



Response to the I-SEM Consultation Paper on Market Power (SEM-015-094)

Prepared for VPE/Energia

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Agenda



Principles:

A. Review of "Key Principles" and the Current MPM

Proposals:

- 1. Identification of Candidates for MPMs
- 2. SRMC as the Target for "Competitive" Pricing
- 3. Specific Problems with SRMC Pricing for Transmission Constrained Generation
- 4. The Forward Market and Vertical Ring-Fencing

Findings and Conclusions



Conclusions on Principles

- For competition to thrive, MPM must set out transparently what (kind of) behaviour is prohibited, so as not to discourage competitive behaviour
- The success of the BCoP shows how any new MPM will need the same flexibility, to avoid Type 1 errors when facing a similar range of costs
- Letting competition set prices is preferable to regulating prices

Conclusions on Proposals

- 1)i) HHI and RSI indicate persistent market power (for 1 or 2 players), until 2024 at least, in **peak/stress hours** and in **capacity markets**.
- 1)ii) The Consultation Paper recognises the "SCP" framework (para 5.1.2) and Structural filters require further work on **Conduct** and **Performance**
- 2)i) Setting **competitive prices** is difficult for competition authorities. **Regulating prices** raises different questions, e.g. about cost recovery etc
- 2)ii) Prescriptive rules on SRMC pricing will not promote efficient competition and will deny consumers the services they want
- 3) Competitive behaviour in the **BM** can only be defined **in principle**, as in the BCoP, and not through **prescriptive formulae**, as in the Consultation Paper.
- 4) The **stated mandate** of the "**Forwards and Liquidity Workstream**" must cover market power (and vertical ring-fencing), as well as liquidity per se

Transparent, flexible application of principles will produce better outcomes for consumers than tightly prescriptive formulae for SRMC



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The five "Key Principles" are a good starting point for appraising MPMs



The Key Principles (para 8.3.1) acquire meaning through consideration of "Type 1" and "Type 2" errors (para 8.3.3)

- Effective: MPM should not fail to identify abuse (Type 2 error) and should also not hinder competitive behaviour (Type 1 error)
- Targeted: MPM should constrain dominant players but not impose a major compliance burden or otherwise hinder potential competitors
- Flexible: Rules must capture new forms of abuse, but must also permit all forms of competition behaviour
- Practical: MPM should be "understood, predictable and reasonable" for market participants, so that they know how they are permitted to compete.
- Transparent: Vital for avoiding Type 1 errors (so a major omission from the appraisal of options on slide 66 of the presentation on 02/12/15)

For competition to thrive, MPM must set out transparently what (kind of) behaviour is prohibited, so as not to discourage competitive behaviour

The Consultation Paper finds that MPM have worked well in the SEM



The SEM Committee notes the success of the current MPM (paragraph 7.3.1)

- MMU "has worked well...especially in...enforcing BCoP"
- BCoP "has been effectively enforced" and "likely prevented...abuses"
- Directed Contracts "effective measure...[against]... structural market power"
- Vertical Ring-Fencing "effective working alongside other [MPM] measures"

The BCoP is not a prescriptive formula. Its success derives from its design as a flexible set of bidding principles

Para 6:

SRMC over a Trading Day, valued at Opportunity Cost

Para 10:

Start-Up and No-Load costs, subject to scheduling algorithm

Para 8(iii):

The cost of risks to plant and equipment

Para 11:

The Opportunity
Cost of time or
emissions
constraints

Para 8:

Allowance for ("good cause") exemptions

The success of the BCoP shows how any new MPM will need the same flexibility, to avoid Type 1 errors when facing a similar range of costs

Promoting competition is different from prescriptive regulatory pricing



The Consultation Paper's objective is to "interfere with the operation of the market to the minimum extent necessary" (para 8.3.1)

- Limiting interference means seeking to promote competition, i.e.:
 - fostering the competitive process without imposing the outcome
- However, the Consultation Paper proposes prescriptive rules that impose specific prices
 - Prescriptive rules will not allow the competitive process to develop
 - Prescriptive rules put in jeopardy long-term financing of generators' activities
 - Prescriptive rules distort incentives and discourage efficient outcomes

Letting competition set prices is preferable to regulating prices



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A. Review of "Key Principles" and the Current MPM

Proposals:

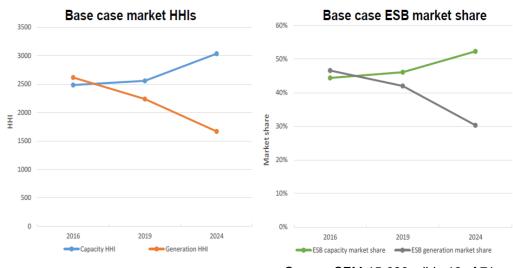
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In order to target MPMs, the RAs need to apply some kind of filter



Chapter 6 reports market shares, HHI for annual generation and capacity, and Residual Supply Index, in 2016, 2019 and 2024

- On 02/12/15, the presenters suggested that the falling HHI for annual generation indicated the problem was diminishing.
- However, the Consultation Paper proposed "to apply the granular definition of hourly product in the DAM and IDM, and half-hourly product in the BM." (para 3.4.2)
- "Annual generation" does not correspond to any relevant market
- It combines low-stress periods (high wind and/or low demand) with high-stress periods (low wind & high demand)
- Trends in this HHI reflect the <u>relative</u> <u>frequency of low/high-stress periods</u>, not just the relative strength of market power.



Source: SEM-15-099, slide 19 of 71

 The structure in (half-)hourly markets is best represented by HHI for capacity and RSI, which are both high and rising until 2024

HHI and RSI indicate persistent market power (for 1 or 2 players), until 2024 at least, in *peak/stress hours* and in *capacity markets*.

"SCP" means not only Structure but also Conduct and Performance



Structural measures provide an initial filter, but may not indicate the potential for abusive Conduct or Performance.

- For the small price-setting generators in table 6.13:
 - Many factors determine the profitability of raising offer prices
 - The next best alternative is not just "next unit in merit order" (para 6.4.25), but also alternative running regimes for other plants, which may set a lower cap on offer prices
- For forward markets concerns over market power and liquidity arise from conduct as well as structure. See section 4 below.
- The RSI margin over demand depends on the characteristics of the market:
 - 1.1 reflects the required capacity margin in thermal generation markets
 - 1.2 better suits small electricity markets facing additional risks (such as *intermittent* generation)
 - See TSO paper SEM-12-105b (page 10) and HLD Consultation SEM-14-008 (para 3.3.11) explaining that the biggest in-feed is 7% of demand in GB but 20% of demand in the SEM

Useful structural measures depend on some aspects of Conduct and Performance

The Consultation Paper recognises the "SCP" framework (para 5.1.2) and Structural filters require further work on Conduct and Performance

Preamble: The Consultation Paper adopts a highly prescriptive view of pricing



The Consultation Paper gives a strong impression of favouring prescription over flexibility:

- It proposes only prescriptive formulae for defining SRMC in the Balancing Market (paras 23 and 8.7.3)
- It strongly indicates a preference for SRMC pricing in DA and ID markets, using prescriptive formulae or bidding principles (para 8.9.3)
- It states that generator offers in general must reflect SRMC, defined as their own cost of production excluding the exercise of market power, scarcity rents and future inframarginal rents (para 4.2.6)

On 02/12/15, the presenters stated that omitting a principles-based option from para 8.7.3 on the BM was a "drafting oversight". They referred to para 8.7.5 as evidence of the intention to allow generators to "innovate" in bidding.

Para 4.2.6: "...In general, the RAs consider that generators should not be allowed to include their own expectation of scarcity rents or future inframarginal rents in their offers ...These issues are best addressed by appropriate market design; for example,...administered scarcity pricing...[or]...virtual bidding...."

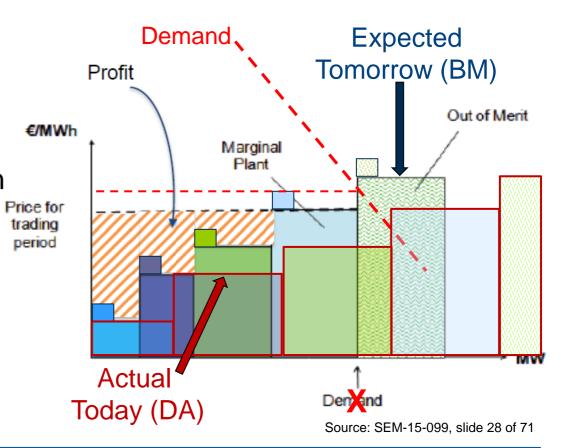
Para 8.7.5: It should be noted that for all options, the SRMC formulae still allow generators to innovate to a certain extent, in driving down costs as specific cost levels would not be prescribed. Generators could also vary prices in response to different hourly fuel prices or to different operating procedures, for example coal handling.

Defining a competitive price is more difficult than regulating prices



Generator SRMC may not define the competitive price:

- when there are economies of scale (e.g. avoidable fixed costs);
- when the next best alternative has a higher cost (providing an "efficiency rent");
- in the IDM, DAM and forward markets (which reflect expected BM prices);
- and where the pricing rule does not reflect scarcity...



Setting competitive prices is difficult for competition authorities.

Regulating prices raises different questions, e.g. about cost recovery, etc

No prescriptive formula for SRMC will ever capture every case



Under-estimating the marginal cost of generation dampens incentives and discourages efficient production (Type 1 error)

Bidding Code of Practice

Para 8(iii):

The cost of risks

to plant and

equipment

Para 6:

SRMC over a Trading Day, valued at **Opportunity** Cost

Cost of extra shifts, deferred

maintenance

Add **EUPHEMIA** scheduling risk?

Para 10:

Start-Up and No-Load costs, subject to scheduling algorithm

Even Box 4.1 contains errors! **Expected** net revenue

foregone and cost of repair

SEM & I-SEM

Para 11:

The Opportunity Cost of time or emissions constraints

Para 8:

Allowance for ("good cause") exemptions

Plant-specific lambda

Longer term costs of availability

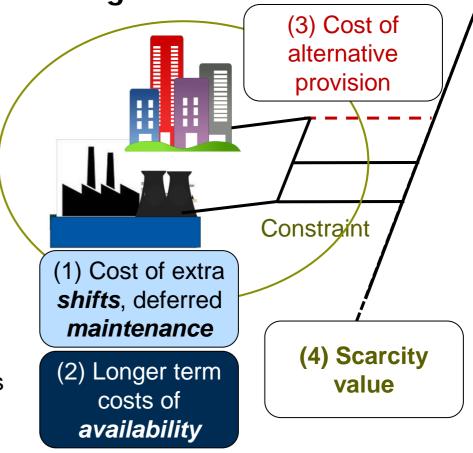
Prescriptive rules on SRMC pricing will not promote efficient competition and will deny consumers the services they want

Transmission constrained generation illustrates the problems with SRMC



Tying offer prices to a narrow definition of SRMC creates several problems for constrained generation

- For single generators operating behind a transmission constraint, the competitive or efficient price in the BM is not uniquely defined by "SRMC":
 - Continued supply may depend on recovery of fixed costs – (1) short or (2) longer term
 - The competitive price may be defined by
 (3) the cost of the next best alternative
 - Constrained generation is not subject to
 (4) local scarcity pricing (in ETA or CRM)
 - Any rules must accommodate unforeseen and short-lived constraints (before contracts can be agreed and approved)



Competitive behaviour in the BM can only be defined in principle, as in the BCoP, and not through prescriptive formulae, as in the Consultation Paper.

Forward markets straddle two workstreams and may fall between them



Referrals to other workstreams must be binding

- The RAs propose a "Forward Contracting Obligation" (FCO), to reduce ESB's incentive to raise prices in the BM and other short term markets.
- The Consultation Paper recognises other concerns about ESB's behaviour in forward markets but
 - (a) the RAs defer to REMIT and financial regulators (paras 16, 4.3.7-8); and
 - (b) the Consultation Paper refers the concerns to a "Forwards and Liquidity Workstream" (para 1.2.2)
- The concerns over liquidity are rooted in the premise that ESB possesses market power over the supply of forward contracts
 - Risk management ties contract sales to asset ownership and diversification, giving ESB market power;
 - REMIT, EMIR and MiFid only cover abusive trading, not withholding supply from third parties
- Design of the FCO (i.e. contract sales to third parties, to change ESB's incentives)
 must be co-ordinated with the design of measures to enhance liquidity
 - The work of the Liquidity Workstream overlaps with the work of the MPM Workstream
 - There is a risk that neither Workstream claims the overlap, resulting in a gap

The stated mandate of the "Forwards and Liquidity Workstream" must cover market power (and vertical ring-fencing), as well as liquidity per se

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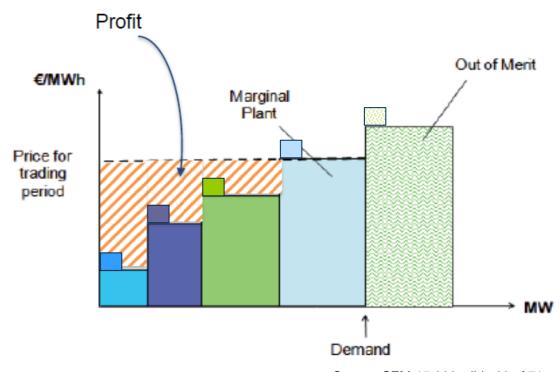
Disaggregated slides

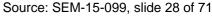
Detailed explanation of deviations from SRMC pricing

Defining a competitive price is more difficult than regulating prices



- Generator SRMC may not define the competitive price:
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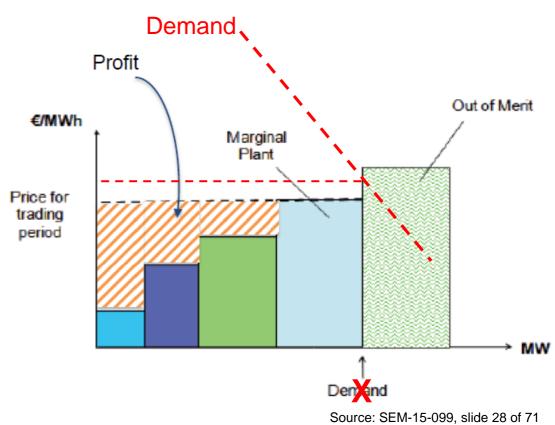


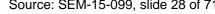


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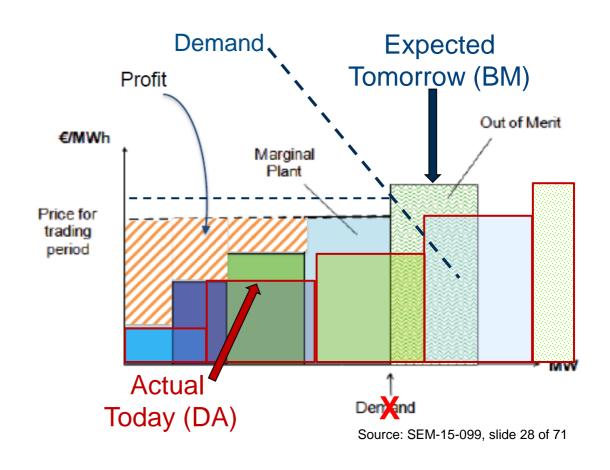




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