Gaelectric Holdings Ltd.

Response Paper to:

DS3 SEM Committee Consultation on Design of Procurement Options

Gaelectric Holdings Ltd Response

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Public

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1 EXECUTIVE SUMMARY

Gaelectric Developments Ltd. and Gaelectric Energy Storage Ltd., collectively "Gaelectric" welcomes the opportunity to respond to the DS3 System Services Procurement Design consultation.

As one of the largest independent developers of wind generation on the island and also as an organisation developing Compressed Air Energy Storage in Larne ("Project CAES Larne"), Northern Ireland, Gaelectric place considerable value on the development of the system services market from the perspective of managing curtailment and further as a means of promoting the investment in flexible new entrants that can provide all of the services in question whilst also interacting with the I-SEM market, specifically the hour ahead and balancing market to manage renewable integration.

Gaelectric commend the prudent approach of the SEM Committee to review the work to date by the TSOs and independent consultants before advancing the process further. Notwithstanding this, we are concerned that the SEM Committee has rushed to judgement on the range of potential procurement options. Indeed we view this as a proposed decision rather than a consultation which is open to the industry to guide and influence.

We wish to seek clarification as to why the SEM Committee did not see fit to accept the recommendation of their appointed consultants, IPA, or more importantly the TSOs proposed procurement mechanism. We believe the TSO recommendation was based on sound judgement and 2-3 years of consultation, under SEM Committee supervision. This recommendation should have been considered as a starting point to develop a clear & investible procurement policy.

Gaelectric believe DS3 is currently suffering from a lack of clear direction which is significantly delaying engagements on investment for new entrant technologies. We request that the SEM Committee make a statement on the primary drivers for DS3 procurement policy, i.e. addressing public policy or simply implementing a least cost solution.

Notwithstanding the comments above we welcome the SEM Committees recognition of the risks faced by new entrants and the subsequent decision to propose long term contracts in Options 3, 4 & 5. We request the SEM Committee consider the same rationale for an adapted version of Option 1 moving forward.

We are concerned that the over caution regarding the perceived risk of overpaying for system services will give rise to a greater risk of non-delivery of the DS3 programme. The DS3 programme is essential to ensure renewable targets, which are binding under Government policy and European Regulations[1], are achieved. The potential fines are widely reported to be between €100-150m per percentage point of renewable target missed. We believe it would be remiss of the SEM Committee not to consider this as a counterfactual public policy argument.

As an overarching comment, we believe that the SEM Committee should focus the design of the procurement methodology on achieving a **competitive *outcome*** rather than a competitive auction *process* of which the outcome is at risk of legal challenge owing to a subjective approach in the allocation process.

[1] EU Regulation: 2009/28/E. Region Specific: N.I. Strategic Energy Framework 2010, RoI: S.I 247/2011

Gaelectric believe that the proposed procurement design, namely Multiple Bid Auctions ("option 5"), will not succeed in producing the most efficient, low cost and objective solution due to the high degree of complexity of the option. We contend that ***option 5 is inappropriate*** for a market with the level of concentration as the SEM ancillary services market, and will not support the investment case for new entrant technologies. This view is reinforced by the results of the IPA analysis into market concentration which found the market to be 'highly concentrated' (given a HHI in excess of 2,000).

We believe that an ***adapted version of the Regulated Tariff proposal ("Option 1")*** provides the greatest opportunity to underpin new investment. We request that the SEM Committee modify Option 1 to a ***value based approach*** which supports investment signals for new generation. New investments require long term contracts of up to 15 years and these contracts need to be supported by a positive Cost Benefit Analysis ("CBA") with respect to integrating renewables and value to the wholesale market by reducing production costs.

We contend that ***new entrants should have access to a separate budget*** to existing capability in order to avoid concerns over first mover advantage and to recognise the unique risk profile of new entrants. We further request the use of ***capability payments and dispatch based payments*** which are designed to mitigate volume risk as detailed further in this submission.

In this regard, the recent consultation which revised the definition of ***remuneration for both dispatch and availability*** has opened up dispatch risk for generators which in all cases is more apparent for new entrant technologies. We strongly believe this serves to stifle investment and prevent new entrant participation. Gaelectric issued a paper to the joint Regulatory Authorities on the 15th August 2014, outlining our concerns with the dispatch based remuneration methodology, and which included a counter proposal that largely mitigates this dispatch risk. We request due consideration of this proposal, and further dialogue with the SEM Committee on same.

Furthermore the ***dispatch risk for availability based payments***, particularly apparent for long term contract holders, creates a considerable risk to investment. We have tested this with the investment community and it is clear that financial institutions will place a substantial risk premium on any financial facilities on the basis of the proposals as drafted. We therefore support capability based remuneration.

In regard to the project programme, we request the immediate release of the ***project Gantt chart, pre-qualification criteria & commercial terms and methodology for selection criteria*** in order to allow all generation, new and existing, to forward plan their investments.

Finally, the proposed TSO valuation of €301million (€241million production savings + €60million HAS) for DS3 services is predicated on conservative modelling with respect to the assumption of particularly efficient interconnector flows. The SEM Committee have accepted the value of services to the system and the value of reduced curtailment to the consumer, however we believe that the SEM Committee have incorrectly focused on reducing the cost of these services without considering the direct relationship between a reduced budget and the subsequent reduced savings to the consumer.

Gaelectric support a budget at the higher end of the proposed value of €301m, in order to stimulate investment in enhanced capability.

From the outset of the DS3 process, incentivising investment has been considered a key pillar. Gaelectric has strongly advocated a value based approach for DS3 system services, and we continue to believe that a cost based approach will not only deter investment, but will inevitably prevent the achievement of an SNSP up to 75% as required to minimise curtailment and provide value to the consumer.

We strongly reject the assertion that allowing long term contracts for new investment may curb the future development of new technology by locking out innovation. In fact we believe that rewarding developers of proven technology will act as a signal for others to develop in the future.

In order to incentivise new investment, Pre-Commercial contracts are an absolute requirement to enable investment and to progress development of projects.

2 INTRODUCTION

Gaelectric Holdings Limited was established in 2006 and currently employs 60 staff across offices in Chicago, Great Falls (Montana), Belfast and Dublin.

The Gaelectric Holdings group comprises of Gaelectric Energy Storage Limited, Gaelectric Developments Limited, Gaelectric North America and Gaelectric LLC.

We have a diverse portfolio which includes significant interest in the US, the Republic of Ireland and Northern Ireland/UK markets. Gaelectric Developments Limited, since its establishment in 2004, has demonstrated its ability to create and develop out an extensive portfolio of renewable energy projects in multiple markets. Our interest within the Irish and UK markets includes a portfolio in excess of 155MW of onshore wind. Currently GDL manage approximately 60MW of wind in operation, a further 6MW to be operational by year end and 90MW in various stages of permitting and development.

In addition to onshore wind, Gaelectric Developments Ltd is investigating the development of large scale offshore wind in the Northern Irish Sea, with a potential of up to circa 1GW.

Gaelectric Energy Storage Ltd ("GES") is currently developing a Compressed Air Energy Storage project in Larne, Northern Ireland ("Project CAES"). The planning application for Project CAES is expected to be submitted in Q4 2014 and is likely to be treated under article 31 status (i.e. strategic infrastructure). Project CAES has been designated as a Project of Common Interest ("PCI") by the European Commission[2] and has secured its position in the NI Generation Listing as of December 2013. GES are currently discussing the connection with SONI.

GES have undertaken a successful drilling programme to validate the measured salt resource under which GES hold an exclusive Mineral Prospecting Licence in Northern Ireland. The results of this have been tracked and assessed by leading European underground specialists, who have indicated a salt resource which is suitable for CAES operation.

Gaelectric welcome the publication of the SEM Committee consultation on the design of procurement options. We request that the DS3 programme moves forward in an expedited manner, given the effect that delays within the programme are currently having on engagements with investors.

We have raised concerns regarding the focus of the consultation on one option, which is contrary to sound TSO modelling and the opinion of the SEM Committee consultants. Given this we have requested the SEM Committee revert to an adapted version of Option 1 under a value based approach which supports new investment by contracting on a pre-commercial basis to support the project's investment and development cycle.

[2] http://ec.europa.eu/energy/infrastructure/pci/doc/2013_pci_projects_country.pdf ref project 1.12

3 GAELECTRIC RESPONSE

The following section outlines the detailed response to the SEM Committee consultation on the design of procurement options. The paper is structured to present our thoughts on each design, followed by discussion on specific elements of design that are not unique to one particular option.

3.1 Key Considerations

This section details the principles Gaelectric believe should be considered when developing a solution that befits the goals of the DS3 programme. Gaelectric agree that the SEM Committee generally addressed the key principles against each of the proposed options, however we do not support the analysis of some options under guiding principles such as investment criteria.

Outlined below are the primary principles we believe the DS3 programme should be guided by in order to satisfy renewable targets and achieve an SNSP of 75%.

Renewable Policy

Renewable policy is a key pillar of the DS3 programme, and the development of system services should continue to be driven by the requirement to integrate more renewables whilst mitigating curtailment levels. The TSO has previously published sound technical data to underline the benefit of 75% SNSP in order to support the renewable targets in both Northern Ireland and the Republic of Ireland.

It is worth noting that the full and complete achievement of the DS3 targets are required in order to realise the proposed benefit to consumers and to ultimately achieve renewable policy. A partial implementation of services to achieve less than 75% cannot be tolerated by the renewable industry, particularly given their reliance on constraint and curtailment reports (which indicate 75% SNSP) for investment.

In order to achieve renewable policy targets, the DS3 programme must be a strong signal for investment in order to support the required enhanced capability of the system.

Investment Criteria

In order to create this signal for new investment, revenues must provide a high degree of certainty with contract terms that are commensurate with the level of risk being taken on by the developer.

In this regard, long term contracts whereby dispatch risk is offset will be a minimum requirement for the investment community. In order to encourage new entrants, 4 year ahead pre-commercial investment contracts are required with terms by 2015.

The WACC assumption of 6.6% used for the purposes of calculating the annualised capital costs is not reflective of the current risk profile of developing new energy infrastructure and therefore

should not be leaned on for decisions regarding the DS3 budget. Furthermore, we strongly believe that the basis for the calculation is flawed given that it is overly prescriptive in terms of choosing a winner from a technology perspective.

Irrespective of this, we believe a cost based structure is inappropriate for supporting new investment and should not be considered further.

Consumer Benefit

Consumer benefit is a key strand of the DS3 programme, and under all circumstances we believe that the consumer should be protected. However the consumer will only retain a benefit in circumstances where new investment is encouraged in order to create the savings in the first instance.

In terms of competition, a competitive process (Option 3, 4 & 5) will not necessarily result in a competitive and transparent outcome, and we believe the consumer is best served by a fair, objective and transparent solution given the concerns regarding market power in competitive processes.

Consumer benefit of course can only be achieved where the consumer is protected in the first instance. Gaelectric contend that the consumer can be protected via managing system services with short term contracts for existing capability in parallel to procuring a number of strategic new entrant generators to provide services over a long term contract which ensures medium term security of supply for the consumer. We believe these generators/storage facilities should present a verifiable CBA which indicates positive benefits to the wholesale market via reducing production costs whilst also showing the ability to integrate renewables through the reduction of curtailment.

The CBA would use the TSO published Generation Capacity Statement to develop its base case scenario.

TSO & RA Licence Conditions

Both the TSO and the joint RAs are bound by their respective licence conditions. It is apparent to Gaelectric that under Option 3, 4 & 5 the ability of the TSOs to discharge their duties in accordance with these licence conditions is challenged. Statutory Instrument 445 of 2000[3] states the following with respect to the duty of non-discrimination by the transmission system operator;

> "In carrying out its functions, the transmission system operator shall not discriminate unfairly between persons or classes of persons, or between system users or classes of system users, particularly in favour of its subsidiaries, associated or affiliated undertakings, joint ventures or shareholders."

[3] http://www.eirgrid.com/media/SI%20445%20of%202000%20-%20Statutory%20Instrument%20establishing%20EirGrid%20and%20the%20TSO%20licence.pdf

We contend that a competitive process with the level of complexity such as those proposed will fall foul of the above mentioned licence requirements of the TSO. The reason for this is EirGrid will inevitably need to introduce an element of subjectiveness into the process of determining a feasible outcome in a competitive process. This opens up the allocation process to legal challenge.

Furthermore, it is the duty of the SEM Committee to develop a competitive and transparent market for participants as per its statutory licence conditions;

> "The SEM Committee in carrying out its functions under section 8a(4), is to protect the interests of consumers of electricity in Ireland and Northern Ireland supplied by authorised persons, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the sale or purchase of electricity through the Single Energy Market".

4 ANALYSIS OF OPTIONS

The following section outlines Gaelectric's issues, concerns and suggestions to remedy same with respect to the proposed procurement design options presented in the SEM Committee consultation.

4.1 Option 1 – Regulated Tariff

The Regulated Tariff option ("Option 1") is characterised by a regulated price per service that is based on a cost plus regulated return as required by a BNE providing a range of services. The value of each service relative to the others is then calculated in accordance with the methodology outlined in the TSO recommendation paper. Contracts are allocated on a 5 year tenor.

Gaelectric do not support Option 1 in its current format, however we propose modifications to Option 1 in section 6, which we believe will support the goals of DS3 and the requirement for investment certainty of generators.

The comments below reflect Gaelectric's opinion on the key elements of the design of the Regulated Tariff option.

Contract Tenor

The SEM Committee have proposed 5 year contracts for Option 1 in all cases, irrespective of the status of a project as a new entrant or existing capability.

Gaelectric strongly advocate the use of long term contracts of 15 years in length for new entrants in order to support a business case and recognise the unique risk of new entrants. We do not support a review of tariffs within the 15 year term given this serves to enhance the risk premium on investment and negate the benefit of the extended contract tenor in the first instance.

We propose that long term contracts would be allocated to new entrants on the basis of a verified Cost Benefit Analysis which indicates a positive effect on both the reduction of production costs and enhancing renewable integration by reducing the level of curtailment.

Furthermore, a pre-qualification threshold would need to be met to avoid speculative bids. This would include an element of substantial progress on planning applications (potentially receipt of) and the provision of bonds to secure the progress of the project as outlined in a construction milestone and financial commitment plan.

New entrants need access to pre-commercial contracts in order to access funding for the project and to progress to Financial Close. We propose that 4 year ahead investment contracts are agreed before the end of 2015. An expedited timeframe is an absolute requirement given the delay to DS3 to date and the effect this is having on new investment.

With respect to existing capability, we believe that short term contracts for standard capability are an appropriate solution for the SEM Committee in terms of managing the risk of locking out innovation and controlling the DS3 budget. For refurbished capacity where there are capital

implications, we believe that a longer period contract is appropriate, albeit the contract length should be determined by the scale of that investment.

Pricing Methodology

It is proposed by the SEM Committee that product rates are determined on the basis of a cost plus regulated return on the basis of provision of service by a BNE technology in addition to other input assumptions.

Gaelectric strongly oppose the use of a 'cost plus regulated return' basis for calculating the tariffs given that it is overly prescriptive with respect to the marginal technology that will provide any one service. We believe this challenges the requirement for an unbiased consideration of technologies and picks a winner.

Partly predicated by this, but primarily by other factors such as concerns regarding the need for clear investment signals, we challenge the approach being consulted upon. We believe that prescribing a specific technology for service allocation risks discriminating against other technologies and undermines the objectiveness of the DS3 programme. Rather we propose that a value based approach is progressed from this point onward. Such an approach determines the total value of the system services (in this case conservatively modelled to be €301m p.a.) and allocates this amongst individual products on the basis of the relative value of each product.

Contract Allocation

It is clear that 5 year contracts will create a first mover advantage for incumbent generators in the ancillary services market which is contrary to developing clear and investible signals for new entrants.

We contend that new entrants will be disadvantaged by achieving a COD between the 5 year allocation period. The SEM Committee paper states that new contracts will be negotiated on a case by case basis where the budget is exceeded through over supply for ancillary services. This ad hoc contracting will not provide certainty to developers who will not invest unless there is certainty over contracted volumes.

Gaelectric propose that the SEM Committee consider that a tranche of the overall budget is reserved for new entrants. This resolves the issue of first mover advantage to existing generators and maintains the business case for new entrants. We propose that further analysis into the exact proportion of this set-aside is carried out by the TSO and SEM Committee.

As outlined above, new entrants must have access to pre-commercial agreements (4 years from COD) in order to enable investments. In section 0 we refer to this further and the proposals for same in GB under the Electricity Market Reform proposals.

Provided the above is resolved, the SEM Committee must then determine the manner in which contracts are allocated to generators in the instance where there is a potential over supply of providers. We believe this is particularly apparent for availability and dispatch based payments.

Gaelectric propose that an element of competition or comparison takes place on the technical capability and performance of the project in providing the specific service. Further analysis of this will be required in the detailed design phase of the project.

With respect to the minimum contracting volumes for each generator, Gaelectric believe the SEM Committee should re-examine the proposal to mandate the TSO to contract only for services up to grid code standard. A primary goal of DS3 is to maximise the capability and performance of the generation portfolio, however this will not be achieved where uncertainty exists. Unless generators have prior certainty or comfort over the volumes that will be contracted, investment in enhanced capability is unlikely to occur.

Value/Cost Based

As mentioned above, Gaelectric believe that investment in new entrants fundamentally relies upon the SEM Committee adopting a value based approach. The bankability and investibility of DS3 system services has been a particular focus of the programme prior to this consultation, and this has been well received by new entrants, existing generators and renewable generators alike.

However we believe that the latest consultation, which focuses on a cost based approach, has strongly challenged this approach and affected the confidence of the investment community in the DS3 programme.

We believe that the importance of regulatory guidance on the DS3 budget is particularly important for Option 1 given its reliance on a SEM Committee led tariff which is informed by the cost based/ value based decision. The emphasis on cost based approaches in the SEM Committee consultation paper is particularly concerning not least due to the assumptions which were made in the analysis that are overly prescriptive, focusing on a proposed enhanced portfolio mix and also with respect to the financial assumptions made.

The assumption of a WACC at 6.6% is wholly inappropriate given the risk premiums charged for investment in new energy infrastructure currently. Irrespective, a cost based budget deters new investment in system services and is discriminatory to new entrant technologies.

Option 2 presents a value based approach to the system services budget and Gaelectric strongly urge this to be represented in a modified version of option 1 as outlined in section 6.

Delivering Renewable Targets

In the assessment of Option 1, the SEM Committee judge that there is a significant risk of not reaching the 2020 targets. Gaelectric contend that this is the case with all options, however under Option 1, the SEM Committee have the greatest level of influence in respect to achieving the renewable targets given their control of the budget and contracting terms. With this in mind, we believe by adopting long term contracts under a value based structure, the all island electricity system stands the greatest probability of reaching 2020 renewable targets, whilst also maintaining value to the consumer.

Remuneration

With respect to remuneration definitions, we refer to Section 5 which discusses this area from the perspective of all proposed options.

4.1.1 SUMMARY OF OPTION 1

Gaelectric's summary position of Option 1 (as presented in the SEM Committee consultation) is as outlined below.

- 5 year contracts will not promote adequate investment into system services
    - 15 year contract are required for new entrants
- New entrants require pre-commercial investment contracts 4 years ahead which secure revenue certainty ahead of operation.
    - This provides investors with the pre-requisite certainty to advance new projects
    - Pre-commercial arrangements need to be in place before the end of 2015
- 5 year contracts for all generators creates a first mover advantage to existing generators which is anti competitive for new entrants
    - A separate tranche in the budget is required for new entrants to resolve this issue and maintain investor certainty
- Cost plus regulated return is an inappropriate metric for determining remuneration for system services owing to the fact that it is not technology neutral.
- A cost based approach, particularly under the assumptions made in the SEM Committee analysis will not achieve adequate levels of investment.
    - The perceived risk of over paying for services is incorrectly being focused on. Rather, the cost to the consumer of not achieving the DS3 goals should be considered as a counterfactual
- Gaelectric contend that in terms developing a procurement option which supports investment & the achievement of renewable policy, the SEM Committee have more control over this than other options proposed.

Key Considerations	Comment
Renewable Policy	The cost based tariffs and cost plus regulated return are not conducive to creating investment in enhanced services and it is not clear how RES policy will be achieved.
Investment Criteria	A cost based approach, with no long term contracts for new entrants is inappropriate for new entrants and deters investment.
Consumer Benefit	The consumer is protected from the DS3 budget under a cost based approach however will not see the benefit of reduced production costs as calculated by the Tso due to lack of investment.
TSO & RA Licence Conditions	Choosing a BNE to base revenues is open to legal challenge on the basis of being discriminatory and subjective.

Considering the comments above, **Gaelectric do not support** further analysis of Option 1 *in its current format*, however we do believe that it forms the basis of a potentially investible solution and

hence in section 6 propose, we propose a modified version of Option 1 which Gaelectric support for detailed consideration and design.

4.2 Option 2 – System Services Pot

The System Services Pot option ("Option 2") is characterised by a budget that is calculated by the SEM Committee based on the total estimated value of system services. This value is then allocated between each service using the TSOs proposed methodology depending on the relative value of each service. Each service budget is then distributed across each trading period in the year.

Generators are not entitled to long term contracts with this option given that each generator that is deemed technically capable and is available or dispatched (depending on the service) will be paid. Generators who are not available or dispatched will not be paid.

The comments below reflect Gaelectric's opinion on the key elements of the design of the System Services Pot option.

Contract Tenor

The lack of any certainty over contract length, and lack of volume certainty, results in this option being unable to support a clear investment signal for new generation or enhanced capability. This is to some extent mitigated by the value based approach which would be adopted, however ultimately new entrant generation will be unable to invest on the basis of volatile energy prices and annually varied DS3 prices, with substantial dispatch risk.

Gaelectric understand the perspective of developing an option to create entry and exit signals. We believe exit signals will present themselves as a result of price volatility, it is not clear however, how a corresponding entry signal will present itself given that entry signals for new investment are generally predicated upon bankable revenues, of which volatile energy/DS3 revenues are not.

System Services Pot

Gaelectric support the approach in this option for the SEM Committee to allocate the entire value to the DS3 services. It is our belief that the value based proposals from Option 2 should be considered for a modified version of Option 1 as proposed in Section 6.

Delivering Renewable Targets

It follows from the points outlined above regarding contract tenor and lack of price/volume certainty, that renewable targets are highly unlikely to be achieved given the potential lack of enhanced capability in the power system.

In respect of the SEM Committee's assessment on minimising curtailment, we contend the rating indicated (Medium) does not account for the thoughts above whereby an investible signal does not present itself to the market. In order to minimise curtailment, the 75% target for SNSP must be achieved, and we believe it is unlikely that this target will be achieved in the first instance.

4.2.1 SUMMARY OF OPTION 2

Gaelectric's summary position of Option 2 (as presented in the SEM Committee consultation) is as outlined below.

- Lack of long term contracts is a barrier to new investment
- Gaelectric support the use of a value based approach
    - We believe this should be considered for a modified version of Option 1
- We agree this option presents an exit signal however in order to create an entry signal, revenues must be bankable which is not the case here.
- Given the likely lack of investment in enhanced capability, we do not believe renewable targets can be achieved.

Key Considerations	Comment
Renewable Policy	The lack of investment will potentially risk the DS3 programme not assisting in achieving renewable policy.
Investment Criteria	New entrants are deterred by a lack of price/volume certainty given no long term contracts
Consumer Benefit	The consumer is not protected given the entire budget is paid out but there is no certainty over investment and hence achieving production cost savings
TSO & RA Licence Conditions	We do not see any issue on TSO/RA licence conditions

Considering the comments above, **Gaelectric do not support** further analysis of Option 2.

4.3 Option 3 – Regulated Competition

The Regulated Competition option ("Option 3") is characterised by a grouping of services which allows different procurement mechanisms for the services. There are 4 groups proposed, split as follows;

- Group 1: Grid Stability - SIR, FFR, DRR, FPFAPR, SRP
- Group 2: Ramping - RM1, RM3, RM8
- Group 3: Fast Reserve - POR, SOR, TOR1, TOR2
- Group 4: Slow Reserve - RRD, RRS

It is proposed that Groups 1, 3 & 4 would be remunerated based on voluntary pay-as-bid processes on long term contracts, whilst Group 2 would be a pay-as-cleared intraday auction.

Long term contracts in this option are envisaged to be 5-10 years and awarded until a monetary cap is reached.

The comments below reflect Gaelectric's opinion on the key elements of the design of the Regulated Competition option.

Contract Tenor

Gaelectric believe long term contracts up to a maximum of 10 years may not ultimately support the investments required to enhance the capability of the generation portfolio on the island. Contracts up to 15 years are more likely to satisfy investment requirements whilst enhancing competition in price which is a key driver of this option.

The consultation is unclear as to whether the SEM Committee mean to say the long term contract would be somewhere between 5 and 10 years or if it is proposed that a 10 year contract would be available to new entrants.

Market Power

We believe the pay as bid auctions for system services to be wholly inappropriate for a market with the levels of concentration of the SEM. We refer to the IPA analysis of the Herfindahl-Hirschmann Index ("HHI") for system services, as discussed in our commentary on Option 5 below.

A market with a HHI index greater than 2,000 indicates a 'highly concentrated' market according to the EU Commission. The SEM Committee consultation has addressed this issue in its assessment of the option, stating;

"Given competition issues in the system services market, a pay-as-bid approach further increases the risk that providers will overinflate their bids".

Given this we do not envisage that the procurement of system services will result in a competitive or transparent outcome.

Remuneration

The option does not indicate if bids can be linked in any way and we have concerns that where a generator clears one group, but fails to clear in another, the business case may not be made for that generator and as such it will need to withdraw for the auction to be re-run. This questions the ability of the auction to clear in an objective manner, similar to the issues we envisage in Option 5.

4.3.1 SUMMARY OF OPTION 3

Gaelectric's summary position of Option 3 (as presented in the SEM Committee consultation) is as outlined below.

- Contracts up to 10 years indicate an appreciation of the unique risk profile of new entrants, which is welcome. Notwithstanding this we believe contracts up to 15 years are required to support an investment case.
- Market concentration levels in the DS3 market are particularly high, making a competition non-ideal. These concerns are compounded by the pay-as-bid approach to procurement.
- It is not clear how bids can be linked and therefore we do not believe the auction will have a direct path to clear. We believe issues may be encountered with clearing the auctions objectively.

Key Considerations	Comment
Renewable Policy	It is not clear if the option provides a business case given uncertainty over an objective outcome, and therefore may not incentivise an enhanced portfolio to promote renewable policy.
Investment Criteria	Competition in a highly concentrated market is not ideal. New investment contracts require 15 years.
Consumer Benefit	Competition potentially limits consumer exposure however market power is a concern and the consumer cannot be guaranteed value
TSO & RA Licence Conditions	The TSO will be unable to form an objective outcome and is likely to have to use judgement on allocating contract, which is contrary to its licence conditions.

Considering the comments above, **Gaelectric do not support** further analysis of Option 3.

4.4 Option 4 - Competitive Split Auction

The Competitive Split Auction option ("Option 4") is characterised by a grouping of services which allows different procurement mechanisms for the services. There are 4 groups proposed, split as follows;

- Group 1: Grid Stability - SIR, FFR, DRR, FPFAPR, SRP
- Group 2: Ramping - RM1, RM3, RM8
- Group 3: Fast Reserve - POR, SOR, TOR1, TOR2
- Group 4: Slow Reserve - RRD, RRS

Groups are auctioned in 1, 5 and 10 year auctions. The annual auction is a mandatory pay-as-cleared, sealed bid auction which is based on the short run marginal cost of generators. The 5 and 10 year auctions are pay-as-bid auctions which are voluntary and based on the long-term costs of generators.

Contract Allocation

Contracts are allocated on an annual basis and there is no guarantee of a contract following this as the generator must submit a bid in the auction the following year. A corresponding auction manages the long run costs of generators on a pay-as-bid basis.

It is not clear if a successful outcome for a generator the long run auction is enduring or is only valid on the basis of the generator clearing the annual auction also. Unless this is the case we envisage a risk of market power being exerted on bidding strategies to ensure long run costs are covered with no absolute requirement to bid in a manner which will clear the annual auction.

We believe the auctions will need to be highly regulated in order to ensure bids are not being inflated, and this is contrary to the design of a competitive process which seeks price discovery. We believe this limits the value to generators of competing in the market.

Remuneration

As discussed throughout this response, new entrants require revenue certainty in the form of payments based on capability and long term contracts. In this option, annual contracts do not offer the requisite certainty on pricing to support the investment of a new entrant. It is not clear if generators will continue to have their long run costs paid where they fail to clear an annual auction, and also how the allocation of long run contracts are managed in the first instance.

As per Option 3, this option does not indicate if bids can be linked in any way and we have concerns that where a generator clears one group, but fails to clear in another, the business case may not be made for that generator and as such it will need to withdraw for the auction to be re-run. This questions the ability of the auction to clear in an objective manner, similar to the issues we envisage in Option 5.

4.4.1 SUMMARY OF OPTION 4

Gaelectric's summary position of Option 4 (as presented in the SEM Committee consultation) is as outlined below.

- It is unclear how the SEM Committee propose to allow a generator to continue on its long term contract covering long run costs where there is a risk it will not clear the annual auction.
- Market concentration levels in the DS3 market are particularly high, making a competition non-ideal.
- It is not clear how bids can be linked and therefore we believe the auction will not have a direct path to clear. We believe issues may be encountered with clearing the auctions objectively.

Key Considerations	Comment
Renewable Policy	Given the lack of price certainty for generators, the investment case may not be made to support renewable integration via an enhanced portfolio
Investment Criteria	The proposals are unclear and the status of the continuation of long run contracts where a generator fails to clear an annual auction is not clear
Consumer Benefit	Consumer benefit cannot be guaranteed given the points above RE: remuneration for long run costs where the generator prices itself out of annual auctions
TSO & RA Licence Conditions	The TSO will be unable to form an objective outcome and is likely to have to use judgement on allocating contracts, which is contrary to its licence conditions.

Considering the comments above, **Gaelectric do not support** further analysis of Option 4.

4.5 Option 5 – Multiple Bid Auction

Multiple Bid Auctions ("Option 5"), the SEM Committee's preferred procurement design, features a competition for the allocation of services to generators. Each service is auctioned separately, however generators will bid packages of offers whereby each offer must be successful in order to validate a package. If for example one service in a package of 14 services is rejected, then the entire package is disregarded.

To counteract the effect of this, the SEM Committee have proposed multiple, mutually exclusive bids for generators to submit numerous bids which are acceptable to them from a revenue perspective.

Contract lengths are determined by the bidder and long term contracts are available to new entrants.

The comments below reflect Gaelectric's opinion on the key elements of the design of the Regulated Tariff option.

Complexity

The competitive process caters for multiple bids. Gaelectric appreciate the SEM Committees attempt to include an element of optionality and provisions for managing risk in the process, however we believe the complexity of the proposals will result in an inability to come to an objective solution. In order to manage the complexity of requiring to bid for 14 services and the fact that each bid must be accepted in order to be successful, generators are highly likely to require a high quantity of bids, each with slight variations on the last, to manage their risk. Because of this added complexity, it is unlikely that an objective and competitive outcome can be managed.

Given the potentially significant number of bids from each generator, the number of potential solutions will be such that the TSO is likely to be required to introduce an element of influence/judgement on the final outcome. We believe this to be highly undesirable and opens the procurement process to a high probability of legal challenge.

We strongly believe that any element of subjectiveness in this process from the TSO will place them at risk of not discharging their duties in a non-discriminatory manner as defined under S.I. 445 of 2000 which states that;

> "In carrying out its functions, the transmission system operator shall not discriminate unfairly between persons or classes of persons, or between system users or classes of system users, particularly in favour of its subsidiaries, associated or affiliated undertakings, joint ventures or shareholders."

Competition

In section 9 of the consultation, the statutory principle objective of the SEM Committee is quoted as below;

> "The SEM Committee in carrying out its functions under section 8a(4), is to protect the interests of consumers of electricity in [Ireland] and Northern Ireland supplied by authorised persons, **wherever appropriate by promoting effective competition** between persons engaged in, or in commercial activities connected with, the sale or purchase of electricity through the Single Energy Market".

Gaelectric argue however that Option 5 does not promote *effective competition*. It is not in question that Option 5 creates competition through bidding however it is a competitive process that will arguably not support a transparent outcome. The spirit of the statutory objective quoted above is to promote a competitive outcome, of which we believe an adapted version of Option 1 best supports.

Remuneration

In Option 5, new entrants are likely to be required to pass stringent pre-qualification requirements (which Gaelectric support) in order to bid for services. Typically these requirements include an element of planning certainty, considerable work on grid access and, as proposed by Gaelectric, a positive Cost Benefit Analysis which is independently verified and signed off by both the TSO and RA.

However we believe that the risk associated with contracted volumes price discovery in the auction will not support the case for investment in the first instance. For a large scale new entrant generator, the investment up to pre-qualification amounts to millions, however without sight of certainty on revenue streams, we believe this potential investment will not arise.

Market Concentration

The IPA consultancy report makes a strong argument in relation to market concentration in ancillary services and possible market power issues associated with a competitive process such as Option 5. In all cases, the HHI is in excess of 2,000 in the base case calculation which is indicative of a highly concentrated market and hence one which cannot support the development of a sealed bid, instantaneous auction, particularly given the complexity of the proposals.

The IPA report states;

> "*According to the EU Commission, a market could be viewed as 'concentrated' if its HHI exceeds 1,000 and 'highly concentrated' if its HHI exceeds 2,000. Our analysis indicates that each system service represents a highly concentrated market – the lowest HHI calculated at 2,009 – and therefore competitive procurement arrangements would need to have a strong regulatory supervision".*

Gaelectric believe it will be particularly difficult for the regulatory authorities to interfere with such a complex process, where they determine instances where market concentration is affecting the outcome, without the risk of extensive legal challenge by generators.

Gaelectric support the analysis undertaken by IPA and echo their concerns regarding market concentration and the effect this may have on a competitive process. We urge the SEM Committee to consider the merits of designing a procurement structure that creates a competitive and

transparent outcome rather than attempting to design a solution with a competitive process what does not facilitate a competitive and transparent outcome.

Failed Auction

The SEM Committee have proposed that where an auction fails, that service will be allocated on the basis of a regulated tariff. This brings about a concern for generators whereas if the regulated tariff falls below their bid price, the auction will need to be restarted and therefore there is a valid question regarding the ability of the process to clear even where regulated tariffs are introduced.

Where an auction fails and regulated tariffs are introduced, the SEM Committee have stated it is not appropriate to consult on the level of the regulated tariff in advance, presumably to avoid setting a floor price in the auction. We believe the lack of forward clarity on potential revenue streams is not acceptable for any generator, irrespective of whether they are in operation or development.

We further believe that given our comments above regarding complexity, the auction is highly likely to end up being cleared on the basis of regulated tariffs.

Contract Tenor

Gaelectric support the SEM Committee proposal in Option 5 to allow generators to determine the preferred length of contract which effectively manages their risk profile. We believe that this proposal should be equally considered for Option 1 with shorter term contracts for existing capability.

Linked Service Bids

Option 5 allows the operator to submit bids for linked services. Gaelectric support the attempt to consider the enhanced flexibility some plants bring to the system through providing a host of services. We believe the value that flexible generators bring to the system should be given due consideration in the final design moving forward (preferably a modified version of Option 1 as set out in section 6.

Instantaneous Auction

Gaelectric believe that the proposed auction design, notwithstanding our previous comments, does not promote any advance revenue certainty and given the level of investment required to achieve pre-qualification requirements for new entrant generators, we believe the price and volume risk is not acceptable, particularly for new entrants.

Market Interaction

Option 5 tends to have a greater level of interaction with the energy market than, for example, Option 1. In order for revenue streams to be bankable a plant will need to show that it is baseload given the dispatch risk incorporated into the revised design of availability payments. It is highly unlikely that any new entrant plant will be in a position to prove this to a financial institution given the volatility of operating hours of plants over the last number of years.

Furthermore, the lack of clarity over the I-SEM design presently complicates matters given it is possible , and likely, that generators will see a revision in their operation characteristics from 2017. We believe capability based payments are more suitable from the perspective of ensuring bankability of revenue streams given the interaction with the market is limited.

Gaelectric have stated on a number of occasions that we favour a value based approach which supports investment signals for new entrants. We do not believe that Option 5 offers such a structure given the SEM Committee statement on market power mitigation in the consultation;

> "It is proposed that a bidding code of practice would be developed and applied to all units participating in the system services auctions. It is envisaged that all bids would be cost based and subject to monitoring through the SEM Committee's Market Monitoring Unit."

This is contrary to developing a competitive market with price discovery, as a highly regulated bidding cap will only allow for the recovery of costs. Whilst we understand the need to mitigate market power concerns, we do not believe this is appropriate and furthermore the need for such regulation underpins the argument that an auction is unsuitable for a market such as the SEM.

Remuneration

With respect to remuneration definitions, we refer to Section 5 which discusses this area from the perspective of all proposed options.

4.5.1 SUMMARY OF OPTION 5

Gaelectric's summary position of Option 5 (as presented in the SEM Committee consultation) is as outlined below.

- Gaelectric support new entrant generators determining the length of contract required. Long term contracts of 15 years should be considered for new entrants in a modified Option 1 also.
- The proposal is overly complex and we believe it faces considerable challenges to achieving a transparent solution.
    - The uncertainty of the outcome for generators will result in a high number of mutually exclusive bids, further increasing the complexity and decreasing the possibility of achieving a legally defensible outcome.

- We believe the TSO will be required to show some form of judgement or subjectivity in the process, which is contrary to their licence conditions.

- The price and volume risk on generators is likely to impact the investment case and hence we believe that the level of uncertainty and risk represents a barrier to new entrants given the pre-qualification milestones will require significant investment without prior certainty over revenues.
- Market concentration concerns determine that a competitive auction is inappropriate for a market such as the SEM.
- The proposal to regulate bids on a cost based approach is contrary to the premise of a competitive auction which is designed for price discovery.
- Gaelectric believe it is highly likely that the complexity of Option 5 will result in regulated tariffs being introduced for many of the services which further increases risk on generators and does not guarantee an objective outcome.
- We support the recognition of value for flexible generators that can provide linked service bids and believe that the value of this flexibility should be considered for other procurement options and Option 1 in particular.
- The level of market interaction introduced in Option 5, partly as a result of the definition of availability based remuneration for services, results in revenue streams being considered unbankable. We recommend a structure akin to Option 1 with capability based payments for services which lessen the interaction with the market and the risk of change from the I-SEM on revenues is mitigated.

Key Considerations	Comment
Renewable Policy	The complexity of this option will result in a lack of investment and a significant challenge to renewable policy.
Investment Criteria	The complexity and lack of transparency of an auction such as this, given the market concentration levels in the SEM, in addition to no prior clarity over revenue certainty, deters investment.
Consumer Benefit	Consumer benefit is challenged by failure to achieve renewable policy and a failure to create investment signals in the market to address this.
TSO & RA Licence Conditions	The TSO will be unable to form an objective and transparent outcome and is likely to have to use judgement on allocating contracts, which is contrary to its licence conditions

Considering the comments above, **Gaelectric do not support** further analysis of Option 5.

5 OTHER COMMENTS

5.1 New Entrant Pre Commercial Arrangements – Enabling Investment

Gaelectric have requested from the outset of this consultation process that pre-commercial arrangements will be in place for new entrant generators. New entrants require a 4 year ahead pre-commercial agreement which includes bonding arrangements and minimum milestone commitments to ensure delivery from the generator.

By introducing pre-commercial contracts, new entrants can begin to make investment decisions to develop and construct the project in a timely manner. We refer to our previous comments regarding high pre-qualification requirements for new entrants and a Cost Benefit Analysis to ensure the projects are viable, provide value to the consumer and promote the integration of renewable technologies.

The CBA should be carried out to reflect the data and system assumptions in the TSO published Generation Capacity Statement in order to ensure uniformity across the board.

We reiterate our concern that the delay in the DS3 programme has impacted upon investment engagements, including for Project CAES. As a result the need for pre-commercial contracts is an urgent requirement for new entrants and in line with this we expect the SEM Committee to expedite the process for pre-commercial contracts with a view to terms in 2015.

We refer the SEM Committee to the principle of "Investment Contracts" in GB under the Electricity Market Reform mechanism and the principles developed to allow developers to take final investment decisions. This policy mechanism was introduced to;

> "… support, rather than undermine the delivery and sustainability of EMR. This includes contract terms and price setting."[4]

This is a minimum requirement to support investment in flexible new entrant capability for DS3.

5.2 Remuneration definitions

Revenue certainty for renewable generators is underpinned by the definition of remuneration, the interaction of this service within the energy market and the method of procurement of the service.

Specifically in regard to availability based payments, we note the change in definition of remuneration from the TSO recommendation paper which proposed capability based payments.

The decision to promote availability based remuneration invokes a dispatch risk on generators which deems the revenues unbankable unless the project can prove it is a baseload generator. Gaelectric

4 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/141873/FIDeR_update_doc_Invitation_to_Participate_2013_-_03_-_14_FINAL.pdf

supported the TSO recommendations paper to remunerate services based on capability in order to remove the dispatch risk and interaction with a market that is currently under material change.

These risks are not conducive to developing a clear signal for investment in new entrants and ***we request the SEM Committee reverts to a capability based remuneration methodology.***

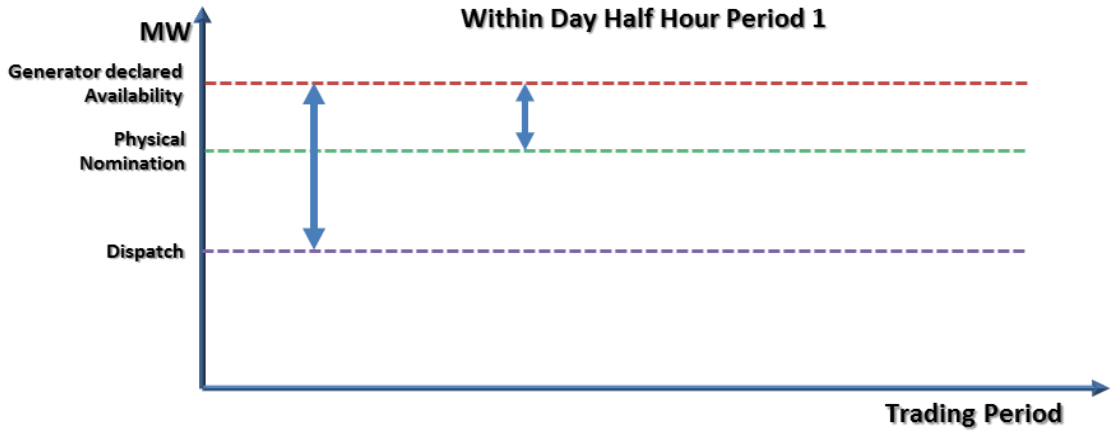
The volume and price risk is further compounded by the redefinition also of dispatch based payments which is particularly concerning for new entrant generators who provide superior capabilities in the provision of reserve. Without a relatively certain revenue stream we believe the case for investment is significantly affected with this redefinition.

5.2.1 AVAILABILITY BASED REMUNERATION

The SEM Committee consultation states the following in respect of availability based payments;

> "Units in the market schedule (for physical contract nomination) but constrained down will be eligible for payment and will not be negatively affected by the actions of the TSO."

Therefore our understanding of how availability based remuneration has been proposed in the SEM Committee consultation of 9th July is shown in the figure below.



Remuneration:
= Max Revenue {((Physical Nomination– Dispatch), (Physical Nomination– Market Firm)) * Clearing price}

By *not being negatively affected* from TSO actions, we understand this to mean the service is paid on the greater revenue of the physical notification and dispatch position.

However in the clarifications paper, the SEM Committee stated the following;

"The higher of a unit's market position or physical dispatch is used to determine the available volume"

Therefore we consider that as a result of this, the payment is the lesser of the revenue based on the physical nomination and dispatch position.

If this is the policy view of the SEM Committee, it is our belief that generators will be incentivised to bid in a more volatile manner in the energy market. This will not be to exert any form of market power, but rather to effectively manage its risk. By way of example should the above definition be pursued, a generator is likely to bid negative decremental bids to ensure it is not constrained down, and so that if it is that its bid covers the opportunity cost of this (equal to foregone DS3 revenue).

Notwithstanding this, Gaelectric continue to work on the assumption that the definition of the original consultation document stands. We do however request clarification and numerical examples to provide final clarity on the proposals.

5.2.2 DISPATCH BASED REMUNERATION

Gaelectric, on the 15th August, sent a submission to the joint Regulatory Authorities on the definition of dispatch based payments. We refer to this proposal below.

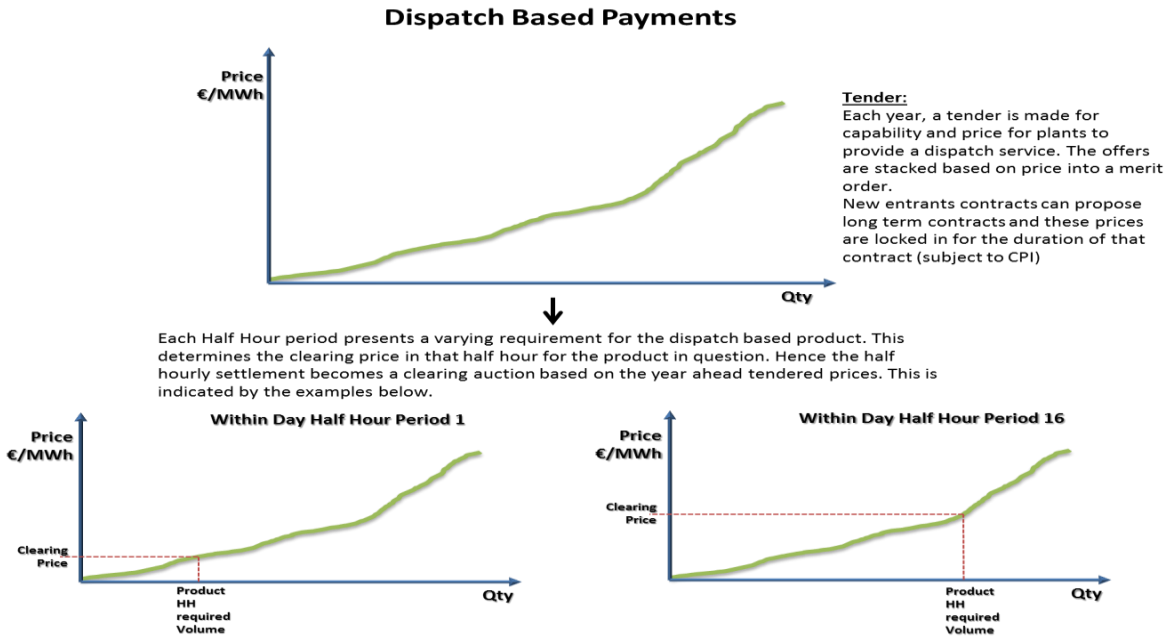
In order to ensure that a long term contract for a new entrant is investible, the most important metric is revenue certainty against specific performance criteria. Unfortunately we believe the dispatch definition in Option 5 falls short of providing an investible case for generators.

The procurement approach proposed in the consultation involves a tender where prices are submitted at the beginning of the year and fixed for one year for existing capability with a contract length to be defined by the generator in the case of a new entrant.

However the tender will only clear on a half hourly basis as per the requirements from the TSO for that service in each trading period. As such, the long term nature of the contract is compromised by the lack of a specific contractual volume and therefore will not provide adequate certainty over the volume.

This is compounded given that generators of existing capability will wish to bid in such a manner as to ensure that they remain in merit for services, resulting in generators on a long term contract being potentially almost consistently out of the money. Whilst this can be considered as promoting competition, it is also a strong indicator of a market with no entry signal, and hence fails to address security of supply concerns, particularly in Northern Ireland, nor does it promote long term value for the end consumer as it creates a lack of flexibility & liquidity in the balancing market. Under such a scenario, the long term price point for a new entrant leaves those plants at a competitive disadvantage, and creates a risk to the debt servicing of an investment to such an extent as to prevent investment in the first place.

Gaelectric's understanding of the proposed dispatch decision is included below;



Gaelectric believe the structure outlined above as published in the SEM Committee consultation paper can be altered in a manner which represents an adequate level of certainty to ensure new investment in the system services market over the long term, without over-paying or locking out innovation.

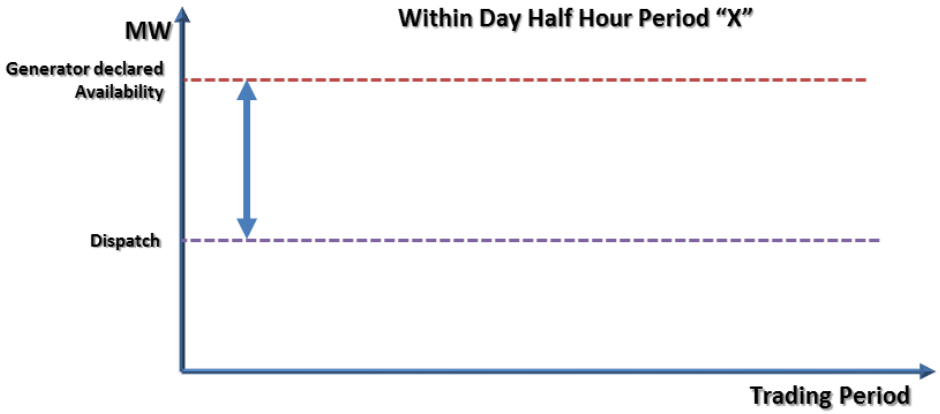
The issue here is the lack of control a participant has over the physical dispatch of the project in a highly constrained system such as the SEM (and continuing into the I-SEM), and as such the lack of foresight over revenues which is required by investors to support a business case for a new entrant. A new entrant will find it difficult to be competitive where the volumes are unclear, as they may be required to inflate their bid to counter this risk, which ultimately compounds the competitive disadvantage for the generator in the first instance given it will find itself regularly out of the money.

Under the proposed structure, TSO dispatch decisions could have a considerable effect on the revenue adequacy of the plant as a result of foregone revenue from dispatch based services. Gaelectric are keen to mitigate this for enhanced capability without moving to a full availability definition which we do not believe will protect the consumer fully given the nature of the services in question.

Proposed Redefinition

Gaelectric believe the issue here is particularly apparent where a capital investment is required for enhanced capability. On the assumption that state aid guidelines indicate that payments for reserve products on a capability basis are unlikely to be approved at commission level, we propose that enhanced capability (under the same CBA requirements as discussed previously to show net benefit to the energy market and the end consumer) are contracted under a more certain revenue structure to manage this risk and maintain the investment case.

The figures below outline the detail of Gaelectric's proposal.

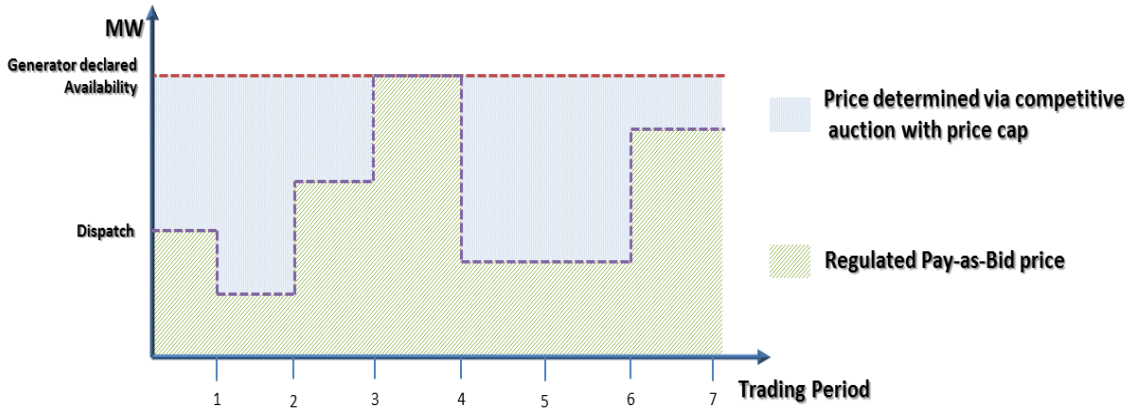


Remuneration:
The definition for remuneration of new entrant plants is "**Generator Declared Availability – Physical Dispatch**".
Following the contract term, the plant reverts to annual tenders as per incumbent generators.

Remuneration:
= Generator Declared Availability - Physical Dispatch

The remuneration formula is designed such that the risk from TSO re-dispatch is mitigated and plants which are dispatched to a position of non-capability are not financially disadvantaged as a result.

The figure below outlines how this structure would work, **in line with the TSO recommendation for dispatch based remuneration**.



In terms of utilisation, it would be at the discretion of the TSO how to utilise the new entrant for dispatch based services depending on their specific requirements in each trading period. However new entrant generators will retain payments for the hours they are not utilised, **with the exception of where the plant is off and cannot provide reserve to the system**.

This is similar to the definition of dispatch as per the TSO recommendation paper, with the exception that generators will receive energy payments for the physical energy provided with DS3 payments for the remaining plant capacity

. The proposal differs from availability based given there is no consideration of the physical nomination of the plant for the reason that if the plant were to be moved by the TSO away from its physical nomination but paid on this basis anyway, there may be a double payment (where physical

nomination is less than dispatch) or the plant may be negatively affected by the TSO re-dispatch (where physical nomination is greater than dispatch) from a revenue perspective.

We believe the above supports a greater degree of revenue certainty for new entrants without compromising the value to the consumer.

5.2.2.1 Potential Issues to be addressed by redefinition of dispatch for new entrants

The proposals outlined within this document have interdependencies with the energy market and the proposed CRM which must be addressed from the outset. This section outlines such issues and proposes mitigations.

Long Term Dispatch Contracts

Gaelectric are aware that the European Commission have a preference to limit the tenor of contracts associated with reserve services. The preference from Europe is for a maximum of 1 year contracts, procured no more than 1 year in advance. The final ENTSO-E draft of the Electricity Balancing Network Code[5] states the following;

> *"The procurement of Balancing Capacity for a longer period than one year and more than one year in advance of the provision of the Balancing Capacity shall be subject to regulatory approval."*

Whilst the TSO is free to contract for up to 1 year, the joint Regulatory Authorities will be required to approve a contract longer than this and indeed a 4 year pre-commercial investment agreement.

Gaelectric strongly believe that the Electricity Balancing Network Code clauses such as the abovementioned do not foster an environment for investment in a system with specific reserve and ramping requirements owing to the ambitious renewable targets in place, such as the SEM. It is within the remit of the Regulatory Authorities to sanction such contracts and we believe it would be remiss of the SEM Committee not to consider this against the counterfactual of little to no investment in new flexible assets to manage to system requirements.

Concern of Locking in Technologies for long term

Offering long term contracts is often challenged by those who are concerned at locking in specific technologies and hence locking out innovation in the market. Gaelectric argue that technologies are already being locked in via availability contracts and the proposed CRM, as such the argument revolves around innovation in the area of reserve type payments.

We believe that the DS3 programme adequately manages this with the reliability scalar which reduces the payments to generators that do not perform above 90% reliability with a complete cut off from service payment for service provision below 50%. This ensures that irrespective of the technology or contract tenor, the plant must remain reliable for the provision of system services over the course of the contract, and as such the consumer remains protected.

[5] http://networkcodes.entsoe.eu/market-codes/electricity-balancing/

Furthermore, we strongly reject the assertion that allowing long term contracts for new investment may curb the future development of new technology by locking out innovation. In fact we believe that rewarding developers of proven technology will act as a signal for others to develop in the future.

5.2.3 CAPABILITY BASED REMUNERATION

Gaelectric previously supported the TSO recommendation to use capability based payments for non-reserve based products owing to the fact that there was limited interaction with the energy market, increased security of revenues and the overall efficacy of the proposals in terms of developing an ancillary services market that promotes renewables.

Gaelectric continue to support the development of a procurement option which remunerates under a capability based methodology for grid stability services, and further is predicated on a value based approach.

5.3 Renewable Generation Participation

Gaelectric support the further consideration of the provision of reserve from renewable generators that have been curtailed. We would welcome analysis of this from the TSO.

5.4 Locational Scalar

Gaelectric support locational scalars however we understand the proposals outlined in this consultation are more akin to an ex-post determination of scarcity. Notwithstanding this we support the objective of the SEM Committee to promote reliability of performance in areas which need it most.

5.5 DS3 Budget

We have argued within this response that a value based methodology is required to promote investment in enhanced services. We believe that provided the budget allocation is under but in the region of €301m (as conservatively modelled by the TSO), the total value to the system and consumers, as per calculations carried out by the TSO, will be maintained.

A budget determination of less than this is likely to erode the value that the TSO calculated on the basis that the enhanced portfolio is unlikely to materialise. Given this we promote a DS3 services budget up to the total value of the services provided which we believe continues to maintain an investment signal provided the methodology for remuneration can indicate certainty of revenues for generators. However, any less than this is likely to impact on investment levels in the system.

In coming to this decision we urge the SEM Committee to consider the counterfactual case which includes consumers ultimately paying for fines levied by Europe for each percent of missed target, increased levels of curtailment and increased production costs.

5.6 RoCoF

We understand that the SEM Committee, in conjunction with the TSOs, are considering alternative options for achieving the specific SNSP target that is expected to be achieved by RoCoF modifications.

We view this as uncertainty in the RoCoF workstream, and hence we do not agree that the SEM Committee simply assume that RoCoF will be implemented. Rather we believe the value of system services should be considered against the backdrop of a partial percentage rise in SNSP from RoCoF/other.

5.7 SNSP Target

We note in the SEM Committee consultation paper the reference, on a number of occasions, to an SNSP level of 70%. The consultation states on page 19;

> "…This approach does not focus on strictly aiming for an achievement of a 75% SNSP but rather focuses on delivering the desired outcomes from a higher SNSP (lower curtailment etc.)"

Gaelectric do not support any amendment to the DS3 target given that constraint and curtailment reports issues in line with connection offers state an increase of SNSP to 75%.

These reports are used for the purposes of justifying investment, and any reconsideration of this will affect the banking case of a renewable generator. It has been shown that the optimum level of savings and benefits are as a result of increasing SNSP to 75% which is technically feasible under the correct contractual arrangements, and as such Gaelectric urge the SEM Committee to continue development of the DS3 programme toward the 75% SNSP target.

5.8 Cost Benefit Analysis

We have proposed that a CBA is required for new entrant technologies to access a long term contract under DS3. The purpose of this is to ensure that generators that commission on this basis provide system benefit, and can show a reduction of curtailment as a result of their operation within the market (under central dispatch conditions).

We believe the CBA should reference industry standard information, namely the Generation Capacity Statement, for input data and should be carried out on the same platform, i.e. Plexos given its extensive use across the industry. The CBA further must be independently carried out.

6 GAELECTRIC PROPOSED SOLUTION

The premise of Gaelectric's response is targeted at the development of a DS3 procurement option which provides a clear signal for investment into new flexible technology that enhances the system capability.

We strongly believe that the TSO recommendation of Regulated Tariffs should have formed the basis of a preferred option, and we have built upon this option in our proposal. Moreover, we reject the assertion that Option 5 represents value to the consumer or certainty to investors and as such, we urge the SEM Committee to continue the development of the ***Regulated Tariff option ("Option 1") with the following adaptations***;

Value based regulated tariff; The TSO calculated the value of system services conservatively at €301 million p.a. This is underlined by production cost savings of €241 million p.a. in addition to the current HAS budget of €60 million p.a.. Industry participants have signalled from the outset of the DS3 programme that a value based approach is the only way in which investment will be made into enhanced services. Gaelectric request the SEM Committee commit to a value based budget for DS3 in order to unlock this investment and maintain value to the consumer.

Long Term Contracts for new entrants are accepted by the SEM Committee in Options 3 & 5 and to an extent in Option 4. This indicates the SEM Committee agree that new entrants have a different risk profile to existing generators and require longer term certainty to compete. Gaelectric urge the SEM Committee to apply this thinking to the Regulated Tariff Option moving forward. We **support contracts of 15 years in length** provided certain pre-qualification criteria are met, and a positive CBA is presented.

Pre-qualification for new entrants should be set to a level which ensures the project is *viable*, provides a *benefit to the system and hence the consumer*, and ensures that the requisite *finance is available* to develop the project beyond pre-commercial contracts. We support the use of a verified Cost Benefit Analysis which indicates a net benefit in terms of reducing curtailment and production costs. The CBA should be signed off at Regulatory level before a long term contract is actioned. Bonding arrangements and a milestone development plan should be provided by the new entrant to ensure timely delivery is incentivised.

Pre-Commercial contracts are required for new entrants in order to enable financial investment decisions in the project, and to support a project's progress through Financial Close. We support a *4 year ahead timeframe* to support Financial Close timelines and to allow a project to construct. Such contracts should be agreed in 2015 to avoid further delays to the development of projects.

A separate tranche of the DS3 budget should be kept aside for new entrants in order to avoid first mover advantage which is anti-competitive to new entrant technologies. Gaelectric request the SEM Committee further considers this proposal and an adequate proportion of budget set aside to support new build.

Dispatch based remuneration needs to be considered in the context of revenue certainty for new entrant flexible generation in order to support a business case. Section 5.2.2 proposes a solution for new entrants.

7 CONCLUSION

In conclusion, Gaelectric do not support the further evaluation of Option 5, and request that the SEM Committee revert to a modified version of Option 1 which supports the needs of flexible new investment.

The proposals within this submission are predominantly built upon proposals already made in the SEM Committee's design of the various options. For example, long term contracts are proposed in Option 3, 4 & 5 and we believe they are therefore amenable to the SEM Committee.

In addition to this, Option 2 is developed on the basis of a value based system services pot, which whilst may not be the ideal position from the perspective of the SEM Committee, is the best avenue of ensuring adequate investment into enhanced capability.

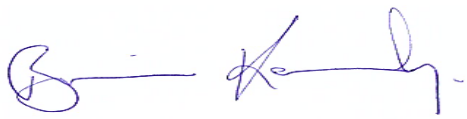
Throughout the DS3 process Gaelectric have raised concerns about the timeline to completion, and importantly the timeline for pre-commercial investment contracts for new entrants. We have recommended a 4 year ahead investment for new entrants that satisfy pre-qualification criteria as discussed throughout this response, and we ask the SEM Committee to respond to this in advance of the Q4 timeframe for decision.

The DS3 programme was developed by the TSO, under the supervision of the joint Regulatory Authorities, to offset the risk of curtailment whilst supporting new investment and the present consultation has strongly challenged this approach. Gaelectric believe the lack of direction currently is creating a hiatus in investment at a time when investment is most required in flexible assets such as Project CAES.

The I-SEM introduces a balancing risk for renewable generators and a revenue risk with respect to the proposed CRM in addition to the risk of curtailment on all renewable generators where DS3 is not progressed in a timely manner. Projects such as Project CAES are well positioned to support the system and renewables in particular, however the delay in DS3 is affecting engagements with the investment community.

We do not accept further slippage of the DS3 programme given the effect the delays to date have had on confidence in investment in both renewables and enabling technologies such as CAES. Gaelectric fully expect the SEM Committee to prioritise DS3 to the extent necessary to achieve pre-commercial investment contracts in 2015.

Gaelectric would like to take the opportunity to thank the SEM Committee for the opportunity to comment on this consultation, and we look forward to engaging with the SEM Committee and the industry on developing the DS3 programme further.



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