

I-SEM Market Power Mitigation

RA Public Workshop

Crowne Plaza Hotel, Dundalk, 2nd December 2015

Welcome & Introduction

- Market Power is a key workstream in I-SEM
- A complex and important area
- Discussion Paper of May started the public consultation process
- Now the SEMC has detailed proposals and options in our Consultation Paper
- Engagement and feedback is good for all of us!

Agenda

- 14:25: I-SEM Market Power Discussion Paper and Stakeholder Comments
- 14:45: I-SEM Market Power Modelling Results and CEPA Views on SRMC
- 15:15: I-SEM Market Power Consultation - Key Proposals and Options
- 16:00: Workshop Discussion

Further Planned Engagement

- RA bilateral meetings with interested stakeholders
 - Monday 14th December in CER Dublin
 - Tuesday 15th December in UR Belfast
 - 45 minutes each
- Contact Gonzalo Saenz by Tuesday 8th December if interested
 - gsaenz@cer.ie
- Responses to Consultation Paper by Monday 18th January

Summary of Comments to Market Power Discussion Paper

James Curtin, CER

Discussion Paper

- SEMC Discussion Paper published 8th May
- SEMC Response Paper published 14th August
- 18 Responses Received

Generators	Suppliers	Group	Other
AES	Energia	ESB	ElectroRoute
AA	PrePayPower	BGE	EirGrid
BnaM	Power NI	SSE	
Brookfield			
Invis			
IWEA			
Grange			
Lumcloon			
Power NI PPB			
SIGA			

Responses on Market Power Concepts

- Agreement that market power includes financial / physical withholding and price suppression
- Majority stressed that we should consider and improve the forwards market
 - But a small number do not think it is an issue
- Temporal interaction between physical and financial markets is important
- Majority agreed that we should take account of areas such as CRM, FTRs and DS3
 - A small number believe they should be incorporated more

Responses on Geography / Market

- Emphasis on the island and local constraints

Island	Local	GB-Island
7	8	3

Balancing Only	Balancing & IDM	BM, IDM & DA	Financial
3	2	8	12

Responses on Metrics

- Many agreed that suggested metrics are relevant:

Market Share	RSI / PSI	Generation Price setting	HHI	Liquidity	Entry/Exit
5	4	3	6	3	1

- Incentives and impacts also need to be examined
- Consider interactions between trading periods markets

Responses on Measurement Periods

- Mixed response on which periods most applicable for measuring level of market power

Historic	Snapshot	Future
8	8	7

Responses on Mitigation Measures

- Market Power is an issue on the island, not simple
- Maintaining I-SEM competitive dynamic was raised
- Balancing and local market power is a key concern
- General consensus that current SEM measures have been effective, with some applicability to I-SEM

Have BCoP/Rules	Have MMU	Have DCs	Keep VI
10	10	8	5

Responses on Mitigation Measures

- Some respondents referred to targeting rules at large player(s) only
- Some mentioned out of market contracts for local market power
- REMIT was pointed to as a key tool
- Examine the forward market was a clear message:
 - Market maker and/or clearing house
 - Practical measures such as collateral
- Small number referred to divestment of ESB as an option

I-SEM Market Power Modelling Results and CEPA Views on SRMC

CEPA Consultancy

Market Power Modelling

- Modelling has been undertaken to provide high-level assessment of the potential level of *structural* market power
- Focus on key relevant trading periods: DAM & BM
- Future market developments, including future generation, interconnection, demand and fuel price scenarios have been considered
- Modelling undertaken using RAs' validated SEM Plexos Forecast Model for 2015-16
- Three years modelled: 2016, 2019 and 2024

Modelling Assumptions

- Scenarios reflect forecast demand and generation capacity from the TSO All-Island GCS 2015-2024
- To identify upper bound of structural market power, we used high demand forecast from the GCS

Key base case scenario assumptions

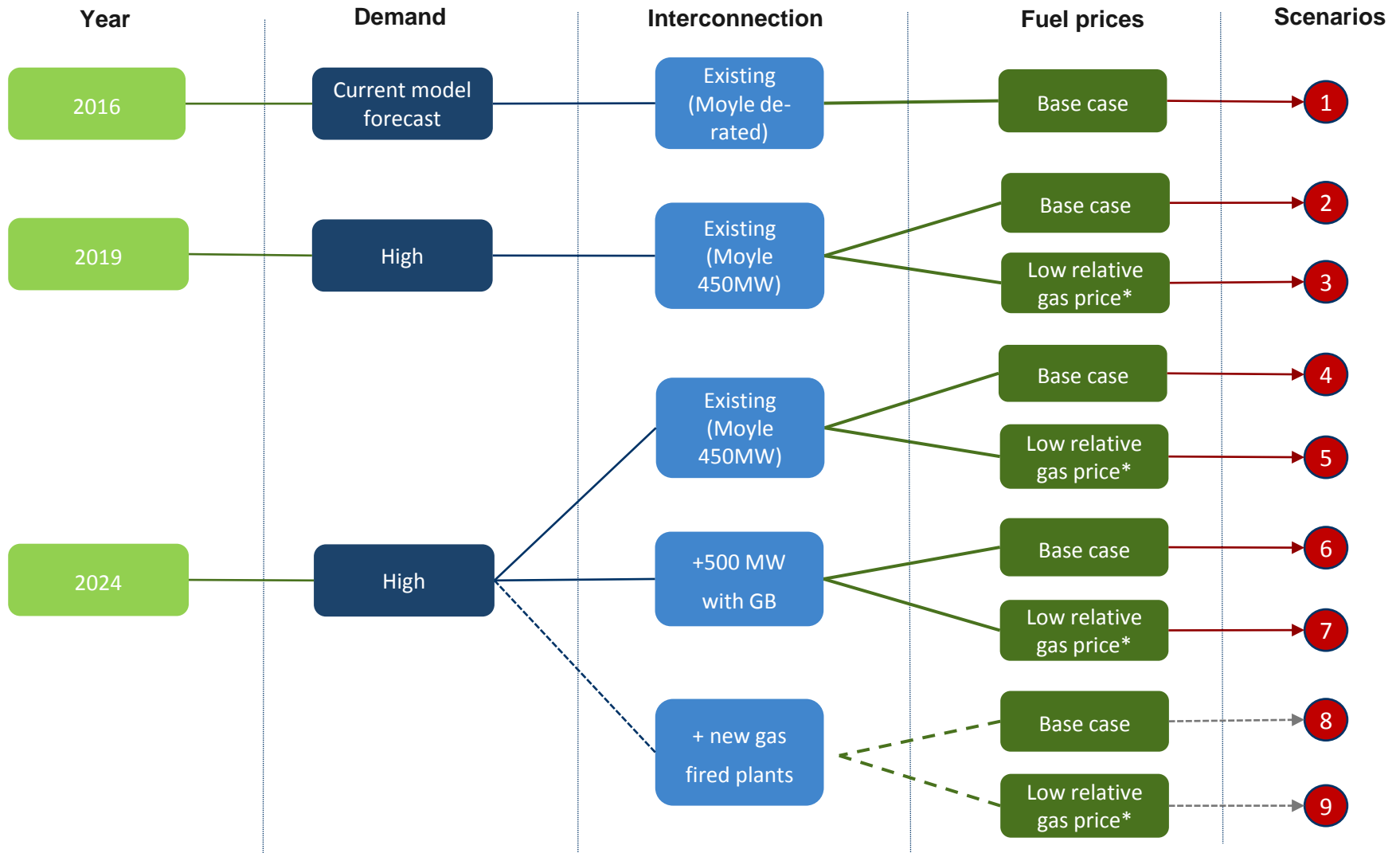
Year	2016	2019	2024
Demand	Current model	High demand forecast as per GCS 2015-2024	
Dispatchable generation	Existing	Two new plants: Dublin waste to energy plant (62MW) + New OCGT plant (98MW)	
Plant retirements	None	Ballylumford (B4, B5 & B6) - 250 MW	Tarbert (592 MW) Kilroot Coal (476 MW)
Wind*	Current model	Wind installed capacity as per GCS 2015-2024, allocated proportionally to wind regions based on current regional capacities. Ownership share is assumed unchanged in all years.	
Interconnection	Existing (Moyle derated)	Existing - EWIC + Moyle restored at full capacity	

**Company ownership ratio of wind is based on estimates for 2014.*

Alternative Scenarios

- Sensitivities tested include:
 - Additional 500 MW of GB interconnection in 2024
 - Additional 412 MW gas-fired generation capacity in 2024
 - Alternative fuel price scenarios for 2019 and 2024: gas price is low relative to coal, which replaces coal with gas in the merit order

Scenarios Modelled



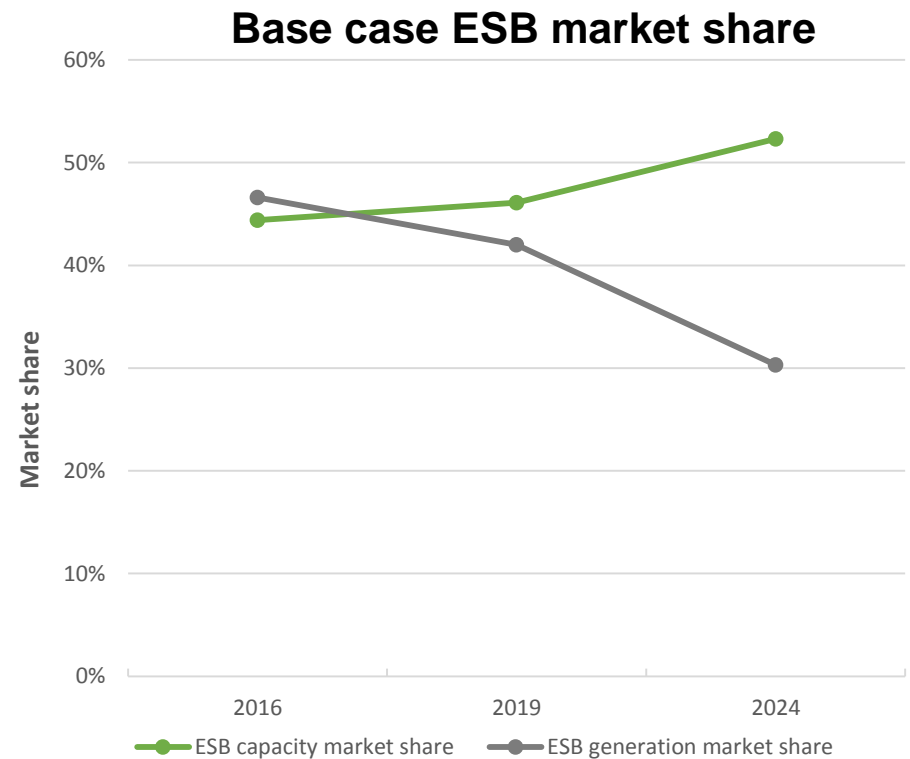
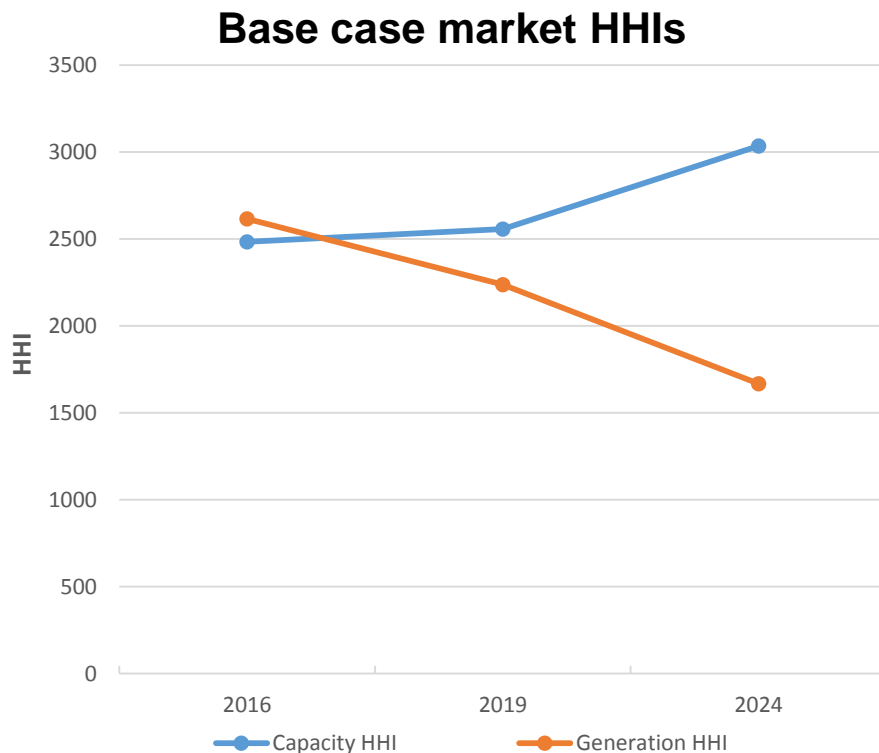
* Low gas prices relative to coal prices

Market Power Metrics

- For each scenario we used structural metrics (market shares/HHI and RSI) to assess level of structural market power
- **Herfindahl-Hirschman Index (HHI)** = Sum of squared market shares
- **RSI** = (Total *available* capacity + Wind generation output + IC capacity) / Total demand
- Metrics reported for each half-hourly period in a given year and as annual averages

Key Modelling Results – DAM Base Case

- As measured by HHI, generation market becomes less concentrated, although more concentrated when applied to installed capacity



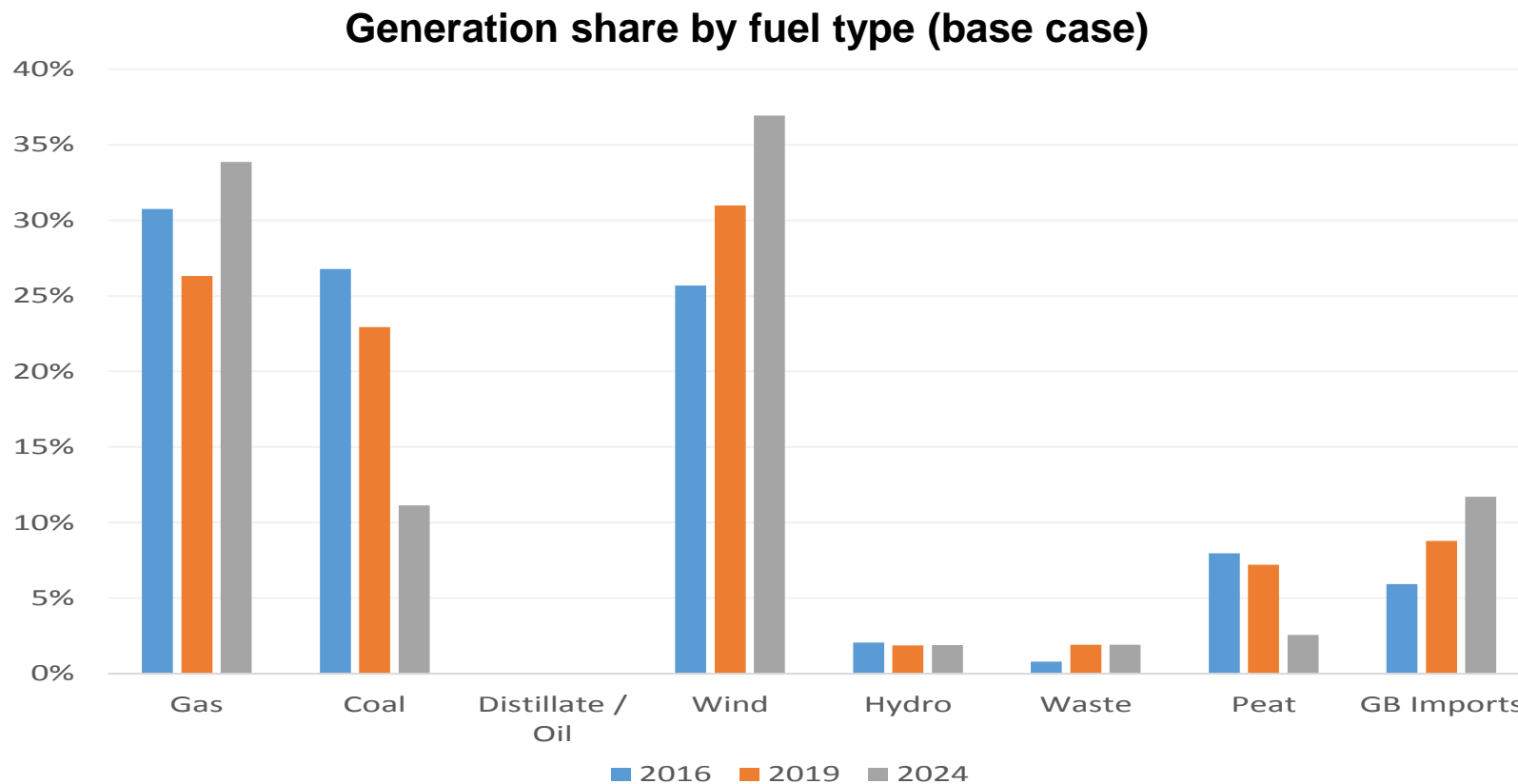
* Generation market shares include forecast company wind generation

** The HHI ranges shown here are indicative of moderately to highly concentrated markets

*** Note: we are not assuming a straight-line movement between years in reality

Key Modelling Results – DAM Base Case

- Lower generation market concentration driven by increased wind generation



Key Modelling Results – DAM Base Case

- Decreasing average RSI and increasing % of periods when the largest market player is pivotal show potential to exercise market power

Metric	2016	2019	2024
Average RSI (ESB)	1.60	1.57	1.35
% periods when ESB RSI < 1.2 *	9.1%	12.5%	37.5%

* The 1.2 RSI threshold has been used to capture the need for additional spare capacity, for example, to meet system operational reserve requirements. This is consistent with empirical case studies suggesting an RSI above 1.2 results in competitive market outcomes and previous structural market power assessments in the SEM (2010). The European Commission Energy Sector inquiry (2007) has used an RSI threshold of 1.1. even when explicitly accounting for reserve requirements.

Key Modelling Results – Alternative Scenarios

- Additional capacity available to meet demand compared to the 2024 base case scenario:
 - Results in lower number of periods when a particular player is pivotal and lower generation market HHIs
 - However, structural market power still remains a concern

Metric	Base case (2024)	Additional I/C	Additional gas generation
HHI (generation market)	1,667	1,386	1,313
Average RSI (ESB)	1.35	1.47	1.57
% periods when ESB RSI < 1.2	37.5%	25.1%	16.9%

Key Modelling Results – BM Base Case

- BM results shows more potential to exercise market power than in the DAM

BM - Market Participant	2016	2019	2024
1PS	64.9%	62.2%	72.8%
2PS	87.5%	89.7%	94.9%

1PS represents the RSI of the largest market participant in each half-hourly period of the BM

2PS represents the combined RSI of the two largest market participants in each half-hourly period of the BM

Non-structural Market Power

- Modelling assessed expected level of structural market power
- Market power can however be exercised even by smaller players who do not have structural market power, e.g. when a generator is the marginal price-setting unit
- Increased intermittent wind generation could result in a wider range of price-setting generators and larger price swings across periods
- A unit could exercise market power if it finds itself on a steep portion of the supply curve

Modelling Conclusions

- Modelling results show that:
 - Measured on an *annual average* basis, structural market power is expected to decline mainly due to increased wind penetration
 - However, the *number of periods* within a year when structural market power is a concern is expected to increase significantly
 - Thus structural market power remains a concern for the future
- Mitigating factors, such as new interconnector/generating capacity, would diminish but not eliminate concern with structural market power in I-SEM

SRMC Bidding

- In uniform-priced markets, it is a rational economic decision to offer at **SRMC** when a producer faces strong competitive pressure:
 - If a producer were to price above its SRMC, it could lose a sale to a competitor (even though that competitor may have a higher SRMC)
 - When a producer offers at SRMC, it will not lose out on any sales on which it can make a profit
- Example: SRMC of Gen A = £50/MWh; SRMC of Gen B = £54/MWh

Gen A offers at its SRMC

- Market price = £53/MWh
- Gen A is inframarginal
- Gen B is not dispatched
- Gen A's profit = £3/MWh

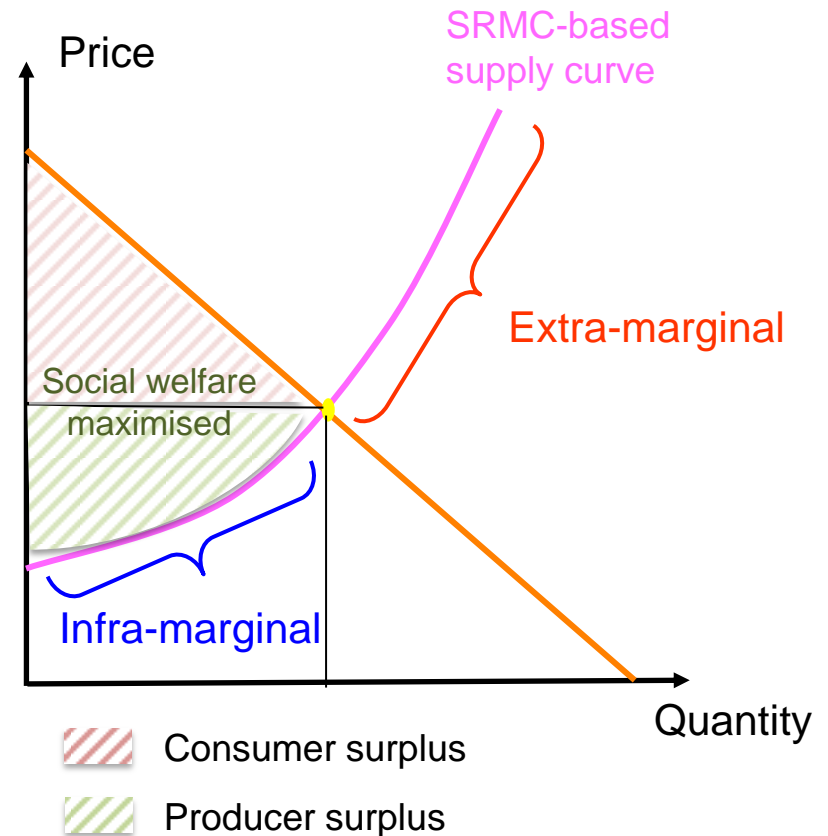
Gen A offers 10% above its SRMC

- Market price = £54/MWh
- Gen A is not dispatched market price < offer
- Gen B displaces Gen A
- Gen A's profit = £0/MWh

- **SRMC bidding represents the profit maximising behaviour in a competitive market**

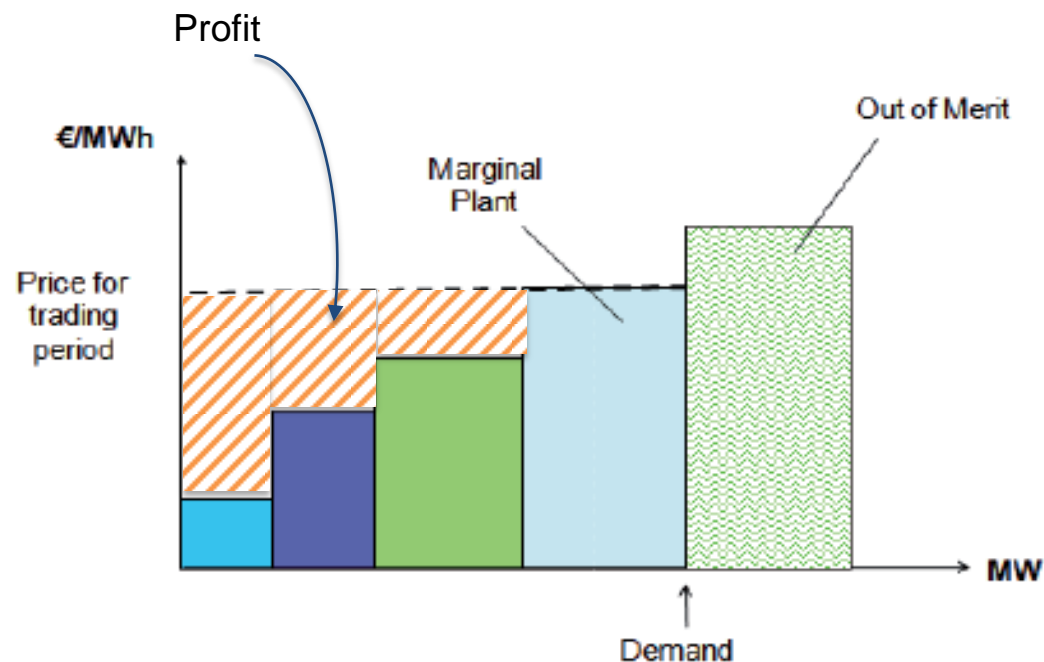
SRMC Bidding Results in Efficient Outcomes

- **In general, social welfare is maximised when:**
 - Marginal benefit received from consuming the last unit of a good equals the marginal cost of producing it
 - This will only be the case when the market price is set by the price-setting generator offers its product at its SRMC.
- **SRMC is not the rational behaviour if the market is not competitive and producer has the potential to exercise pricing power**



SRMC Bidding in Electricity Markets

- In the electricity market, SRMC bidding yields an efficient market outcome because it yields a least-cost dispatch
- SRMC captures all costs of producing that unit of output (fuel, operational costs, opportunity costs, etc.)
- In a competitive market, the generator will maximize its operating profit by bidding at SRMC
- SRMC bidding does not prevent the recovery of fixed costs
- Fixed costs are recovered through:
 - infra-marginal rent;
 - scarcity pricing;
 - system services; and
 - capacity revenues



Evidence of SRMC bidding

Regulators around the world use SRMC as a **competitive benchmark**. A number of empirical studies have found that competitive electricity markets produce market prices that are consistent with SRMC bidding:

- **GB market** – In its Energy Market Investigation, the Competition and Markets Authority used an SRMC-based competitive benchmark and has (provisionally) found that the GB wholesale electricity markets are competitive [1]
- **Nordic market** – generally perceived to be one of the most competitive markets in the EU. A 2009 study found that on average, the system price deviates only marginally from the competitive benchmark [2]
- **PJM market** – PJM's market monitor concluded the wholesale energy market is competitive based on the finding that energy prices in PJM are generally set by marginal generators, which offer at, or close, to their SRMC [3]

1] Energy market investigation, Provisional findings report, Competition and Markets Authority, 7 July 2015

[2] Market power in the Nordic electricity wholesale market: A survey of the empirical evidence, Sven-Olof Fridolfsson, Thomas P. Tangerås, Research Institute of Industrial Economics (IFN), April 17, 2009

[3] 2014 State of the Market Report for PJM, Monitoring Analytics, LLC, Independent Market Monitor for PJM, 12 March 2015

I-SEM Market Power Consultation

Andrew Ebrill, CER

Jean Pierre Miura, UR

Consultation Paper

- Published on Friday 20th November, responses due by 18th January
- Aim of market power mitigation strategy and measures:
 - Mitigate the incentive and ability to exercise market power in the physical and financial markets
 - Enable efficient and transparent price formation
 - Be in line with the I-SEM HLD
 - Promote competition
 - Allow for the development of liquidity
 - Be consistent with ETA, CRM, F&Ls, FTRs and DS3 and retail policy

Relevant Markets / Geography

Relevant Market	Definition
Forward	<ul style="list-style-type: none">• All forward products traded prior to the opening of the DAM• The geographic market includes I-SEM and interconnector capacity
Day-Ahead Market	<ul style="list-style-type: none">• Hourly product for the next day without consideration for transmission and generator operational constraint• The geographic market includes I-SEM and interconnector capacity
Intra-Day Market	<ul style="list-style-type: none">• Similar to the DAM though there are some operational differences• The geographic market includes I-SEM and interconnector capacity
Balancing Market	<ul style="list-style-type: none">• Half-hourly product, taking into account transmission as well as operational constraints• Largest geographic market will be the I-SEM and interconnector capacity• Smallest geographic market may be as small as a constrained area consisting of a single generator

Relevant Questions

- Do you agree with the proposed appropriate markets / trading periods for assessing market power in I-SEM's energy and financial markets?
- Do you agree with the proposed geographic scope of the proposed markets/trading periods?

Market Power and Interactions

- Competitive behaviour could be defined as that which generally yields prices as:
 - *SRMC, where SRMC includes relevant opportunity costs and a scarcity premium if it applies*
- Hence consistent market prices above or below this benchmark could indicate exercise of market power
- Forward market power appears weaker than physical markets and is covered by EU financial regulation
- Physical markets interaction issues with other areas to be considered

Relevant Questions

- Do you agree with the proposed definition of competitive behaviour and pricing in I-SEM?
- Do you think that the suggested examples in which market power can be exercised in I-SEM captures the relevant issues?
- Do you agree that the potential for market power abuse in I-SEM appears to be weaker in the forward financial market compared to the physical markets?

Relevant Metrics

- **Structure**: refers to the established market structure, e.g. concentration or pivotality of suppliers
- **Conduct/behaviour**: whether market participants engage in economic withholding or physical withholding
- **Performance**: whether market performance is affected, e.g. price mark-ups and outcomes compared with SRMC, net revenues
- **SCP** needs to be examined jointly, and so different metrics needed

Relevant Metrics

Metric	Type	Applicable markets	Role within broader I-SEM market power strategy
Market Structure Metrics			
Market shares	Ex-ante	BM, IDM, DAM	Descriptive metrics by MMU in its regular reporting May be used to determine FCOs
HHI			
RSI PSI	Ex-ante Ex-post	BM, IDM, DAM	RSI to be used by the MMU for ex-ante determination of the expected level of market power RSI/PSI could be used for ex-ante mitigation in the BM May be used to determine FCOs
Residual Demand Analysis	Ex-post	BM, IDM, DAM	To be used on an ad hoc basis by the MMU to conduct ex-post investigations when significant market power concerns arise.
Market Conduct Metrics			
Mark-up indices	Ex-post	BM, IDM, DAM	Generator mark-up over its SRMC and system mark-up to be monitored by the MMU and included in its regular reporting Applied by the MMU as part of ex-post enforcement
Withholding analysis	Ex-post	BM, IDM, DAM	MMU should conduct audits of outages and derates as well as withholding through falsely declared generator parameters (e.g. ramp rates). Applied by the MMU as part of ex-post enforcement

Proposed Relevant Metrics

Market Performance Metrics			
Net revenue	Ex-post	BM, IDM, DAM	Generators' net revenue and system mark-up to be routinely monitored by the MMU and included in its reporting Applied by the MMU as part of ex-post enforcement
Liquidity measures	Ex-post	All	The MMU should conduct audits of generator outages and derates, as well as withholding through falsely declared generator parameters, e.g. ramp rates Applied by the MMU as part of ex-post enforcement

Relevant Questions

- Do you agree that these are the appropriate metrics to identify market power ex-ante and ex-post in I-SEM?
- Are there other metrics that you consider should be applied?

Key Modelling Results

	Capacity market share, DA			Generation market share, DA		
Market participant	2016	2019	2024	2016	2019	2024
ESB	44.4%	46.1%	52.3%	46.6%	42.0%	30.3%
SSE	13.5%	14.0%	8.4%	14.1%	14.9%	19.1%
AES	13.2%	8.1%	3.2%	7.2%	5.7%	0%
BGE	4.7%	4.9%	5.6%	7.0%	7.8%	12.5%
GB import	n/a	n/a	n/a	5.9%	8.8%	11.7%
Independent Wind	n/a	n/a	n/a	6.7%	8.1%	9.6%

Company	% half hourly periods, DA					
	RSI < 1.2			RSI < 1		
	2016	2019	2024	2016	2019	2024
ESB	9.1%	12.5%	37.5%	0.7%	1.3%	13.9%
SSE	0.0%	0.0%	0.02%	0.0%	0.0%	0.00%
2PS	40.6%	40.4%	54.8%	15.4%	16.2%	30.8%

Key Modelling Results

- Diverging results between HHI and RSI, with a falling HHI but a decreasing RSI
- Market less concentrated overall, but ESB and 2PS market power increases at certain times

Metric	2016	2019	2024
HHI	2,617	2,237	1,667
Average RSI (ESB)	1.60	1.57	1.35

- BM more concentrated than DA, hence a robust market power mitigation strategy is needed

BM - Market participant	2016	2019	2024
1PS	64.9%	62.2%	72.8%
2PS	87.5%	89.7%	94.9%

- Smaller participants can also exercise market power

Generator	Ballylumford B31 & B32	Whitegate
% periods price-setting	1.2%	6.0%



Relevant Questions

- Do you agree with the approach taken by the RAs to modelling market power in I-SEM?
- Do you agree with the conclusions for I-SEM market power that have been drawn from the modelling results?

Current SEM Measures

Mitigation measure	Assessment
Market Monitoring Unit (MMU)	<ul style="list-style-type: none">Working well especially, especially in monitoring and enforcing BCoP
Bidding Code of Practice (BCoP)	<ul style="list-style-type: none">Effectively enforced, monitoring ex-post and SMP by reflecting SRMC inputs and principles
Directed Contracts (DCs)	<ul style="list-style-type: none">Set by RAs at a level to mitigate market powerSEM public contracts at circa 37% of spot market, 27% of contracts were DCs in 2013It has reduced ESB's and PPB's incentive to exercise market power in the spot market
Vertical ring-fencing	<ul style="list-style-type: none">Appears to be effectively working in conjunction with other measures

Relevant Questions

- Do you agree with the SEM Committee's view on the effectiveness of each of the SEM market power mitigation measures?
- Are there any particular aspects of the SEM market power mitigation strategy that you think should be applied differently, especially in relation to I-SEM?

Context for Mitigation Measures

- SEMC focuses on competitive outcomes and market power mitigation options in I-SEM physical markets
- Forward market is primarily a matter for EU financial regulation
- SRMC pricing / outcomes can be seen as a key competitive benchmark for efficient outcomes in I-SEM

Context for Mitigation Measures

- SRMC pricing is compatible with cost recovery of efficient generators via IMR and capacity payments
- For most options, a deviation from the SRMC benchmark is considered as a *potential* exercise of market power
- REMIT is a strong tool in any event:
 - EU-wide market rules
 - Market surveillance
 - RAs can take ex-post enforcement action

Principles for Measures

- **Effective:** effective in mitigating the potential market power conduct or outcome
- **Targeted:** interfere with the market to the minimum extent necessary
- **Flexible:** sufficiently flexible and allow for sun-setting
- **Practical:** implementable, cost-effective, enforceable
- **Transparent:** easily understood and accessible

Relevant Question

- Do you agree with the five key principles for assessing market power mitigation policies?
- If you think there should be alternatives, please state the reasoning

Proposal 1: Market Monitoring

- Modelling shows some structural market power to 2024 and others can exercise market power
- International experience suggests continued need for market monitoring
- RAs propose robust market monitoring to cover at least all physical markets
- RAs to access data from ACER under REMIT

Proposal 1: Market Monitoring

- Determines what constitutes competitive behaviour in physical markets
- Monitors performance of market for consistency with competitive outcomes
- Using various **CP** metrics such as mark-up indices, withholding analyses and financial performance

Proposal 2: FCOs

- Modelling shows at least one participant with market power to 2024
- Requirement for generator(s) to contract forward to help mitigate physical market power
- Could be wider than current DCs
- RAs pose key questions for comment

Relevant Questions

- What should be the measure and threshold that results in a market participant being included or excluded in the FCO, i.e. what is its applicability?
- What should be the volume and product definition of forward contracting required from a market participant who falls under the FCO?
- How should the price be set for the volume contracted under the FCO?
- What type of access should buyers have to FCO volumes?

Proposal 3: Balancing Market Intervention

- Not sufficient competitive dynamic in BM, while local market power is a key concern
- SEMC proposes specific regulatory intervention in BM
- 4 key options provided for consideration and comment
- SRMC offer curve determined for each generator by RA market monitoring

Proposal 3: Balancing Market Intervention

- **Option 1: MMU Triggered Intervention**

- Focus is on local market, but in reality includes energy actions too
- If market power is observed by MMU, SRMC offers curve is set for a period thereafter
- Ex-post in terms of intervention
- Appears to score well under targeted and flexible principles, possibly less clear in relation to effective principle

Proposal 3: Balancing Market Intervention

- **Option 2a: Automated Intervention - PST**
 - Involves systems to dynamically identify a breach of a PST in a local market
 - Automatically switches offers to SRMC before market clearing
 - Structural and ex-ante mitigation
 - Appears effective, but possibly less practical due to system needs

Key Proposal 3: Balancing Market

- **Option 2b: Automated Intervention - “Flagging and Tagging”**
 - TSO switches to SRMC-based offer only when generator is called to address local system constraint
 - Structural and ex-ante mitigation
 - Appears effective and practical as uses an already planned imbalance process

Proposal 3: Balancing Market Intervention

- **Option 3: Prescriptive Bidding Controls**
 - All generators must offer at formulaic SRMC levels for all trades in the BM
 - Broader than other options as explicitly involves energy and non-energy / local actions
 - Appears effective, but arguably less flexible and targeted

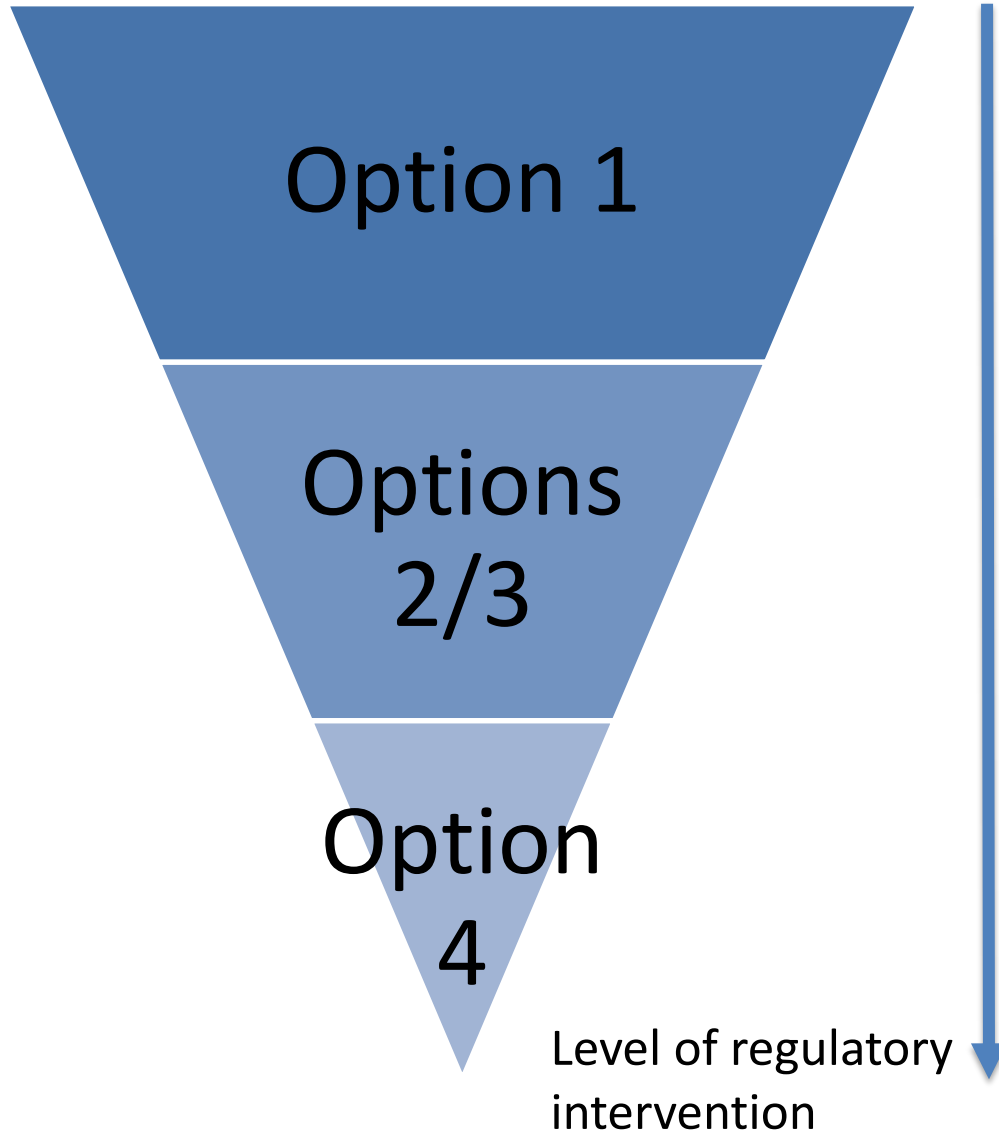
Proposal 3: Balancing Market Intervention

- Which of the balancing market mitigation options do you consider most appropriate, i.e. MMU-triggered intervention, automated intervention via a PST or via the “flagging and tagging” approach, or prescriptive bidding controls?
- Where feasible please relate the preferred approach to the five key principles for this workstream of effective, targeted, flexible, practical and transparent

Day Ahead and Intra-Day Markets

- Market Structure still a concern in the day ahead and intraday market
- However these markets are relatively less vulnerable to market abuse than the balance market
 - Price Making Demand
 - Auction process
 - Cross border competition
 - Voluntary participation
- REMIT (REGULATION (EU) No 1227/2011) applies to all markets
 - Article 5 - Prohibition of market manipulation
 - Article 3 - Prohibition of insider trading
- SEMC is of the view that REMIT only may not be sufficient to protect consumers from market abuse given structural market power modelled

Day Ahead and Intra-Day Markets



- Option 1: Prescriptive Bidding
- Option 2: Bidding Principles and Ex-post Assessment
- Option 3: Ex-post Assessment Only
- Option 4: Market Abuse Condition

Day Ahead an Intra-Day Markets

- **Option 1: Prescriptive Bidding Controls**
 - Requires all generators bids to be set mandatorily at formulaic SRMC levels
 - Deviations from SRMC bid formulae a violation of bidding rules
 - Similar to the current bidding rules for the SEM
 - SEMC is of the view that this option would not be justified from modelling or HLD, at least as non-targeted
 - Too restrictive in terms of market dynamics

Day Ahead and Intra-Day Markets

- **Option 2: Bidding Principles and Ex-Post Enforcement**
 - Ex-ante guidelines to bid generally at SRMC, but not necessarily in every trading period
 - MMU reviewing bids for the exercise of market power using various **CP** metrics including an SRMC benchmark
 - Market participants would need to demonstrate compliance with bidding principles, CP metrics and REMIT

Day Ahead and Intra-Day Markets

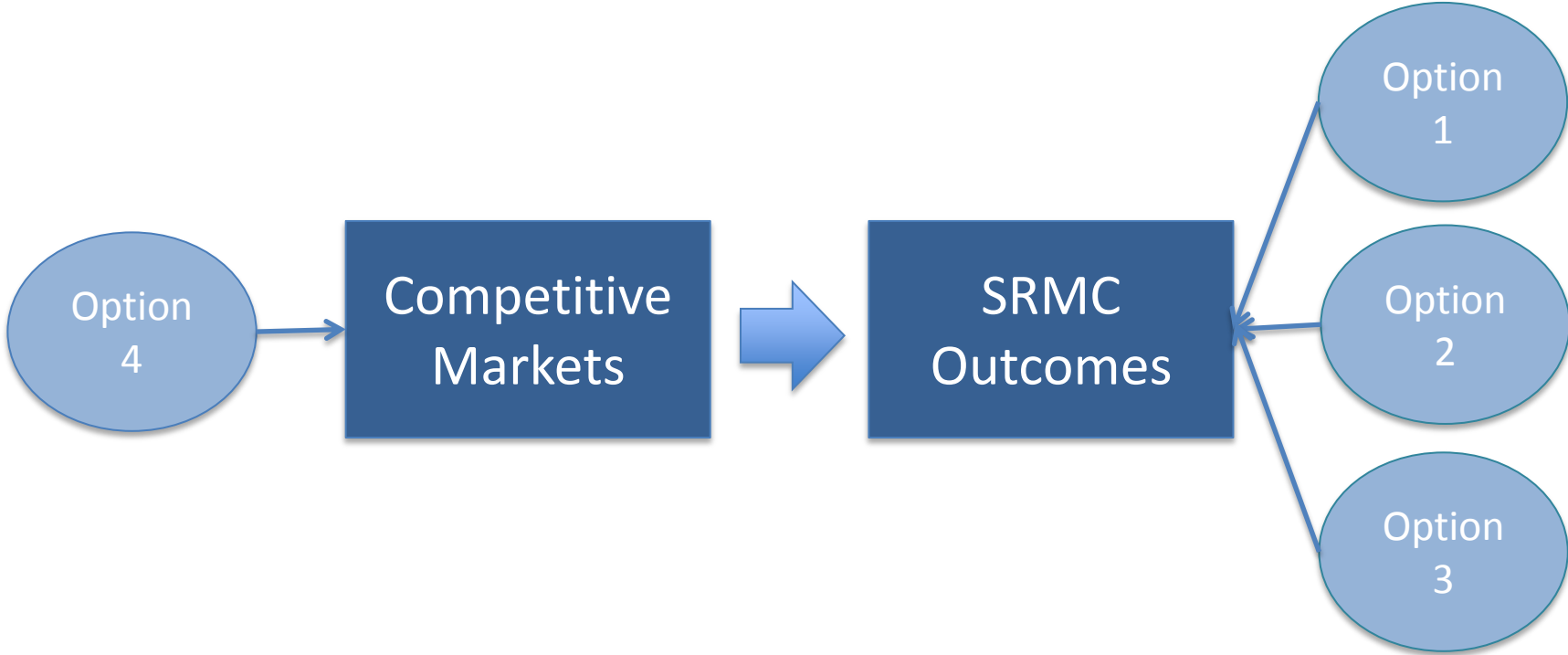
- **Option 3: Ex-Post Enforcement Only**
 - No explicit bidding regime (controls or principles) set ex-ante for generators
 - MMU reviewing bids for the exercise of market power using various **CP** metrics including an SRMC benchmark
 - REMIT-only is a key lever to achieve this outcome, but otherwise similar to Option 2
 - Market participants would need to demonstrate compliance with CP metrics and REMT

Day Ahead and Intra-Day Markets

- **Option 4: Market Abuse Condition**
 - A licence condition would be introduced outlining the high level principles in terms of market conduct
 - A latent licence condition requiring additional reporting would be in all licences but would only apply to market participants with structural market power
 - The MMU would periodically revise the list of market participants deemed to have structural market power
 - It would apply to both Generators and Suppliers




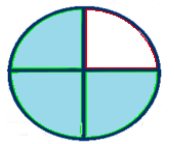
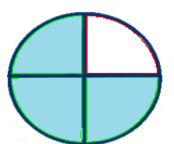
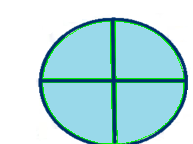
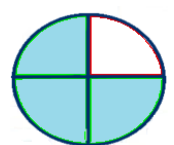
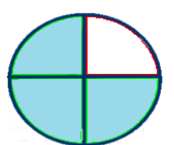
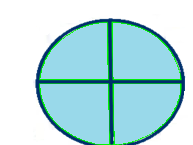
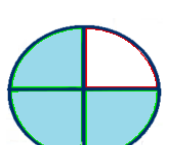
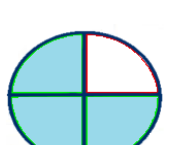
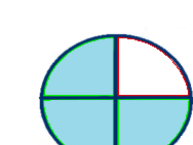
Day Ahead and Intra-Day Markets

Focus of the market power mitigation measures in the DA and ID markets



Day Ahead and Intra-Day Markets

Initial assessment

	Option 2 – Bidding Principles	Option 3 – Ex-post Enforcement	Option 4 – Licence Condition
Effective			
Targeted			
Flexible			
Practical			

Day Ahead and Intra-Day Markets

- Which of the options for the DA and ID markets do you favour?
- Where feasible please relate the preferred approach to the five key principles for this workstream of effective, targeted, flexible, practical and transparent
- If ex-ante bidding principles were to be adopted, how flexible should they be and how would this be facilitated/enshrined in their wording?

Vertical Ring-fencing

- Ring-fencing of ESB and Viridian has been effective in SEM with other market power mitigation measures
- Both costs and market power benefits to ring-fencing:
 - to continue in I-SEM if benefits are likely $>$ costs
- SEMC is considering the structural conditions under which ring-fencing could be relaxed:
 - to take account of other market power measures
- SEMC is considering the criteria under which ring-fencing would be applied to others

Relevant Questions

- Under what structural conditions or in combination with other market power mitigation measures should vertical ring-fencing of the incumbents be relaxed?
- Under what circumstances and criteria (or metrics) should the application of ring-fencing to other market participants be considered?

Next Steps

- RA bilateral meetings with interested stakeholders
 - Mon 14th December in CER Dublin
 - Tues 15th December in UR Belfast
- Responses to Consultation Paper by Mon 18th January
- Decision Paper by Q2 on high-level market policy issues
- Market power implementation from Q2 2016 including
 - any licence changes needed
 - implementation issues such as the detailed operation of the FCO
 - other issues such as in relation to the market monitoring activity of the RAs

Workshop Discussion

Questions and Answers