



Draft IWEA response to the EirGrid/SONI consultations on

DS3 System Services Enduring Tariffs

DS3 System Services Enduring Scalar Design

21 August 2017

Introduction

The Irish Wind Energy Association (IWEA) is committed to the promotion and education of wind energy issues and plays a leading role in the areas of conference organisation, lobbying and policy development on the island of Ireland. IWEA is committed to promoting the use of wind energy in Ireland and beyond as an economically viable and environmentally sound alternative to thermal or nuclear generation.

IWEA welcomes the opportunity to respond to the TSOs consultations on the Enduring DS3 Tariffs and Scalars. IWEA supports the work the TSOs have undertaken through the DS3 programme and commends the success that has been seen to date increasing the maximum level of SNSP that can be accommodated on the system. The introduction of the enduring tariff regime for System Services in 2017 is a key part of ensuring that we can move safely and securely to higher levels of wind energy penetration in this country without causing unacceptable levels of curtailment.

IWEA are mindful that as there will be a further significant increase in the level of wind capacity connected to the system in the period to 2020, in order to maintain the levels of curtailment that have been on the system to date, it is essential that the system services element of the DS3 programme is successfully implemented and the maximum level of SNSP accommodated increased to 75%.

As such IWEA welcomed the SEMC's information in March'17 when the DS3 system services expenditure cap to 2020 was set out. The SEMC determination that increased expenditure in relation to system service should be linked to increased system requirements has been interpreted in the consultations by linking the effective tariff rate for services provision to the level of SNSP in a given trading period. IWEA considers that while the proposal meets the SEMC requirements it places a significant risk in the providers of system services and IWEA is concerned that the level of risk may delay the investment in service provision required to secure the system at 75% SNSP.

This risk has been recognised in the enduring tariff consultation and the 'stepped' scarcity scalar implementation is proposed as a mechanism to mitigate the risk to investors. IWEA agrees that this form of implementation does offer benefits in terms of supporting investors' confidence in service provision however the proposed implementation i.e. increases in scalar value from 60% SNSP and above is dependent on future increases in the maximum level SNSP. As a result, potential investors are likely at a minimum to wait until this increase in SNSP is in place and possibly observe for a period the operation of the system at this increase SNSP level before committing to an investment. As a result, this may result in a delay in the required investment in service provision coming forward and to overcome this, IWEA proposes that level of SNSP at which the scarcity scalar acts to increase the

effective tariff rates, be reduced to 55%. In this way, potential investors will have a track record of the system operating at this level of SNSP.

The enduring tariff consultation includes a reference to the potential merit in exploring whether the provision of FPFAPR and DRR should become Grid Code requirements. IWEA would not support any proposal which would retrospectively place additional requirements on wind capacity to provide system services. This is particularly the case where the commercial arrangements for the remuneration of these services have yet to come into force and so the efficacy of these arrangements in providing the required level of system service provision has not been tested.

Additionally, the consultations include a proposal to include a mechanism within the performance scalar to incentivise certainty of services availability. IWEA recognises the importance to the TSOs of reliable services availability and performance. However, IWEA is concerned the timeframes under consideration by the TSO for the forecast of services availability would have a significant detrimental impact on the ability of wind capacity to participate in the provision of system services. It is considered that at six hours ahead of delivery the indicated requirement for the provision of an availability forecast is out of step with the ISEM balance mechanism where intra-day trading is supported up to one hour before real time.

Detailed Response

DS3 System Services Enduring Tariffs

Question 1: Have you any comments on the proposed tariff rates for the Enduring Regulated Tariff arrangements?

As the 11 existing service tariffs have been increased by 5.3% from the Original Interim Tariffs decision paper published in August 2016, for the role over contract tariffs, we would question why the three new services tariffs (to be introduced in 2018) have not also been increased by 5.3%? We believe this rate should be increased by at least 5.3% to remain on par with the other services. The increase of 5.3% is considerably less than expected based on the projected “glide path”; this has caused increased uncertainty around for the remaining years on the glide path. Can we expect the gap to close between the actual expenditure and the glide path for 2018/2019 and 2019/2020? Finally, we would welcome clarity on when the tariff rates will be reviewed again.

Question 2: Have you any comments on the TSOs’ recommendation that the regulated arrangements be put in place for a minimum defined time duration until such a time as there is greater information available on the timeline for implementing a long-term market mechanism for System Services?

We strongly support the provision of multi-year contracts in order to provide investor confidence in the business case for building out these projects. We believe that setting 6 years as the minimum contract length is reasonable. A “no earlier than” clause in parallel with 4 to 6 year contracts in the regulated arrangements would be necessary.

Question 3: With respect to contract certainty, are there other considerations which we should take account of or other options that we should explore further?

We believe that significant work is still required around the detailed contract design in order to ensure that parties awarded contracts are given sufficient time to deliver but also that these parties are tracked and penalised for non-delivery. It will be critical to ensure ‘real’ projects are awarded contracts.

Question 4: Have you any comments on the TSOs' recommendation to replace an annual tariff review with a conditional tariff review, or are there alternative approaches that you think are better?

While we recognise the responsibility to manage expenditure, this must be balanced with providing the required level of certainty to investors. We disagree with any measure which would materially negatively impact on revenues for parties which are already contracted. Once a party has signed a multi-year contract they should be able to rely on a base case revenue stream driven by the tariff on signing along with a reasonable certainty of scalar impacts on that tariff. Since new contracts will be awarded on a regular basis we believe that managing expenditure can be achieved more pragmatically by limiting contracts awarded and ensuring that projects are delivered in a timely manner.

Question 5: Are there other considerations on the conditions under which a conditional review would be triggered?

A possible consideration would be to have a conditional review of scarcity scalars if necessary, unless the volume scalar had already taken care of that.

Question 6: Have you any comments on the proposal to exclude a high annual wind capacity factor as a consideration for triggering a conditional tariff review?

We strongly support this measure and we propose that the Scarcity Scalar should also remove any interaction with annual capacity factors for wind.

Question 7: Have you any comments on the TSOs' recommendation to use the 'Stepped' scarcity scalar design rather than the 'Linear' scarcity scalar design?

We propose that FPFAPR and DRR are paid for above 60% SNSP, similar to FFR. To only pay for these services above 70% will not create the desired targeting of investment to provide these services. We would strongly oppose the provision of FPFAPR and DRR to become Grid Code requirements as many generators currently connect to the system may not be capable of providing the fast response is required.

Question 8: Should we decide to use a 'Stepped' scarcity scalar, are there other considerations which we should consider in its design?

We understand the driving factor behind the Scarcity Scalar as defined by the SEM committee:

"To create marginal incentives for providers to make themselves available during periods or in locations of scarcity, therefore enhancing the performance of the system where it is most needed."

However, we disagree with linking this scalar to the variability of wind and interconnector operation on an annual basis. We believe this measure is unacceptable for a number of reasons:

- The measure would introduce a huge level volatility in revenue for low wind vs. high wind years and also depending on interconnector flows.
- The measure, as currently described, would only pay providers when the SNSP is above 60% but System Operators may take pre-emptive actions to keep SNSP below this level- this is another measure beyond control of system service providers which would result in a risk to their revenue.
- We believe that the measure is not ideal from a regulator's perspective either since it makes it difficult for them to plan the System Services spend year on year.

Our proposal is to remove the connection between System Service payment and annual variations in SNSP. Rather, we believe that payment should be calculated using a reasonable base case annual spend. Annual payments would then be made on this basis ex-ante with a factor applied for the times when the SNSP was above 60% and the unit was available.

Example

If the base case payment was €1000 but the unit was only available 50% of the periods when wind was above 60% SNSP then the unit would receive:

$$€1000 \times 0.5 = €500$$

If the stepped scarcity scalar is used we would recommend that this is reassessed annually as part of the proposed conditional review to ensure expenditure is in line with the glide path, giving security to investors while also protecting the consumer.

Question 9: Do you agree with the TSOs' recommendation on the method by which to mitigate over-expenditure as a result of potential overinvestment by high availability technologies?

We agree with the recommendation to mitigate over-expenditure as a result of over investment by high availability technologies, however, we believe that further consultation on this topic is required.

Question 10: Have you any comments on a preferred method to implement a procurement based volume limit on the level of high availability technologies to obtain system service contracts?

Further consultation and details are required to determine the best, non-discriminatory approach.

Question 11: Do you agree with the TSOs' recommendation to delay the implementation of taking the higher of a service provider's market position or physical dispatch, to determine the available volume of a service, for a minimum of 12 months post I-SEM go-live?

No, we don't see any reason for a delay and would disagree with the TSO recommendation. More information must be supplied regarding this delay and the impact this will have on the projected revenues for investors. This creates further uncertainty for investors before go-live.

Question 12: Do you have any comments on the method by which a resettlement between market and physical dispatch could occur following the 12 month delay?

12 months is an unacceptable duration to wait. Why can this not be a monthly or bimonthly resettlement?

DS3 System Services Enduring Scalar Design

Question 1: Do you agree with our proposal to include in the performance assessment methodology to determine the value of the Performance Scalar an additional measure to incentivise a unit to supply to the TSOs an accurate forecast of its availability to provide Reserve and Ramping Margin Services? If not, please specify why or identify what element of the proposal you believe requires amendment?

We wish to note the importance of having a reasonable time-frame for the forecasts in particular in relation to wind farms. The proposal to provide a 6-hour forecast 6 hours ahead is workable. We think further work is needed to agree how this will work and the impact of this performance scalar on revenue.

Question 2: Do you agree with our proposal to implement a Product Scalar for the Faster Response of FFR? If not, please specify why or identify what element of the scalar design you believe requires amendment?

We support this measure and believe that a faster response of FFR should be incentivised up to a scalar of 3 at a response of 150m/s.

Question 3: Do you agree with our proposal to implement a Product Scalar for the Enhanced Delivery of FFR, POR, SOR and TOR1? If not, please specify why or identify what element of the scalar design you believe requires amendment?

We agree with this proposal and welcome the change in to the upper threshold to 49.985Hz. We welcome more information on the Type Scalar for FFR regarding the use of frequency response curves to define the provision of this service. We note the definition of dynamic response needs more work.

Question 4: Do you agree with our proposal to implement a Product Scalar for the Continuous Provision of Reserve from FFR to TOR1? If not, please specify why or identify what element of the scalar design you believe requires amendment?

Yes, we support this measure. We believe that this scalar should have a linear relationship from FFR to TOR1 (1 - 1.5). Therefore, providers that can provide FFR and POR (1.1666) or FFR, POR and SOR (1.3333) can also be incentivised.

Question 5: Do you agree with our proposal to implement a Product Scalar for Enhanced Delivery of SSRP with an AVR? If not, please specify why or identify what element of the scalar design you believe requires amendment?

We agree with this proposal and we welcome continuity from Interim Arrangements to Regulated Arrangements.

Question 6: Do you agree with our proposal to implement a Product Scalar for SSRP with Watt-less VARs? If not, please specify why or identify what element of the scalar design you believe requires amendment?

We cautiously support this measure. There is, however, some concern, that there is not enough of a financial incentive here to invest in STATCOMs, as the provider is only paid the upper scalar for SSRP when dispatched by the TSO and receive no compensation for the inherent energy cost to the provision of reactive power at OMW output.

Question 7: Do you agree with our proposal to implement a Temporal Scarcity Scalar for DRR and FPFAPR? If not, please specify why or identify what element of the scalar design you believe requires amendment?

Yes, we support this measure, although we believe there will be limited interest at the payment rates set out for any significant investment to provide.

Question 8: Do you agree with our proposal to implement a Temporal Scarcity Scalar for FFR? If not, please specify why or identify what element of the scalar design you believe requires amendment?
No comment

Question 9: Do you agree with our proposal to implement a Temporal Scarcity Scalar for 11 Existing System Services? If not, please specify why or identify what element of the scalar design you believe requires amendment?

We agree with this proposal. We would also ask for clarity on what happens at 59.9% SNSP – is there a ramp up of the scalars?

Question 10: Do you agree with our proposal to implement a Locational Scarcity Scalar for All System Services? If not, please specify why or identify what element of the scalar design you believe requires amendment?

We support this measure, acknowledging that it requires further work to define and welcome further developments in this area.

Question 11: Do you agree with our proposal NOT to implement a Product Scalar for Enhanced Delivery of DRR with more reactive current? If not, can you provide rationale to support your views?
We agree with this proposal.

Question 12: Do you agree with our proposal NOT to implement a Product Scalar for Enhanced Delivery of SSRP with a PSS? If not, can you provide rationale to support your views?

We agree with this proposal.

Question 13: Do you agree with our proposal NOT to implement a Product Scalar for SIR with Reserve? If not, can you provide rationale to support your views?

We do not agree with this proposal and believe that it should be offered. It is up to TSO's to determine the lowest Min Gen to avoid gaming.

Question 14: Do you agree with our proposal NOT to implement a Product Scalar for Faster Response of FPFAPR? If not, can you provide rationale to support your views?

Yes, we agree with this proposal, however, we do have some concerns over synchronous versus non-synchronous investment.

Question 15: Do you agree with our proposal NOT to implement a specific Temporal Scarcity Scalar for Reserve Products? If not, can you provide rationale to support your views?

Yes, we agree with this proposal. This is already covered under temporal scalar proposal for the 11 existing services.

Question 16: Do you agree with our proposal NOT to implement a specific Temporal Scarcity Scalar for SIR? If not, can you provide rationale to support your views?

No comment.

Question 17: Do you agree with our proposal NOT to implement a specific Volume Scalar for Regulated Arrangements? If not, can you provide rationale to support your views?

Yes, we agree with this proposal. We are however, conscious that it could be brought in on a conditional basis even without the Protocol Doc.

Question 18: Do you agree with our proposal to implement Frequency Response Curves to define the provision of the FFR Service? If not, please specify why or identify what element of the curve design you believe requires amendment?

We support this measure but believe that this needs further work to define clearly the response and associated signal interface. We are grateful that EirGrid has shared the results of their studies demonstrating which FFR response characteristics are likely to give the best results for the grid. Experience in the field has shown that Inertia Emulation from wind power plants is capable of meeting the minimum FFR requirements, and that it can also achieve various types of dynamic response curve. A scalar to incentivise a dynamic response curve is therefore welcome.

We also welcome the TSO's plan to proceed with conducting a detailed evaluation of potential FFR response curves. In the context of this evaluation the wind industry is keen to participate in field trials (such as a QTP or similar process) as we believe this will allow the maximum possible FFR benefit to be gained from the all-island wind generation resource. As the TSOs plan to proceed with conducting a detailed evaluation of the control parameters applicable to the response curves for FFR providers, will this have a knock-on delay on the go-live date of this service in September 2018?

Finally, on page 54 ("Proposed Curves..." section) a reference is made to over-frequency events: "*At times of over frequency, the curve design is identical (the control parameters may differ), except mirrored about the nominal frequency.*" We would also be strongly in favour of payments for FFR and other frequency response system services being extended to over frequency response.

Summary

We would like to thank EirGrid and SONI for the opportunity to respond to these important DS3 System Services consultations on Enduring Tariffs and Enduring Scalar Design. The introduction of the enduring tariff regime for System Services in 2017 is a key part of ensuring that we can move safely and securely to higher levels of wind energy penetration in this country without causing unacceptable levels of curtailment.

As the leading association for the Irish renewable energy sector, IWEA would consider ourselves as a proactive partner, willing to step out in explaining the benefits of an effective, modern and climate friendly Irish electricity system, and we look forward to continuing our work alongside EirGrid in this regard. Please feel free to contact us should you have any questions.