

Philip Newsome
Commission for Energy Regulation
The Exchange
Belgard Square North
Tallaght
Dublin 24
pnewsome@cer.ie

Jean-Pierre Miura
Utility Regulator
Queens House
10-18 Queen Street
Belfast
BT1 6ED
jeanpierre.miura@uregni.gov.uk

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RE: Consultation on the High Level Design of the Integrated Single Electricity Market (ISEM) for Ireland and Northern Ireland

Dear Philip, Jean-Pierre,

1. Introduction

SWS Natural Resources Holdings Limited (SWS), a wholly owned subsidiary of Bord Gáis Energy, welcomes the opportunity to respond to the consultation paper on the High Level Design of an Integrated Single Electricity Market on the island of Ireland. SWS is the single largest renewable generator in the SEM with a wind portfolio of 321 MW of operating wind capacity across 17 wind projects in eight counties in Ireland and Northern Ireland representing approximately 15% of the installed wind capacity in Ireland. SWS have an additional 125MW currently under construction and a further 300MW development pipeline.

Wind generation currently represents 20% of the SEM's installed capacity¹. This share will continue to grow and therefore wind generation must be central to the market design. SWS believes that the current SEM is delivering competitive end costs for consumers and is delivering an environment attractive to the investment needed to meet renewable energy policy targets. SWS believes that the SEM is performing well because of its key market attributes including; liquidity of the ex-post market, market transparency, cost recovery for generators, ex-post balancing regime, market power mitigation measures, and the capacity payment mechanism. Furthermore, SWS believes that rationale behind these key attributes remains and the SEMC must consider the contribution of these key attributes to the success of the SEM when determining the detailed design of the new ISEM energy and capacity remuneration arrangements.

This response will first discuss the SWS perspective of the key issues that must be considered when designing the Integrated SEM solution. A discussion of the Capacity Remuneration Mechanisms will follow before the conclusions of this submission. The questions put forth in the consultation will be answered at the end of the response, referring back to the key considerations where necessary.

¹ [All-Island Generation Capacity Statement 2014-2023](#)

2. Key Considerations

SWS believes that there are several key considerations that need to be addressed in any successful High Level Design (HLD) that is adopted for the I-SEM. The considerations outlined below bear particular relevance to wind generators and are also discussed in relation to each market timeframe and the proposed options.

2.1. Policy Context

2.1.1. Alignment with Decarbonisation Policy

Ireland has a binding target under the Directive 2009/29/EC for renewable resources to account for 16% of total energy consumption by 2020. In line with these commitments, the DCENR have put in place a target for electricity from renewable energy sources (RES-E) of 40% by 2020. Failure to meet these targets will result in significant EU sanctions. Looking beyond the 2020 horizon to 2030, the European Commission's recently published proposed energy and climate change policy measures include a further renewable energy target of at least 27% across Europe.

The long term decarbonisation policy is clear and will mean further development of renewables beyond 2020 in Ireland and across Europe. In the SEM that will mean the levels of wind generation will continue to grow, even beyond the mandated 2020 targets. For this reason wind generation must have a central role in the new market design.

2.1.2. RES-E Directive Obligations: Priority dispatch and Minimise Curtailment

The principles of priority dispatch and access are set out in the RES-E Directive (2009/28/EC) and transposed into Irish law. The RES-E Directive outlines a number of obligations on member states to promote the development of generation from renewable sources. In particular the Directive mandates the integration of renewable energy and the minimisation of curtailment.

As per the requirements of the RES-E Directive and the SEMCs Next Steps decision the new market must ensure that absolute priority dispatch is maintained and the curtailment of wind must be minimised. SWS recognises that other curtailment mitigation measures such as delivery of the DS3 programme are necessary. However, these measures must complement the correct design of a suitable market that will promote cross-border interconnector trade and liquid Intraday markets, promoting more trade such as from demand side management.

2.2. Balancing Responsibility

The Consultation proposes that all market participants must be balance responsible including wind and demand. SWS recognises that this proposal is in the spirit of market integration and in line with the current approach across much of Europe. However SWS believes that the SEMC should consider that the primary objective of the EU Target Market is to promote cross-border trade and efficient interconnector flows. The promotion of renewables is the other key EU energy policy objective which must continue to be prioritised.

This context and the particular market context of the SEM (i.e. an island market with high levels of wind and relatively low levels of interconnection) and the challenges that wind generators will face by becoming balancing responsible parties must be recognised in choosing an appropriate balancing solution for the ISEM.

Moving from a socialised balancing regime has massive commercial impacts for wind generators and SWS believes that, consistent with Irish commitments to renewable generation, it would be prudent ensure the balancing solution is not penal. Furthermore SWS believes that unavoidable impacts to the overall commercial position of wind generators associated with the migration to ISEM must be well understood by the regulatory authorities.

The material impacts of the new market must be mitigated by measures such as compensation to ensure that investors retain confidence in the market and consumers continue to benefit from the lower energy costs wind generation delivers. As a paramount priority a stable investment environment must be maintained and any situations which erode already invested capital should be avoided at all costs. The resultant flight of capital as experienced in Spain most recently as a result of regulatory uncertainty has decimated the renewables industry and is likely to take some decades to recover from.

2.2.1. Benefits of Current SEM Approach

The current SEM is ex-post and uses the actual outturn wind and demand. As such, market participants are not responsible for balancing their output with a forecast. The difference between the unconstrained market schedule and the dispatch schedule is met through Dispatch Balancing Costs, which are met through socialised Use of System charges. SWS believes that the existing socialised balancing regime has worked well for all parties. It has delivered stability and transparency and helped to deliver the large levels of investment needed to meet renewables policy objectives.

SWS believes that adopting a penal approach to imbalance pricing in the I-SEM must be avoided. If this were to happen it would mean drastically altered risks for market participants, particularly demand and wind. This will undermine investor confidence, regulatory certainty, perceived market revenue returns, prospects for project financing and re-financing and raises barriers to entry.

2.2.2. Promoting Balancing Trade

SWS has concerns with liquidity, transparency and market power in the Intraday market timeframe and thus believes that, without rectification, wind generators could face significant challenges to trading in this timeframe. The size of the SEM and the limited level of interconnection means that availability of generators (or suppliers) as counterparties in the Intraday market may be limited. If the Intraday market cannot be relied on to hedge out volume risk, it forces participants into the balancing market, an outcome not desired by generators or by the system operator.

Wind generation and demand are most exposed because of their variable nature. In modelling conducted for SWS it was shown that at current wind levels the most frequently observed deviation of wind between forecast and actual levels is around -50MW with observations ranging from +380MW to -520MW. This clearly illustrates the challenges that wind generation face with regard to balancing its output. For this reason careful consideration must be given to the design of the Intraday and Balancing markets and the bidding rules that will accompany them. SWS believes that by ensuring that bidding in the Balancing timeframe is cost-reflective, it will encourage cost-reflective bidding in the Intraday market and will also help to promote liquidity as counterparties seek certainty prior to the balancing timeframe.

2.2.3. Imbalance Pricing

The ultimate aim of the Target Model is to achieve efficient cross-border trade across all timeframes and promoting renewable generation. As already stated any shift from the current socialised balancing regime represents a drastically altered commercial environment for wind generators in particular and must be minimised. To achieve this, SWS believes that there is sufficient scope under the draft Balancing Network code² to mitigate the balancing risk by separating the treatment of imbalance prices and the procurement of balancing energy.

SWS acknowledges the regulatory rationale behind the proposal that balancing energy prices should be based on the marginal cost of bids submitted for energy balancing. However, SWS strongly resist the proposal to settle imbalance prices at the price of the marginal balancing energy action. To do so is extremely penal, and, given the current socialised balancing regime, could expose generators to volatile, unpredictable costs that would be very damaging to investor confidence.

As already stated, SWS believes that market participants must be required to submit cost-reflective Increment (Inc) or Decrement (Dec) bids to the market to ensure the balancing market is transparent and predictable and not open to market power abuse. Such an approach would mean that the marginal price of Incs and Decs in energy balancing actions is paid to those that provide the balancing action service. Paying the marginal price will send a signal for the provision of flexibility. Provided the bidding is cost reflective it will influence liquidity and bidding and protect against market power concerns in the Intraday market.

Options 1 and 3 are at the other extreme from the SEM's current, fully socialised model. The use of a net pool to establish the marginal price of balancing actions in Option 2 is concerning. The proposal for a Gross Pool – Net Settlement market in Option 4 is the most similar to the current ex-post SEM arrangements but in the context of the design of other market timeframes, Option 3 is preferred by SWS with the strong caveat that our balancing concerns as discussed above are addressed.

² ENTSOE: [Draft Balancing Network Code](#) Article 38 (Procurement of Balancing Energy) and Article 60 (Imbalance Price)

2.3. Liquidity

Liquidity, the ease at which commodities or financial instruments can be bought or sold, is an important indicator of a well-functioning competitive electricity market. In the ISEM liquidity will be essential to the establishment of a robust reference price and is needed to ensure that price and volume risks can be hedged across the market timeframes. Illiquid markets undermine transparency, efficiency and competition and increase barriers to entry. SWS would like to see the use of financial transmission rights in the forward market timeframe with no physical trading permitted. Liquidity must also be promoted in the Day Ahead and Intraday timeframes to establish a robust, credible reference price and to ensure there are adequate opportunities to trade and mitigate balancing risk.

2.3.1. Maximise Trade opportunities

As has already been discussed, balancing the output of wind generation presents significant challenges. If the primary objective of the Target Model to achieve efficient cross-border flows is to be met there must be adequate opportunities for participants to respond to price signals and trade surplus or shortfalls of energy. Aside from the market design, liquidity is key to achieving this objective.

SWS is concerned about the levels of liquidity in the Intraday market in particular and believes measures must be introduced to promote liquidity that allows trade across the Day Ahead and Intraday timeframes.

Market power will remain a concern in the Intraday (ID) timeframe if the marginal plant is not restricted in the prices they offer. These concerns can be addressed in two ways; by firstly ensuring that ID market bids are cost reflective and secondly if liquidity cannot be guaranteed in the ID market, by ensuring a benign balancing regime. Predictable ID and balancing prices are necessary particularly for those with difficulty in forecasting output accurately such as wind and demand.

If the depth of liquidity in ID is insufficient to allow out of balance participants to re-balance within day, they will be relying on balancing cash-out prices. These prices need to strike a balance between encouraging balancing responsible behaviour while also respecting the fact that the current SEM is based on socialised balancing costs and a penal approach to imbalance pricing will have negative consequences contrary to local RES policy and competition development needs. SWS reiterates our request for a significantly less penal imbalance regime and for cost-reflective bidding in the balancing market timeframe.

SWS believes cost-reflective bidding in the balancing market will also influence generator bidding behaviour in the Intraday market, improving liquidity and cost-reflectivity of bids. If generators know that participants seeking to trade out imbalance exposures can wait for the balancing timeframe to receive cost-reflective prices, they will be influenced to bid into the ID cost-reflectively in order to ensure they receive that price and avoid the balancing market where they may not be required and thus receive nothing³.

³ Cost-reflective bidding rules in the Balancing timeframe will have the advantages of levelling the playing field for all participants in the Balancing market and helping to keep bids in the Intraday market honest

SWS prefers the use of financial transmission rights and financial energy hedging products in the forwards market as we believe they will not remove liquidity from other market timeframes while still allowing market participants to hedge out price and volume risk.

2.3.2. Establishing a Robust Credible Reference Price

The current SEM provides a clear reference price through its ex-post SMP, through which the whole market is required to trade. This has been used successfully as a reference price for renewables support schemes such as REFIT, for PPAs and for the settlement of other financial contracts. It is essential, and in the interests of both support scheme recipients and consumers that the market design is compatible with support schemes, both existing and incoming.

The SEM has delivered a very liquid and robust credible reference price through its mandatory gross pool design. This has been crucial to delivering transparent entry signals and has helped to attract significant investment since its inception. SWS are concerned with the options proposed that a similar level of liquidity will not be delivered thus impacting the establishment of a robust credible reference price. While it is possible that trading will converge in the day-ahead market, given the market context and without explicit incentives to do so, the benefits gained to date in terms of liquidity promoted by the gross mandatory nature of the pool could be severely eroded. This issue is of particular importance given the growing levels of wind that will be coming off support schemes and trading as merchants in the lifetime of this market.

Options 1 and 2 allow for trading outside centralised markets which will impact negatively on liquidity. The proposals to limit ID trading to the volumes traded in the DA market in Option 2 are concerning. SWS does not believe that Option 4 will deliver liquidity in the ex-ante timeframes for the same reason there is little ex-ante activity in the current SEM, it exposes participants to the ex-post price and this will mean higher curtailment of wind. Option 3 is preferred as it mandates trading through centralised markets, maximising liquidity.

2.4. Local Market Issues

There are a number of local market issues that are not explicitly discussed in the Consultation but remain of critical importance to market participants, particularly wind generators. They include; treatment of tie-breaks under priority dispatch and the concept of 'Firmness' amongst others. It is the strong view of SWS that the underlying policy and current treatment of these issues must not change. Should local market issues such as those listed, require substantial changes it must be flagged in the regulatory impact assessment prior to a decision being made on the design of the ISEM.

SWS welcome the publication of worked examples as an illustration of how the proposed options would work under example scenarios. However, the examples do not address how a variable price taker with priority dispatch would interact with the market. Given that the majority of wind generation is in this position in the current SEM, this issue needs to be addressed. If the market design wishes to encourage wind generation to

become price makers and begin bidding into the market this needs to be addressed clearly, with commensurate understanding and mitigation of the impact to a wind generator's commercial position.

It is essential that current market arrangements with regard to tie-breaks under priority dispatch are maintained in the new market arrangements.

These issues must be addressed under all options. Option 4 has the advantage of providing a template as to how the issues are addressed currently. Options 1, 2 and 3 will require careful consideration as to how these issues will be addressed.

2.5. Transparency

SWS believes that transparency in the market is highly related to liquidity and believes that continued market power mitigation measures will be required to ensure transparency. In their 2012 review of Irish energy policy the IEA noted⁴ that the electricity incumbent, ESB, continues to maintain almost half of the total dispatchable generating capacity and most of the price-setting generation assets in the SEM. One of their key recommendations was to ensure the energy regulator is sufficiently empowered to ensure that market and competition rules are strictly adhered to.

In CEPA's 2012 review of market power⁵ in the SEM, their analysis showed that in 2020 market power will remain an issue in a significant number of scenarios where, due to large amounts of wind generation on the system, in periods of low wind generation, generators with even modest market shares become pivotal as they become the marginal price setters. The report recommends that a robust market power mitigation strategy is likely to continue to be required. SWS echoes the requirement of continued market power mitigation, particularly as this analysis shows that it is in the Intraday and Balancing timeframe, where wind generation is most exposed, that market power remains an issue.

The SEM has delivered a high level of transparency, equity and competition. SWS believes that the market mitigation measures that have been in operation throughout the lifetime of the SEM have contributed hugely to this success. Measures such as the Bidding Code of Practice, the Market Monitoring Unit, Directed Contracts and restrictions around horizontal unbundling and vertical integration merit careful consideration when establishing a market mitigation strategy for the Integrated SEM.

Options 1 and 2 allow for extensive trading outside the market, as well as portfolio bidding and SWS is concerned about transparency and market power for both these options. Option 4 could address transparency concerns as the current SEM does. Option 3 is favoured as it also allows for current market mitigation features to be retained while providing for efficient cross-border trading.

⁴ [Energy Policies of IEA Countries 2012 Ireland Review](#)

⁵ [CEPA – Market Power and Liquidity in the SEM](#)

3. Discussion of Capacity Remuneration Mechanisms (CRM)

SWS is firmly of the view that a CRM is required in the Integrated SEM solution. Furthermore, the CRM must remain transparent and non-discriminatory and reward wind generation fairly for its contribution to capacity and generation adequacy.

3.1.1. Review of Current CRM

SWS believe that the current CRM has been successful. It has given generators a reliable, transparent revenue stream that has helped to send signals for investment. For consumers it has helped to deliver stable energy prices and generation adequacy. SWS believes that this price-based approach is appropriate to a small market where a single large generator entering or exiting the market has a large effect. It has ensured that the “missing money” problem hasn’t occurred while also ensuring, along with the structure of the existing SEM, that generators aren’t doubly compensated for providing capacity.

The Medium Term Review of the CRM completed in 2012 concluded that the CRM is working well and remains a key feature of the SEM design and that the concept of a CRM should remain in place incorporating its original objectives⁶. The advantages and success of the CRM in the SEM were reiterated when the SEMC committed in last years Next Steps decision paper⁷ to retaining a CRM in some form as part of the design changes to the SEM. SWS believes that the current CRM objectives remain relevant but acknowledge that additional objectives may be required. They may include EU State Aid requirements such as avoiding distortion of cross-border trade, being technology neutral and fitting into the broader decarbonisation policy.

3.1.2. Proposed CRM Options

At this stage SWS believes that it is premature to decide on the type and composition of the CRM that will end up in the Integrated-SEM design. This should be subject to separate consultation following the ISEM proposed decision. However, we have made specific comments on the options put forward in the consultation in the relevant part of the questionnaire included in this response.

3.1.3. CRM Conclusion

The current CRM is transparent and non-discriminatory among market participants. It has succeeded in sending clear, predictable signals to the market that are necessary for long term investments. SWS believes that the objectives that have been relevant to date in the SEM will remain relevant in the Integrated SEM and must be maintained in whatever CRM solution is ultimately incorporated into the new market. To this end it is premature at this point to choose a preferred CRM without knowing what the energy market will look like and without any quantitative analysis of the different options. A separate consultation should take place following the proposed decision on the ISEM that addresses both the CRM objectives and the options for a CRM within the context of the energy market within the proposed decision.

⁶ [SEM-11-088](#) (p.43)

⁷ [SEM-13-009](#) (p.39)

4. Conclusions

SWS concurs with the consultation that each energy market option presented has strengths and weaknesses and in deciding on the most suitable option the SEMC will have to strike a balance between meeting all the High Level Design criteria set forth. This response seeks to highlight key issues from the perspective of a wind generator that must receive due consideration from the SEMC as they seek to strike this balance. By addressing these key issues in the new HLD, SWS believes that the SEM Committee's primary objective of protecting consumer interests where appropriate by promoting effective competition between market participants in the new I-SEM, will be best achieved.

SWS submits that within the context of the long term European policy of decarbonisation, wind generation must be central to the design of the ISEM. This response seeks to highlight the importance in the market design of the key issues of balancing, liquidity, transparency and local market issues such as the treatment of tie-breaks under priority dispatch.

- The application of balance responsibility must bear in mind renewables policy and target model objectives and ensure that wind generation is not penalised. Further consultation on this issue is needed.
- Recognising the context of the market in terms of liquidity, transparency and the need to maintain entry signals, SWS believes that bidding in the balancing market must be cost-reflective. We expect that this will have the added benefit of positively influencing prices and liquidity in the Intraday market.
- Liquidity is crucial across all timeframes to enable participants to hedge out balancing exposures. It is also essential for the establishment of a transparent, robust reference price in the market. SWS sees a continued need for liquidity-boosting measures to ensure hedging opportunities exist for all participants and to deliver a robust, credible reference price.
- Current local market arrangements must be maintained with regard to the treatment of tie-breaks under priority dispatch, the participation of price taking generation in the market and the rights of generators with firm connections to financial compensation if dispatched away from their market position.
- Transparency remains a paramount objective for the new market design. Market power will continue to be an issue and could increase under certain market conditions as participants become more exposed to balancing obligations. Therefore a market power mitigation strategy is required and must be a key element of the new market design.

SWS does not believe that any of the options as proposed in the Consultation will deliver a market that is acceptable to participants or achieve the SEMC's primary objective.

SWS suggest that the new HLD should include provision for:

- Portfolio bidding should only be permitted for wind generation. Otherwise, and across all timeframes, it should be prohibited for liquidity and transparency reasons.

- In the interests of transparency, cost-reflective unit bidding is required. Wind generators should be exempted, who should be allowed to bid as a portfolio to take advantage of the clear benefits in terms of balancing energy exposures.
- In the **Forwards timeframe** financial transmission rights and financial energy products are preferred to ensure that cross-border trade is not restricted by congested interconnectors and to encourage liquidity into the Day Ahead and Intraday markets.
- In the interests of liquidity and transparency the **Day Ahead timeframe** should be mandatory for all participants except for wind generators, who face unique forecasting challenges. Wind generators must exclusively participate in the energy market through the Day Ahead, Intraday or balancing markets.
- Bidding in the **Day Ahead timeframe** should be cost-reflective and allow for simple and block bidding to allow generators to capture the full true costs of generation in their bid and provide a transparent, credible reference price.
- All trading in the **Intraday timeframe** should take place via the European Shared Order Book Function. Liquidity measures will be necessary in this timeframe to enable all participants and in particular demand and wind generation to hedge out balancing exposures.
- Bidding in the **Balancing timeframe** must also be cost-reflective.
- Settling imbalances at the price of the marginal energy balancing action and should be rejected as it is unduly penal preferred and will damage the stable, predictable investment environment that has delivered and will be required to deliver large scale investment in wind generation.
- The designs of the Intraday and Balancing timeframes must be compatible because they are closely interlinked and their design will affect the behaviour of market participants in both timeframes.

SWS concludes that when assessed against the SEM HLD criteria and against the key issues discussed in this response, Option 3 (Mandatory Centralised Market) represents the best opportunity to meet these criteria, **subject to the required provisions listed above**. SWS also believes that in any HLD pursued, the impacts to the commercial position of wind generators be well understood, and mitigation measures included to ensure the continued Irish commitment to renewable generation.

With regard to a Capacity Remuneration (CRM) mechanism, SWS is firmly of the view that a CRM is required in the new market design. The CRM must remain transparent and non-discriminatory and reward wind generation fairly for its contribution to capacity and generation adequacy. SWS recognises that the current CRM is transparent and non-discriminatory and has succeeded in sending clear, predictable signals to the market. The future CRM should look to replicate this success. SWS believes that without any quantitative analysis of the different options proposed including their interactions with the proposed energy options it is premature to suggest which option would work best. To the end, this analysis should be presented in the proposed decision and followed by a dedicated consultation. While it is premature to comment on the merits and weaknesses of the proposed options, SWS believes that a Strategic Reserve should be excluded as it is a corrective action to instances of market failure which should not be the desired outcome for a market design.

Finally, SWS welcome the opportunity to respond to this consultation on the High Level Design of the Integrated SEM and would like to restate their support for continued engagement between all stakeholders to achieve the optimal outcome.

Regards,

Ciarán O'Brien
Regulatory Affairs - Commercial
Bord Gáis Energy

{By Email}

Responses to Consultation Questions

1. Which option for energy trading arrangements would be your preferred choice for the I-SEM market, and why?

SWS concludes that when assessed against the SEM HLD criteria and against the key issues discussed in this response, Option 3 (Mandatory Centralised Market) represents the best opportunity to meet these criteria, **subject a number of provisions** detailed in the Conclusions section (Section 4) of this response. In the 2013 Next Steps decision paper, the RAs stated that their primary objective is to promote the interests of consumers by promoting effective competition in the SEM. SWS opines that the best way to promote the interests of consumers is to design a properly functioning market that recognises the context in which it will operate, i.e. a market with very high levels of intermittent wind generation and limit interconnection to its neighbouring market, GB. The reasons why Option 3 will now be discussed, including the detail and rationale behind the provisions we deem necessary to make this Option acceptable.

Financial Forwards Markets

SWS prefers the Financial Transmission Rights (FTRs) proposed under this option. They provide a method for market participants to financially sell forward energy across interconnectors and hedge out their price exposure. They do this without diluting the available IC capacity in subsequent market timeframes. As well as enabling financial players to trade in the forwards market, it frees up physical interconnector capacity for use in the Day Ahead and Intraday timeframes. It is crucial that cross-border interconnector trade is maximised in these timeframes to ensure Ireland's wind resource is maximised and curtailment mitigated.

Similarly, SWS believes that all energy trading in the forwards timeframe should be financial, as per current SEM arrangements. This has a number of advantages that should be retained in the new market design. Firstly, similarly to transmission rights, the use of financial energy hedging products does not remove liquidity from where it is needed most, the Day Ahead and Intraday markets. It also allows financial players to participate, aiding liquidity. Finally, it also enables market power considerations to be addressed through mitigation measures such as Directed and Non-Directed Contracts which ensure all market participants can hedge power in the forward markets. Bilateral portfolio trading, financial or physical, removes transparency and liquidity from the market and must not be permitted.

Liquidity and Cost-reflectivity in the Day Ahead (DA) Market Timeframe

In the view of SWS, the Day Ahead market timeframe offers the greatest opportunity to achieve liquidity and drive efficient flows across interconnectors due to price being set through the marginal pricing auctions of the European Market Coupler (EMC). Enhanced liquidity is necessary for a robust reference price, crucial for settlement of financial contracts including renewable supports and PPAs in Ireland and in Northern Ireland. Liquidity combined with transparency of bidding in this timeframe will ensure the resulting reference price is reflective of the true cost of providing marginal power in the SEM.

Balancing and Forecasting Challenges for Wind

In a centrally dispatched market the TSOs will have a continued need to accurately forecast wind. Given the obvious challenges for all wind generators of forecasting accurately Day Ahead, and in the interests of fairness and transparency, particularly to small independent generators, the TSO's Day wind forecasts should be made available to the market. Furthermore, the TSO should be empowered to act as an aggregator of wind generators, where it is responsible for submitting forecasts and managing imbalance risks. However, this should not exclude commercial parties from developing and offering an aggregator service.

Bidding in the Day Ahead Market: Liquidity & Transparency

The Day Ahead timeframe accesses the European Market Coupler (EMC) and if efficient interconnector flows are to be achieved, SWS believes that there is a need for transparency in the market operation in this timeframe. To do this cost-reflective bids are required, not just in the Day Ahead market but across all timeframes. Simple or Block bids that are submitted to the EMC must obey this principle and the monitoring of bid from a body such as the Market Monitoring Unit must continue to ensure that cost reflectively is observed. In this regard, SWS believes that unit bidding for conventional generators best achieves the objectives of transparency and technical feasibility.

The unit bidding in Option 3 (Mandatory Centralised Market) is preferred, with the caveat that wind generation be allowed to bid as a portfolio if desired for the reasons stated above. However, SWS does not see the necessity to make the Day Ahead market mandatory for wind generation, as has been proposed in Option 3. In our view the mandatory participation of wind generation in the Day Ahead market is not fair or efficient. Forcing wind to submit forecasts at this point does not empower wind to minimise its energy imbalance as it sees fit. Furthermore, it is unclear how wind acting as a price taker would participate in this timeframe. However, in the interest of liquidity and transparency, SWS believe that all other market participants aside from wind generation should be mandated to participate in the Day Ahead market. Additionally, mechanisms may be required to ensure that bidding in the Day Ahead market is cost reflective, whether by the retention of BCOP-like bidding rules or market monitoring.

Liquidity in the Intraday Market

SWS believes that the EU Shared Order Book Function (SOBF) should be the sole platform for Intraday trading. Once again, liquidity is the key to this market timeframe and must be sufficient to enable wind and demand to minimise their exposure to balancing. Periodic auctions are supported provided they do not enable liquidity to be diverted to small windows throughout the day, making it more difficult for wind and demand to close out their position. Bilateral trades and portfolio rebalancing within this timeframe are also not supported for the same reason.

As a renewable generator, SWS is concerned that the Intraday (ID) market will not have adequate liquidity to enable wind to trade out balancing exposures. As has already been highlighted, market power will remain a concern in this timeframe if the marginal plant is not restricted in the prices they offer.

These concerns can be addressed in two ways; by firstly ensuring that ID market bids are cost reflective and secondly if liquidity cannot be guaranteed in the ID market, the cost of balancing must not be penal. Predictable ID and balancing prices are necessary particularly for those with difficulty in forecasting output accurately such as wind and demand.

If the depth of liquidity in ID is insufficient to allow out of balance participants to re-balance within day, they will be relying on balancing cash-out prices. These prices need to strike a balance between encouraging balancing responsible behaviour while also respecting the fact that the current SEM is based on socialised balancing costs and a penal approach to imbalance pricing will have negative consequences contrary to local RES policy and competition development needs. SWS reiterates our request for a significantly less penal imbalance price and for cost-reflective bidding in the balancing market timeframe, and that commercial impacts to wind generators are considered in the implementation of any HLD.

SWS believes that cost-reflective bidding in the balancing market will also influence generator bidding behaviour in the Intraday market, improving liquidity and cost-reflectivity of bids. If generators know that participants seeking to trade out imbalance exposures can wait for the balancing timeframe to receive cost-reflective prices, they will be influenced to bid into the ID cost-reflectively in order to ensure they receive that price and avoid the balancing market where they may not be required and thus receive nothing.

Balancing Market Timeframe

The consultation proposes that all market participants including wind and demand must be balancing responsible. SWS recognises that the intention of the European Target Market is to promote balancing responsible behaviour among market participants and to harmonise balancing markets so that balancing requirements can be shared among different countries within the overall EU market. However, SWS urges the RAs to bear in mind the EU Target Market's primary goal, which is the promotion of cross-border trade. The achievement of this goal must be prioritised along with the EU's renewable energy policy goals. Additionally, the market context of the SEM with high levels of wind generation and relatively low levels of interconnection must be recognised when deciding on the approach to balancing. We believe that a less penal approach to the treatment of energy imbalances is necessary.

Currently the SEM socialises energy balancing costs by running an ex-post market with the actual outturn wind and demand. This is a significant advantage in terms of attracting investment as it provides transparency and stability, giving investor confidence. The current balancing regime has helped to attract significant investment in both wind and conventional generation. Any movement away from these arrangements will erode this stability and transparency. Of utmost importance in the SEMC's considerations

is that existing investments are not undermined and also that the SEM remains attractive to future investment.

A balance must be struck between encouraging balancing responsible behaviour and not unduly penalising imbalances which is contrary to current treatment in the SEM and would erode investor confidence. To this end, SWS believes that a significantly less penal approach to imbalance pricing is needed and that residual commercial impacts to wind generators be considered in the HLD given the need for Irish commitment to renewable generation to be continued. The Balancing Network Code separates the pricing of Balancing Energy Actions from Imbalancing Pricing and SWS believes that the ISEM market design must do the same. While balancing energy actions should receive the marginal price of balancing energy actions, parties out of balance should receive an imbalance price that is not unduly penal. The cost difference could be socialised as currently through TUOS costs.

2. Is there a requirement for a CRM in the revised HLD, and why?

SWS is firmly of the view that a CRM is required in the Integrated SEM solution. Furthermore, the CRM must remain transparent and non-discriminatory and reward wind generation fairly for its contribution to capacity and generation adequacy.

SWS believes that the context of the SEM merits the inclusion of a CRM. The SEM is a small market where the loss of a single large conventional generator would account for up to 10% of installed capacity. It has relatively low levels of interconnection and, crucially, it has levels of wind generation. In this context an energy only market would result in volatile prices to the detriment of consumers and generators who are attracted to the transparency and stability of the current CRM.

Energy only markets throughout Europe have seen boom and bust investment cycles develop that have led to generation adequacy concerns and the mothballing of out of merit plant, most notably in the UK. SWS believes that this approach must be avoided in the SEM. Over the long term it will deliver security of supply concerns and volatile peaking prices that are not acceptable politically. Including a CRM ensures that the “missing money” problem doesn’t occur to ensure investment that delivers generation adequacy. Furthermore, by including the CRM as a fundamental element of the ISEM design it can be safeguarded that generators aren’t doubly compensated for providing capacity. SWS believes that this approach also alleviates EU State Aid compliance concerns as it is not aid but a fundamental part of the market that helps generators to recover their long run marginal costs.

3. If there is a requirement for a CRM in the revised HLD, what form would be your preferred choice for the I-SEM, and why?

As has been discussed in **Section 4** of the cover letter to this response, SWS believes that the current CRM has worked well, giving generators a reliable, transparent revenue stream that has promoted investment and giving consumers stable energy prices and generation adequacy. As already stated, the CRM must remain transparent and non-discriminatory and reward wind generation fairly for its contribution to capacity and generation adequacy.

SWS believes that the Strategic Reserve and the Short Term Price options do not merit further consideration because of their drawback further discussed in the relevant questions. The Strategic Reserve option is a corrective market action while the Short term Price option will not provide long term transparent price signals to the market.

At this stage SWS believes that it is premature to decide on the type and composition of the CRM for the Integrated-SEM design given the lack of clarity on what the energy market will look like and the rules that will apply regarding bidding etc. Further details on the proposed options should be subject to separate consultation following the ISEM proposed decision in June.

4. Are these the most important topics to consider in the description of the HLD for the revised energy trading arrangements for the single electricity market on the island of Ireland?

The topics listed in Table 2 of the consultation capture most relevant topics pertaining to the design of energy trading arrangements for the ISEM. However, they are by no means exhaustive. The aspects of market design that have not been addressed in the consultation but have been highlighted in **Section 2** of this response; namely the treatment of balancing, the promotion of liquidity, the treatment of local market issues and the market power mitigation strategy for the ISEM. All these issues need careful consideration as part of the process of deciding on the High Level Design energy trading arrangements.

5. Are there other aspects of the European Internal Electricity Market that should form part of the process of the High Level Design of energy trading arrangements in the I-SEM?

As highlighted in **Section 2.2.3** above, further consideration is required to the topic of Imbalance pricing. The Balancing Network Code allows for flexibility in this regard and we believe that this flexibility should be used within the context of overarching policy objectives to achieve efficient cross border trade and promote renewables.

6. What evidence can you provide for the assessment of the HLD options with respect to security of supply, efficiency, and adaptability?

The proposed HLD options vary widely when assessed against the criteria of security of supply, efficiency and adaptability.

Security of Supply: *The chosen market design should facilitate the operation of the system that meets relevant security standards.*

Wind generation is a positive contributor to security of supply on the island of Ireland. It is an indigenous, renewable resource that delivers zero carbon generation. Ireland has one of the best wind resources in the world and this has meant that Irish wind generation has needed less support than in other member states. As one of the pillars of Irish and European energy policy, security of supply must be assured in the HLD of the

ISEM. SWS believes that continued promotion of renewables, particularly wind generation given Ireland's resource, is in the best interests of the SEM customers.

The security of supply of a market can be considered over two timeframes, the short-term operational timeframe and the longer term generation adequacy timeframe.

The short term operational security of supply is delivered by the TSO through feasible dispatch schedules that ensure supply matches demand. No issues have been highlighted to date regarding the TSO's ability to maintain short term security of supply for the options proposed. When it comes to the longer timeframe, generation adequacy can only be delivered by investment by market participants. If a market participant or would-be market entrant cannot accurately and transparently estimate what revenues it might recoup from a market this will undermine market entry signals and the ability to maintain competitiveness in the market.

Regardless of which Energy Option is chosen, the revenue adequacy of the market will also be highly dependent on the existence of a CRM.

- i. If market power abuse is permitted to exist, e.g. physical and economic withholding to the detriment of volumes (particularly for supplier-only participants or balancing of demand and wind) and prices, this signals market exit and is also a barrier to entry. The potential for such potential abuse is higher in a market with bilateral and/or portfolio optimisation measures than a market with centralised highly liquid trading arrangements (e.g. a pool);
- ii. A lack of transparency makes price discovery very difficult which in turns undermines the attractiveness of either existing or new investment in the market. BCOP type rules and a central repository for bid compilation details (e.g. an MMU) also facilitate price discovery enabling risk assessments for hedging needs and potential market entry opportunities to be better assessed. Again the potential for erosion of transparency is significant in a market with bilateral and/or portfolio optimisation compared to centralised, liquid trading arrangements;
- iii. Liquidity is critical in a well-functioning competitive electricity market and is reflected in the ease at which one can buy or sell a particular commodity or instrument without incurring onerous costs or significantly affecting the price. Liquidity provides investor confidence allowing for optimal risk and market manipulation mitigation enabling adequate forwards hedging and facilitating the derivation of a robust DA reference price. Permitting bilateral and/or portfolio optimisation trades can undermine the liquidity for forwards hedging and take from the volumes in DA eroding DA prices. Without liquidity, market competitor numbers will diminish and there will be a barrier to entry.

Without liquidity and transparency and in markets where market power is facilitated, targeted measures, such as strategic reserves are required to deliver security of supplies. The issues previously faced in the Irish market prior to SEM and the issues currently faced in the UK market demonstrate that bilateral markets do not efficiently or effectively deliver security of energy supplies to markets over the long term. Options 1 and 2 would therefore perform least favourably in this regard. Option 3 performs best against this criterion.

Efficiency: *The market design should, in so far as is practical to do so, result in the most economic (i.e. least cost) dispatch of available plant.*

SWS believes that efficiency, in terms of arriving at the least cost dispatch of available plant, requires a transparent and liquid market. One of the most important elements of an efficient market design in the context of the wider European energy market is the efficiency of interconnector flows. In this regard the overall dispatch of all units on the system and in general is important. If cost-reflective bids that also reflect technical capabilities are not inserted into the market coupler, it can result in incorrect flows across interconnectors or inefficient cycling and pricing in the market. It is for this reason every effort should be made when considering the market trading arrangements to ensure that bids that reflect the costs and technical capabilities are submitted to the market coupler.

Adaptive: *The governance arrangements should provide for the development and modification of the arrangements in a straightforward and cost effective manner.*

Until the current market issues of market power, transparency and liquidity dissipate, there will be a continued role for the regulators in ensuring efficient trading arrangements for the benefit of competition and ultimately consumers, no matter what energy trading arrangements are in place though some will require more regulatory intervention than others (e.g. Options 1 and 2 more so as compared to Option 3). With regards to the unusual trading arrangements proposed in Options 2 and 4 (in the context of wider European energy markets) they can be seen as less adaptive than options 1 and 3 when possible future changes to the European Target Model and Network Codes are considered.

Energy Trading Arrangements for the I-SEM

7. Are there any changes you would suggest to make the Adapted Decentralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

The proposed forwards timeframe in this option has clear disadvantages in our view. Physical Transmission Rights are preferred under this option, which could restrict interconnector capacity from Day Ahead and Intraday markets, where it is needed most. It also allows physical and financial energy to be traded either bilaterally or through a broker. Physical trading would serve to remove liquidity and transparency.

SWS believes that gross portfolio bidding hinders the achievement of transparent, cost-reflective prices in this timeframe. Allowing market participants to remove their generation and demand portfolios from price formation is harmful as it removes liquidity and transparency from the market and makes an efficient outcome or a representative reference price difficult to achieve.

SWS rejects this option on the basis that it does not adequately address the key issues summarised as balancing, liquidity, local market issues and transparency. In particular, the opportunity for large volumes to trade outside of the market is most concerning. The proposal for “market maker obligations” begins to address some of the issues around liquidity, however SWS believes that for this option to become viable other measures such as financial trading in the forwards markets and mandatory, cost-reflective unit bidding in the Day Ahead and Intraday market are needed. Introducing such measures to this option effectively changes it into Option 3, a Mandatory Centralised Market.

8. Do you agree with the qualitative assessment of the Adapted Decentralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

SWS disagrees with the qualitative assessment with regard to Stability and Competition due to the possibility for bilateral trading and the voluntary nature of participation in the Day Ahead and Intraday markets.

As discussed above, liquidity is a key aspect of the ISEM design. Under this option there are significant concerns that liquidity will be diluted due to the ability to trade outside the market and to bid as a gross portfolio in both the Day Ahead and Intraday markets. For this reason the Equity, Competition and IEM criteria score poorly. The follow on effect of poor liquidity also causes the Environmental criteria to score poorly because it reduces wind ability to trade out exposures to balancing in the Day Ahead and Intraday markets.

9. How does the Adapted Decentralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?

SWS believes that the regulatory assessment criteria used to assess the option are good indicators for establishing if the option will meet its primary objective, which is to be in the best interests of consumers over both the long and short term.

In the view of SWS, the shortfalls of this option in terms of Competition, Stability, Equity and Environment shows that it is not in the best interests of consumers on the island of Ireland. The lack of transparency and liquidity under this option would benefit large portfolio players and undermine existing investments by other market participants. Such an approach would represent a dramatic change to the commercial environment leading to regulatory uncertainty which ultimately could lead to higher prices and a security of supply risk.

10. Are there any changes you would suggest to make the Mandatory Ex-post Pool for Net Volumes more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

SWS also rejects this option due to concerns similar to Option 1 around balancing, liquidity and transparency. In particular with the opportunity for large volumes to trade outside of the market is most concerning. Option 2 appears to have even more opportunities to trade outside of the market with options to trade physical and financial products bilaterally or through exchanges across all markets bar balancing. The use of a pool to establish the imbalance settlement price is also concerning given the impact a lack of liquidity might have on an unconstrained market schedule. Efficient interconnector flow appears very unlikely given the possibility for liquidity to be diluted from the Day Ahead and Intraday markets.

11. Do you agree with the qualitative assessment of Mandatory Ex-post Pool for Net Volumes against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

SWS agrees with the qualitative assessment of this option, that the Stability, Equity and IEM criteria score poorly. This is primarily due to concerns around market liquidity with a number of opportunities for participants to trade outside of the market and the impact that this would have on the fair allocation of costs nor of efficient cross-border trade. Furthermore, the Competition and Environment criteria should score poorly. The opportunity for so much trade outside of the markets will reduce transparency, one of the key enablers of competition. The Environment criteria should score poorly due to poor liquidity in the DA and ID markets which would increase wind generators exposure to an imbalance price that is unpredictable.

12. How does the Mandatory Ex-post Pool for Net Volumes measure against the SEM Committee's primary duty to protect the long and short term interests of consumers on the island of Ireland?

In the view of SWS, the shortfalls of this option in terms of Stability, Equity Competition, Environment and IEM indicate that is not in the best interests of consumers on the island of Ireland. The split liquidity between different market timeframes is the primary driver of a number of concerns. However, the opportunities to trade outside the market would benefit large portfolio players and similar to Option 1 it is in the best interests of the consumer not to pursue this option.

13. Are there any changes you would suggest to make the Mandatory Centralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

As discussed in detail in Question 1 and in the Key Considerations part of this response (Section 2) SWS suggests that Option 3 should include the following provisions:

- Portfolio bidding should only be permitted for wind generation. Otherwise, and across all timeframes, it should be prohibited for liquidity and transparency reasons.
- In the interests of transparency, unit bidding is required. Wind generators should be exempted, who should be allowed to bid as a portfolio to take advantage of the clear benefits in terms of balancing energy exposures.
- In the interests of liquidity and transparency the **Day Ahead timeframe** should be mandatory for all participants except for wind generators, who face unique forecasting challenges. Wind generators must exclusively participate in the energy market through the Day Ahead, Intraday or balancing markets.
- Bidding in the **Day Ahead timeframe** should be cost-reflective and allow for simple and block bidding to allow generators to capture the full true costs of generation in their bid and provide a transparent reference price.
- All trading in the **Intraday timeframe** should take place via the European Shared Order Book Function. Liquidity measures will be necessary in this timeframe to enable all participants and in particular demand and wind generation to hedge out balancing exposures.
- Bidding in the **Balancing timeframe** must also be cost-reflective.
- Settling imbalances at the price of the marginal energy balancing action and should be rejected as it is unduly penal preferred and will damage the stable, predictable investment environment that has delivered and will be required to deliver large scale investment in wind generation.
- The designs of the Intraday and Balancing timeframes must be compatible because they are closely interlinked and their design will affect the behaviour of market participants in both timeframes.

14. Do you agree with the qualitative assessment of Mandatory Centralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

SWS disagrees with a number of the qualitative assessment made for this option:

- The **Security of Supply** criteria should replace ‘neutral’ with ‘possible strength’ as, with a mandatory DA market where physical trades are exclusively cross-border, market power abuse is mitigated e.g. withholding. The liquidity and transparency of a uniform price helps hedging, risk assessment, reference pricing all facilitating investment and market entry signals. A cost-reflective balancing market should drive ID liquidity and inhibit market power abuse. In the view of SWS this option best offers Security of supply but ultimately the view is contingent on the existence of a CRM.
- The **Stability** criteria is not a ‘possible strength/weakness’ but should be a possible strength. While regulatory rules may be needed to make DA mandatory, ID liquidity should increase provided cost-reflective bidding in balancing is required. Further, the forwards and DA timeframe are effectively the same as in current SEM save for different market operator. The market coupler will ultimately become a ‘Europool’ as is the European Commission’s vision.

- **Efficiency** should be ‘possible strength’ as opposed to ‘neutral’ as not only can it be delivered by this option, but central dispatch and central scheduling will be the effective outcome which leads to least cost dispatch and is favourable as compared to options 1 and 2 where self commitment is proposed.
- **Competition** should be a ‘possible strength’ and not split with ‘neutral’. This option retains the beneficial elements of SEM which, SWS agrees with the RAs, has been conducive to competition. The high transparency is critical and a competitive split between balancing and intraday market timeframes should arise as a result of cost-reflective bids in balancing.
- **Adaptive** should be split ‘neutral/ possible strength’ (not ‘neutral’) as it is more conducive to cross border trading and it should not be the intention to retain control/ limit the market, from interacting cross border.

SWS agrees with the assessment of the other criteria, namely Practicality, Equity, Environment and IEM. With regards to the Environment criterion, SWS believes that if concerns around liquidity, particularly in terms of the Intraday market, as well as concerns around the treatment of balancing are addressed, then this option can become a ‘possible strength’. The proposals listed above aim to address these concerns. Finally, SWS agree that IEM is a ‘possible strength’ as it provides the greatest opportunity for facilitating cross-border trades while retaining the key attributes of the SEM.

15. How does the Mandatory Centralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?

SWS believes that the regulatory assessment criteria used to assess the option are good indicators for establishing if the option will meet its primary objective, which is to be in the best interests of consumers over both the long and short term.

In our view, Option 3 offers the greatest opportunity to protect the short and long term interests of consumers subject to the provisions that have been stated. By ensuring transparent and liquid trading arrangements, competition is promoted and a stable investment environment emerges to the benefit of consumers.

16. Are there any changes you would suggest to make the Gross Pool – Net Settlement Market more effective for the all I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?

It may be considered that large aspects of Option 4 bear strong resemblance to the current SEM and hence its positive attributes. SWS believe that may be the case, but however is concerned that this option will not promote efficient cross border trade.

Option 4 enables participation in the European Market Coupler through financial CfDs where accepted interconnector trades are physically firm. However, these accepted trades are open to a price exposure to the ex-post gross pool. SWS believes that this exposure will act to disincentivise participation in this market as it does in the current SEM. This will result in inefficient interconnector flows in both the Day Ahead and

Intraday markets and ultimately result in higher levels of curtailment of wind generation. Also, an expansion of financial compliance (under MIFIT, REMIT etc.) under this option due to the purely financial nature of market participation across the timeframes could act to further disincentivise liquidity.

Option 3 with adequate provisions that address balancing, liquidity and transparency issues is seen as a more optimal way of ensuring efficient cross border trade.

17. Do you agree with the qualitative assessment of Gross Pool – Net Settlement Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?

SWS agrees with the qualitative assessment that the ‘possible strengths’ of this option are in terms of Stability due to its minimal changes from the current SEM and Equity in terms of allowing all participants access to markets. Furthermore, Competition should be a ‘possible strength’ which reflects how the transparent nature of the current SEM has been beneficial in terms of competition. The ‘possible strength/neutral’ split for Environment reflects the advantages in terms of balancing, transparency, liquidity and access to market but also the disadvantages in terms of the disincentives to trade across the interconnectors in the Day Ahead and Intraday timeframes.

18. How does the Gross Pool – Net Settlement Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?

As has been demonstrated by the success of the current SEM, this option can deliver an environment that is attractive to investors and enables competition to develop. If this option was chosen it is likely that consumers would benefit to the degree they have to date from a transparent, competitive market. However, consumers are unlikely to benefit from access to European markets in the Day Ahead and Intraday timeframe given the financial exposure as well as the increased compliance requirements that would come with trading through the interconnectors in those timeframes.

Capacity Remuneration Mechanism (CRM) for I-SEM

19. What are the rationales for and against the continuation of some form of CRM as part of the revised trading arrangements for the I- SEM?

The responses to questions 2 and 3 outline why SWS believe that a CRM must be continued and remain part of the ISEM market design.

The current long term price based CRM is transparent and non-discriminatory among market participants. It has succeeded in sending clear, predictable signals to the market that are necessary for long term investments. SWS believes that the objectives that have been relevant to date in the SEM will remain relevant in the Integrated SEM and must be maintained in whatever CRM solution is ultimately incorporated into the new market. To this end it is premature at this point to choose a preferred CRM without knowing what the energy market will look like and without any quantitative analysis of the different options. A separate consultation should take place following the proposed decision on ISEM that addresses both the CRM objectives and the options for a CRM within the context of the energy market within the proposed decision.

20. Are these the most important topics for describing the high level design of any future CRM for the I-SEM?

The most important elements of the future CRM are described within the 5 topics listed in Chapter 10 of the consultation.

21. Are there any changes you would suggest to make the design of a Strategic Reserve mechanism more effective for the I-SEM (for instance a different choice for one or more of the topics?)

The Strategic Reserve option for a CRM is corrective and reactive to instances of market failure. No market should be designed with the inclusion of a Strategic Reserve as to do so is to cede from the start that the new market will not succeed in rewarding participants appropriately and maintain the required level of adequacy. A Strategic Reserve does not meet other existing CRM objectives such as transparency, equity and sending efficient price signals for the entry and exit of long term investments to and from the market. For these reasons SWS believe that a Strategic Reserve should be rejected as a possible CRM for the ISEM market.

22. Do you agree with the initial assessment of the strengths and weaknesses of a Strategic Reserve Mechanism? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

23. Would a Strategic Reserve Mechanism work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address

detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wishes to see CRM addressed separately following a principled decision in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.

24. Are there any changes you would suggest to make the design of a Long-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic?)

The Long Term Price Based CRM option is the most similar to the existing CRM. SWS has already stated that it believes that the current CRM is currently functioning well and its design objectives remain relevant. Noting that some changes may be required to ensure that this option fits in the new market and does not distort cross-border trade, this option has proven to be successful in delivering generation adequacy, predictability, transparency and equity.

25. Do you agree with the initial assessment of the strengths and weaknesses of a Long-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

26. Would a Long-term price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wish to see CRM addressed separately following a principled decision in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.

27. Are there any changes you would suggest to make the design of a Short-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

The Short Term Price Based CRM relies on short term price signals to reward generation when it is required most. In this regard it is doubtful if this option would contribute to price stability or deliver the efficient price signals needed for long term investments to ensure capacity adequacy. A functioning energy market would deliver similar signals to this option, questioning the utility of its inclusion. For these reasons SWS believe that a Short Term price-based CRM should be rejected as a possible CRM for the ISEM market.

28. Do you agree with the initial assessment of the strengths and weaknesses of a Short-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

29. Would a Short-term price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wish to see CRM addressed separately following a principled decision in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.

30. Are there any changes you would suggest to make the design of a Quantity-based Capacity Auction CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

It is difficult to comment on this option without more detail as to how it would operate, what restrictions might be applied to participants in terms of bidding for the auction proposals and how it would interact with the different proposed energy market options. These issues should be addressed through further consultation following a principled decision in June.

31. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Auction CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

32. Would a Quantity-based Capacity Auction CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wish to see CRM addressed separately following a principled decision in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.

33. Are there any changes you would suggest to make the design of a Quantity-based Capacity Obligation CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

It is difficult to comment on this option without more detail as to how it would operate, what rules might be applied to participants and how it would interact with the different proposed energy market options. These issues should be addressed through further consultation following a principled decision in June.

34. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Obligation CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

35. Would a Quantity-based Capacity Obligation CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wish to see CRM addressed separately following a principled decision in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.

36. Are there any changes you would suggest to make the design of a Centralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

It is difficult to comment on this option without more detail as to how it would operate, what rules might be applied to participants and how it would interact with the different proposed energy market options. These issues should be addressed through further consultation following a principled decision in June.

37. Do you agree with the initial assessment of the strengths and weaknesses of a Centralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

38. Would a Centralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wish to see CRM addressed separately following a principled decision

in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.

39. Are there any changes you would suggest to make the design of a Decentralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?

It is difficult to comment on this option without more detail as to how it would operate, what rules might be applied to participants and how it would interact with the different proposed energy market options. These issues should be addressed through further consultation following a principled decision in June.

40. Do you agree with the initial assessment of the strengths and weaknesses of a Decentralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?

The initial assessment of the strengths and weaknesses is reasonable. Evaluation of this option relative to the other CRM options proposed is dependent on its context within the new energy market and the intent of the CRM.

41. Would a Decentralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?

It is not possible at this time to suggest that any of the presented CRMs would work better with any of the presented energy trading arrangements. This consultation is a high level design that does not address detailed trading arrangements such as market power mitigation measures and bidding rules within the energy markets. For this reason SWS wish to see CRM addressed separately following a principled decision in June, where the detail of the CRM can be established alongside a high level design of the energy trading arrangements.