

# The work of European energy regulators on generation adequacy

FTS-CEER workshop on

Regulatory Aspects of Power Capacity Markets

7 February 2012



### Summary

#### 1. European Energy regulators and security of supply

- 1.1 Background
- 1.1 ESS TF: a task force dedicated to security of supply analysis

#### 2. Work in progress on generation adequacy

- 2.1 Call for evidence on generation adequacy treatment in electricity
- 2.2 The Guidelines of Good Practice on generation adequacy

#### 3. Capacity mechanisms in Europe



### Background

- ✓ CEER has been working on security of supply since 2001. Important developments or events have emphasized the central role of security of supply in the European electricity supply and market since:
  - . EU Directive 2005/89/EC on Security of Electricity Supply
  - . ERGEG Electricity Regional Initiatives
  - . 4 November 2006 disturbance
- In 2007, the new ESS TF was mandated by CEER to serve as the place for National Regulatory Authorities (NRA) to discuss on electricity security of supply aspects.
- ✓ New Task Force is co-chaired by the Austrian and French regulators (E-Control and CRE)
- Responsibility for the European energy regulators in the area of security of supply is to deliver a well-defined, stable and effective regulatory framework, so that the market participants' and customers' risk management and hedging instruments can function properly.



## ESS TF: a task force dedicated to security of supply analysis

#### Past work of the Electricity Security of Supply TF

- ✓ Security of Supply Directive (2005/89/EC) implementation:
  - Specific aspects of the SOS Directive implementation in the Member States
  - Roles and responsibilities of different stakeholders in each country
- **✓ Improvements to the System Adequacy Forecast of ENTSO-E:** 
  - Evaluation by the European regulators of ENTSO-E's document and paths of improvements in providing information on adequacy forecast to investors and market players
- **✓** Overview of generation adequacy practices:
  - Comparative analysis of "market" versus "non-market" based solutions for ensuring generation adequacy



#### A document setting out CEER's view on generation adequacy

- ✓ Directive 2005/89/EC, reference document for the ESS work on security of supply that points to:
  - .Importance of transparent and stable regulatory framework and investment climate;
  - Importance of encouraging the establishment of liquid wholesale markets and suitable price signals;
    - .Importance of removing administrative barriers to investments;
    - .Possibility to take additional measures;
- ✓ In 2008, ESS report on generation adequacy treatment:
  - .Analysis of the available practices to achieve generation adequacy;
  - .Advantages/drawbacks of energy only markets and of capacity mechanisms
- ✓ Following the paper, a Call for evidence on generation adequacy treatment in electricity:
  - launched in 2010 to set out CEER's views on generation adequacy and how generation adequacy needs to be addressed throughout the European Internal Electricity Market (IEM).



- 1. Efficient electricity markets an stable regulatory framework: Key elements for ensuring a favorable investment climate
- ✓ Take all necessary measures to facilitate price risk management for generation projects:

Long term contracts, hedging tools, VPPs,...

Market monitoring:

Increase the comprehension of market mechanisms, detect anti-competitive behaviors, identify where transmission networks are needed to develop market integration,...

✓ Demand flexibility:

Participate to reduce price spikes and risk of shortages



#### 2. Identification of barriers to investment in new generation capacity

#### Environmental risks detrimental to investment:

risks originating from uncertain environmental objectives and goals (CO2 targets, technical standards for industrial emissions,...)

#### Regulated energy tariffs:

CEER proposed progressive ending of regulated tariffs as they distort the market and jeopardize security of supply

#### ✓ Price spikes:

Measures like price caps need to be minimized to ensure maximum effectiveness of the market

#### ✓ Delays to build new power plants and reinforce grid:

Shortening of authorisation procedures and delays to grid reinforcements



#### 3. Additional measures facilitating the provision of new generation capacity

Ability of electricity markets to ensure security of supply:
risks originating from uncertain environmental objectives and goals (CO2 targets, technical standards for industrial emissions,...)
Avoid adverse market effects by national generation adequacy approaches:

#### Examples of measures:

Demand side measures, Locational signals, fuel sourcing, incentives to run during tight periods, diversity in electricity generation,...

**✓ Capacity mechanisms might be considered as a solution** 



## The Guidelines of Good Practice on generation adequacy

#### **Scope and aim of the Guidelines**

- ✓ Based on the conclusions of the call for evidence, the GGP intend to provide a global analysis on the key factors ensuring an adequate level of generation capacity in Europe:
  - . Give the right signals economic and investment signals
  - . Provide a clear and stable regulatory framework
  - . Identify the barriers to the ability for energy markets to ensure generation adequacy and the possible solutions
    - → Key factors to increase markets efficiency
- ✓ Tackle growing concerns of renewables integration, flexibility and peak demand:
  - . Bring the generation capacity to where it is needed
  - . Manage the intermittency of renewables
  - . Seasonal outlooks of ENTSO-E reveal that under certain circumstances generation adequacy concerns is growing in Europe (tight margins under severe weather conditions, structural differences between European countries,...)



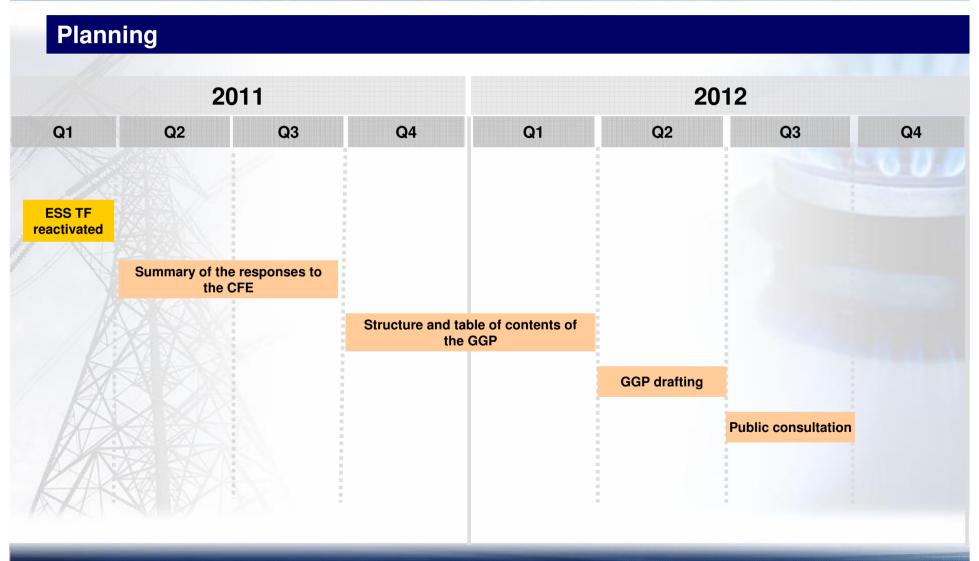
## The Guidelines of Good Practice on generation adequacy

#### **Capacity mechanisms in the Guidelines**

- ✓ Diversity of the capacity mechanisms already implemented or under study in Europe underline the complexity of reaching a satisfactory level of generation adequacy for European countries
- ✓ The GGP will deal with capacity mechanisms while raising the issue of additional measures facilitating the provision of new generation capacity.
- ✓ ESS TF will work on evaluating the impact of such national measures on European security of supply, pointing out potential adverse market effects led by national generation adequacy approaches.



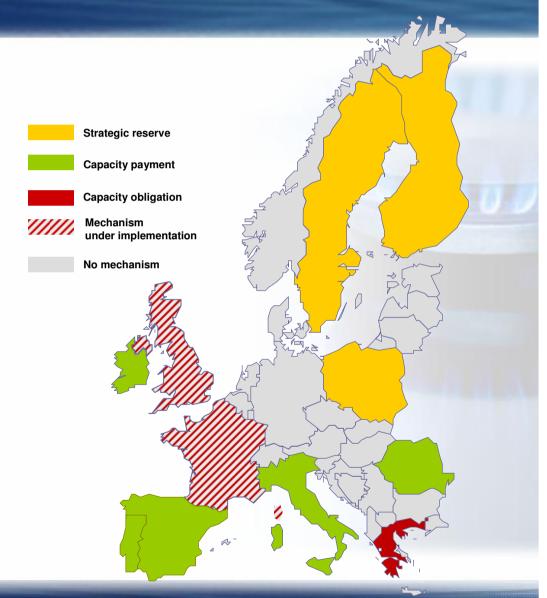
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### Capacity mechanisms in Europe

- ✓ Capacity obligation Greece
- ✓ Capacity payment Ireland, Italy, Portugal, Romania, Spain,
- ✓ Strategic reserve Finland, Poland, Sweden
- Mechanism under implementation France, UK
- Impacts on neighboring countries and on global European security of supply uncertain at the moment





### Thank you for your attention!



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