IWEA response to the consultation DS3 System Services Procurement Design

SEM-14-059

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Executive Summary

IWEA's overriding objective with the DS3 arrangements is that they must deliver the necessary system services and any required investment for services to facilitate the achievement of the 2020 renewable targets and minimise curtailment. The delays that have been seen to date in increasing the System Non-Synchronous Penetration (SNSP) on the electricity system are of serious concern to the wind industry, and wind generators are likely to see increasing levels of curtailment if these system services are not introduced in a timely manner, thereby putting the 2020 renewable energy targets at risk. It should also be recognised that the market re-design currently underway, along with changes to the capacity remuneration mechanism, bring a lot of uncertainty for generators in relation to forecasting revenues in the coming years. From this viewpoint, IWEA believes that the most appropriate procurement option for system services at this time is one which provides certainty and transparency for service providers.

Therefore IWEA proposes that the following procurement option be implemented, which constitutes **a variation of Option 1: Regulated Tariff**:

- Individual regulated tariff set for each service, paid to all providers of that service.
- The tariff should be set on a value-based approach as put forward in the TSO recommendations paper.
- Tariffs fixed for five years and revised every five year period.
- For new entrants there should be the facility to provide longer term contract if required.
- Further consideration to be given to the use of scalars and performance incentives.

Introduction

IWEA welcomes the opportunity to comment on the SEM Committee consultation on DS3 System Services Procurement Design Options. The procurement option chosen will be of critical importance to ensure the appropriate investment in the right technologies so that there can be further integration of renewable energy into the electricity system.

With increasing levels of wind generation connecting to the system, the issue of curtailment has come to the fore. The DS3 programme has highlighted a number of workstreams which are required to address some of the system security challenges that need to be overcome, and IWEA welcomes the ongoing work in this area. One of the key factors contributing to curtailment is the level of instantaneous system non-synchronous penetration (SNSP) allowable, which is currently limited to 50%. The introduction of the East West Interconnector has actually been seen to increase the levels of curtailment of wind generation, requiring the use of TSO countertrading to ensure curtailment levels can be reduced. While good progress has been made in this area we believe that there is scope for further progress to be made. It is essential that the new market design will lead to more efficient interconnector trading which will see exports at times of high wind rather than curtailment of wind generation.

However we believe that the main focus needs to be on the enduring solution of increasing the SNSP levels above 50% to 75% as outlined in the DS3 programme. This needs to be done in a timely manner to ensure the most efficient use of renewable generation on this system which can contribute to our renewable energy targets. Effective implementation of the services proposed, in conjunction with delivering the RoCoF grid code modification requirements, will be necessary if we are to start moving towards increasing the non-synchronous penetration level from 50% to 75%, and relevant financial solutions to facilitate this are necessary and should be considered as part of the holistic I-SEM and DS3 projects. This 75% level is necessary to achieve the curtailment mitigation assumed in EirGrid's modelling of curtailment in relation to the 2020 targets. Significant progress on both these factors, and other curtailment mitigants, are vital to the wind industry and therefore we strongly support the introduction of these new services. It is vital to reflect the investments needed to facilitate this in the payments made to the industry and the investment community.

IWEA has noted in previous submissions to the SEM Committee that there is an urgent need to advance progress on mitigation measures to minimise and reduce curtailment. Mitigation measures are crucial in realising the full costs and social benefits of the investment in renewable energy. In the years up to 2020 there are a number of key initiatives that are all underway which are required and indeed expected to deliver significant results in curtailment mitigation. These initiatives include:

- Increasing SNSP limit to 75%
- Decreasing levels of must-run generation
- Flexibility of conventional generation
- Effective operation of interconnectors to export at times of high wind

There are also a number of other key areas also which will also contribute positively to curtailment mitigation. These include:

- Further efficient interconnection
- Storage and other flexible solutions

- Demand side management including electric transport and heating.

IWEA has previously raised concerns with the lack of urgency on some mitigation measures and contends that the market must reflect and reward participants who provide services to facilitate renewables in line with the responsibility as set out in the RES-E Directive (Directive 2009/28/EC).

This system services review currently underway aims at addressing a number of the aspects highlighted above and it is essential that this is treated as a priority workstream by the regulatory authorities. There are a number of issues affecting investment in renewables at the moment - uncertainty post 2016 arising from extensive market change, decisions with respect to renewable supports, delivery of the grid infrastructure, but most imminently it is the rising level of curtailment.

Given the levels of uncertainty within the market and expectations of curtailment rising to unsustainable levels if mitigation measures are not introduced, sourcing competitive finance is a significant concern for developers. IWEA has previously noted that regulatory uncertainty has led to considerable delays to the development of wind energy projects and investment in flexible generation and requests that this consultation, and the wider DS3 programme, be advanced to ensure clarity is provided to market participants. Notwithstanding our comments above, we wish to emphasise the importance of a solution which is feasible to implement and provides a clear and bankable signal for investment in both incumbent and new flexible generation.

Timelines

We are increasingly concerned that the two biggest work streams in the DS3 programme, System Services and RoCoF, have been significantly delayed from the original timelines set out and will therefore have a negative impact on the push to meet 2020 renewable targets through unsustainable levels of wind curtailment.

The timeline of the upcoming REFIT 2 deadline for wind energy projects, which requires wind farms to be constructed by the end of 2017, needs to be taken into consideration for services which can be provided by wind farms. There is concern that there will not be sufficient clarity around the contract for system services in time for investment decisions to be made at the turbine procurement stage, and the opportunity for wind farms to participate in the provision of system services may be missed. It is essential that the maximum benefit can be obtained from new generation assets connecting to the system, however if the system service contracts cannot be awarded in sufficient time, the certainty for investors will not be there. This consultation process needs to be progressed in a timely manner to ensure that the turbine suppliers can test any new capabilities and bring them to market in sufficient time to allow wind farms to provide the required services so that sufficient capacity to reach the 2020 targets can be built.

With large amounts of wind generation expected to connect ahead of the REFIT 2 deadline it is expected that there could be significant curtailment observed in the short to medium term before the SNSP can be increased to 75%. This is an area of significant concern to the industry as these high levels of curtailment are likely to have a serious impact on wind farm revenues and the ability to service the associated debt and required investments. This, in turn, will have an impact on the financing of new projects and could bring further development to a standstill, thereby putting the 2020 renewable energy targets at risk. Combined with the decision to remove compensation for curtailment at the end of 2017, this is likely to have considerable impact on many wind farm

projects. IWEA reaffirms our position that compensation for curtailment should remain, particularly in light of the delays to increasing SNSP and higher levels of curtailment being experienced than were originally expected. The table below outlines the delays which have been observed to date in increasing the SNSP from the original schedule set out. The decision to remove compensation for curtailment penalises those who are least able to manage the solutions. Compensation for curtailment, similar to constraints payments, would provide a signal to the party that can influence it, the TSO. In turn, DBC incentives provide the TSO with an incentive to minimise those costs. However, without compensation for curtailment, no such signal exists.

SNSP Level	2010 (PGOR's)	April 2013	April 2014
55%	2013	2014	Q4 2016
60%	2013	2014	Q4 2017
65%	2015	2015	Q4 2017
70%	2017	2017	2019
75%	2019	2019	2019

In summary, it is essential that the system services regime is introduced in a timely manner and that further significant delays are avoided, but it is also essential that the option implemented delivers the required services so that the system can operate at the higher levels of SNSP. Therefore appropriate consideration needs to be given to the option selected to ensure that the investment case is there for wind and supporting generators and the services will be provided in a timely manner.

Market Change

It should also be recognised that the market re-design currently underway, along with changes to the capacity remuneration mechanism, introduce considerable uncertainty for generators in relation to forecasting revenues in the coming years. From this viewpoint, IWEA believes that the most appropriate procurement option for system services at this time is one which provides certainty and transparency for all generators, and which is not reliant on a market position, which at this time would be extremely difficult to predict. IWEA believes that, while the system services procurement needs to be compatible with the new market design, there should be no requirement to wait for the I-SEM design to be finalised before completing the design of System Services procurement as this would put further pressure on the DS3 timelines.

ROCOF

Achieving the ROCOF targets is a large part of achieving the overall benefits of DS3 which IWEA is very keen to see attained. At this point, it is still not certain that these ROCOF targets can be achieved by the current fleet of thermal generators, and alternative solutions are also being investigated. The TSOs and the RAs should not simply assume that the ROCOF targets are achievable given the fact that the effect of them not being achieved is very large for the system, existing thermal generators, the renewable fleet and the customer.

Comments on the consultation paper

IWEA's overriding objective with the proposed DS3 arrangements is that they must deliver the necessary system services and any required investment for services to minimise curtailment and facilitate the achievement of the 2020 renewable targets. The SEMC focus on minimising the cost of the services provided runs the risk of not achieving the substantial €301m projected production cost savings (€241 + current €60m allocated for ancillary services).

We believe the perceived risk of overpaying for system services should be considered against the counterfactual of not creating an investment signal into the system services market and thereby impacting the ability to achieve renewable targets.

In this regard, the procurement options proposed should be assessed in terms of their deliverability. Options that interact heavily with the energy market and have high levels of complexity have a higher delivery risk. Options should be appropriately discounted or effectively rewarded in the SEMCs considerations given the need to deliver low curtailments levels to facilitate wind investment and realise benefits for consumers.

We note with interest in the SEMC consultation (page 19) that the RAs approach "does not strictly aim to achieve a 75% SNSP but rather focuses on delivering the outcomes from a higher SNSP (lower curtailment etc.)". Given that all curtailment modelling projections are based on assuming the achievement of 75% SNSP it is concerning that the consultation appears to leave open the extent to which curtailment minimisation is achieved.

SNSP levels

There is some discussion in the consultation paper in relation to the achievement of renewable energy targets with SNSP levels of 70% and 75%. The constraint and curtailment reports which were issued to wind farms as part of their connection agreements noted an increase of SNSP to 75% and this was used as the basis for financing and building projects. Any reduction in the expected SNSP levels would **not be acceptable** to the wind industry. The analysis provided in the consultation shows a clear benefit to all in reaching an SNSP of 75%, and these benefits need to be realised. If the target SNSP were to be reduced we would run the risk of not meeting renewable energy targets, which would incur fines for Ireland and add a significant cost to consumers.

It should be noted that there is a requirement on Member States to minimise curtailment of electricity from renewables. The fact that this can be done while providing benefits to the consumer means that there should be no question as to pushing for an SNSP of 75%, which has been identified

as being technically feasible with the relevant changes made to existing thermal plant and investment in new generation/technologies.

RES-E Directive obligations

The principles of minimising curtailment are set out in Directive 2009/28/EC of 23 April 2009 (the "Directive", as transposed in Ireland by S.I. No. 147 of 2011). Article 16.2 states:

b) *Member States shall also provide for either priority access or guaranteed access to the grid-system of electricity produced from renewable energy sources;*

c) *Member States shall ensure that when dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources in so far as the secure operation of the national electricity system permits and based on transparent and non-discriminatory criteria. Member States shall ensure that appropriate grid and market-related operational measures are taken in order* ***to minimise the curtailment*** *of electricity produced from renewable energy sources. If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply, Members States shall ensure that the responsible system operators report to the competent regulatory authority on those measures and indicate* ***which corrective measures they intend to take in order to prevent inappropriate curtailments****.*

Providers of system services

While it will be important for wind generation to be able to participate in the provision of system services, it is also important that those best able to provide the required services have a strong investment case. Therefore this response takes into account the provision of services from the generation portfolio. As with the RoCoF workstream, in order for the system to be able to accommodate increasing levels of renewable generation, much of the investment is required from other providers. In the case of system services the investment case needs to be there to ensure the system services are delivered. Revenue certainty is required to ensure investment both for the existing fleet and new investments.

Constraints in the provision of system services arising from issues such as location or technology need to be addressed in the detailed design.

Volume of system services required

The absence of information on the volumes of the required services makes it difficult to see how the different options being presented will work in terms of delivering the services. In order to progress investment decisions, the volume requirements of the TSO will be required to underpin generator revenue projections. While some work on this has been carried out for previous publications, IWEA requests that further work is carried out to determine the required volumes for all services, the interactions between services, and the capability of the existing generation portfolio. We support the recommendation in the IPA Economic Appraisal of DS3 that

"The TSOs should provide greater transparency in relation to the volumes of system services (by group) required in the year ahead and over the period to 15 years ahead. The TSO should also publish an estimate of the surplus/deficit profile in system services (by group) over the 15 years period."

Contract Length

While existing generators may be able to provide certain levels of the required system services, and others can be provided through refurbishment, more services may be required from new market entrants. There need to be options of contract length which are suitable for each of these scenarios. Feedback to date has shown that for new entrants, contract lengths in the region of 15 years may be required, while for existing generators shorter duration contracts would be more appropriate. Again, the volumes of system services required are an essential piece of information in this regard.

In order for new entrants to be able to participate in the provision of system services, pre-investment contracts would need to be considered. This would need to be sufficient to provide participants with sufficient time to get through Financial Close and construct.

Demand Analysis

The work done by KEMA and IPA demonstrates that there is still not a lot of reliable information available about the costs of delivering the investment needed for the new System Services. This would indicate that more flexibility around the terms of the procurement option chosen is preferable to ensure that the appropriate investment can be delivered, and that the value based approach may be more suitable. It also highlights the difficulties to using the Best New Entrant approach to setting payment terms for the System Services as has been proposed in Options 1 and 5.

Payment Nature

Further clarity is required in relation to the definitions in the consultation paper and in the information note which was published in August. The definition of availability based payments is still not fully clear. It is our understanding that availability based payments relate to the greater availability of the service that could have been provided based on either the market position or the dispatch position. In the case of reserve this would mean that if you are dispatched down, the payment would be based on the new volume of availability, but if you are dispatched up it would be based on the market position. The opposite would apply for services which are based on your actual generation levels, so that in all cases the greater of the revenues would be protected. If this was not the case there could be unintended impacts on the bidding behaviour of generators within the market where the cost of not receiving system service payments would have to be taken into account.

Payments which are linked to the market position of a generator are less predictable and are less likely to be bankable than capability based payments. It will be difficult for generators to predict their market positions when they are bidding for system service contracts, in particular in light of the significant market change currently under way. The additional risk associated with not being in the market and therefore not receiving availability based payments would need to be priced into the

bids or the regulated tariffs, meaning that the perceived benefits over capability based payments may not be there.

In regard to revenue certainty, we believe that the revision of the proposed remuneration methodology for system services has created a dispatch risk for generators. This is particularly apparent for long term contracts where investment is required, given an investor is likely to require a substantial risk premium to manage the uncertainty of the contract over the medium to long term period. In addition to this, the complexity of the proposed procurement option increases risk to generators and hence we believe the structure may not be bankable.

IWEA supports reverting to the definition of remuneration as per the TSO recommendations.

Comments on Procurement Design Options

Option 1: Regulated Tariff

Option 1 has some attractive features and some concerns identified, and some key points are summarised out below:

1) Individual tariffs will be set for each service, and will be paid to providers of the service. On page 35 the Consultation states that "the basis of the price proposed could be determined in advance for each product based on the value of that service relative to the combined value of all the other services, or indeed based on a cost-plus service approach". SEMC then go on (pg 36) to state that the "Tariffs would be set based on cost plus regulated return required by a BNE providing a range of services. Questions remain around how the Regulated Tariffs would be set using the Best New Entrant methodology, particularly given the range of services required and the differing technologies that can provide those services. IWEA believes that a value based approach to calculating the tariffs is more appropriate, particularly in light of the level of data available on the cost.
2) The tariffs would be set for a 5 year period and "existing units would be entitled to a renewal of their contract (at the new tariff rates)." 5 years with an extension right (albeit with price risk) would have some certainty value. Further consideration would need to be given to contract lengths for new entrants.
3) There is concern about the allocation of services to generators within the 5 year periods. If a new entrant reaches COD 1 year into the 5 year contracts, it is likely the value available for those contracts is eroded significantly (assuming a contract is available in the first instance).
4) Option 1 payments for SIR, FPFAPR, SRP and DRR are proposed to be paid on "Capability", which is bankable as it is not dependent on interactions with the market schedule. IWEA welcomes the use of capability based payments under this option.
5) Clarity is required on how the allocation of contracts by the TSO on an ad hoc basis would work. Transparency on the process used would be required to ensure equitable treatment of all generators. In particular there is concern in relation to services which can be supplied by the East West Interconnector. Regulatory oversight would be required to ensure that contracts are allocated in an appropriate manner. This is

something that arises under all options and will require consultation in the detailed design phase of the DS3 System Services implementation plan.

Given the ambiguity around the costs of investments needed, there is concern that this option may not deliver the investment required. If the Regulated Tariffs are set too low (with a contract length that is too short) and no investment takes place, consumers will be prevented from benefiting from DS3. It is contended that Option 1 Regulated tariffs with some amendments would be most likely to deliver the required services. If the tariffs fail to attract the necessary volume of services, adjustments can be made quickly with regulatory approval to facilitate the provision of services. There is a lesser threat of legal challenge to the procurement process than under Option 5, though the TSO will need to use its judgement in procuring the services, and given the overall cap on service costs, this is likely to require scarce allocation of some services. The TSO's will need to be able to demonstrate a fair and equitable process and rational decision making in this case.

Our proposals for improvements to Option 1 are as follows:

1) The pricing of services needs to be adequate to ensure that services are actually delivered. On page 35 the Consultation states that "the basis of the price proposed could be determined in advance for each product based on the value of that service relative to the combined value of all the other services", although the SEMC have stated a preference for a cost based on BNE plus regulated return. It is difficult to see how a BNE reference plant could be regarded as "technology neutral", and it may not be the appropriate technology to deliver all of the required services. The TSO's recommendation report to SEMC in 2012 recommended a value based approach to determine the value of the system service pot. The TSO's further recommended that the allocation of the pot across the services on the basis of the relative marginal benefit of those services, and this could be consulted upon. We would agree with the TSO's proposal in principle. This would set an implicit price cap of the value of production cost savings, which the SEMC suggest is €241m. We assume this is in addition to the current €60m which is allocated to ancillary services. This combined €301m should be allocated across the services on the basis of relative marginal benefits of each of the services as a uniform tariff for each service. This implicit price cap should set a fair level of service prices to underpin existing providers and new investments provided that there is also the possibility of contract term flexibility. If a new investment required revenues above these levels, it could not be justified by production cost savings. We would argue that an extended period of price certainty at these tariff levels could be awarded to new investments where a need for a contract up to 15 years in length was established (see 2) below).

2) Contract length

   A 5 year period of regulated revenues is too short to underpin an investment in large scale new plant, such an OCGT or Compressed Air Energy Storage. It may in some cases be sufficient to underpin retrofitting of existing plant or investment in some technologies. There should therefore be flexibility given to the TSO's, where there is a need identified for particular services, or a specific case for new plant investment can be made, that longer term contracts, up to a maximum of 15 years, could be awarded. This should be driven by the TSO's having an informed view of the requirements needed by a particular investment project in terms of contract term. A methodology could be developed by the TSO's to

identify the circumstances in which a case could be made for such contracts. Contracts could be awarded under a long term contract where a need could be demonstrated and signed off by the Regulatory Authorities.

3) Use TSO Definitions of Capability and Dispatch dependent payments (as set out in DS3 System services consultation Finance Arrangements) in place of the SEMC proposed definitions.
   The SEMC have revised the definitions in particular of Dispatch and created a new category of Availability. The SEMC definition of Availability requires a provider to be in the market schedule or constrained on, and it is not clear that this would be optimal for the operation of system services. This is even more concerning in the definition of Dispatch, which requires the Availability criteria to be met (in market or constrained on) and in merit for system services. Given that reserves and ramping are indicated to be paid on Dispatch, it would seem to be contradictory to require a plant with reserves to be in the market. We would contend that the TSO's position on Capability and Dispatch dependent payments should be used. Capability would appear to be similar to the SEMC proposal, but Dispatch dependent payments under the TSO proposals allow for payment to providers that are "used". This is significantly less restrictive to TSOs and service providers, as the specific requirements to be in market (or constrained on) and be in merit for system services are not included.

We would contend that Option 1 with the three proposed adjustments above in respect of price and contract term for contract offers would be most likely to deliver the necessary system services.

Option 2: System Services Pot

- Option 2 raised some of the same concerns as Option 1.
- Option 2 is not considered suitable to deliver the required investment as there are no long term contracts available for this option, and there is also significant price uncertainty.
- There would not be sufficient clarity of the likely revenue for each service in the absence of historical information and the volumes of system services required, in particular because of the potential volatility of price fluctuations between trading periods.

IWEA **does not** support Option 2.

Option 3: Regulated Competition

- There is significant complexity associated with this option, with four separate procurement processes for the different groups of system services.
- The allocation of contracts is subjective and it is not clear how this option would work if a generator needs to be successful for more than one group of products in order to justify the investment.
- While there are some advantages to Option 3 in relation to price discovery, there is concern that the investment may not be delivered if the price cap is too low.

- The SEM Committee have scored this as low in relation to Consumer Interest due to the risk of being locked in to expensive long term contracts. However these long term contracts, combined with capability based payments, provide certainty to investors. The interests of the consumer can still be protected by a price cap, however if this is set too low there is a risk that investment may not be delivered. If the investment is not delivered the benefits will not be passed on to the consumer.
- It is not clear under this option whether a new entrant will have the opportunity to sign up to a system services contract if they enter the market after the first contracts have been awarded.

IWEA **does not** support Option 3.

Option 4: Competitive Split Auction

- There is significant complexity associated with this option with a number of different auctions for the different product groups.
- The flexibility regarding different contract durations is welcome, however transparency would be required in the methodology of determining how much long term capacity is allocated and how much annual capacity is required.
- It is not clear how the auction to recoup Long Run costs will be managed and how it is determined which generators clear this auction. A generator can clear the long run auctions but not clear the annual auctions which recoup the short run costs. Therefore it is possible plants will recoup their long run costs over a long term contract but may not clear the annual auctions. This does not appear to be an efficient method of allocation of resources.
- We welcome the mandatory participation in the annual auction for the provision of existing services.

IWEA **does not** support Option 4.

Option 5: Competitive Multiple Bid Auction

The SEM committee have formed the view (pages 69-70 of the consultation) that Option 5 is the best of the market based options, and that Option 1 is the best of the regulated options. They further argue that Option 5 should be used as the "starting point" for system service procurement, but that for services that are "highly concentrated" and so lack sufficient competition, a regulated tariff (Option 1) will be introduced. Page 24 of the Consultation quotes the IPA Report, issued with it, which states "the system services market is highly concentrated which raises the risk of predatory or price-inflated bidding strategies. This is a particular concern for the competitive procurement options." There is a real lack of certainty as to whether Option 5 will work, as evidenced throughout the consultation paper. Detailed information on what constitutes a failed auction, and how the resulting regulated tariff would be set would be required. This option does not afford certainty to investors as it is not known at the outset whether or not a regulated tariff will be used, thereby eroding investment signals. It should also be noted that, while an approach such as this may reduce

prices in the short term, there is a real risk that it will increase costs in the medium to long term as the risk of non-delivery is higher because the investment signals are not there.

Competitive Multiple Bid Auctions delivers the most flexibility in terms of allowing participants to include the price and term of contract needed to provide the System Services. However this is a complex multi-objective optimisation problem that may not deliver the most efficient outcome for consumers, a number of concerns with Option 5 have been identified and can be summarised as follows:

1) Constraints in the provision of services resulting from factors such as location or technology would need to be given detailed consideration.

2) The proposed auction process with multiple sealed bids with contracts of varying lengths and no pre-determined quantity of the services may be difficult to legally defend, and could end up mired in legal claims. At a minimum, clear and transparent methodology would need to be consulted on and published, and the volume requirements must be made available.

3) There is significant complexity in this option and generators are likely to have to submit a number of different format bids to ensure that their capability is best represented. By using different methods of allocating the costs associated with the enhancement to different services, the chances of being "in merit" for a particular service would be impacted, and this would lead you to be included or excluded depending on your bidding strategy.

4) Given the risk of a subjective outcome owing to complexity, we believe new entrants will be taking a significant risk in investing towards pre-qualification with no sight over their probability of success.

5) The proposed methodology to allocate services to sealed bid where bids are "in merit" regardless of the contract term and to remove bids which are "out of merit" could give completely different solutions depending on the order in which services are assessed adding complexity to the bid selection process by the TSOs. An agreed methodology would be required to ensure transparency and clarity, however it is still difficult to see how this would provide an efficient outcome.

6) Option 5 has no pre-determined quantity of services to be procured at auction. This is left to the discretion of the TSOs. Participants face added challenges in having to formulate multiple bids of varying duration without knowing the volumes of services required to clear the auctions.

7) Option 5 payments for SIR, FPFAPR, SRP and DRR are proposed to be paid on "Availability", which is defined as "A provider must be in the market (or constrained on) to receive system service revenues." To obtain these payments a unit must be in the market schedule. By contrast the same services under Option 1 will be paid on a capability basis. It is contended that the Availability basis payments proposed for these Option 5 services is more uncertain for investors and may not be bankable unless a plant can be demonstrated to be in baseload, whereas a capability payment arrangement does provide certainty. In this respect Option 5 tends to a greater interaction between energy markets and system services markets.

8) Page 63 of the Consultation also states that a "Bidding Code of Practice would be developed and applied to all units participating in the system services auctions. It is envisaged that all bids would be cost based and subject to monitoring through the MMU". This suggests that in reality a highly regulated approach would underlie the pricing of 'competitive bids', in any case. The development of bidding rules also increases the complexity of delivering this Option, increasing the risk that it will not be delivered on schedule. Furthermore we believe this is contrary to a premise of a competition which is designed to secure price discovery.
9) Page 63 also states that where the auction fails to produce a viable result, or sufficient quantities, for one or more of the services, the additional volume will be remunerated through a regulated tariff. Option 1 is clearly seen as the fallback and the alternative to Option 5. No examples of what a failed auction consists of are provided. Any attempts to fail an auction based on the price outcome will increase investor uncertainty about this solution.
10) Under Option 5 no consultation would take place on the level of regulated tariffs, whereas under Option 1 SEMC would have to carry out a consultation on the value of each of the services.

Option 5 has a number of features that are attractive, which could ideally be retained in a preferred solution. The attractive features include:-

1) Ability to set price through a competitive bid, with payment as cleared.
   However there is an implicit price cap in relation to all procurement options. At a maximum this would be the value of the reduction in the generation costs, but potentially this could be limited to the cost of provision of system services which the consultation shows to be €70m-€84m. Under Option 5 no proper consultation would take place on these levels and default regulated prices, whereas under Option 1 a regulatory consultation would be required on setting the values. In theory Option 5 could allow services to be priced at their value rather than at reference plant based costs with a regulatory WACC assumption. However the impact of the bidding code of principles and the implicit price cap may in practice limit this feature.

2) Flexibility to submit linked service bids.
   Option 5 allows multiple sealed bids for all feasible combinations of services. This allows different technology providers to offer combinations of services appropriate to their plant type. However this may in practice be limited by the interaction of payments which are proposed to be paid on Availability, which will only pay for the service provided the unit is in the market. This may not be sufficiently predictable, or achievable in the case of reserve or ramping type plant, to be bankable.

3) Flexibility to submit long term contract periods and to price the services over a longer term.
   Auctions will be run annually and will allow parties to offer bids for long term contracts of whatever length is proposed. This has the benefit of allowing a new entrant to bid when ready to participate, and once long term contract has been allocated, that volume of capacity of services is withdrawn from the future auctions for the relevant period. This is an attractive feature for the party obtaining the long term contract, which will be bankable for that period, but parties could be undercut by competitors seeking a longer contract and winning the bid on lowest annual price for a given set of services. This flexibility may also be

undermined where services are allocated in a particular order, which could lead to a bid being rejected, whereas allocation in a different order could lead to the same bid being accepted.

Given the level of complexity and the concerns around the lack of competition for the provision of system services, IWEA **does not** support Option 5 at this time. We would be concerned that this option may frustrate public policy by not delivering efficient investment in system services and may not protect the consumer as envisaged in the consultation paper, as the benefits may not be realised. However, we recognise that over time the Ancillary Services market should move towards a fully competitive one. The introduction of cross-border reserve markets through the Network Code for Balancing demonstrates the intent across Europe to begin developing fully competitive Ancillary Services. However, this will only happen over the medium term and as the delivery of DS3 must be prioritised, Regulated Tariffs appear the best solution to achieve this.

IWEA Preferred Option

As stated at the outset, IWEA's overriding objective with the DS3 arrangements is that they must deliver the necessary system services and any required investment for services to facilitate the achievement of the 2020 renewable targets and minimise curtailment. The delays that have been seen to date in increasing the SNSP on the electricity system are of serious concern to the wind industry, and wind generators are likely to see increasing levels of curtailment if these system services are not introduced in a timely manner, thereby putting the 2020 renewable energy targets at risk.

It should also be recognised that the market re-design currently underway, along with changes to the capacity remuneration mechanism, bring a lot of uncertainty for generators in relation to forecasting revenues in the coming years. From this viewpoint, IWEA believes that the most appropriate procurement option for system services at this time is one which provides certainty and transparency for generators, and which is not reliant on a market position, which at this time would be extremely difficult to predict. Consideration will need to be given to the interactions with the market design and the CRM.

Therefore IWEA proposes that the following procurement option be implemented, which constitutes **a variation of Option 1: Regulated Tariff**:

- **Individual regulated tariff set for each service, paid to all providers of that service.** As outlined in the IPA analysis published alongside the consultation paper, there is currently not enough competition in the system services market on the island of Ireland to allow a competitive auction. The RAs propose that where an auction fails under Option 5, then a regulated tariff would be introduced. IWEA believes it is more appropriate to begin with the regulated tariff due to the lack of competition in the system service market.
- **The tariff should be set on a value-based approach as put forward in the TSO recommendations paper.** IWEA believes that this is necessary due to the lack of detailed data on the cost of the services. We also note that the value based approach is most likely to deliver the services required as the investment case is more likely to stack up.
- **Tariffs fixed for five years and revised every five year period**. This provides a degree of certainty to generators on the likely revenue for the coming years and should provide sufficient clarity to allow a certain level of refurbishment of plant to provide services.
- **For new entrants there should be the facility to provide longer term contract if required**. It is essential that new entrants can have the investment security required, and one of the main concerns with Option 1 as proposed is that a 5 year contract length would not be sufficient for new investment. Price certainty would also be required for these extended contracts, and IWEA considers that the proposal that a contract could be extended without the price certainty would not be sufficient for these investors. IWEA supports contracts of up to 15 years for new entrants. We believe that such plants should be required to demonstrate a benefit to the consumer, in the form of a CBA, as a pre-requisite before achieving regulatory approval. In order for new entrants to be able to participate in the provision of system services, pre-investment contracts would need to be considered. This would need to be sufficient to provide participants with sufficient time to get through Financial Close and

construct. In order to ensure consumers are protected from being locked in to long term contracts, IWEA suggests that a certain portion of the tariff could be set aside for longer term contracts based on the volume analysis to be carried out.

- **Further consideration to be given to the use of scalars**. IWEA does have concerns in relation to how the system service contracts would be allocated under this option and believe that further consideration will need to be given to the rules around this. There was discussion in the TSO recommendations paper in relation to the introduction of scalars which could be further investigated as a means to allocate system service contracts. This may provide a method to improve the efficiency of the provision of system services and reward those more valuable service providers.

IWEA believes that this option is the most likely to deliver the required investment for the provision of system services and thereby minimising curtailment of wind generation, and is the option least likely to frustrate public policy to deliver renewable energy.

Conclusion

IWEA welcomes the opportunity to comment on this extremely important consultation for the wind industry. The procurement option chosen will be of critical importance to ensure the appropriate investment in the right technologies so that there can be further integration of renewable energy into the electricity system. The IWEA preferred option at this time is an **adapted version of Option 1: Regulated Tariff** as we believe this option is the most likely to deliver the required investment is system services in the near timeframe.