European framework for capacity mechanisms

June 2018
The Commission’s sector inquiry on capacity mechanisms confirmed that...

- Many Member States have yet to implement market reforms that are indispensable to deliver on security of supply issues.

- Member States have often failed to adequately assess the need for a capacity mechanism before introducing one.

- The design of most capacity mechanisms could be significantly improved to minimise competition distortions.
What the clean energy package can achieve

1. Make capacity mechanisms only a temporary, last resort option.

2. Evaluate on the basis of a common assessment framework.

3. Minimise the impact on sustainability and competition.

4. Ensure rules are applied to all schemes.

Extra: The case of strategy reserves.
1. Capacity mechanisms as a temporary, last resort option

**European Parliament**

MS to develop an *implementation plan* to eliminate distortions and market failures at the root of the adequacy concern.

The plan must be **approved** and **reported on**, with **scrutiny** from COM and ACER. No capacity mechanism can be put in place without an approved plan.

**Council GA**

MS to identify issues contributing to their adequacy concern and publish a *roadmap* with a concrete timeline for eliminating them.

No approval process, no follow-up, no role in approval of capacity mechanisms. Capacity mechanisms may be introduced to address residual concerns.

**TEMPORARY**

Capacity mechanisms shall be approved by the Commission for **no longer than five years**.

“Capacity mechanisms shall be temporary but...” (but are permitted as long as the relevant resource adequacy assessment identifies a resource adequacy concern)
2. Assessed on the basis of a common framework

**European Parliament**
- MS to monitor resource adequacy on basis of the European resource adequacy assessment (ERAA).
- ERAA to contain a worst case scenario (but not best case scenario).
- MS to monitor resource adequacy on basis of the European, and potential national resource adequacy assessments (NRAA).
- ERAA based on “appropriate central scenarios” of projected demand and supply.
- One NRAA must be based on the same methodology and use the same modelling tool as the ERAA, take into account contribution of foreign capacity, but can include additional scenarios, sensitivities and assumptions. MS may also perform a 2nd assessment using different modelling tools.
- If the national assessment alone identifies adequacy concerns, ACER to provide opinion on basis of input from relevant body and ENTSOE.
- Capacity mechanisms shall not go beyond ‘what is necessary to address the resource adequacy concern’ – according to which assessment?
3. Minimise the impact on sustainability and competition

Competition

**COMPETITION - BETWEEN ALL MARKET PARTICIPANTS**

CRMs shall be open to participation of all resources (“including storage and demand side management”).

Contracts for existing installations limited to length of 1 year.

**COMPETITION – CROSS-BORDER PARTICIPATION**

CRMs other than strategic reserves shall be open to direct participation of capacity providers located in another MS.

MS shall not restrict capacity located in their territory from participating in CRMs in other MS.

Council GA

CRMs shall be open to participation of all resources (“including storage, energy efficiency and demand response”).

CRMs including strategic reserves when possible, shall be open to direct participation of capacity providers located in another MS.

MS shall not restrict capacity located in their territory from participating in CRMs in other MS.
### 3. Minimise the impact on sustainability and competition

#### Sustainability (1/2)

<table>
<thead>
<tr>
<th>European Parliament</th>
<th>Council GA</th>
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</thead>
<tbody>
<tr>
<td><strong>SUSTAINABILITY CRITERION (“550”)</strong></td>
<td></td>
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<tr>
<td>No payments to <em>new</em> plants emitting more than 550gCO2/kWh <strong>right after</strong> entry into force.</td>
<td>Some <em>lax restrictions</em> to payments to <em>new</em> plants emitting more than 550gCO2/kWh <em>from 2026</em> (but no actual end date).</td>
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<tr>
<td>No payments to <em>existing</em> plants emitting more than 550gCO2/kWh <strong>5 years</strong> after entry into force, with some <em>restricted</em> derogations for strategic reserves.</td>
<td>Some <em>lax restrictions</em> to payments to <em>existing</em> plants emitting more than 550gCO2/kWh after 2030 (but no actual end date).</td>
</tr>
<tr>
<td>‘<em>New</em>’ defined as capacity <em>which has started commercial production</em> after entry into force.</td>
<td>‘<em>New</em>’ defined as capacity for which a final investment decision has been made after entry into force – plants which will be built in a couple of years could be considered as ‘<em>existing</em>’.</td>
</tr>
<tr>
<td>Criteria calculated for emissions per unit of <em>electricity</em>.</td>
<td>Criteria calculated for emissions per unit of <em>energy</em>: could fully exempt coal plants providing heat as well as electricity.</td>
</tr>
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<td>To apply to all schemes.</td>
<td>Risk of it applying <strong>only</strong> to entirely new schemes.</td>
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</table>
3. Minimise the impact on sustainability and competition

Sustainability (2/2)

- Building on the Commission’s original proposals, both the European Parliament and the Council have decided to grant exemptions to plants emitting more than 550gCO2/kWh, by introducing new criteria expressed in kgCO2/kW.

- These criteria limit the number of hours a given plant can run in a year, in function of how much it emits – it sets a ‘carbon budget’ per plant. For instance, a coal plant emitting 750gCO2/kWh could run at full capacity:
  - up to 267h a year and stay under the threshold set by the European Parliament
  - Up to 933h a year and stay under the threshold set by the Council GA

<table>
<thead>
<tr>
<th>CO2 Emissions (gCO2/kWh)</th>
<th>200 kg/kW (EP)</th>
<th>350 kg/kW (Original FR proposal)</th>
<th>700 kg/kW (Council GA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>550 gCO2/kWh</strong> (Some oil, diesel, gas plants)</td>
<td>364 h / 15 d</td>
<td>636 h / 27 d</td>
<td>1273 h / 53 d</td>
</tr>
<tr>
<td><strong>750 gCO2/kWh</strong> (Hard coal)</td>
<td>267 h / 11 d</td>
<td>467 h / 19 d</td>
<td>933 h / 39 d</td>
</tr>
<tr>
<td><strong>1000 gCO2/kWh</strong> (Lignite)</td>
<td>200 h / 8 d</td>
<td>350 h / 15 d</td>
<td>700 h / 29 d</td>
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</tbody>
</table>
4. Ensure rules are applied to all schemes

Member States applying capacity mechanisms shall adapt their mechanisms to comply with the new rules.

Including DG COMP: when it approved new FR, BE, DE, EL, IT and PL schemes in February 2018, it introduced a ‘review clause’ as part of its decisions...

“... without prejudice to commitments or contracts, concluded before that date, and without prejudice to the Union State aid rules pursuant to Articles 107 to 109 TFEU, including state aid decisions taken thereafter before that date.

(see press release)
**Extra: the case of strategic reserves**

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<td><strong>STRATEGIC RESERVES &amp; OTHER TYPES OF CRMs</strong></td>
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<tr>
<td>Promotes a “strategic reserves first” approach: MS shall assess whether a SR can do the job before introducing a different type of CRM.</td>
<td>All CRMs are equal.</td>
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<tr>
<td>Strategic reserves do not have to be open to cross-border participation.</td>
<td>Strategic reserves, when technically feasible, must be open to cross-border participation.</td>
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**DEFINITION OF STRATEGIC RESERVES**

- **More stringent definition:** capacity in strategic reserves must be held outside of the market, and be dispatched only when all other options have been exhausted.
- **Weaker definition:** capacity in strategic reserves must be held outside of the market, and can be dispatched when TSOs ‘are likely’ to exhaust all other options.
Other resources

- European Commission [FAQ on sector inquiry](#)
- “Capacity payments, the final ingredient to supercharge coal” by Sandbag
- RAP “Realising the benefits of European market integration”

European and regional adequacy assessments at the core of an efficient and secure energy transition

To Permanent representations of the EU, Energy attachés

Dear Madam,

Dear Sir,

COGEN Europe, E3G, Energy Cities, Greenpeace, SolarPower Europe, WindEurope and WWF would like to express their concerns regarding the latest developments within the Council on the Electricity Regulation.
More information

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