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**Re.: DS3 System Services Auction Design Consultation Paper (SEM-15-105)**

Dear Andrew and Mo

This letter sets out Energia's comments in response to the above Consultation Paper published by the SEM Committee on 22 December 2015, including answers to the questions posed within that Consultation Paper in Annex 1. In support of this response, we also submit a memo from NERA (the "NERA Memo"), who are internationally recognised experts in electricity markets and auction design, giving their independent views on the DotEcon proposals.

***The NERA Memo***

Relevant extracts from the NERA Memo have been reproduced for ease of reference below:

Summary of NERA's critique of the proposed auction design and commitment model

*"The uniform pricing rules that DotEcon proposes deriving from package bids may not provide winners with incentives to deliver the agreed services when required, because the cost of delivering a service for contracted generators can lie above the price paid for that service;"<sup>1</sup>*

*"Case (i) [i.e. mandated DEC bidding rules] concerns a generator that is producing too much energy to be available to provide reserve (for instance). This case would normally arise if the generator was in-merit, i.e. if its own marginal cost of production is below the energy (market) price. However, that implies that it would have to submit a DEC that is higher than its INC (which is normally impossible for reasons connected with despatch algorithms), or else to submit an INC that is higher than its costs (which would raise concerns over the potential abuse of market power)."<sup>2</sup>*

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<sup>1</sup> The NERA Memo, p.1.

<sup>2</sup> The NERA Memo, p.6.

*"The proposed contingent-commitment model does not reward generators who are constrained on for providing system services, which undermines the incentive for generators who are frequently constrained on to invest in the provision of ancillary services;"<sup>3</sup>*

*"This combination of rules does not provide a sound basis for any scheme. The only solution is for DotEcon to set out its assumptions about the costs of providing system services (as we have done above) and to analyse the implications for incentives, contracts and auction design. In the meantime, it would be imprudent to implement auction rules that give perverse incentives for efficient provision of system services."<sup>4</sup>*

Summary of NERA's views on balance of risks within / overall efficiency of the auction design, including the potential impacts on incentives to invest in provision of DS3 system services

*"Each option requires providers to bid a guaranteed price and volume for services whose costs are intrinsically uncertain. DotEcon expects providers to allow for these risks by building a risk premium into their bids. However, many of these risks derive from the design of the system and are not necessary for procuring system services. Owing to the arbitrary nature of these risks, they will affect different providers to different degrees, requiring them to include different risk premia in their bids, leading to an unnecessary and inefficient distortion of the auction. In addition, this unnecessary risk may discourage investment even if it raises prices."<sup>5</sup>*

*"Different types of plant and technology generate (or consume, or store) electricity in different periods, have different cost structures, and have different proportions of fixed and variable costs. Since DotEcon has not given this issue any consideration, its proposals impose risk arbitrarily on different plants and technologies to different degrees. It is hard to work out a priori which plants and technologies will be hit hardest by these risks, and which to a lesser extent, but investors will have to estimate the risks they face when compiling their bids in the auction for DS3 contracts. Those facing the greater risks will need to bid a higher price to compensate for greater risk and will face a disadvantage in the auction."<sup>6</sup>*

*"The need to build a risk premium into bids is a consequence of certain decisions about the auction design and so represents an unnecessary additional cost to consumers, relative to other more cost-reflective (and less risky) approaches. In addition, this unnecessary risk may discourage investment even if it raises prices."<sup>7</sup>*

Summary of NERA's conclusions

*"DotEcon has formed ... [its] proposals within the framework of previous decisions taken by the SEM-C, but has chosen to deviate from those decisions in some respects. In our view, either DotEcon should abide by the SEM-C's decisions, or the SEM-C's decision should be amended in the light of experience from implementing the current version, or DotEcon should make a different proposal that deviates from the SEM-C decision in a different way. We have reached this conclusion because DotEcon has chosen to impose an arbitrary set of constraints on its current proposals that distort incentives and hinder the efficient procurement of system services. The outcome is a flawed proposal*

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<sup>3</sup> The NERA Memo, p.1.

<sup>4</sup> The NERA Memo, p.6.

<sup>5</sup> The NERA Memo, p.1.

<sup>6</sup> The NERA Memo, p.7.

<sup>7</sup> The NERA Memo, p.7.

*that is not consistent with either regulatory guidance or economic imperatives. It does not make sense to try to salvage or amend individual parts of the current proposals, without undertaking a basis analysis of the costs of providing system services. Proceeding with proposals developed without the benefit of such a cost analysis would be imprudent. Auction outcomes would not be efficient and are unlikely to meet the needs of system security.”<sup>8</sup>*

*“If it is not possible to structure an auction efficiently, it may be necessary to procure system services by offering a tariff (as at present). There is always a risk that tariffs do not accurately reflect costs. If tariffs are too low, then the TSO will be unable to procure enough system services and will have to revise the tariff upward. If the tariffs are too high, providers may be overpaid for providing system services. However, in such circumstances, systematic differences between these tariffs and the provider’s costs would be largely offset when market participants come to bid for Reliability Options in the CRM auctions. The more they expect to earn from system service tariffs, the less they will require in the CRM. Indeed, fixing tariffs for system services would provide a more certain basis for CRM auctions than the risky auction proposals outlined by DotEcon.”<sup>9</sup>*

*“... [T]he electricity industry does not exist in order to spawn auctions. Rather, auctions help the electricity industry achieve its objectives if, and only if, they produce a more efficient outcome. If they produce inefficient outcomes, they are unhelpful and should be dropped.”<sup>10</sup>*

Energia concurs with NERA’s findings and conclusions, but before we elaborate on the substantive basis for this and other concerns with the proposals, we would first like to echo industry wide concerns about the compromised process for meaningful stakeholder engagement and project delivery in relation to the wider I-SEM Programme which incorporates DS3.

### **Process and Project Delivery**

The Chief Executive of the Electricity Association of Ireland (EAI) recently wrote to his counterparts in the Commission for Energy Regulation (CER) and the Utility Regulator (UR) on 4 February 2016 with reference to the compressed timetable for delivery of the complex I-SEM Programme. He stressed the need for a base-line project plan, understood and agreed by all participants, without which the volume of simultaneous and interlinking consultations currently in progress is so great that meaningful engagement by the RAs and TSOs with companies or their consultants is *undeliverable*. He further requested that a realistic and pragmatic project plan be agreed and its implementation progressed and monitored in a professional manner. We would like to echo these points in the context of DS3.

The compressed and highly ambitious timetable against which the DS3 process is being progressed, which is a result of the delays already incurred in the DS3 project, is placing a significant burden on stakeholder resources, particularly with the ongoing intensive schedule of I-SEM which is running in tandem. The current level of congestion, including the overlap of fundamentally important consultation papers<sup>11</sup>, being experienced by stakeholders relating to I-SEM and DS3 is so great that

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<sup>8</sup> The NERA Memo, p.1.

<sup>9</sup> The NERA Memo, p.13.

<sup>10</sup> The NERA Memo, p.13.

<sup>11</sup> In particular, responses to three major consultation papers relating to I-SEM and DS3, on market power (SEM-15-094), the capacity remuneration mechanism (SEM-15-014), and DS3 auction design (SEM-15-105), had to be submitted in quick succession on 18 January, 8 February and 12 February 2016 respectively and the

meaningful stakeholder engagement is undermined. With reference to the proposed DS3 Auction Design developed by DotEcon (in collaboration with the TSOs who engaged them), it is particularly unhelpful that there was no engagement with industry whatsoever until publication of the final report which contains proposals that are radical, complex and alarming within the context of electricity markets (for reasons explained later) and that are legally problematic in key areas, not to mention inconsistent with the I-SEM HLD<sup>12</sup>.

This response should therefore be considered to be preliminary. Further submissions may be necessary to elaborate and build upon the views expressed herein given the compressed DS3/I-SEM timetable in which to review, understand and respond meaningfully to a high volume of consultations and review processes

### ***Substantive Concerns with DotEcon Proposals***

From Energia's review of the DotEcon Report, supported by NERA's expert analysis, our high level concerns are that the proposals will impose several undesirable features on the system services market. These include:

- A) A poorly designed auction process that could deliver prices for individual services that are below the operating costs of system service providers cleared through the auction. This will result in auction outcomes that are not "incentive-compatible", as explained in the accompanying NERA Memo, and will impose significant and unmanageable commercial risks on service providers who compete in the auction – i.e. it will create "very unhappy winners".
- B) A significant transfer of risk from TSO to provider – i.e. the proposals impose a largely fixed revenue and show no understanding of how costs vary, both unpredictably in relation to out-turn 'availability' for system services and predictably in response to changes in output, such that variations in return for providers could be substantial.
- C) A significant increase in the complexity of the arrangements, not just in the DS3 process itself, but also in its interaction with energy and capacity markets – i.e. providers are faced with having to coordinate complex interactions between DS3, energy and capacity markets.
- D) Removal of any revenue certainty for new investors - i.e. the minimum revenue guarantee is now deemed not to be needed and actual revenues vary unpredictably.

Each of these features on their own would represent a barrier to investment, and we are therefore concerned that the combination of all four will not deliver the DS3 system services that the TSO requires to minimise wind curtailment.

Of particular concern to us is the lack of attention to risks and incentives within the proposals. This seems particularly obvious in the scenario of high levels of wind generation, when DS3 system service providers are most needed to support variations in renewable generation. At such times, at

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consultation periods did not account for this overlap or other significant stakeholder demands associated with I-SEM (for example the I-SEM Rules Development Process).

<sup>12</sup> The co-optimisation of energy and reserves was expressly ruled out during the consultation process on the I-SEM HLD and this is effectively what is being proposed as part of the DotEcon proposals. Specifically, footnote 20 of SEM-14-008 states "For the purposes of the revised SEM HLD, co-optimisation of energy and reserves has been ruled out as a possible option". Having been ruled out this option was never re-considered and did not feature as part of the I-SEM HLD Decision.

least some DS3 system services are likely to come from providers who are “constrained on” - i.e. despatched out of merit. Under DotEcon’s proposals, however, such providers will have little or no economic incentive to provide system services, which seems perverse, and could undermine their delivery when most needed:

- at worst, providers could receive less than even their cost of generation and so lose money (if their BM offer price is capped at the market price – DotEcon, Box 2);
- at best, in the “more lenient” version, they are remunerated only for the cost of generating energy but are paid nothing for providing system services (DotEcon, Box 3, assuming that the contractual reserve payment fully offsets the deduction of reserve payments from BM revenues).

Under DotEcon proposals the TSO would therefore not be paying some system service providers (or could even be forcing them to operate at a loss) when their services are most needed by the system. We note that these are likely to be valuable service providers (from a system management perspective), which is why they are constrained on in the first place – i.e. they are critical for the TSO to be able to securely operate the system. This outcome is therefore perverse, and in combination with proposals on prescriptive bidding rules, the approach will place such generators at a substantial competitive disadvantage in the CRM, despite being vital to maintain system security. This could result in the inappropriate exit of strategically key generation assets, which in turn could lead to local security of supply issues and / or higher levels of curtailment for wind, contrary to the objectives being pursued by DS3 in the first place.

Such proposals, on their face, disregard the constitutional and statutory requirements which govern the exercise by the regulatory authorities of their powers concerning the single electricity market. As we have already explained in our response to the consultations on market power mitigation measures (SEM-15-094) and the capacity remuneration mechanism (SEM-15-014), they include, among others:

- The functions and duties of the CER under section 9 of the Electricity Regulation Act 1999, which reflect the objective of fostering effective and sustainable competition. In particular, under section 9(1), the CER is responsible for ensuring, among other things, effective competition and the efficient functioning of the electricity markets and this requires the CER to monitor, among others “the level of competition and transparency in respect of wholesale prices...” It is also a duty of both the Minister and the CER under section 9(3) to carry out their functions and exercise their powers in a manner which does not discriminate unfairly between holders of licences and the ESB.
- Section 9(4)(a) of the Electricity Regulation Act which requires both the Minister and the CER, in carrying out the statutory functions in Article 37 of the Electricity Market Directive, to have regard to the need, among others, to secure that licence holders are capable of financing the undertaking of the activities which they are licensed to undertake.
- Where a measure affects a constitutionally protected right – such as the right to property or the right to earn one's livelihood, the implementing authority is under the obligation to ensure (a) that the measure is rationally connected to the objective and is not arbitrary, unfair or based on irrational considerations; (b) that the measure impairs the right as little

as possible and (c) that the measure's effects on the right are proportional to the objective.<sup>13</sup>

- The general principle of European and administrative law of equal treatment and non-discrimination whereby similar situations are treated in a similar way and dissimilar situations in a different way.

The proposal that in effect, the provision of system services is in some cases not remunerated at all, or not remunerated in full so as to cover all relevant costs, and accordingly provided at a loss by a generator, displays a disregard for the requirement to ensure that all generators are able to finance their activities. In particular, the proposals do not properly account for the position of "constrained on" generators and as such are discriminatory and unfair.

Moreover, as existing generators such as Energia and their shareholders are highly likely to be constrained on from time to time, the proposals directly and significantly affect their property rights. As participation in the market(s) designed by the RAs, including the market for system services, is the only means available to existing generators such as Energia and its shareholders to exercise their property rights and right to earn a livelihood, it is incumbent upon the RAs, and essential, that the market design respects such property rights in all instances and allows a generator to recover the costs that it has properly incurred – any design which does not allow a generator to recover its costs, as would be the case with the DotEcon proposals, would amount to a form of unconstitutional expropriation.

The mandated INC proposals and DEC proposals also indicate a lack of detailed consideration of the costs incurred to provide system services.<sup>14</sup> This misunderstanding may be a result of the origin of these proposals seeming to be in the telecommunications sector, which incurs only the fixed costs of investment, and virtually no incremental costs of output. In reality, providers of system services in the electricity sector incur fixed costs to provide certain equipment, and variable costs to provide output from it. The proposals do not adequately recognise this variation in costs (which creates commercial risk for participants), or the associated incentive problems they create. While participants in theory could add a risk premium to auction bids to compensate for these risks, we observe that this approach results in an imperfect hedge for service providers, and an inefficient outcome for customers (i.e. will unnecessarily increase costs to consumers). It also does not solve the fundamental problem that the proposals do not create the appropriate economic incentives to provide system services. The alternative proposal for Contingent Commitment put forward by the RAs in section 7.3 of the Consultation Paper does nothing to allay the concerns we have and the fundamental issues with the DotEcon proposals<sup>15</sup>.

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<sup>13</sup> *Heaney v Ireland*, [1994] 3 I.R. 593.

<sup>14</sup> Energia are concerned that the proposals for mandated DEC bidding may not be implementable in practice, if it requires the service provider to submit bids to the balancing market. This is because a generator who is scheduled in the energy market is likely to have running costs that are below the energy market price – i.e. be in merit. If it therefore submits a DEC price at the energy market price, this DEC is likely to be higher than its INC price, assuming this is close to SRMC. Submitting DEC prices that are higher than INC prices is unlikely to be viable under energy market rules. Therefore, unless the INC is also changed, which would result in further potential distortions to balancing market pricing, we do not believe this proposal is workable. These issues are explained in more detail in the accompanying NERA memo.

<sup>15</sup> See our response to consultation question 20 in Annex 1 for further details.



The DotEcon report also shows a strong desire—which is not justified by any legal, economic or regulatory requirements—to protect the TSO from upward variations in its costs. However, we note that DotEcon is happy to impose financial risk on providers, and to create unnecessary uncertainty over their future DS3 revenues, which will severely damage the incentive to invest in providing system services. We believe in the context of needing to secure investment to deliver the required levels of DS3 system services the balance of risk implicit in the proposals is inappropriate.

### **Market Power Concerns**

Energia notes that ensuring that the market design for the provision of system services sets up a level playing field for all providers is a key aspect of the statutory duties of the regulatory authorities:

- The framework governing the provision of system services must be consistent with the Third Energy Package and its objectives, namely, as regards electricity, the implementation of the internal market in electricity so as to deliver real choice for all consumers of the European Union and more cross-border trade, and achieve efficiency gains, competitive prices and a higher standard of service, and contribute to security of supply and sustainability. This means that measures that are adopted by the regulatory authorities must enable further competition and the supply of electricity at the most competitive price.<sup>16</sup>
- Section 9 of the Electricity Regulation Act 1999 reflects the objective of fostering effective and sustainable competition. In particular, under section 9(1), the CER is responsible for ensuring, among other things, effective competition and the efficient functioning of the electricity markets. It is also a duty of both the Minister and the CER under section 9(3) to carry out their functions and exercise their powers in a manner which does not discriminate unfairly between holders of licences and the ESB. Section 9(4)(a) requires both the Minister and the CER, in carrying out the statutory functions in Article 37 of the Electricity Market Directive, to have regard to the need, among others to promote competition in the generation and supply of electricity.
- The regulatory authorities are also required to ensure that the rules that they put in place are consistent with, and reflect, the principles underlying the competition rules, including section 5 of the Competition Act 2002 to 2014 and Article 102 and Article 106 of the Treaty on the Functioning of the European Union. This means that the regulatory authorities are obliged to take into account positions of market power, including in particular the position of market power enjoyed in electricity markets by a State-owned entity, namely the ESB. Measures which do not properly distinguish between the position of (1) undertakings, in particular public undertakings, in a position of dominance on the market and (2) others, would lead to unlawful discrimination and distorted competition. Similarly measures which do not recognise the special position of public undertakings and the possible differences in their incentives and consequent market behaviour would be incompatible with Articles 102 and 106 TFEU and Article 4 of the Treaty on the European Union.

Energia notes that DotEcon has not considered the appropriateness of the auction approach in the context of the structural market power issues that exist in the I-SEM – i.e. whether sufficient

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<sup>16</sup> Recital 8 of the Electricity Directive, Directive 2009/72/EC.

competition exists to support a combinatorial auction approach, or are too many services too concentrated. While we welcome their conclusion to exclude “any services with significant market power from the auction and rely on a regulated tariff for these services”<sup>17</sup>, we believe this analysis should have been completed prior to proposing such complex auction arrangements and the analysis must be completed prior to taking any enduring decision on this matter.

The proposal to include semi-competitive services within the auction, however, is disconcerting to Energia. We are concerned that the approach could increase the capability for a structurally dominant participant to exert market power within the system services market (which could be detrimental to competition). The proposed approach could also make monitoring anti-competitive behaviour in the ancillary service market more difficult, given the complexity of the auction clearing system, and the lack of transparency from participant’s point of view regarding the determination of results. It does not appear to us accordingly that sufficient attention has been given to how market should be addressed with the view to allowing fair competition in the provision of system services, consistent with the statutory duties and objectives of the regulatory authorities.

Energia would therefore welcome further detailed consideration of these issues, including the criteria proposed for determining whether insufficient or limited competition exists, and for this to be duly consulted upon.

### ***Unduly Discriminatory Proposals***

#### **1. Separate Auctions of Long Term Contracts for New Plant Only**

Energia does not believe that DotEcon's proposals to hold separate auctions for system service contracts depending on whether competitors are existing providers, which will only be offered annual contracts, or "new" providers (providers who have yet to build), which will be entitled to longer term contracts, are well thought out. They are, for a start, at odds with the policy decided by the CRM workstream to use one single CRM auction. Moreover, and fundamentally, no objective reasons have been provided by DotEcon explaining how holding separate auctions will further the objectives pursued by the regulatory authorities. In this regard, DotEcon's rationale appears to be to address a technical problem with its proposed auction rules, namely that existing providers might not be awarded a contract even though they bid less than the clearing price. The possibility of the clearing price being *above* the bid prices of some existing providers is possible, however, only as the result of artificial and arbitrary constraints imposed on the conduct of the auction, in particular that separate quantities to be sourced from new providers and from existing providers would be specified in advance.

Energia believes that this issue should be addressed, not by holding separate auctions for longer contracts available to new suppliers, and shorter contracts available to existing suppliers, but by addressing the problem at source, and treating new and existing providers equally. This means that no targets should be set for the procurement of system services from new providers. We note the following:

- DotEcon’s proposals to set a target for the quantity of system services brought from new providers are not logical or rational. In particular, it is not rational to set a target for the quantity of system services bought from new providers if they are assumed to be more

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<sup>17</sup> See page 19 of DotEcon Report.



expensive than existing providers: it would be cheaper to procure more from existing providers. Of course, and as set out in our responses to the market power mitigation consultation and the capacity consultation, a fundamental principle of administrative law and constitutional justice is that public authorities such as the CER act in a manner that is (1) consistent with the legal framework within which they operate and (2) reasonable. A decision may only be reasonable if it is not irrational and/or arbitrary and/or discriminatory.

- DotEcon's proposals also introduce a significant degree of unpredictability and therefore arbitrariness in respect of the quantities of system services that providers will be able to offer. P. 104 of its report, DotEcon acknowledges in respect of the evaluation of new investment bids that "there may be some subjectivity in determining these factors and some associated risks (e.g. possible legal challenges) that make it difficult to do so in practice". Splitting the auction volumes between annual contracts (for existing providers) and long term contracts (for new providers) would involve a similar, if not higher, level of subjectivity. In these circumstances, it is simply not an option that is open to the regulatory authorities. Implementing a separate auctions' system would rely on discriminatory and arbitrary decisions and, contrary to the European Treaties' principle of undistorted competition, establish an unlevel playing field in the provision of system services where existing providers could be excluded although they deliver more efficient services for the benefit of I-SEM consumers.
- The regulatory authorities have acknowledged that the procurement of Systems Services is likely to be governed by the Utilities Procurement Directive. The rules provided for by the Utilities Procurement Directive are based on a number of fundamental principles which must be ensured at each level of the procurement process. They include the principles of non-discrimination, equal treatment, transparency, mutual recognition, proportionality, freedom to provide service and freedom of establishment. Energia believes that the dual auction system proposed by DotEcon will not lend itself to the development of rules that are compliant with public procurement requirements. In particular it will be impossible, among others, to set up rules that are non-discriminatory, as they would exclude from some auctions, providers who are in fact in the position to provide the services when assessed on an objective basis, and rules that are transparent.

Fundamentally, there is no valid reason to differentiate between existing and "new" providers of system services as the services that they would provide are the same. In accordance with the fundamental principles of equal treatment and non-discrimination, in the absence of pertinent differences between existing and "new" providers of system services, they should be subject to the same rules and regime and allowed to compete in the same auction of the same contracts. Any other approach would be contrary to the public procurement rules, section 9(3) of the Electricity Regulation Act and would not allow for the level playing field necessary to the development of competition, contrary to the requirement that the regulatory authorities promote competition in the generation of electricity.

## **2. Treatment of the interconnectors**

Issues of discriminatory treatment also arise in respect of the proposed treatment of the interconnectors. In its report, DotEcon explains that "interconnectors differ fundamentally from other system service providers because *they consist of transmission infrastructure and the*

*technical realisability of system services is a function of the electricity flows across the interconnector at a given time. It appears unlikely that an interconnector would easily be able to influence its market position and therefore its availability for system services.”* In other words, DotEcon finds that for the purpose of system services, interconnectors are unable to affect actual flows, and hence their provision of reserve and other ancillary services. That alone would be good reason for excluding interconnectors from the provision of system services at all (and the same applies to capacity in the CRM).

However, instead of excluding interconnectors, DotEcon proposes that they should not participate in the SS auction, face contractual obligations or be paid for system services “on the same basis as other providers”. Then, DotEcon defers to “the SEM-C’s view” (without further reference) that (i) “the volume requirement would therefore be reduced by the maximum quantity a single bidder can bid for and the EWIC would always be awarded a contract for this amount”; (ii) it would be a price-taker and would automatically be paid at the clearing prices established without its participation;” and “the EWIC would receive payments whenever it is available.”

These proposals create a very advantageous position for the interconnectors as they will be given a contract at a clearing price for whatever “availability” they provide in circumstances where it is acknowledged that they have no power to adjust their output in the light of the TSO’s needs, i.e. that they cannot actually provide reserve energy! It is difficult to see how this is not simply discriminatory and in breach of the principle of equal treatment.

The contradiction between DotEcon’s stated views (Interconnectors are transmission facilities and cannot provide energy services) and the proposal put forward under instruction from the SEM-C decision (Interconnectors must be awarded contracts without participating in the auction) means that in fact absolutely no valid reason has been provided to explain and justify the very favourable position being offered to the interconnectors. On the face of it, in the absence of any justification for the preferential treatment awarded to the interconnectors, any such decision would be unlawful because it is arbitrary and discriminatory.

### ***Suggested Way Forward***

DotEcon claim that its proposals are required to make the SEMC decision on DS3 work, but Energia is concerned that closer inspection of them reveals fundamental flaws as outlined in the NERA Memo submitted along with this response, relating to distorted incentives and inappropriate transfer of commercial risk, and therefore conclude that the proposals are unlikely to deliver the system services required to reduce levels of curtailment for wind generation.

If DotEcon is correct in its assertion that the current SEMC decision on DS3 is not implementable, then we agree that the SEMC decision must be amended. However, for reasons set out in the NERA Memo and the related issues discussed above; the DotEcon proposals do not seem to be a viable alternative. We therefore suggest that the RAs should adopt a simpler approach given the timeframes available:

1. **Regulated tariffs paid on a ‘capability basis’, not an ‘availability basis’ (i.e. no commitment to produce energy).** A system of tariffs would at least provide stable revenue streams for participants (subject to 2 below) and would also allow the TSO to manage its expenditure more predictably, which removes the need for complex (“contingent”) commitments from bidders. To ensure delivery of the required investment for DS3, Energia would again emphasise that

tariffs need to be set at an appropriate level – i.e. they should be based on the estimated value to the consumer of delivery of the DS3 programme. A cost based approach will not deliver the investment required to ensure delivery of DS3 and will therefore lead to higher levels of curtailment undermining the already substantial investment in renewables in the all-island market.<sup>18</sup>

2. **Fix DS3 tariffs for successful CRM participants for the duration of any CRM contract they secure.** The purpose of this rule is to let participants know what DS3 revenues they would receive when they are formulating their bids in the CRM auction. Such a rule would deliver certainty for new investors and other participants, without the need for complex combinatorial auctions. It removes the need to pay less to “losers” – avoiding the potentially perverse incentives this creates for the TSO (i.e. everyone would be eligible for the same tariff and the TSO would be subject to the same costs when calling on any provider of services). Furthermore, in combination with capability-based payments, it also removes one set of unknown variables when bidding in CRM auctions (i.e. DS3 revenues). Given the large scale uncertainty and financial risks faced by participants in the transition to I-SEM this would provide some welcome stability.<sup>19</sup>
3. **Use the CRM as the main vehicle for selecting plant.** This principle removes the possibility of plant winning in the DS3 auction but not in the CRM auction greatly simplifying the need for complex interdependency arrangements and auction re-runs. The market signal provided by DS3 tariffs therefore emerges, all other things being equal, in the CRM auction.

We believe that the above proposal represents a better balance of risk between the TSO and providers, while delivering solutions to key concerns, such as TSO cost management and revenue certainty for providers. We therefore conclude that they are significantly more likely to secure the levels of investment required to deliver DS3, and note that DotEcon acknowledge that the “no commitment model” would be consistent with a regulated tariff approach:

“We note that, though the no commitment model is not suited to an auction, it seems a more viable model with regulated tariffs, which the TSOs can use as a price instrument to incentivise providers to position themselves as available.” (DotEcon report, p.45 footnote 30)

The above represents our current views based upon analysis of the DotEcon proposals, however, given the current I-SEM and DS3 project plan, and the fact that this major consultation on DS3 has ran in parallel with two other major consultations on market power and the capacity remuneration mechanism, Energia strongly emphasises that sufficient time has not been allocated to participants to properly consider and review what are complex proposals that recommend fundamental changes to the SEM Committee’s DS3 HLD (and in our view, the I-SEM HLD). While we believe our suggested alternative could be workable and pragmatic within the timescales available, we recommend further consultation in this area is required with stakeholders, to ensure an appropriate approach to

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<sup>18</sup> For a more detailed discussion of our views in relation to tariff setting please see our response to the DS3 System Services Consultation Regulated Tariff Calculation Methodology consultation paper submitted 18<sup>th</sup> December 2015 to EirGrid.

<sup>19</sup> We acknowledge there may be issues in the suggested approach for smaller scale investors in DS3 who may not want, or be eligible to compete in the CRM, but we believe special arrangements for long-term contracts at fixed tariff rates could potentially be put in place for such providers.

DS3 system service procurement is developed within the timelines available – i.e. one that is likely to deliver the substantial investment required.

### **Conclusions**

In conclusion, Energia is fully supportive of the DS3 initiative with a view to facilitating renewables and minimising curtailment (in line with European legislation). However, these objectives can only be achieved by ensuring that flexible generation is adequately remunerated in combination with I-SEM revenue streams. This in turn will only be the case where overall I-SEM and DS3 arrangements provides for a clear framework which adequately rewards, on a non-discriminatory basis, both existing and future investments which are necessary to meet the broader energy policy objectives, including security of supply, being pursued. This means, having regard to the statutory duties and objectives and the legal requirements which apply to the actions of the regulatory authorities, establishing a framework that is conducive of the development of competition and this includes setting objective rules the application of which is not determined by the existing presence or not of the provider. Where due account is taken of market power issues, rules which promote revenue adequacy for all investments will further competition and bring the required investments. Energia does not believe that DotEcon proposals are consistent with these principles and would allow the regulatory authorities to achieve their statutory objectives.

It is also imperative that the new DS3 arrangements are implemented with expediency and that they provide a financeable solution for investors. Energia believes that one of the major risks to the timely delivery of the necessary DS3 system services is the overly complicated design of the DS3 arrangements, a concern which is further compounded by the proposals in the DotEcon Report, which are fundamentally flawed, as validated by the expert independent analysis of NERA. Energia therefore reiterates its concerns that the proposed DS3 design is unnecessarily complex, fundamentally flawed and, in our view, impractical, and we are concerned it will not deliver the investment required, especially given the highly contracted timelines for its development in parallel with I-SEM. The regulatory authorities will be aware of the requirement that apply to them to have due regard to the need to ensure that generators are capable of financing the activities for which they are licensed. We believe that the proposals put forward for system services, however, will compromise the ability of generators that are needed for system security to finance their operations and furthermore, raise very serious issues as regards their direct and significant impact on the constitutionally protected rights to property of such generators, including Energia and its shareholders. In this response we have suggested a pragmatic solution that does away with these issues, will promote efficient investment and is consistent with the spirit of the DS3 High Level Design and we would urge the SEM Committee to give this serious consideration.

We remain at your disposal should you wish to discuss any of the above.

Yours sincerely



Kevin Hannafin  
Regulation Manager, I-SEM Project

## Annex 1: List of Consultation Questions

For ease of reference, we set out below the list of questions in the Consultation Paper and our response to them. This Annex must be read in conjunction with the main body of our response letter and the independent NERA Memo submitted along with this response.

### ***Question 1: What are your views on the proposals to try to ensure a level of consistency between CRM and DS3 System processes?***

Energia observes that it is the preferred procurement approach selected for DS3 (i.e. auctions) that generates difficulties in relation to ensuring consistency between CRM and DS3. We suggest that adoption of a tariff based approach would significantly reduce the complexity of the DS3 process. The CRM could then be used as the primary selection mechanism within the I-SEM, while any required pre-qualification required to ensure delivery of DS3 system services could be added to the pre-qualification and implementation agreement for the CRM.

If a decision is taken to proceed with the dual auctioning approach then we do see benefits in streamlining the process for participants, but note that the products / services being contracted for under DS3 and CRM are fundamentally different (indeed the DS3 system services themselves are fundamentally different from each other), and therefore alignment of implementation agreements and qualification processes should only be implemented where it is appropriate to do so, otherwise the overall integrity of each scheme could be compromised.

Energia does not support combinatorial auctions for DS3 system services, or a combinatorial auction which includes CRM and DS3 system services. Such auctions are black boxes and result in sub optimal outcomes for participants – i.e. with unhappy winners – which in the context of the risk imposed upon service providers under DotEcon proposals could result in very unhappy winners undermining investment incentives.

Energia does not support segmentation of existing and new providers and note that the service being offered by new and existing providers are the same. Therefore it is difficult to understand the rationale for segmenting the market. In the absence of objective differences between the system services provided by existing and new suppliers, existing and new suppliers should be treated the same and offered the same opportunity to participate in auctions. In fact, even if the system services that existing and new suppliers were capable to provide differed, it would still not justify establishing separate auctions and separate rules depending on whether the provider is "existing" or "new": rather all should be entitled to bid for the services that they are in the position to provide. Only such an approach could be considered to be compliant with the principles underlying the Utilities Procurement Directive.

Energia furthermore does not accept that developing a competitive market for system services requires favouring entry into the market by favouring new entrants. Encouraging efficient entry means providing a level playing field so that new and existing providers have equal opportunity to compete, to the ultimate benefit of electricity consumers. It does not require the segregation of new and existing providers, which is in any event ineffective in ensuring efficient outcomes and contrary to the principle of non-discrimination, which must guide the regulatory authorities in the choice of the DS3 mechanisms.

We also note that the proposal to have a dual auction system will involve in its implementation introduces a significant amount of subjectivity in relation to how volumes requirements would be set by the TSO for existing and new providers. This introduces unwelcome regulatory uncertainty, contrary to the statutory objectives and functions. It also creates further risks that depending on how requirements are set existing providers are excluded even though they deliver more efficient service provision for I-SEM consumers.

For the same reasons as those that we have articulated in our response to the consultation on the Capacity Remuneration Mechanism in respect of similar proposals, providing an unwarranted and objectively unjustified advantage to new entrants is to unfairly discriminate against existing plants and distorts competition in the market for the provision of system services.<sup>20</sup>

***Question 2: Do you consider that the SEM Committee should consider facilitating a link (where participants require) to only proceed with participation in the DS3 System Services auction subject to a successful outcome in the CRM auction or (vice versa) i.e. create an interdependency that as much as possible mitigates the need for auction re-runs.***

The approach of running two auctions processes will result in auction re-runs regardless of whether an interdependency is implemented or not. For example, if a participant clears in DS3, is therefore eligible to compete in CRM but does not clear in CRM this then leaves them either with an exposure under their DS3 contractual arrangements, or if the contract is voided, the TSO having under procured volumes. We note these issues do not occur under the tariff based approach set out in the main body of our response letter.

While a combinatorial auction between DS3 and CRM may seem to solve this issue it leads to other more fundamental problems, including a black box auction clearing mechanism and unhappy winners. Within the context of the substantial commercial risks imposed on service providers under the DotEcon proposals, these outcomes would seriously undermine incentives to invest.

***Question 3: What are your views on managing the interactions between the CRM and DS3 System Services auctions?***

As set out above, we believe management of these interactions would be significantly easier under the proposed tariff based approach. We note that the DotEcon Report indicates that fundamental changes to the SEMC decision on DS3 are required (as summarised in Table 1 of the Report). However, for the reasons set out in the main body of our response letter and in the NERA Memo, we do not believe their proposals are viable. We therefore suggest a tariff based approach combined with a “no commitment” model is reconsidered, as we believe this would address many of the issues discussed in this section and be significantly more likely to secure the investment in DS3 that is required.

***Question 4: Do you agree with the proposals for separate DS3 System Services long-term and short-term auctions as set out in the DotEcon recommendation?***

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<sup>20</sup> As noted in our response to the CRM consultation, the decision of the European Commission of 23 July 2014 approving the State aid to be provided by the UK to capacity providers, including longer contracts for new entrants, has been appealed to the General Court (see Case T-788/14 and also Case 793/14) on the ground, inter alia, that the discriminatory availability of longer contract durations cannot be justified by the legitimate objective of procuring the necessary amount of generation capacity.



No, for the reasons set out in our answer to question 1 above. Fundamentally, there is no valid reason to differentiate between existing and “new” providers of system services as the services that they would provide are the same. In accordance with the fundamental principles of equal treatment and non-discrimination, in the absence of pertinent differences between existing and “new” providers of system services, they should be subject to the same rules and regime and allowed to compete in the same auction of the same contracts. Any other approach would be contrary to the public procurement rules, section 9(3) of the Electricity Regulation Act and would not allow for the level playing field necessary to the development of competition, contrary to the requirement that the regulatory authorities promote competition in the generation of electricity.

***Question 5: Do you think the treatment of long-term contracting for System Services should be aligned with the proposed framework in the CRM?***

Given that investors are likely to require DS3 and CRM revenues it would make sense to align long-term contracting between DS3 and CRM. However, we observe that holding separate auctions for existing providers (T-1) and for new providers (T-4) is likely to result in the TSO driving potentially inefficient exit through their volume allocation for each segment of the system services market. We note our proposals in relation to regulated tariffs effectively align long term contracts for DS3 and CRM by fixing DS3 tariff rates for successful CRM participants for the duration of their CRM contract.

Apart from the obvious and significant legal difficulties of discriminating between (or even defining) new and existing plant, we foresee a number of economic and practical difficulties with offering new entrants very long term contracts. This was explained in significant detail in our response to the recent capacity remuneration mechanism consultation paper (SEM-15-014).

The anomalous approach taken in GB, offering “up to 15 year” contracts for capacity, offers no useful precedent for the I-SEM or DS3. Legally it is under challenge and internationally it represents a significant outlier.

Discriminating in favour of new plant will only saddle consumers with higher costs than necessary. Moreover, precedents from other regimes, and consideration of the technological and economic risks facing investors, suggest that a shorter contract period is in order. For reasons of administrative simplicity and non-discrimination, we favour a model that offered shorter term contracts to all generators, bolstered by the promise of relatively stable (annual) contracts after those contracts end. Offering all participants (new and existing) the chance to compete for contracts of shorter duration (e.g. 3 to 7 years) will reduce risk and cost to consumers and will avoid discrimination. Should it be shown that conditions in the I-SEM require an even longer duration, we strongly recommend, based on our considerable investment experience, that there is no reason to extend ROs beyond 10 years.

***Question 6: What are your views on the proposals to calculate clearing volumes for the auction as set out by DotEcon?***

Energia is concerned by the admission by DotEcon that their simplified approach to calculating volume requirements “may fail to capture all of the TSOs requirements for procurement of system services”<sup>21</sup>. A minimum requirement for the design of the auction process however must be that

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<sup>21</sup> DS3 System Services Auction Design Consultation Paper (SEM-15-105), page 12.

the TSO's requirements for procurement of system services is met, otherwise the result approach would be systemically flawed.

We note the suggested approach to addressing this issue is to increase the granularity of products. As we set out in our answer to the next question, however, this leads to the following issues:

**Increased Time Granularity:** Lower granularity time products will increase out-turn availability risk, and therefore the commercial risk faced by system service providers under the auction design. As set out in our answer to the next question, we believe this will reduce revenue certainty for providers, increasing barriers to investment under the dot.econ auction proposals.

**Increased Locational Granularity:** Care needs to be taken if introducing locational granularity that the additional auction complexity provides more efficient outcomes. This is acknowledged in the DotEcon Report. In particular careful consideration would need to be given to the effect splitting volumes geographically has on levels of concentration in the system services market (i.e. market power issues).

**Technology Type:** We note that the TSOs do not believe this is required, as also confirmed in their DS3 Consultation on Volume Calculation Methodology and Portfolio Scenarios published on 14 October 2015 (the "Volumes Consultation")

**Question 7: Do you agree with the proposals for introducing granularity for the purposes of calculating auction clearing volumes?**

In answering this question we address each of the proposals for introducing additional product granularity in turn.

**Increased Time Granularity:** Energia does not agree with the introduction of lower time granularities on the basis that this would significantly increase the out-turn availability risk faced by participants under the dot.econ proposals. Forecasting 'availability' for provision of system services, and the lost opportunities and commercial risks associated with it, will be extremely difficult given the high and increasing levels of intermittent wind generation and the wholesale changes to energy trading arrangements being introduced as part of the move to I-SEM. Energia note that under current proposals participants will be bidding in DS3 auctions with no operation experience of I-SEM. Introduction of products with lower granularity time banding therefore simply increases the difficulty of accurately forecasting 'availability' for system services and the cost of their provision, and therefore participant's overall commercial risks when participating in auctions. As discussed throughout this response this is likely to undermine incentives to invest in provision of system services.

**Locational Granularity:** In relation to splitting products by location we observe that there are significantly more constraints than just the north / south constraint on the transmission system. We therefore do not believe that splitting the market between Northern Ireland and the Republic of Ireland is sufficient to necessarily ensure sufficient locational provision of services, and will result in other issues for auctions, such as different prices for provision of identical services, which, in conjunction with implementation of mandated bidding, could distort energy market dynamics. We also note that splitting the market will result increase market concentration levels and therefore market power issues, and question, if this is deemed necessary, whether auctions represent the most appropriate procurement methodology for system services. Assuming market splitting is not feasible, which seems likely for the reasons outlined above, Energia observe that aggregate

procurement volumes will need to take into account the requirement to ensure adequate provision of system services at a more localised level. This was discussed in more detail in our response to the Volumes Consultation.

**Technology Type:** Given recent experience in the GB capacity auction Energia believe it may be worthwhile introducing volume limits for certain technology types to ensure an appropriate generation mix that will deliver security of supply. For example, it may be prudent to limit the volume of new, untested technologies. We provided more detail on this in our response to the Volumes Consultation. However, we do not support segmenting auctions by technology type. The all-island market is a small market and if substantial further segmentation is introduced it will result in highly concentrated system services markets. Furthermore, we note the TSOs do not believe this is required, as also confirmed in their DS3 Volumes Consultation.

***Question 8: What are your views on the proposal to introduce flexibility on the volumes to be procured?***

Energia is concerned that the DotEcon proposals introduce potential incentives for the TSO to under procure system services. This is a result of the TSO having access to system services provided by auction “losers” at lower cost. It is essential, if the integrity of the system service market is to be maintained, that there are no incentives on the TSO to set the auction volumes lower than what is required (e.g. based upon the knowledge that providers who are not successful in the auction may be able to provide services when needed at a price lower than the auction clearing price). Energia is therefore concerned more fundamentally with the determination of the volume requirements – i.e. ensuring appropriate incentives are placed upon the TSO to procure the appropriate volume of system services and that there is strong governance and oversight on how the volume requirements are set. We are therefore concerned that a price dependent volume requirement would provide too much latitude to the TSO in relation to the determination of its volume requirements and, under current proposals, and the incentives they create, could tend towards a bias to under procure system services. We therefore do not support this option.

***Question 9: What are your views on the proposals for package based bidding?***

Energia understands the rationale for package based bidding – i.e. to ensure that participants are not left with winning contracts in some services but not others and therefore not fulfilling the revenue requirements required to fund investment. The consequence of implementing package bidding however is a combinatorial auction, which requires a “black box” auction clearing mechanism that generates “unhappy winners”. Within the context of the substantial commercial risks imposed on service providers under the DotEcon proposals, Energia believe these outcomes could seriously undermine incentives to invest in DS3 system service provision.

Energia observe that the requirement for package bidding and a combinatorial auction is a result of the decision to implement procurement via auctions and that the issues driving package bidding, which result in the negative implications of combinatorial auctions described above, do not arise if a tariff based approach similar to the one outlined in the main body of our response letter were adopted.

***Question 10: Do you consider that a provider will be able to predict its expected availability accurately on an annual basis?***

Given the wholesale change in energy trading arrangements under I-SEM, and the high and increasing levels of wind penetration, it will be extremely difficult for service providers to accurately estimate their “availability” for provision of system services, or their lost opportunity costs and financial risks in their provisions. Energia is therefore struggling to understand why, in the context of a market where significant investment is required, it is thought appropriate to impose such high levels of unmanageable<sup>22</sup> commercial risk onto service providers. We believe this is driven by the desire for the TSO to limit expenditure, but we observe that a much simpler approach, which will not jeopardise the delivery of DS3, is to adopt value based regulated tariffs that are paid on a capability basis.

Energia observe that the DotEcon proposals essentially result in service providers having no certainty in relation to their DS3 revenue streams and therefore the proposals will make it difficult to secure financing for the new investment that is required, which could jeopardise the successful delivery of the DS3 programme. We note that failure to deliver DS3 will result in higher levels of wind curtailment, undermining the substantial investment in renewables that has already been made in the all-island market. Furthermore, uncertainty in revenue streams from DS3 will also impact upon the efficiency of the CRM, and therefore could result in inappropriate and uneconomic exit signals, undermining security of supply in the longer term.<sup>23</sup>

***Question 11: Do you agree with DotEcon’s proposals in relation to quantity units for the services outlined above?***

If this question refers to the quantity units for each individual system service identified in section 5.1 of the DotEcon report, then the quantity units proposed seem reasonable. However, the NERA memo accompanying this report provides strong evidence that the wider DotEcon proposals are fundamentally flawed.

***Question 12: What are your views on a suggested cap or clawback on expected availability per plant to manage DS3 System Service expenditure?***

The issue in relation to managing TSO expenditure is based on the decision to implement an “availability” based payment mechanism. We note that this issue would be greatly reduced under a value based, tariff approach with a “capability based” payment mechanism, which creates revenue certainty for investors and makes it easier for the TSO to manage cost. Energia is concerned that the proposal to cap, or claw back, what, from the participant’s point of view, is commercial upside to protect the TSO, while leaving participants with only downside risk – i.e. the risk of their out-turn availability being lower than their expectations when bidding – will seriously damage the incentives to invest.

If a claw back or cap is introduced then the TSO must be obligated not to take delivery of system services from providers that have reached their availability cap, otherwise system service providers would be forced to provide system services without being paid. Energia is concerned this could

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<sup>22</sup> We note that the consultation paper acknowledges this fundamental issue when it states “.. it is possible that actual availabilities may differ from expected availabilities, for reasons that are outside the provider’s control.” p.14

<sup>23</sup> We note the dot.econ proposals either to force “constrained on” generators to operate at a loss, or without payment for system services. In combination with proposals on prescriptive bidding rules this design will place such generators at a substantial competitive disadvantage in the CRM, despite being vital to maintain system security.

result in a “one way bet” for the TSO when setting volume requirements – i.e. a perverse incentive to systemically under procure system services.

***Question 13: Do you consider the DotEcon Report to have accurately captured the considerations for availability the TSO should use for different DS3 System Service products? If not, please explain your reasons why.***

As set out elsewhere in this response and in previous responses to DS3 consultations, Energia does not agree with an ‘availability based’ payment approach for system services. The reasons for this include:

1. It results in difficulty for the TSO to manage expenditure, which in turn results in complex arrangements, including mandated bidding and claw back / capping mechanisms. These provide protection to the TSO but only by transferring commercial risk (which is difficult to estimate and manage) onto system service providers.
2. It significantly increases out-turn availability risk for service providers. In the context of the I-SEM, with high levels of wind penetration and the introduction of new and untested energy trading arrangements, this equates to substantial and difficult to manage commercial risk.
3. It results in substantial revenue uncertainty under system service contracts which is a significant barrier to securing finance for investment.

For the reasons set out above and elsewhere in this response Energia is therefore concerned that introducing an ‘availability based’ payment mechanism, in combination with combinatorial auctions and a contingent commitment model will threaten the successful delivery of the DS3 programme.

***Question 14: Do you agree with the proposals to ensure lower payments are received by System Service providers who are not successful in the DS3 auctions but who are dispatched by the TSO to provide System services, than those providers who are successful in the Auctions?***

Energia does not agree with this proposal. While we understand the argument as to why, within the context of an auction framework, losers may need to receive lower payments than winners – i.e. otherwise winning confers no benefit but only increases the obligation and therefore commercial risk of providing system services – we are concerned that, in practice, it results in inequitable treatment amongst service providers. This is on the assumption that “losers” are mandated to provide their system services capability to the TSO regardless of whether or not they win a contract, which would be legally problematic as well as economically unsound.

Energia is also concerned that implementing lower payments for “losers” could distort incentives on the TSO, who could reduce the overall cost of system service provision by maximising the use of auction “losers” relative to “winners”. This would seem to create the perverse incentive for the TSO to under procure system services. From a participant’s point of view it would mean that service providers, who are required to securely manage the system, but who did not clear in an auction (e.g. due to artificially low volume requirements and/or their higher costs of provision), were further penalised for meeting their obligations to provide system services – i.e. not paid for their provision.

Energia notes that these issues do not arise under a tariff based approach to system services as all providers are paid the same rate – i.e. the tariff.

***Question 15: Do you agree with the proposals for determining the winner/price as set out in the DotEcon recommendation?***

The NERA Memo accompanying this response identifies fundamental flaws with the auction design and we would refer the reader to that memo. The NERA Memo should therefore be considered as an integral part of our answer to this question.

Of particular concern to Energia is that individual prices for services may be less than the winners cost of provision, given the combinatorial auction design, which would not deliver the correct economic incentives to deliver services and would impose further unmanageable commercial risks on service providers if competing in the auction.

We are also concerned that the auctions clearing process will be a “black box” for participants –i.e. it will be difficult for them to understand why a bid has been cleared or rejected. Furthermore, because prices are set after the determination of winners, it will be difficult for participants to link auction prices back directly to cleared bids. This reduces transparency and given the peculiarities of the outcomes from the auction process, will further undermine confidence in the selection process.<sup>24</sup>

When the above is combined with the auction producing “unhappy winners”, so there is no guarantee participants will be cleared at their optimal bid, we believe the DotEcon proposals could act as a significant barrier to investment.<sup>25</sup>

Energia also notes the complexity of the auction design, and the risks this generates for implementation. While it was claimed that the complexity of the design simplifies participation for participants, we observe that it results in a significant increase in commercial risks, including out-turn availability risk, financial risks associated with obligations to submit mandated repositioning bids, and increased operational risk, given the extremely large volume of potential mutually exclusive package bids participants may need to submit to cover all possible permutations and combinations in outturn scenarios.

Energia notes that ensuring that the market design for the provision of system services sets up a level playing field for all providers is a key aspect of the statutory duties of the regulatory authorities (see main body of our response letter for further details).

Energia notes that DotEcon has not considered the appropriateness of the auction approach in the context of the structural market power issues that exist in the I-SEM – i.e. whether sufficient competition exists to support a combinatorial auction approach, or are too many services too concentrated. While we welcome their conclusion to exclude “any services with significant market power from the auction and rely on a regulated tariff for these services”<sup>26</sup>, we believe this analysis should have been completed prior to proposing such complex auction arrangements and the analysis must be completed prior to taking any enduring decision on this matter.

The proposal to include semi-competitive services within the auction, however, is disconcerting to Energia. We are concerned that the approach could increase the capability for a structurally dominant participant to exert market power within the system services market (which could be detrimental to competition). The proposed approach could also make monitoring anti-competitive behaviour in the ancillary service market more difficult, given the complexity of the auction clearing system, and the lack of transparency from participant’s point of view regarding the determination of results. It does not appear to us accordingly that sufficient attention has been given to how market should be addressed with the view to allowing fair competition in the provision of system services, consistent with the statutory duties and objectives of the regulatory authorities.

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<sup>24</sup> Note, Energia believes the auction process is fundamentally flawed for the reasons set out in the accompanying NERA Memo.

<sup>25</sup> Energia is concerned that “unhappy winners”, could in reality be “very unhappy winners”, given the level of commercial risk participants are being asked to take on under the DotEcon proposals.

<sup>26</sup> See page 19 of DotEcon Report.



Energia would therefore welcome further detailed consideration of these issues, including the criteria proposed for determining whether insufficient or limited competition exists, and for this to be duly consulted upon.

***Question 16: Do you agree with the proposed treatment of interconnectors? Should this apply equally to all interconnectors?***

Issues of discriminatory treatment arise in respect of the proposed treatment of the interconnectors. In its report, DotEcon explains that "interconnectors differ fundamentally from other system service providers because *"they consist of transmission infrastructure and the technical realisability of system services is a function of the electricity flows across the interconnector at a given time. It appears unlikely that an interconnector would easily be able to influence its market position and therefore its availability for system services."*

(DotEcon Report, Chapter 12, page 112) In other words, DotEcon finds that for the purpose of system services, interconnectors are unable to affect actual flows, and hence their provision of reserve and other ancillary services. That alone would be good reason for excluding interconnectors from the provision of system services at all (and the same applies to capacity in the CRM).

However, instead of excluding interconnectors, DotEcon proposes that they should not participate in the SS auction, face contractual obligations or be paid for system services "on the same basis as other providers". Then, DotEcon defers to "the SEM-C's view" (without further reference) that (i) "the volume requirement would therefore be reduced by the maximum quantity a single bidder can bid for and the EWIC would always be awarded a contract for this amount"; (ii) it would be a price-taker and would automatically be paid at the clearing prices established without its participation;" and "the EWIC would receive payments whenever it is available." (DotEcon Report, Chapter 8, page 113)

These proposals create a very advantageous position for the interconnectors as they will be given a contract at a clearing price for whatever "availability" they provide in circumstances where it is acknowledged that they have no power to adjust their output in the light of the TSO's needs, i.e. that they cannot actually provide reserve energy! It is difficult to see how this is not simply discriminatory and in breach of the principle of equal treatment.

The contradiction between DotEcon's stated views (Interconnectors are transmission facilities and cannot provide energy services) and the proposal put forward under instruction from the SEM-C decision (Interconnectors must be awarded contracts without participating in the auction) means that in fact absolutely no valid reason has been provided to explain and justify the very favourable position being offered to the interconnectors. On the face of it, in the absence of any justification for the preferential treatment awarded to the interconnectors, any such decision would be unlawful because as arbitrary and discriminatory.

***Question 17: Do you agree with DotEcon's proposed preferred model of Contingent Commitment in DS3 System service Auction procurement?***

The NERA Memo accompanying this report provides strong evidence that the "Contingent Commitment" model proposed by DotEcon, as well as the wider auction design, is fundamentally flawed. Energia would emphasise that the memo was written by independent experts in the fields of electricity market and auction design and that it reflects NERA's independent views on the proposals. Furthermore, that NERA are an internationally respected consultancy firm.

Therefore, for the reasons set out in the NERA Memo and this response, Energia does not support the “Contingent Commitment” model, the accompanying auction design proposals or the “availability based” payment mechanism, and conclude that a decision to implement DotEcon proposals will undermine investment in provision of DS3 system services, and therefore will jeopardise delivery of the DS3 programme. This will result in higher levels of wind curtailment and undermine the already substantial investment in renewable technologies made in the all-island market. Implementation of the proposals would also contravene the principle of revenue adequacy for provision of services and, when considered in the context of proposed prescriptive bidding rules in the I-SEM balancing market, will lead to longer term security of supply issues, particularly for “constrained on” generation required to facilitate the safe and secure operation of the transmission system.

The proposal that in effect, the provision of system services is in some cases not remunerated at all, or not remunerated in full so as to cover all relevant costs, and accordingly provided at a loss by a generator, displays a disregard for the requirement to ensure that all generators are able to finance their activities. In particular, the proposals do not properly account for the position of “constrained on” generators and as such are discriminatory and unfair.

Moreover, as existing generators such as Energia and their shareholders are highly likely to be constrained on from time to time, the proposals directly and significantly affect their property rights. As participation in the market(s) designed by the RAs, including the market for system services, is the only means available to existing generators such as Energia and its shareholders to exercise their property rights and right to earn a livelihood, it is incumbent upon the RAs, and essential, that the market design respects such property rights in all instances and allows a generator to recover the costs that it has properly incurred – any design which does not allow a generator to recover its costs, as would be the case with the DotEcon proposals, would amount to a form of unconstitutional expropriation.

Energia also notes that the proposals would seem to contravene the Network Code on Energy Balancing as set out by DotEcon in their report.

“We note that the imposition of restrictions on BM offers would potentially contravene the EU Network Code on Electricity Balancing...” (DotEcon Report, page 57)

***Question 18: Do you agree with the position proposed by DotEcon that successful winners in the DS3 Auction should bid in the BM only at DEC prices set to a proxy of the energy price (section 7.2 above)?***

Energia are concerned that the proposals for mandated DEC bidding may not be implementable in practice, if it requires the service provider to submit bids to the balancing market. This is because a generator who is scheduled in the energy market is likely to have running costs that are below the energy market price – i.e. be in merit. If it therefore submits a DEC price at the energy market price, this DEC is likely to be higher than its INC price, assuming this is close to SRMC. Submitting DEC prices that are higher than INC prices is unlikely to be viable under energy market rules. Therefore, unless the INC is also changed, which would result in further potential distortions to balancing market pricing, we do not believe this proposal is workable. These issues are explained in more detail in the accompanying NERA memo.

Energia are concerned that any potential implications mandated bidding rules may have for balancing market prices has not been considered in the dot.econ report, nor have any of these

proposals been discussed in the rules meetings for the energy trading arrangements, where imbalance pricing is currently being developed. Energia also note that they were not consulted upon in the Markets consultation paper. This is disconcerting as there would seem to be the possibility that mandated bids could be taken for the purposes of energy balancing, rather than provision of system services, which would then distort balancing market pricing. This seems to be acknowledged by the RAs in their proposed 'Alternative Contingent Commitment' model where they comment:

"These proposals aim to ensure that the alternative commitment model offers a level of security in terms of service provision and cost mitigation from successful providers, however it does not interfere directly with the balancing price."<sup>27</sup>

If it is proposed that adjustment to bids are made prior to submission to the balancing market then it is not clear how a participant determines ex-ante which service it should, or should not include. If the intention is to include all potential services, Energia then caution that careful consideration would then need to be given to whether a provider could be dispatched for only a subset of these services, which would create an exposure for the participant between its DEC bid and its DS3 revenues.

Furthermore, Energia observe that the implementation issues likely to be associated with calculating "as traded" ex-ante market revenues for each contracted system service provider is likely to result in providers being exposed to basis risk between the formula used to set the bid price under mandated DEC bidding, and the actual ex-ante trade revenues received by contracted system service providers. This therefore further increases the commercial risk of contracting for system services under the DotEcon proposals.

On the basis of the above, Energia would again emphasise that the balance of risk in the dot.econ proposals is not appropriate, particularly within the context of a market that requires substantial levels of investment. Imposition of unmanageable risk introduces significant uncertainty in revenue streams, and increases potential downsides, making securing financing difficult. Therefore dot.econ proposals will not provide the framework required to incentivise the investment required to deliver DS3 system service requirements. This will result in higher levels of wind curtailment, and undermine the substantial investment that has already been made in renewable generation in the all-island market.

***Question 19: Do you agree with the position proposed by DotEcon that successful winners in the DS3 Auction should bid in the BM only at INC prices set to a proxy of the energy price, or on a costs minus System Services income basis (section 7.2 above)?***

Energia does not agree with the DotEcon proposals. The proposed approach is not acceptable and indicates the lack of attention to risks and incentives within the DotEcon proposals. The perverseness of these proposals is particularly obvious in the scenario of high levels of wind generation, when DS3 system service providers are most needed to support variations in renewable generation. At such times, at least some DS3 system services are likely to come from providers who are "constrained on" - i.e. despatched out of merit. Under DotEcon's proposals, however, such providers will have little or no economic incentive to provide system services, which could undermine their delivery when most needed:

- at worst, providers could receive less than even their cost of generation and so lose money (if their BM offer price is capped at the market price – Dot.Econ, Box 2);

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<sup>27</sup> P.21 of consultation paper.

- at best, in the “more lenient” version, they are remunerated only for the cost of generating energy but are paid nothing for providing system services (Dot.Econ, Box 3, assuming that the contractual reserve payment fully offsets the deduction of reserve payments from BM revenues).

Under DotEcon proposals the TSO would therefore not be paying some system service providers (or could even be forcing them to operate at a loss) when their services are most needed by the system. We note that these are likely to be valuable service providers (from a system management perspective), which is why they are constrained on in the first place – i.e. they are critical for the TSO to be able to securely operate the system. This outcome is therefore perverse, and in combination with proposals on prescriptive bidding rules, the approach will place such generators at a substantial competitive disadvantage in the CRM, despite being vital to maintain system security. This could result in the inappropriate exit of strategically key generation assets, which in turn could lead to local security of supply issues and / or higher levels of curtailment for wind.

The proposal that in effect, the provision of system services is in some cases not remunerated at all, or not remunerated in full so as to cover all relevant costs, and accordingly provided at a loss by a generator, displays a disregard for the requirement to ensure that all generators are able to finance their activities. In particular, the proposals do not properly account for the position of "constrained on" generators and as such are discriminatory and unfair.

Moreover, as existing generators such as Energia and their shareholders are highly likely to be constrained on from time to time, the proposals directly and significantly affect their property rights. As participation in the market(s) designed by the RAs, including the market for system services, is the only means available to existing generators such as Energia and its shareholders to exercise their property rights and right to earn a livelihood, it is incumbent upon the RAs, and essential, that the market design respects such property rights in all instances and allows a generator to recover the costs that it has properly incurred – any design which does not allow a generator to recover its costs, as would be the case with the DotEcon proposals, would amount to a form of unconstitutional expropriation.

***Question 20: Do you support the application of an alternative contingent commitment model that avoids direct commercial interaction and obligation within the Balancing Market (section 7.3 above)?***

Energia cannot properly assess the alternative commitment model presented in section 7.3 of the Consultation Paper. It is not properly explained or fully specified and there are significant gaps in the proposals including, but not limited to:

- 1) What is the nature of the periodic review proposed to be carried out by the TSO?
- 2) How would compliance regarding contracted providers obligation for each system service be measured?
- 3) What is the basis for the compensation in the event of a short fall? Will the TSO claw back revenues? Or will the compensation relate to the cost of alternative providers? In either case, what would be the stop-loss on this compensation – 1x revenues or more? Would these details be known by participants in advance of the auction?

Respondents cannot be expected to give a view of the proposal in section 7.3 of the Consultation Paper given how poorly defined it is. Energia therefore cannot support it and a decision to

implement it cannot be taken without the proposal first being properly specified, fully explained and further consulted upon, to ensure there is an opportunity for the views of stakeholders to be properly taken into account.

***Question 21: Do you agree with the proposed treatment of plant that does not require it to be in the schedule or on for provision of System Services?***

Under the contingent commitment model proposed by DotEcon, Energia observe that different generators will face different degrees of risk, since different types of plant and different technologies generate in different periods and have different cost structures. As NERA have explained:

“Different providers will face different degrees of risk when offered a fixed payment for system services. Different types of plant and technology generate (or consume, or store) electricity in different periods, have different cost structures, and have different proportions of fixed and variable costs. Since DotEcon has not given this issue any consideration, its proposals impose risk arbitrarily on different plants and technologies to different degrees. It is hard to work out a priori which plants and technologies will be hit hardest by these risks, and which to a lesser extent, but investors will have to estimate the risks they face when compiling their bids in the auction for DS3 contracts. Those facing the greater risks will need to bid a higher price to compensate for greater risk and will face a disadvantage in the auction”. (NERA Memo, page 7).

Energia is therefore concerned that under such a contingent commitment model, providers who do not need to be running to provide a service, are subject to significantly less onerous obligations, and therefore commercial risks, than other service providers. They are accordingly placed at a considerable competitive advantage. As a result, the auction outcomes could be skewed and deliver an inappropriate mix of contracted providers. In the long run, it means that security of supply would be undermined. As such the proposal is unable to help achieve security of supply while unfairly and unduly discriminating between providers by failing to recognise the relevance of the technology used by the generators. These issues should, and can, be addressed by ensuring that DS3 arrangements are technology neutral, that is, that the scale of obligations and significance of commercial risks to which a generator is subject is not determined as a function of the technology that it uses.

***Question 22: Do you believe that either the Full Commitment model or the No Commitment model offers a better option for DS3 System Service providers? Please explain your reasons for your view.***

As set out in the main body of our response letter, we believe that the “No Commitment” model, combined with value based regulated tariffs, and a “capability based” payment methodology, provides the best option for ensuring the investment required to successfully deliver the DS3 programme within the available timelines. This addresses most of the issues discussed in this consultation paper and provides a much simpler procurement approach more suited to the extremely challenging delivery timeframe.

We do not believe the DotEcon “Contingent Commitment” model is feasible for the reasons outlined in our answers to previous questions in this section and the accompanying NERA Memo. We furthermore observe that the RA variant is poorly defined and consequently impossible to assess. We therefore reiterate our view that a decision to implement it cannot be taken without it

first being properly specified, fully explained and further consulted upon, to ensure there is adequate opportunity for the views of stakeholders to be properly taken into account.

The “Full Commitment” model is not suitable in the context of the energy trading arrangements (I-SEM is not a self-dispatch market) or given the protracted procurement timeframes for system services. It would also be extremely inefficient as a system service provider would be obliged to position to provide their services even if not needed. These issues are clearly set out in the section “Volume requirement and expenditure” from page 49 of the DotEcon report.