



## Powerhouse Generation Ltd response to SEM Committee consultation on System Service Future Arrangements High Level Design

21/10/2021 Author: - Brian Mongan

Powerhouse Generation (PHG) welcomes the opportunity to comment on the proposed adjustments to the System Service arrangements for the future. We understand that the consultation reflects a possible High-Level Design and that comments to that consultation are likely to be reflected in the SEMCs approach to the development of the future System Services market.

## Overview

PHG notes that the current System Services arrangements are facilitated by the DS3 process. This is a process governed by Eirgrid and SONI together, however the services are contracted by SONI and Eirgrid individually on a jurisdictional basis. It is not clear to PHG why the services are contracted on the jurisdictional basis, although it may be a reflection of the relative Grid Codes of SONI and Eirgrid.

PHG would ask if the High-Level Design approach, expressed in the consultation document, of a single settlement across the island is the correct approach. We would ask if there is a specific reason why there was jurisdictional contracts in the first place.

PHG believe that whilst the Consultation document is attempting to address a High-Level Design, there is insufficient information to allow PHG and others to assess the suitability of the proposals therein. Therefore, we are unable to assess if the High-Level Design can be supported at this time.

The proposal to incorporate long term contracts is a concern for what appears to be a well-established service provision at the current time. The DS3 products/services have been fully understood by the TSOS and participants for quite a while and the provision of them on a daily basis is also well understood. The only difference is that the payment shall change from a regulated tariff to a cleared auction price and that the amount of services available shall be based on the volumes identified by the TSOs in advance of the auction, and the cleared awarded amount. This removes the other capability, that did not get awarded, from the TSOs armament.





## Consultation questions

The paper poses three questions which PHG addresses below.

- Q1 Do stakeholders consider that the commitment to putting these arrangements in place on an enduring basis, at least to 2030, represents sufficient certainty of process?
- A1 There is a requirement to have a stable period of operation when all can understand and work within the arrangements, similar to that of the DS3 process. This enduring process should run from 2024 through to 2030, giving a 6 year period. To extend that period further would require a continuing assessment of the functioning of the process and its design. It should be kept to the front of the SEMC thinking that any design may require quick and fundamental changes should there be any inconsistencies identified or if the process does not deliver the expected outturn.
- Q2 What are stakeholders' views on the options and recommendations presented for qualification/registration? Are there further options that may be considered?
- A2 PHG understand the sporadic ability to enter the DS3 process and we agree that this should be changed to be smoother and more timely in its operation. The registration of an operational unit, along with the ability to adjust its service capabilities as and when they occur is a much better approach. This is similar to the current process of Grid Code Operational Certification of a unit. PHG supports the Option 2 "Rolling Application Approach" as it provides higher granularity and flexibility, which would match the competitive competition approach. This is more appropriate if the competition is carried out Weekly/Daily/Hourly.
- Q3 What are stakeholders' views on the proposed formalisation of the QTP?
- A3 The development of new technologies or the need by the TSOs to obtain new identified services shall require a period of trial and testing. This is an understandable and acceptable process to ensure progress and advancement of the market. We are concerned that the QTP may be a vehicle for some parties to obtain a full year business revenue through the testing of unproven technology, whereas others are competing on a short term basis with a lower opportunity of return. We therefore suggest that the QTP be run over a short period of time, which would include sufficient opportunity to prove the technology. A four month period over the winter months should be sufficient.
- Q4 What are stakeholders' views in terms of the introduction of a single System Services Code?
- A5 The ability to discuss the operations and possible changes to the System Services process is a very import function for those that participate within the various energy markets. The





Balancing Market has that ability through the T&SC Modifications Committee and the Capacity Market also has a similar workshop to discuss changes. In addition to those there are review panels for the Grid Codes which facilitate the discussion and understanding of implications of proposed changes and how they may impact various technologies. This has proved to be a successful approach and one that should be replicated within the System Services process. It is understandable that the TSO want to retain full control and that they would attempt to highlight certain 'legal obligations', however that is just an excuse. PHG support the role of the RAs in deciding which rules are implemented and how they are to be implemented and by whom.

- Q5 What are stakeholders' views on the options in terms of governance of rules changes?
- A5 Governance of the DS3 process has been criticised by participants since the start of the DS3 process. Participants have not had any joy in influencing the rules nor the methodologies employed by SONI and Eirgrid. This inability to put forward carefully thought through suggestions has led many to believe that the TSOs had too much power in how the DS3 should be assessed. The TSOs understanding of certain technologies may not be as comprehensive as that of the operators of that technology. PHG supports Option 2 "System Support Code Panel" in a similar fashion to the T&SC Modification Panel. Participant representation with voting power to implement changes is a very important element to the operation of the activities on such a small island as Ireland.
- Q6 Do stakeholders have views on the potential to amalgamate different Panel meetings?
- A6 Whilst all participants, TSOs – Generators – RAs – Suppliers – Interconnectors - Market Operators, have increasing demands on their time it must be remembered that each section of the energy markets require specialists. That means that those attending the Capacity Market Modification Workshops may not have detailed knowledge of the System Services and therefore amalgamation of those panels would not be beneficial. Grid Code Panels similarly may not have close links to the T&SC. Whilst it is understandable that there shall be some cross over of discussions between some panels, any amalgamation should be treated with great concern. The Grid Codes are the superior documents and should not have any amalgamation with any other panel. With the movement of System Services into an allisland competitive commercial function then they shall be seen to be further removed from Grid Code obligations. The T&SC is strongly linked to the Capacity Code although the complexity of each code makes it difficult to amalgamate these two codes in the near future, especially as they continue to go through ongoing modifications to address the rushed implementation of the I-SEM and the rules thereof. The interactions of System Services competitive competitions and the Day Ahead Market positioning of generating units may suggest the need to amalgamate these panels, but PHG would not support such an approach





and would strongly suggest that they stay separate. That way the important details of each wont be lost in 'the bigger picture'.

- Q7 What are stakeholders' views on the funding arrangement proposals?
- A7 PHG acknowledge that the costs for System Service shall ultimately be borne by the electricity consumers. There is little difference between Option 1 and Option 2, however we agree that it may be more efficient to split these System Services costs out of the GTUOS and place it into the energy market. PHG supports Option 2. We agree that this would place the provision of energy within the Balancing Market arena, and leave the more technical transmission costs within the GTUOS. PHG would draw the attention of the SEMC to the fact that there have been significant increases in the raw energy costs, which has resulted in the unprecedented increases of Supplier Tariffs during the year. Should the cost of the System Services be applied to each trading period then that would place a variable on the Suppliers and they may have to change their tariffs to compensate. PHG therefore do not support Option 3. It is best if there is a forecast by the TSO and a fixed amount allocated at the start of the year, so that Suppliers know what they shall have to cover at the start of the year and therefore they can be slightly more confident in setting such tariffs.

PHG is appalled by Option 3a. There should be no implications that those helping to keep the light on, through the provision of the cheapest power, should be the ones to be penalised for doing so. They do not have any ability to lessen their impact to the system, as that impact is one that is decided unilaterally by the TSO.

- Q8 What level of involvement should the DSO/DNO have in the governance process?
- A8 PHG acknowledge the important role of the DNO/DSO in the process as a large portion of participant shall be connected via the distribution system. It is of course the responsibility of the DNO/DSO to maintain a safe and stable system, whilst allowing new connections and new technologies to use the system. Having said that they should not have any governance of the competitive commercial process which is designed to run alongside the DAM and Balancing Market and to be controlled by the TSOs. The role of the DNO/DSO is subservient to the System Services arrangements.
- Q9 How should the interactions with distribution connected parties be governed?
- A9 PHG understand that the DNO/DSO have to control the connected generators and demand on the distribution network so that the power flow and voltage can be maintained at an acceptable level. This could be viewed as a safety issue and an incentive for the DNO/DSO planning of infrastructure improvement.
- Q10 Are there any further considerations for the High-Level Design of the Governance Arrangements?





- A10 The System Services shall be controlled by the TSOs and payments shall be issued via the TSOs therefore they should be the main point of contact and PHG supports Option 3 "TSO-Led" approach.
- Q11 What are stakeholders' views on the Auction Design options and SEMC Recommendation?
- A11 The SEMC indicates a preference for "a whole system approach" which sees the DNO/DSO further facilitating technologies such as Demand Side Response, Solar PV and battery storage. Whilst the SEMC state that these technologies are a growing portion in the support of the system we do not see the correct financial signals being sent out through the various markets. The continuing weakening of the derating factors for Demand aggregation and the lack of energy payments all go to undermining the SEMC suggestion that they believe that technology is important for the support of the system.

PHG does not support Option 2 "Pre-DAM Day Ahead System Services" as the timeframe does not work effectively. Option 3 is similar to where we are today and allows constrained units to be paid for the system services they are providing. PHG believes that Option 1 is too reliant on the DAM positions to identify which units can provide system services. We would ask what happens when units do not play in the DAM, and how that impacts them in the system services competition. In addition to that we would ask what happens to a unit that is constrained on in the Balancing Market and how it gets paid for the System Services it is providing under its Grid Code obligations. These are the same obligations that the other generators that clear in DAM and System Services competition have, so why should some get paid and the others not.

- Q12 Are there any further considerations in terms of the Auction Design options?
- A12 The suggestion that there shall be an option for secondary trading is challenged by PHG, since such suggestions have been made for the Capacity Market and they have not been successfully delivered within the last three years. This is an important matter as any unit that clears in the DAM and subsequently the SS process, may be exposed if it is constrained off by the TSOs. This highlights the issue between commercial markets and the real time dispatch requirements of the TSOs.
- Q13 What information is required to get a full view of the volumes requirements for System Services?
- A13 That is a matter for the TSO who schedule the generation portfolio throughout the island and who set the rules regarding the reserve requirements to be set. They should publish a full set of parameters and assumptions for their calculations a week ahead and update them for each day up to the trading day, and within the trading day.
- Q14 What are stakeholders' views on the development of Secondary Trading of System Services?





- A14 PHG believe that some type of trading is required to allow units to reposition themselves, following rescheduling by the TSOs. We are not confident that there shall be a successful trading mechanism introduced given the experience of the Capacity Market secondary trading. Should a unit that had a DAM position, cleared in the SS competition, and schedule to run by the TSO, actually tripped during the provision of these services then how would that drop in system services be replaced? Is it a matter for the generator that tripped or for the TSOs to go back to the SS competition process and take the next bid, remembering that the next bid may no longer be available?
- Q15 What are stakeholders' views on the proposals regarding Commitment Obligations and Scalars?
- A15 The ability of a generator to obtain a position in the DAM shall allow it to position it in the SS competitions, should the market be design as such. The price for SS may not be a true reflection of the cost, as it may cross subsidise with its energy payments. The fact that the TSOs can constrain the unit off exposes it to non-delivery of SS is not a concept that PHG can support. A unit should not be exposed to any issues due to the action of the TSOs.
- Q16 Do Stakeholders have views on the introduction of the concept of Firm Access to the System Services market?
- A17 There is a current approach being taken by NIE that they shall assess the ability of their system to handle coordinated response of units and individual sites connected to their network. This is reflected in their application of Instruction Sets, and NIE are developing a more dynamic Instruction Set approach. This is in effect an impact on the Firm Access to providing services to the support the System. That should be handled by the participant in their approach to the SS competition, but it should be clearly identified that the role of the DNO/DSO is important in providing the Instruction Sets prior to any SS competition. Whilst we do not believe that TSO actions, such as constraining off a unit, should result in any obligation shortfalls we also believe that units should only be paid for what they are actually able to provide. The TSO may make a decision and the DNO/DSO may also make a decision, all of which result in a unit not being able to deliver. What would be the mechanism to handle this? It is not clear in the consultation if units that are constrained on in the Balancing Market shall avail of SS payments. It may be best to use the approach that all providers have non-firm access, that they clear in the SS market, and get paid for providing what they are asked to do.
- Q17 Do stakeholders have views on layered procurement of System Services? What approach could be taken to support this?
- A17 PHG believes there is a significant lack of information regarding the details of the SS Market 'products' and this has been commented on through both of the workshops held. This lack of information means that it is difficult for PHG and others to support that which they do not





know. There are comments on long-term and short-term approaches, but little definition of timeframes and quantities. It is understandable that certain technologies, such as Wind may have other auctions to participate in and they may want to align such investment signals, but that could be seen as providing an advantage to a certain technology. Having experience of operating in other markets we can say that long-term contracts are not the norm.

There are also other concerns over how changes to the requirement of services shall be handled over the period of the SS competition process. Investors shall bring forward the capability to cover certain services and fulfil the TSOs requirements. If the TSOs decide to change their priorities then the investors shall be left isolated in providing services that are no longer required. How does the SEMC expect to cover such investment risk?

- Q18 Are there any further considerations in terms of Market Design?
- The layered approach addresses investment and security of provision of certain products. The SS competition shall likely be done on a Daily or similar short-term basis, in obtaining prices and volumes for the SS services. The design of these services and how they can be delivered must be looked at in great detail as the ability to deliver shall be inextricably linked to the award volume. Without the details surrounding the services PHG can not support the competitive process proposed by the SEMC. PHG have experience in the control and deliverability of System Services products, both in the fast response and in the longer term response. We would suggest that the fast products be bundled together so that the provision they provide can be continuous and smooth. If a fast acting and controllable unit is awarded FFR and SOR, but not POR, then that is exactly what shall be provided and the impact to the System may not be the preferred outcome. Without information on the thoughts of the SEMC or Eirgrid or SONI regarding the design of the auction products then PHG can not support the proposed competitive process at this time.

Powerhouse Generation agrees that the comments herein can be published and used openly, and are not confidential.