Re:- Endeco Technologies response to Eirgrid/Soni Consultation on DS3 System Service Enduring Tariffs

August 10, 2017

Overview
Endeco Technologies Ltd, a Demand Side Unit (DSU) provider through sub-site aggregation (demand and embedded generation) welcomes the opportunity to respond to the DS3 System Services Enduring Scalar Design Consultation. We believe that the DSU industry can contribute significantly to System Service provision across a range of the required services, to assist the electricity system in its goal of operating securely at higher levels of non-synchronous renewable generation. The benefits of the provision of System Services though Demand Side Aggregation are many; with little or no carbon impact (where provision through demand is concerned), a distributed service response across the system jurisdiction, with no single point of unit delivery failure, and it gives the opportunity to the end consumer to benefit directly as well as the Grid System as a whole. It is important that accurate and clear service information (particularly around pricing and technical requirements) is available for Individual Demand Sites (IDS) hoping to deliver services as part of an aggregated Demand Side Unit well in advance of the commencement of arrangements to ensure stable trusted relationships with the industry can be generated and maintained into the future. The response to the consultation follows the consultation document queries as numbered where relevant.

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

Response 1: It would be our view that the Tariff rates should be higher for the faster more valuable services to ensure investment is incentivized as the application of scalar's will in some circumstances reduce the base tariff rate. By way of an example there is quite a likely scenario where a service provider providing a static delivery of Tor 1 & also providing Tor 2 would be paid more for Tor 2 service delivery than for Tor 1. We believe there is scope to for a higher level of increase to tariff rates upon next review and remain well within glide path budget. It is our view that a higher increase than the 5.3% from Oct 2017 coupled with greater certainty on the longevity of the value would expedite the take up of these services from demand side end consumers who currently view the value of these schemes to them as being marginal in terms of an investment decision to provide service.

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?*

Response 2: We believe that the TSO's recommendation of 4 years of regulated arrangements is the minimum that would be required to give investment certainty to demand side end consumers that DS3 service provision is worthwhile from their perspective.

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?*

Response 3: From a demand side perspective, the greater flexibility that can be provided in contracting arrangements the easier it will be to improve and increase levels of service provision from these new technologies e.g.
Proven Demand Side Operators could have scope to add Individual demand sites on their unit for DS3 service provision on an ongoing basis within given parameters rather than every 6 months.

Similarly, we could have the flexibility to add new sites to meet a given contract MW number rather than declaring the MPAN's in our providing unit at tender stage. We add new individual demand sites to our providing units every day, the greater the flexibility in onboarding new sites to DS3 service provision the easier it will be to collectively meet the objectives of DS3.

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?*

Response 4: We would support the TSO's recommendation and basis for a conditional tariff review albeit we would caution against any restrictions that are not technology agnostic.

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

Response 5*:* We don't believe that there should be conditional tariff review mechanisms that discriminate against particular technology types however if there is a decision to proceed with such a discriminatory mechanism then it would stand to reason that the opposite should be provided for also i.e. If there is underinvestment in new technologies that provide the flexibility and storage that the system will need to meet it's objectives under DS3, there should be a mechanism for the conditional review of tariffs to favor the outcome required.

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?*

Response 6: We would support the TSO recommendation in this respect, the risk of over expenditure is mitigated by the recommendation for a stepped scalar rather than linear and any over expenditure in a given year as a consequence of wind capacity factor's is more likely to be an anomaly in a given year rather than an ongoing over expenditure considering the forecast modelling is based on 10 year historical averages.

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

Response 7: We would support the TSO's recommendation to use the stepped scalar rather than the linear scalar as it will enable the TSO to have greater control over potential over expenditure versus the glide path. It also provides a simpler mechanism for the administration and communication of this scalar.

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

Response 8: From a demand side perspective particularly, the value required for the vast majority of sites to consider DS3 service provision is the revenue associated with continuous service of all DS3 services from FFR through Tor 2 at a minimum. At current tariff rates, FFR makes up a very significant proportion of the potential revenue driving that investment decision. The greater the uncertainty around the level of payment for this service, the more confusion in the marketplace and the more trust is diminished with the end consumer whom we all serve. This will reduce the level of adoption of DS3 services through demand side.

We believe a preferable solution would be to apply a Scalar of 1 form 0-60% SNSP and increase on a stepped basis thereafter. If this means to ensure you are within your expenditure objectives you need to reduce the incremental scalars at the 60% & 70% SNSP levels so be it, we view some level of certainty on

base level availability fees for FFR to be preferable and a better solution all round.

Furthermore, we believe that one of the fundamental principles of the service provision is availability, if a service provider is available to provide service, the availability fee should be payable. Equally as important from demand side perspective is the end consumers expectations, the end consumer is not overly concerned with the level of SNSP on the system. They do need to know when they can be called for service and what service they can be called for. Again this Scalar being at 0 from 0-60% adds another layer of unnecessary complexity as to when they should be available or not and therefore confusion in the marketplace.

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?

Response 9: We strongly disagree with the TSO's recommendation to mitigate over expenditure on high availability new technologies. We believe that following the introduction of new technologies to DS3 System Services, there should be no potential for restriction on service providers availability that is discriminatory against a particular technology type. This is critical to ensure that there is investment in new technologies. This proposal is clearly discriminatory and goes against a fundamental tenant of the TSO's mandate to be technology agnostic. It could also be perceived that the TSO is favoring thermal generation which has little flexibility and no inherent energy storage capability over new technologies like DSU and batteries which are the most suited to supporting the increase in renewable generation and SNSP.

A more sensible and reasonable technology agnostic approach in our view would be to allow a conditional review (similar to that recommended on tariff rates) of the procurement volume on a holistic basis or at a service level where volumes provided are in excess of 2020 forecast requirements at any time during regulated arrangements and are causing an over expenditure v's the glide path. While such a mechanism would diminish investment certainty which is undesirable, by leaving a contingent threat hanging over the recommended 4-year certainty of regulated arrangements, it would at least do so in a manner that is technology neutral. If a competitive procurement process is required at an individual service basis or on a holistic basis as a consequence due to over expenditure, all service providers should be on a level playing field and tender accordingly. This would be the only solution that is neutral to all technology types while being in the interest of the end consumer. What is proposed simply favors conventional generation.

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?*

Response 10: We believe that following the introduction of new technologies to DS3 System Services, there should be no potential for restriction on service providers availability that is discriminatory against a particular technology type. This is critical to ensure that there is investment in new technologies. This proposal is clearly discriminatory and goes against a fundamental tenant of the TSO's mandate to be technology agnostic. It could also be perceived that the TSO is favoring thermal generation which has little flexibility and no inherent energy storage capability over new technologies like DSU and batteries which are the most suited to supporting the increase in renewable generation and SNSP.

Currently DSU's have only one revenue stream which itself is likely to decrease significantly in December's first capacity auction, the revenue that DSU's can potentially earn in the future from DS3 is extremely uncertain with many unanswered questions about market entry outstanding at this point meaning clear direction is impossible to give to end consumers who provide DSU's capacity. Further uncertainty will exacerbate this problem at a time when the survival of a viable DSU industry in the Irish market is seriously under threat.

We support an ultimate competitive procurement process for the procurement of DS3 services to ensure

that the consumer is protected from over expenditure, however we believe it to be essential that this procurement process is truly technology agnostic. Furthermore, if there is any real desire to support the growth of new technologies to provide these services, it is essential that there is some certainty in revenue streams for a minimum of 4 years.

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?*

Response 11: No comment

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?*

Response 12: No comment