
- ✧ ETS and more...

Overcapacity (and low market prices) as an average  
But still persisting concerns regarding security of supply (short / long term)

# EU “CLEAN ENERGY PACKAGE” PROPOSAL AND STATE AID GUIDELINES



- Increased market integration of Renewables
  - But still subsidized
- Focus on short-term market and scarcity management
  - Energy-only markets (capacity funded on infra-marginal rent)
  - Uncapping wholesale markets (spot, day-ahead, balancing,...)
  - Enforcing spot-based retail prices (for all suppliers)
  - Promoting independent aggregators (flexibility service providers)
- Common adequacy assessment
  - Annual adequacy assessment (ENTSO-E)
  - Common methodology approved by ACER (how about VoLL?)
- Price zones

An adequate answer to the investment challenge?  
Effect of risk / uncertainty on long term financing conditions?

# DIFFERENT SITUATIONS / ENERGY POLICIES TAILORED SOLUTIONS



## United Kingdom of Great Britain

- Objectives
  - Developing emission-free capacities (nuclear / off-shore wind)
  - Ensuring security of supply
- Challenges
  - Aging baseload capacity
  - Flexibility
  - Peak load remuneration
- Solution
  - Contract of difference
  - Strengthening emission market
  - Capacity market (TSO centralized)



## Germany

- Objectives
  - Massive RES development
  - Nuclear + coal / lignite phasing out
- Challenges
  - Managing disinvestment
  - Flexibility and short term adequacy
  - North / south network constraints
  - Financing economic / social transition
- Solution
  - Strategic reserve
    - Box 1: adequacy
    - Box 2: network
    - Box 3: coal / lignite



Other Member States (DG COMP sector inquiry)

28 existing or planned capacity mechanisms  
in 11 Member States

Including Italy, Spain, Poland, Sweden, Belgium, Denmark...

# AND HOW ABOUT FRANCE?

## Objectives

- Peak demand adequacy
- Competition

## Challenges

- Thermal gradient (2400MW/°C)
- One dominant producer

## Capacity remuneration mechanism

- Market-based
  - Capacity providers vs suppliers
  - Cross-border capacity (implicit)
  - Up to 4 years ahead
- Decentralized
  - Responsibility on suppliers
  - Depending on portfolio profile and contribution to risk
- Technology neutral
  - Generation, demand-side management,...
  - Based on contribution to adequacy

## Regulated access to nuclear energy

- Facilitate alternative suppliers' entry on the retail market
  - Access to nuclear energy "at cost" price
  - Retail regulated prices contestable
- Designed to incentivize generation investments / co-investments
  - Regulated volumes (100TWh/an max)
- Target partially missed
  - Improved market opening
  - But very limited generation investments
  - Inadequate mechanism in inverted price squeeze

## Further steps

- Explicit cross-border participation
- Longer anticipation (~7 years ahead)

## Further steps

- Periodic report on mechanism
- Proposal for adjustments / cancellation