

Agenda

- 10:00 - 10:30: Registration
- 10:30 - 10:45: Introduction
- 10:45 - 12:30: Designing appropriate obligations and penalties
- 12:30 - 14:00: Lunch break
- 14:00 - 15:45: Competitive bidding processes, and competition between new and existing capacity providers
- 15:45 - 16:00: Conclusion

Work programme and deliverables

1. Demonstrating necessity
2. Eligibility 1: General design considerations, demand response and storage
- 3. Designing a competitive bidding process and eligibility 2: existing and new resources**
- 4. Designing appropriate obligations and penalties**
5. Eligibility 3: interconnector / cross-border participation
6. Example models



Designing appropriate obligations and penalties

EEAG Requirements

Summary

<u>EEAG requirement</u>	<u>Objective</u>
(49)	1. The aid must have an incentive effect inducing the beneficiary to change its behaviour to improve the security of the energy market.
(219)(225)	2. The aid must remunerate solely the service of pure availability (MWs), not the sale of electricity (<u>MWhs</u>).
(233)(b)	3. The measure should not undermine market coupling, including balancing markets.

Why might obligations and penalties be needed?

- Market and/or regulatory failures may prevent the market providing the right signals for flexibility

Examples of obligation + penalty

- Obligation to deliver electricity or make capacity available + penalty for failure.
- Obligation to pay difference between price in a reference market and contract strike price whenever reference price higher (reliability option).

Design choices and trade offs

- What is the obligation (delivery / availability)?
- When does the obligation apply?
 - When a price threshold reached? When SO runs out of reserve?
 - Do people get a warning? How far ahead?
 - 100% of the time, or just in specific periods?
 - Are there any exemptions?
- How high is the penalty? Are penalties capped?

Discussion

1. Are obligations and/or penalties and/or over-delivery payments required in a capacity mechanism, or do market signals provide sufficient incentive effect for efficient short term operation and investments in flexibility?
2. Should obligations and penalties be set purely on the basis of ensuring optimal economic incentives, or is a balance needed to limit the risks faced by capacity providers?
3. Should capacity providers receive any advance warning before a stress event?
4. Which obligation and penalty designs could pose the greatest risks to the efficient operation of the internal energy market? Which designs could be most readily compatible?



Designing a Competitive Bidding Process and Ensuring Competition between New and Existing Capacity

Relevant EEAG provisions

- Competitive bidding process can ensure required reasonable rate of return (§§ 19, 228, 229 and 232(d))
- Measure should:
 - Be open to and provide adequate incentives for existing and future generators and operators using substitutable technologies (§ 226)
 - Allow for the participation of new market entrants with different build times (§ 226)
 - Have built-in mechanisms to avoid windfall profits (§ 230)
- Price for availability should tend to zero when supplied capacity levels are expected to be adequate (§231)
- Preference to low carbon capacity providers *ceteris paribus* (§ 233 (e))

Bidding process aims

- Select technologies that can most cost effectively provide the required capacity
- Identify funding gap preventing adequate investment without state support
- Maximise competition and opportunities for new market entry
- Ensure actual delivery of successful projects

Bidding process design choices (1/2)

- Eligibility
 - in principle open to all types of capacity
- Pre-qualification and collateral rules
 - prior auditing of candidates
 - require collateral
- Structure and bidding rules
 - open format vs sealed bid

Bidding process design choices (2/2)

- Pricing rule
 - pay as bid vs pay as clear
 - price caps and price floors
- Selection rules
 - establishing the level of demand
 - tie break rule
- Transparency
 - prior publication of information

Ensuring competition between new and existing resources

- Lead time
 - time between bidding process and delivery must be sufficient to allow different technologies to participate
- Contract length
 - longer contracts for new projects provide additional certainty which can reduce financing costs
 - potential downsides of longer contracts:
 - Reduced competition in future bidding processes
 - Shift of price and capacity risk to consumers
 - Increase cost of future market design transition

Discussion

1. Have we identified the main design choices in this area?
2. Is a bidding process the only means of designing a competitive generation adequacy measure?
3. Is a pre-qualification process required?
4. What information should be published in advance of a competitive bidding process?
5. Do new resources require longer contracts? How should the balance be struck between this need – if any – and the risk transfer to consumers?