28 Capacity mechanisms. Reigniting Europe's energy markets

Annex: Capacity mechanisms in key EU Member States

Questions:

- 1. Does the Member State have/ does it plan to introduce some form of capacity mechanism?
- 2. If yes, does/will the capacity mechanism take the form of either (a) a targeted mechanism in the form of a strategic reserve (i.e. centrally procured capacity removed from the energy market and only used in certain extreme circumstances) or (b) a market-wide mechanism where all providers are willing to offer reliable capacity and are provided with incentives to do so?
- 3. Is the capacity mechanism open to all technology types?
- 4. Is the capacity mechanism open to generation from outside the Member State?
- 5. Who operates and administers the capacity mechanism?
- 6. Is there a capacity agreement? Is it public or private? How long does it last?
- 7. Is there any change in law protection for generators?
- 8. Short description of the capacity mechanism.

Glossary:

- **EC**: European Commission
- **EU**: European Union
- MS: Member State
- NRA: National Regulatory Authority
- TSO: (electricity) Transmission System Operator

Note: The Communication of the EC on public intervention in the electricity markets can be found here: http://ec.europa.eu/energy/ gas_electricity/doc/com_2013_ public_intervention_en.pdf.

Click here to view the new State aid Guidelines. http://ec.europa.eu/competition/ sectors/energy/eeag_en.pdf

Icons:



Nuclear









Solar, geothermal and other RES

Capacity mechanisms (electricity) in the EU:

Implementation in key Member States



Summary: The Government decides the amount of capacity it is seeking, based on analysis from the British TSO, National Grid and an enduring reliability standard.

Pre-qualified capacity will enter competitive central pay-asclear auctions run by National Grid, Successful bidders will be awarded "capacity agreements", which provide a steady payment for capacity in return for a commitment to deliver energy when required in the delivery year, or face a penalty linked to the value of lost load.

The costs of capacity agreements will be met by suppliers based on their market share.

Open to DSR.

Change



Summary: No proper capacity mechanisms are in place, but there are mechanisms that can be interpreted as elements of a capacity mechanism.

- Two types of incentives result from the law: (i) availability incentives to support thermo-electric power
- plants' continuous operation; and (ii) investment incentives to support new investments in hydroelectric generation technology, awarded during the
- first years of operation. Eligible power plants can only benefit from these incentives if they comply with a minimum coefficient of final availability ("Cdf"). The Cdf also determines the annual incentive
- amount to be awarded. If a power plant subject to availability tests fails to reach a certain value of hourly average power, a penalty is applied, depending on the degree of the failure in relation to the Cdf. A 5 MW margin of tolerance applies.



Summary: Each supplier of electricity is under an obligation to hold a certain amount of capacity guarantees, calculated each year, based on the peak consumption of its clients. The capacity guarantees are granted by RTE to the operators of generation facilities or of "erasure" capacities based on their ability and contractual commitment to help

meet peak demand. The capacity guarantees can then be traded until a certain date to be set each year by RTE. Electricity suppliers failing to justify that they hold sufficient capacity guarantees can be subject to a penalty to the cost of building a new capacity.

Operators of the certified capacities will be subject to a penalty to the cost of building a new capacity.

Open to DSR.



Summary: No proper capacity mechanisms are in place, but there are incentive mechanisms associated with the Two kinds of incentives are handed by the government

(i) compensation for investments in new capacity; and (ii) remuneration to existing plants in accordance with their installed capacity and level of availability. The relevant plant operators must request eligibility from the Ministry of Industry, Energy and Tourism, which decides the capacity to receive the applicable remuneration. The remuneration is determined by the Spanish TSO, REE, and paid to each plant owner.



TSO, Elia, to call upon production capacity that has been temporarily, or is scheduled to be, taken out of service. The mechanism allows such capacity to be (re)activated to bridge shortages in available production capacity, in order to match the load required to ensure the country's security of supply. The cost of the strategic reserve is borne by a public

Besides the introduction of a strategic reserve, the government has also initiated proceedings for investment support through a competitive tender for combined steamand gas and open-cycle gas-fired plants. The support is issued for up to six years following the commissioning of

PORTUGAL



NORWAY

ITALY

SWEDEN

POLAND

SLOVAK

CROATIA

Capacity





Sweden

in place/planned?

Form of capacity

(due to be phased out

Targeted (strategic reserve)

Public 1 year

Summary: The strategic reserve is procured through

to cover neak demand in the winter season

procurement rules), which is carried out on an annual basis

Summary: Currently, ancillary system services are carried out, the subject of which is:

Capacity

capacity in those critical periods. The cost of the capacity mechanism is finally charged to the end consumers, through the electricity bill. In case a provider fails to generate the offered capacity, the NRA (AFFGSI) can impose a fine ranging from €25,000 per MW to €50,000 per MW. In case of serious and repeated breaches, the AEEGSI may suspend the payment of the

remuneration provided by the capacity mechanism.

Private 1 year rolling

Summary: Each year, Terna assesses the critical periods in which excess generation capacity is expected to be required, and selects the providers that are willing to offer their power

(i) to maintain the contractor's generating units on standby in order to startup and produce electricity; and (ii) to use the capacities of the contractor's generating units to feed power into the grid upon PSE's instruction, both in exchange for a remuneration paid by PSE. Draft legislation, or at least proposals for principles of a full-fledged targeted capacity mechanism (capacity reserve)

are expected to be published by the Polish government and

the NRA (ERA) in the second half of 2014.

PSF (TSO)

