

DS3 System Services Consultation – Volume Capped Procurement

This questionnaire has been prepared to facilitate responses to the consultation. Respondents are not restricted to this template and can provide supplementary material if desired.

Please send responses in electronic format to DS3@eirgrid.com or DS3@soni.ltd.uk

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Note: It is the TSOs' intention to publish all responses. If your response is confidential, please indicate this by marking the following box with an "x". Please note that, in any event, all responses will be shared with the Regulatory Authorities.

Response

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To whom it may concern,

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 Eirgrid's consultation on the DS3 System Services Volume Capped Competitive Procurement dated 29th March 2018. Responses to the specific questions raised in the consultation are included below, but we would like to first make a number of general points and observations that are highly relevant to this consultation process.

IWEA believes that a key component to the success of the DS3 Volume Capped auction process will be the ability of a reasonable number of well-advanced projects to bid into the process- projects which are capable of delivering DS3 services onto the Irish grid in a timely manner in order to mitigate the curtailment of wind as we reach higher levels of non-synchronous renewable penetration on the Irish grid. In order to achieve this objective, access to a grid connection is crucial and EirGrid must ensure that the ECP DS3 grid access framework delivers sufficient certainty to a sufficient number of projects to make the DS3 Volume Capped auction process a success.

IWEA support the proposal in the consultation to apply a 30MW limit to any individual contract, however we would note that this doesn't appear to be very well aligned with the proposed 100MW cap and 400MW limit for DS3 grid applications in the final ECP-1 grid access decision¹. The ECP-1 decision has the potential to facilitate and encourage hoarding of grid capacity. Under the proposed ruleset, companies that are likely to be successful in securing grid access, have an opportunity to block market access to those further down the queue, artificially limiting competition in the auctions. IWEA recognises the difficulty in making a change to the final ECP-1 decision in order to apply a 30MW limit to ECP DS3 grid, however we would note that in the ECP-1 decision the CRU reserved the right to increase the batch size if this was considered necessary to protect consumer interests. We have written to CRU on this basis calling on them to confirm that the batch size will be increased such that 400MW of "DS3 contractable" capacity receives connection offers. i.e. When determining whether a 400MW cap has been breached only the first 30MW of any individual offer would be considered. We believe this is necessary to ensure fair competition in the auction process and we would ask that Eirgrid support this request to the CRU. Were this to be confirmed in advance of the ECP-1 application deadline it may have the effect of discouraging capacity hoarding as it would remove the ability of those higher up the queue to block / restrict market access.

We would also note that within the volume capped consultation document, a staged procurement approach is envisaged, with an additional procurement round for 100MW anticipated in 2019. Under the ECP-1 decision the regulators anticipate the next round of grid connection offers following ECP-1 will be processed in 2020. As such, the grid offers issued under ECP-1 will need to be sufficient for projects bidding in at least the first two rounds of the volume capped procurement process. While it may be the case that not all DS3 providers will require grid access under ECP-1, it would seem to be in consumers interests to ensure that 400MW of "DS3 contractable" capacity issue under ECP-1.

¹ https://www.cru.ie/document_group/electricity-connection-policy/

<p><u>Question 3:</u> Do you have any comments on the availability obligation proposed?</p>	<p style="text-align: center;">TOR2</p> <p>In relation to the provision of over-frequency response, battery technology is inherently capable of providing such a service but the specifics of the service requirements are critical to the design of the battery and the associated grid connection. In order to allow for over-frequency response in their bids, battery projects would need clarity on:</p> <ol style="list-style-type: none"> 1. The % response required for over-frequency 2. Whether this response should be assumed from Day 1 of contract or at some later date 3. That the over-frequency requirements would not change over the course of the contract term 4. Whether EirGrid will require ability to dispatch TOR1/ TOR2 for over-frequency also <p>Furthermore, in the context of battery providers, we note that a full symmetrical over-frequency response requirement would have a significant impact on the volume capped auction bid prices versus no over-frequency response requirement. A requirement for fully symmetrical over-frequency response would likely reduce competition in the auction by making a number of projects unviable We would note that depending on the approach taken to MIC charging, the operational costs could become a very significant factor in the overall bid price. We would therefore cautiously welcome the TSO's proposal, subject to the above points being clarified and an appropriate charging regime for battery storage projects.</p> <p>Answer 3</p> <p>IWEA support the proposed availability obligation in principle but would suggest that it is more appropriate that this be measured annually rather than monthly. The current proposal of 97% monthly availability allows for unplanned unavailability of 1 day per month. Whereas, in the event of an unplanned outage, as battery projects are not designed to have 24/7 on-site maintenance personnel (as related costs would be prohibitive), other than for minor nuisance outages that can be addressed remotely, it is unlikely for the outage to be responded to, diagnosed and rectified in under 24 hours. Therefore, if an unplanned outage occurs in a given</p>
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	<p>month, the service provider is very likely to exceed the 3% unavailability allowance and therefore be penalised through the Availability-linked Performance Scalar. It is noted that EirGrid envisages the 3% unavailability allowance (equating to 1-day per month) to cover “short periods of unplanned unavailability”, however, since an unplanned outage occurring in a month would very likely result in the service provider exceeding the monthly 3% unavailability allowance, the assessment period proposed does not appear to consider the low likelihood-high impact nature of unplanned outages.</p> <p>Without increasing the 3% unavailability allowance, measurement of availability over a longer period (such as annually) allows for a longer allowance to address an unplanned outage. As unplanned outages (other than nuisance trips) would not be expected to occur every month, and given the low likelihood-high impact nature of unplanned maintenance events, it may be more appropriate to allow up to 12 days for a single outage event as opposed to 12 1-day allowances per month.</p> <p>We would also like to request clarity on a number of points:</p> <ul style="list-style-type: none"> • What allowance is Eirgrid proposing for scheduled maintenance? • Will the availability measurement and associated scalar be applied on an individual service basis or will reduced availability for one service impact all 5 services revenues via the availability scalar? • What allowance is Eirgrid proposing for periods of recharge following manual TOR1/TOR2 dispatch? • Is it confirmed that the Event Performance Scalar will apply? <p>How is Availability measured/calculated? Is Eirgrid proposing that availability is measured as a binary 1 or 0 or a percentage (to consider part-availability of DS3 service volume) during a Trading Period or other measurement resolution/blockWe request a worked example of the way the availability scalar will interact with the event performance scalar to help clarify these points for the industry.</p>
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Question 4: Do you have any comments on pre-requisites with respect to Connection Offers?

Answer 4

IWEA support either option 2 or option 3 with the following caveats:

Option 2-

1. Adherence to this requirement is a pre-requisite to the submission of auction bids.
2. The deadline for submission of bids must be aligned with offer issuance in the ECP-1 DS3 process to ensure that all ECP DS3 offers have been issued prior to the deadline for Volume Capped Auction bids.

Option 3-

1. Adherence to this requirement is a pre-requisite to the submission of auction bids.
2. For offers still in process at the time that the Volume Capped tender notice issues, projects are offered a connection method meeting with EirGrid so that they can come to reasonable level of certainty regarding their grid connection costs
3. EirGrid commit to having offers issued prior to award of contract to successful Volume Capped bidders

As already outlined in the introduction to this response, we believe this is necessary to ensure reasonable and fair competition in the auction process and to ensure that projects winning projects are capable of delivering services in a timely manner. We would also request that providers shouldn't be required to accept their connection offers until the auction result has been confirmed. This may require some flexibility in the standard timeline for offer acceptance but prevents locking in grid capacity for projects which may not be capable of delivering

<p><u>Question 5:</u> Do you have a view on the two options provided with respect to managing network limitations?</p> <p><u>Question 6:</u> Do you have a view on the staged approach proposed under the volume capped arrangements?</p> <p><u>Question 7:</u> Do you have a view on the proposed bid pricing requirements and the mechanism for assessing bids and determining price?</p>	<p>services.</p> <p>Answer 5</p> <p>IWEA would in principle support Option 1 though we would request that Eirgrid clarify the process by which providers would secure the necessary confirmation from the TSO / DSO. Would this be clarified through the ECP-1 offer issue process?</p> <p>Answer 6</p> <p>IWEA notes that this is a surprisingly small volume to procure in the first auction given the overall volume of service required. As things stand a maximum of 100MW of storage will be connected by 2020 and so the remaining volume requirement for these services will need to be sourced elsewhere. Is Eirgrid able to clarify, at this time, whether the full 300MW needs to be procured in advance of moving to an SNSP of 75%? Given the anticipated build out of wind energy envisaged out to 2019 / 2020 we believe this is an important consideration. If the full 300MW is required we believe consideration should be given to increasing the capacity in the first round. At a minimum we would suggest that Eirgrid clarify a volume floor rather than cap for each round of the procurement process, in order to give developers an incentive to continue to invest in project development.</p> <p>Answer 7</p> <p>Taking these points in turn:</p> <ul style="list-style-type: none"> • Proposal on contract start and end dates. IWEA supports the proposed dates, however we would ask that Eirgrid clarify that these dates apply only to the first round of the volume capped procurement and that the timelines will be extended on future rounds with the same time period being applied between the proposed contract execution
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	<p>date and service provision dates- i.e. a 2nd stage auction contract signed in May 2020 would need to be online by May 2022 for 6 years thereafter.</p> <ul style="list-style-type: none"> • Proposal on performance bond requirements. IWEA supports the proposal to apply a performance bond of €12,000 per MW that would be chargeable in the event of non-delivery. However we would expect that where delays occur as a result of non-contestable grid delivery issues, then these should not impact on bonds and provision to extend deadlines by the amount of delay should be included in the final contract arrangements • Proposal to require an individual price per service. IWEA supports this proposal. • Proposal for assessment of prices. IWEA supports option 2, whereby bids are assessed based on an overall bundled price with ongoing remuneration based on a typical wind year. We assume this would take the form of a published hourly SNSP profile for a typical wind year that would be applied to determine the number of hours in which the various temporal scarcity scalars would apply. We would request that this “typical year” SNSP data be made available to Industry with the publication of the decision on this consultation. • Proposal on tariff caps. IWEA would note that there are a number of proposals included within this consultation that will have the effect of reducing the gap between anticipated auction bid prices and the proposed tariff caps. These include: <ul style="list-style-type: none"> ○ Over frequency response may require some additional capital cost for any increased energy capacity required and a possible increase in operational costs depending on the approach taken to MIC charging ○ Proposed removal of the continuous provision scalar. <p>IWEA would suggest that these items need to be considered together. In the event that the existing tariff caps are to be retained, we would suggest that at a minimum the continuous provision scalar should continue to apply. Provided the ECP-1 batch size is adjusted as noted in the introduction, a competitive auction will ensure that these services are provided at least cost to consumers, accounting for the presence of this scalar. Retaining the continuous provision scalar should ensure that sufficient projects will be viable at the regulated tariff levels.</p>
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<p><u>Question 10</u>: Do you have a view on the market interactions outlined here and the proposed mechanism for mitigating?</p>	<p>ask for clarity on the time period for the measurement of availability and suggest it makes more sense to apply this as an annual as opposed to a monthly metric.</p> <ul style="list-style-type: none"> • Product Scalar for Faster response. IWEA would suggest that if there is a system benefit in encouraging response times up to 0.15 seconds then option 2 would appear to be the most sensible approach. If option 1 is selected then there would be no incentive for faster service provision, and it is unclear how option 3 would work in practise. We wish to highlight that it is non-trivial to measure, test and monitor speed of response well – and whether the assets can deliver may depend on how exactly how the test & monitoring is defined. We request that EirGrid clarify how response time will be measured • Product Scalar for Continuous Provision. As noted above IWEA does not support the removal of the continuous provision scalar on the basis that the application of this scalar was considered when determining the proposed tariff caps. As such removing this scalar is a further erosion of the viability gap at the regulated tariff level. • Locational Scalar. IWEA support the proposal not to apply a locational scalar in the 1st round of the volume capped procurement process • Minimum Volume per jurisdiction. IWEA support the proposal not to apply a minimum volume per jurisdiction <p>Answer 10</p> <p>Taking these in turn:</p> <ul style="list-style-type: none"> • Grid Code requirements. IWEA support the proposal that providers must comply with the applicable Grid Code or Distribution Code requirements for their connection, however we would ask that the TSO / DSO clarify how future grid code changes will be addressed with battery providers. In the scenario where retrospective application of grid code changes would have hardware implications for installed systems we ask EirGrid to confirm that derogations would be available to contracted service providers and that these would be processed in a timely manner. We also request clarification from the SOs that Grid Code takes precedence over DS3 service provision where any
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	<p>conflict occurs.</p> <ul style="list-style-type: none"> • Proposal on Network Charges. IWEA have no objection to this in principle but would note that it is critically important that the applicable charges are clearly communicated to industry well in advance of the first auction. We would also note that these charges will be factored into the bid prices in the auctions so it is important that these are reasonable and proportionate in order to ensure that projects remain viable at the regulated tariff cap level. As already noted, consideration should be given to the impact of MIC charging on the cost of provision of over frequency response services. • Proposal on management of positions in the energy market. IWEA have no objections to this in principle, however we would ask that Eirgrid / CRU confirm that, in circumstances where providers respond to a system frequency event, they would not be subjected to uninstructed imbalance charges. We would also ask that the SO's clarify that where a service provider is less than 10MW do they need to be registered in the balancing market in order to be eligible to enter into a DS3 contract. In addition, IWEA recommend that Eirgrid/SONI explore the ABSVD² mechanism used within GB to protect frequency response providers from imbalance price exposure, to see if this might be transferrable to the Island of Ireland context. <p>Proposals for re-charge after activation. IWEA support the TSO proposal but as already noted, we would ask for a clarification in relation to precisely what is meant by trickle re-charge. Our understanding is that this is not required through the 'trickle recharge rate'. Clarification is needed on how units can recharge by positioning in the market and how this will be considered against availability. This is particularly important after dispatch events. We would envision one of the three solutions listed below:</p> <ol style="list-style-type: none"> 1. On positioning in the balance market, time to re-charge is not considered to impact availability (It must be noted after a dispatch event, if the trickle recharge rate is similar to that of EFR in the UK, e.g. 9%, then the system will require ~11 hours to fully recharge) 2. Limitation of the total capacity that can be delivered for a period of time. For example on a 10 MW project, the unit will for an amount of time only be available to provide 9 MW of response. The 1 MW headroom is used to charge the battery. (How will a
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² Applicable Balancing Services Volume Data.

<p><u>Question 11</u>: Do you agree with the proposed mechanism for assessing applications?</p>	<p>reduced service capacity be counted in availability?)</p> <p>3. There is an obligation to oversize capacity by 20% of the capacity submitted to provide DS3. I.e. a 10 MW contract, must have a system capable of 12 MW capacity. The additional 20% allows for re-charging and SOC management. This is the option chosen in ENTSO-E.</p> <ul style="list-style-type: none"> • Proposal on management of positions in the capacity market: We would note that this appears counter to the approach adopted in the GB market. In order to ensure revenue stackability, we would ask that DS3 service providers are not penalised in relation to availability requirements when they are responding to a capacity event. There is a certain logic to this approach in that capacity events are unlikely to occur at times of high SNSP (high wind availability) and Eirgrid have clearly indicated through the temporal scarcity scalar framework that the service need from these providers will be greatest at these times. Adopting this approach should ensure greater plant utilisation to the benefit of the system. <p>In the GB market, batteries offering Enhanced Frequency Response (EFR) are recognised as enabling conventional plant to operate at their full output rather than being part-loaded to provide frequency response. 100 MW of EFR thus enable 100 MW of permanent response, subject to fuel availability etc. and so EFR batteries were allowed full capacity market revenue and stackable revenue while offering the EFR service.</p> <p>Answer 11</p> <p>IWEA agree with the proposed assessment mechanism subject to the deadline for submission of applications being extended to align with the issue of DS3 offers under ECP-1, and we would again request that the cut off point should be at the first project over 100MW.</p>
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We would like to thank Eirgrid for the opportunity to respond to these important consultations on DS3 System Services Consultations Volume Capped Questionnaire.

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.

Regards

IWEA
Irish Wind Energy Association.