Energy for generations

Generation & Wholesale Markets

ESB GWM Response:

DS3 System Services Enduring Tariffs

21st August 2017

ESB Generation and Wholesale Markets (GWM) welcomes the opportunity to respond to Eirgrid/SONI's (TSOs) consultation on the enduring tariff rates to apply to DS3 system services in the period from May'18 and remains committed to supporting the objectives of the DS3 programme.

The SEMC set out in the March'17 information paper, unfortunately not a consultation paper where GWM would have been afforded the opportunity to provide feedback, the DS3 system services expenditure cap glide path to 2020. The SEMC specified that the expenditure cap limits expenditure to a maximum level and does not represent a guaranteed level of TSO expenditure. The SEMC called on the TSOs to develop a tariff rate methodology which would ensure that the relevant tariff rates would not increase where there is no additional system need and where additional investment is not required.

The principle proposal in the consultation to implement a temporal scarcity scalar which links the effective tariff rate of system service provision to the level of SNSP on the system is considered by GWM to be a reasonable interpretation of the SEMC specification. In any given trading period, it will also result in the effective tariff rate increasing as the number of traditional services providers (conventional plant) operating falls as higher levels of wind capacity come on the system and this is considered to be a good analogue to what will be seen under a competitive procurement process.

However, GWM has some concerns relating to the proposal, these concerns are detailed more fully in the responses below to the specific questions raised in the consultation. However principally they relate to balance of risk between the providers and consumers of services. The TSOs are the apparent consumers of system services but they are in effect acting on behalf of the end-users, the TSOs are seeking to not only securely operate the system but to do so in a way that maximises the level of renewable energy the system can facilitate. From the end-user's perspective, maximising the level of renewable energy has a societal benefit, as reflected in the 2020 governmental targets for RES-E, and also a direct economic benefit given the investment in renewable generation that has been committed to through various out of market support schemes, it is in the end-user interest to ensure there is a return on this commitment through maximising the impact of zero marginal cost generation acting as a drag on the wholesale electricity prices.

The end-user benefit of ensuring the required level of service provision is in place to support the achievement of the 2020 RES-E target cannot be realised if the level of risk placed on risk services providers is such that the requirement investment in services provision does not come forward. On this basis GWM considers that end-users, through the TSOs, have a direct incentive to share in the risk associated with service provision.

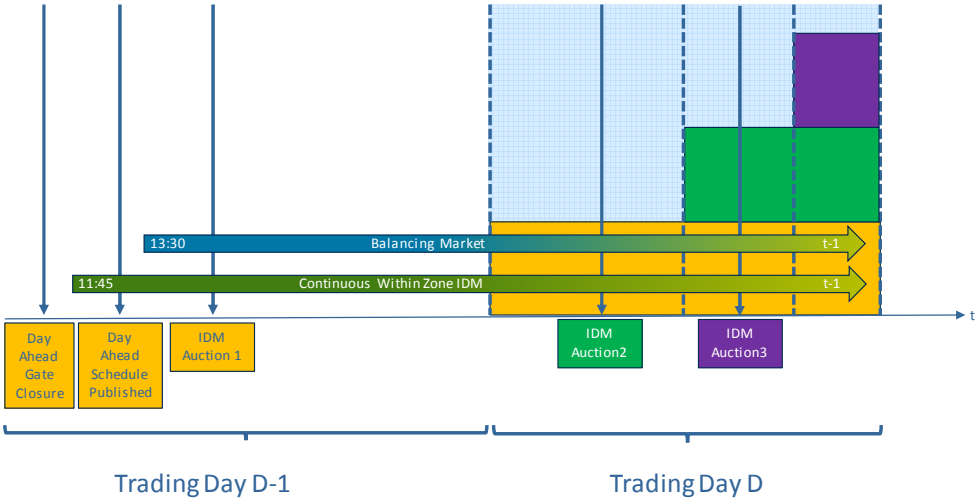
Under the current proposals GWM considers the balance of risk has been disproportionately allocated to service providers, new and existing. To rebalance this risk GWM proposes that the implementation of the scarcity scalar be adjusted to reduce the level of SNSP at which the scalar begins to increase the effective rate of the tariff rates. This would reduce the dependence of service providers on future wind capacity increases and changes to the system operational constraints. This would act to increase the forecast ability of revenues for service providers and support investor confidence.

GWM is also concerned that the proposed scarcity scalar will result in a very close interaction between the system services and the ISEM energy market.

The consultation does not specify the timeframe in relation to a given trading period at which the scarcity scalar will be established therefore it is assumed that the intention is for the SNSP and therefore the scarcity scalar value to be determined by the TSOs on an ex-post basis. This being the case, the onus will fall on system services providers who are also energy market participants to forecast the SNSP as part of the formation of their ex-ante, intra-day and BM energy market bids.

The components of SNSP are system demand, non-synchronous generation, and interconnector flows. The exact metrics for these components will need to be specified if it is decided to implement the proposed scarcity scalar. For example, does the non-synchronous generation value include the de-minimus non-synchronous generation or is this considered to be represented in the system demand value. Access to timely information on the metrics specified will be a key determinate of the efficacy of the interaction between the system services and energy markets being created as the ability of system service providers who are also energy market participants to forecast the ex-post value each of the SNSP components will have a direct impact on their energy market bidding behaviours.

The diagram below is a representation of the energy market trading arrangements under ISEM.



The diagram shows that in addition to the DAM market timeframe there are a number of coupled intra-day auctions, meaning the outcome of these intra-day auction processes will affect the flow scheduled on the EWIC and Moyle interconnectors. The outcome therefore of these intra-day auctions will have a direct impact on the SNSP. As a result where there is a significant change in the scheduled flows on the interconnectors after an intra-day auction there is potential for a significant change in the incentives seen by system services provider.

For example, if at the Day Ahead market (DAM) coupling it was forecast there would be a high level of wind generation and the interconnector flow were expected to be from GB -> ISEM the level of % SNSP could be relatively low and services providers who are also energy market participants would tend to bid to maximise their energy output.

If at the IDM Auction 1 there is a an increase in energy prices in the UK and the scheduled interconnector flows reverse to flow from ISEM -> GB and the level of forecast SNSP increases above 60% there will be a significant incentive on services providers who are also energy market participants to seek to re-position from their DAM positons to maximise the level of their services provision. While this has the potential to be an efficient market signal GWM is concerned that given the ISEM market is yet to be established there is no experience of whether the intra-day market will offer the degree of liquidity required to respond to the incentive being put in place.

Additionally after the final coupled intra-day auction market participants will have no further opportunity to influence the flows on the interconnectors. Under the current SEM arrangements the TSOs have the facility to counter trade across the interconnectors. GWM seeks clarity on whether this facility will remain in place and whether the TSOs will have the ability to adjust in the scheduled flows on the interconnectors in advance of the opening of the BM.

It is proposed that as services providers who are also energy market participants will have no sight of this counter trading activity, until after the relevant period, the interconnector flows for the purpose of the calculating the SNSP applied to the ex-post scarcity scalar would be based on the interconnector flow as schedule by the final coupled intra-day auction.

More generally, the interaction between the different components of the market across the various timelines and formats require carefully consideration if the efficient operation of ISEM and DS3 systems services is to be achieved.

Below are the GWM responses to the specific questions included in the consultation document

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

GWM Response: The proposed enduring DS3 base tariffs for the existing 11 services are equal to the rates to be applied in the Interim DS3 roll over period (Oct'17 to Apr'18). When these tariff rate were consulted upon by the TSOs the response made would have been predicated on the assumption that they would be in place for a period of 7 months. However it is now proposed that these rates be in place until at least 2019 and it suggested that they be in place for a minimum of 4 years. This represents a significant change in the underlining value represented in the determination to these rollover tariffs and as such would have a bearing on the responses that participants would be expected to have submitted.

The interim DS3 roll over tariff consultation proposed increase of 5.3% increase in the interim DS3 tariff rates on the basis this level of increase would align the total expected payments with those previously communicated to the industry. In response GWM stated that In the absence of further detail on how the proposed increase of 5.3% was derived the direct implication is that the under expenditure resulting from the application of the Performance Scalar being recycled to increase the tariff rates in the roll over period rather than there being an absolute increase in the monies available

The TSOs recommendation paper states that the under expenditure (under the interim DS3 period to date) was due to a number of factors with no single issue solely responsible. Notwithstanding the drivers of the under expenditure the outcome of the proposed 5.3% increase is to align the overall expenditure to that indicated when the interim DS3 tariff were determined in August 2016.

At that time the TSOs stated they had developed the interim DS3 tariff such that the "HAS expenditure pot" for the 7 HAS services would be maintained however no provision was included for the impact of inflation.

As a result if base DS3 enduring base rates are adopted as proposed no indexation will have be applied to the tariff rates from beginning of the interim DS3 framework in 2016 to at least 2019 or possibly to 2022.

This is starkly at odds with the recently approved TSOs recommendation paper to the SEMC in relation to Other System Charges for the period 2017-18 where provision was included for an increase of 1.7125% in the charges and rates to adjust for inflation. This follows as similar increase of1.6% in the OSC charges and rates in the previous year.

The impact of inflation on the value of the base tariffs over the period of their application should be included in the DS3 enduring tariff framework. While this will have a consequential impact on the TSOs adherence to the system services expenditure cap it is essential that value of service provision in the majority of periods

when the proposed scarcity scalar will not apply is maintained if the existing levels of service provision are to be retained.

Consultation 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?

GWM Response: The consultation references the procurement of Enhanced Frequency Response (EFR) by National Grid UK which awarded four year contracts to successful tenderers. GWM considers the nature of both the EFR service and the procurement process undertaken by National Grid UK are specific to the electricity industry in GB. This extends to the prices at which contracts were awarded under this process as the tender submissions would be reflective of the various revenue streams available to a given project in GB. It doesn't necessarily follow that the procurement of services in Ireland/Northern Ireland requires or would be most economically achieved by issuing long term contracts. However, GWM agrees that regulatory and market stability significantly supports investor confidence. This is of particular relevance currently as the implementation of ISEM and the move to an RO based CRM has resulted in a high degree of uncertainty across the principle market revenue streams.

With this in mind, GWM agrees that the implementation of a stable system services framework would support investor confidence. However GWM is concerned that the regulated arrangements as proposed, in the current context, may not offer the requisite degree of stability. These concerns relate to proposed nature of the relationship between the TSOs and services providers and resultant balance of risk between the producers and consumers of the services.

GWM does not support the proposal in the consultation that a lower set of scarcity scalar should be adopted if a minimum contract duration of years is adopted. The consultation asserts that given the longer contract term there would be sufficient revenue available for new technologies to invest however no supporting evidence is given to justify this assertion. If this assertion is soley based on the prices at which contracts were awarded under the EFR tender process it would not accurately reflect the different risks faced by investors in GB compared to ISEM. For example, the capacity market in GB has no provision for the penalties that can be incurred by a capacity contract holder being greater the a value of the contract unlike the ISEM RO framework.

Consultation 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?

GWM Response: As referenced above the nature of the proposed relationship between the TSOs and services providers investing in the provision of the 'fast' services could be characterised as a zero hours contract, where services providers make themselves available to the TSOs and then subject to the system conditions on a given day TSOs decide if the services providers is required. While this acts to protect the TSOs in terms of system service expenditure, it places the risk on the service provider of not just their own availability but also the system's requirements. The TSOs are in effect acting on behalf of the end user, they are seeking to not only securely operate the system but to do so in a way that maximises the level of renewable energy the system can facilitate. From the end-user's perspective, maximising the level of renewable energy has a societal benefit as reflected in the 2020 governmental targets for RES-E but also a direct economic benefit, given the investment in renewable generation has been committed to through various out of market support schemes, it is in the end user interest to ensure there is a return on this commitment through the impact of zero marginal cost generation acting as a drag on the wholesale electricity prices.

The end user benefit of ensuring the level of service provision is in place to support the achievement of the 2020 RES-E target will not be realised if the level of risk placed on risk services providers is such that the required investment in services provision does not come forward. On this basis GWM considers that end users, through the TSO, have a clear incentive to share the risk associated with service provision. Under

the current proposals it is considered the balance of risk has been disproportionately allocated to service providers. To rebalance this risk GWM proposes that the implementation of the scarcity scalar be adjusted to a lower level of SNSP at which the scalar begins to increase the effective rate of the tariff rates. This would reduce the dependence of service providers on future wind capacity increases and changes to the system operational constraints. This would act to increase the forecastability of revenues for service providers and support investor confidence.

Consultation 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?

GWM Response: As discussed above GWM considers that provision should be included in the enduring DS3 framework to adjust the base tariff rates for inflation. To the extent the TSO recommendation to only apply annual tariff reviews where predefined conditions have been meet would not allow for indexation to be applied to the base tariff rates GWM does not support this proposal. However GWM does support the TSOs' position that where high wind load factors in a given year result in high over expenditure system services expenditure there should not necessarily a revision in the DS3 tariff rates. Additionally, the linear nature of the SEMC DS3 expenditure glide path may not reflect the profile of increased wind capacity on the system given the incentives put in place by the existing renewable support mechanism. As such where there is a rapid increase in the level of wind capacity connected the SEMC expenditure glide path should be revised upwards rather than the DS3 tariff rates being adjusted.

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

GWM Response: The TSO propose that significant over investment in specific new technology would be included as one of the triggers for a conditional tariff review. GWM recognises that, given the approach to setting the enduring tariff rates, there is a risk that a disconnect could arise between the revenue available and the cost of service provision. As such there is a potential for a "gold rush" situation to arise where the quantity of service providers increases rapidly and results in the TSO expenditure exceeding the SEMC expenditure glide path. However applying a tariff review to mitigate this potential places an additional risk on investment in service provision, GWM suggest that there are mechanisms such as the grid connection policy that could be applied to ensure the growth in quantity of system services is achieved in a measured way. While grid connection policy is outside of the TSOs control the coordination of difference aspects of the industry is important to support the realisation for the required investment in system services.

Consultation 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?

GWM Response: GWM supports the TSOs' position that where high wind load factors in a given year result in high over expenditure system services expenditure there should not necessarily be a revision in the DS3 tariff rates. Additionally, the linear nature of the SEMC DS3 expenditure glide path is unlikely to reflect the profile of increasing wind capacity on the system given the incentives put in place by the existing renewable support mechanism. As such where there is a rapid increase in the level of wind capacity connected the SEMC expenditure glide path should be revised upwards rather than the DS3 tariff rates being adjusted.

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

GWM Response: Further to the comments above in relation the implications from the adoption of the proposed scarcity scalar on the energy market GWM considers the while the 'Stepped' does hold benefits over the linear approach in terms of estimating in the longer term the number of periods when the scarcity scalar will be set to a given value. This aids the TSO in forecasting expenditure levels, and for a service provider, in forecasting revenues. However in a given trading period there is a significant discontinuity/tipping point in the incentive to provide services that the stepped scalar implementation introduces i.e. where there

is a shift in wind forecast or interconnector flows such that SNSP level fall from just above 60% (for example) to just below 60% which potential impacts for services providers who are also participants in the energy market.

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

GWM Response: If the stepped scarcity scalar is implemented in order to balance the benefits of the stepped scarcity scalar in improving the forecastability of expenditure/revenues in the longer term against the significant potential discontinuity in the incentive to provide services then GWM proposes the granularity of the implementation be adjusted so that a scalar value is set for each 5% step change in SNSP, this reflects the way in which the SNSP has been increased or is excpected to increase as we deliver differnet parts of the DS3 project. Additionally, as discussed above, GWM considers that the implementation of the scarcity scalar should begin to increase from a lower level of SNSP then the 60% indicated in the consultation paper. In addition to helping to balancing the risk between the producers and consumers of the services, it also would, by necessity reduce, the value of the scarcity scalar for each level of SNSP in order to remain within the expenditure cap. This would reduce the scale of the discontinuity in the incentive to provide services resulting from forecast SNSP revision close to real time.

Consultation 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?

GWM Response: GWM recognises the TSO position in seeking to adhere to the DS3 system services expenditure glide path. And while there a significant ability of these category of services provider to be installed rapidly, even the consultation's New Providers scenario where it is assumed that there will be 335MW of DSU and 250MW of Non-synchronous Technology contracted by 2019/20 represents a large increase the levels of these categories of services providers over what is currently installed. Given the the administered nature of the DS3 enduring tariffs GWM would not support the implementation of any over-expenditure mitigation that would have an impact on services providers that had already invested in services provision. Should a mitigation measure prove necessary it should only apply to new entrants to the market after the implementation of the measure.

Consultation 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?

GWM Response: It would be beneficial if the TSO could set out at what level of installed capacity of high availability technologies they would consider a volume limit would likely become necessary. As mentioned earlier GWM considers that there is potential for other mechanisms, such grid connection policy, to be applied to ensure that the growth in quantity of system services is achieved in a measured way. If the volume at which the incremental value to the TSOs of high availability service providers becomes questionable was known, the planned 'DS3 gate' planned under the CER's interim connection policy could be tailored to a level at or below this point.

Consultation 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?

GWM Response: The SEMC in the DS3 system service high level design from December'14 states that the basis of payment for system services would be based on the greater of the unit's market or physical position. GWM welcomes the clarification that under ISEM this decision will be given effect be applying a unit's Final Physical Notification (FPN) as the market position. In the consultation the TSOs identify this decision as a risk based on ability of service providers to position themselves to provide services. To mitigate this risk the TSO has decided to discount €15mill from the 2019/20 expenditure cap.

It is proposed to further mitigate this risk by delaying the implementation of the 2014 decision by 12 months. The nature of the ISEM market is a move away from the SEM central dispatch model and closer to self-dispatch, part of the efficient operation of ISEM will rely on the consistency of the incentives faced by market participants. If the goal of minimising TSO actions in advance of the balancing market timeframe is to be achieved it is important the services providers see a clear incentive to position themselves through their day-ahead and intra-day trading to provide the required levels of system services. On this basis GWM does not support the delay in the implementation of the SEMC decision.

Should you have any queries please do not hesitate to contact me.

Yours sincerely,

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William Carr

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