



# **Integrated Single Electricity Market (I-SEM)**

**High Level Design for Ireland and Northern  
Ireland from 2016**

**Consultation Response Template**

**5 February 2014**

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## 1 PURPOSE OF THIS DOCUMENT

### 1.1 PURPOSE AND STRUCTURE OF THIS DOCUMENT

- 1.1.1 This supplementary document provides a template for responses to the consultation document on implementing a new High Level Design ('HLD') for the Integrated Single Electricity Market (I-SEM) in Ireland by the end of 2016. We request all responses to the consultation are submitted in this template, and in **Microsoft Word** format.
- 1.1.2 This template contains the questions presented in the consultation document.
- 1.1.3 Responses to the Consultation Paper are requested by 17.00 4th April 2014. Following a review of the responses to this paper the SEM Committee will publish its draft decision on the proposals set out in this paper in June 2014.
- 1.1.4 Responses should be sent to Jean-Pierre Miura (JeanPierre.Miura@uregni.gov.uk) and Philip Newsome (pnewsome@cer.ie). Please note that the SEM Committee intends to publish all responses unless marked confidential<sup>1</sup>.

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<sup>1</sup> While the SEM Committee does not intend to publish responses marked confidential please note that both Regulatory Authorities are subject to Freedom of Information legislation.

## 2 CONSULTATION QUESTIONS

### 2.1 RESPONDENT DETAILS

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MAIN INTEREST IN CONSULTATION	DAE currently operate a DSU; the changes could have a significant impact on the future of DSUs in Ireland

### 2.2 GENERAL COMMENTS

Dalkia Alternative Energy (DAE) welcomes the opportunity to respond to the CER and UREGNI consultation document regarding the Integrated Single Electricity Market (I-SEM) High Level design for Ireland and Northern Ireland from 2016.

DAE currently operates a Demand Side Unit (DSU) and also a number of Combined Heat and Power (CHP) sites throughout Ireland. This response’s primary focus will be on the potential impact the changes to the SEM will have on the operation of DSUs. The impact to the CHP portion of our business is not deemed likely as the de-minimus level is 10MW. We recommend that this level is not reduced as part of any I-SEM changes.

#### Introduction

The SEM has been effective thus far in promoting competition and allowing small independent generators to join the market, however there is potential that with the introduction of the I-SEM, unintended barriers to participation may arise. This may not have as great an impact on larger participants; however for smaller existing/new independent generators, these barriers may lead to significant challenges.

Since the introduction of the SEM, DSUs and aggregators on the island of Ireland have joined the market and are beginning to gain traction and grow with purpose. These aggregators by their nature are small, with limited resources, therefore any significant changes to the current SEM, could have negative consequence on their costs and impact their long term viability.

Any discussion on the Capacity Remuneration Mechanism (CRM) must be conscious of the importance of the CRM to DSUs and aggregators. Changes to the CRM must be mindful of the criticality of this payment to these types of participants. The changes to the CRM outlined in the

various options detailed in the document could, to varying degrees negatively impact DSUs and aggregators.

The final makeup of the I-SEM should of course be compliant with the Target Model, but should not lead to excessive cost challenges for smaller independent generators, introduce barriers to new entrants and existing participants or ultimately lead to smaller generators leaving the market.

### **Energy Market Options**

The current SEM arrangement has in broad terms worked since its inception, and we feel that any significant changes that occur as part of the I-SEM implementation has the potential to undo much of the gains achieved. Any proposed changes to the current SEM should not dilute the current level of market transparency, introduce barriers to new and existing entrants and create cost challenges for smaller generators. There is a risk that large incumbent participants could gain greater market power with some of the options proposed.

There is however insufficient detail in the document to fully quantify the impact the various options will have on DSUs and aggregators, nevertheless of the four options, Option 4 appears to be the most suitable. This option closely resembles the existing SEM arrangement and we feel retaining as much of the current SEM arrangement, should be the overarching goal of this process. The current SEM has been broadly successful and the implementation of this option is likely to be the least intrusive compared to the other three. This coupled with a strong CRM that does not discriminate against DSUs and aggregators, and which operates in tandem with the energy market, would be the most beneficial approach.

The option chosen as the basis for the final HLD should not introduce barriers to new entrants or smaller participants. Significant changes to existing SEM make up should be minimised as much as possible and that the changes are not to the detriment of small independent generators, DSUs and aggregators.

### **Capacity Remuneration Mechanism**

We feel that the retention of a capacity payment mechanism is critical to the ongoing development of DSU's and aggregators on the island of Ireland. Any changes to the CRM should not adversely impact DSU's and aggregators, considering that these types of generators rely on the CRM as their primary revenue source. The CRM is the single most important element in the sustainability of DSUs and aggregators.

Priced based mechanisms have the potential to meet the needs of participants including DSUs and aggregators. These mechanisms are similar to the payment mechanism currently in place in the SEM, which has shown to be effective in encouraging investment in capacity and ensuring availability of generation at times of scarcity. The Short Term mechanism may provide the ability for demand to manage its available capacity more efficiently and ensure it's available at times of scarcity. It could also lead to increased price volatility coupled with a lack of forward price certainty, creating a potential barrier to new entrants. The Long Term mechanism will provide better price stability and

price signals to ensure income certainty for all participants and new entrants, it is also closely resembles the existing CRM in the SEM which has thus far been effective.

The Quantity based mechanism would not be a good fit for DSU and aggregators because the ability for DSUs to make long term commitments on capacity is challenging. DSUs by their nature have varying capacity over the course of the day, week and year. The document mentions potential penalties for non-delivery of contracted quantities, in the case of DSUs, this would be unfair.

There is insufficient detail on the Strategic Reserve option and how it would work, especially in relation to DSUs and aggregators, to allow for a thorough assessment of its potential impact. It is a mechanism that is currently utilised in other jurisdictions and has proven to be successful, but without more detail on how it would work, we cannot give a firm opinion on the option.

The current CRM has been effective in promoting new entrants and dampening energy price volatility, however if significant changes to the current arrangements are necessary then we take the view that generation which is flexible, such as DSUs and aggregators should be prioritised. The CRM is an integral element in the viability of DSU and aggregators. Their ongoing involvement in the market is critical to the secure operation of the electricity system. It is acknowledged throughout the consultation that flexible generation will enable the TSO to better manage the high levels of intermittent generation connected to the system. In order to promote the development of flexible generation there should be appropriate financial signals.

If the CRM moves away from the current catch all mechanism to a targeted mechanism then any changes should be biased in favour of generators that are flexible, such as DSUs. Furthermore, any changes to the CRM must be cognisant of the fact that DSUs by their nature have variable capacity, and should not be penalised for said variability. Of all the CRM options discussed in the document, we view the Long Term price based mechanism as the most appropriate method.

DSUs and aggregators are becoming an important cog in the secure operation of the electricity system. It would be an unwelcome consequence of this process, that their potential is curtailed by changing the CRM to such a degree, as to make their long term viability questionable.

2.3 PURPOSE OF THE DOCUMENT (SECTION 1)

Question	Answer
<p>1. Which option for energy trading arrangements would be your preferred choice for the I-SEM market, and why?</p>	<p>There is insufficient detail in the document to fully quantify the impact the various options will have on DSUs and aggregators, nevertheless of the four options; Option 4 appears to be the most suitable. This option closely resembles the existing SEM arrangement and we feel retaining as much of the current SEM arrangement, should be the overarching goal of this process. The current SEM has been broadly successful and the implementation of this option is likely to be the least intrusive compared to the other three.</p>
<p>2. Is there a requirement for a CRM in the revised HLD, and why?</p>	<p>We feel that the retention of a capacity payment mechanism is critical to the ongoing development of DSU's and aggregators on the island of Ireland. Any changes to the CRM should not adversely impact DSU's and other aggregators, considering that these types of generators rely on the CRM as their primary revenue source. The CRM is the single most important element in the sustainability of DSUs and aggregators.</p> <p>The CRM should operate in tandem with the energy market</p>
<p>3. If there is a requirement for a CRM in the revised HLD, what form would be your preferred choice for the I-SEM, and why?</p>	<p>Of all the CRM options discussed in the document, we view the Long Term price based mechanism as the most appropriate method.</p> <p>The Long Term mechanism will provide better price stability and price signals to ensure income certainty for all participants and new entrants, it is also closely resembles the existing CRM in the SEM which has thus far been effective.</p>

2.4 TOPICS FOR THE HIGH LEVEL DESIGN OF ENERGY TRADING ARRANGEMENTS (SECTION 4)

Question	Answer
<p>4. Are these the most important topics to consider in the description of the HLD for the revised energy trading arrangements for the single electricity market on the island of Ireland?</p>	
<p>5. Are there other aspects of the European Internal Electricity Market that should form part of the process of the High Level Design of energy trading arrangements in the I-SEM?</p>	



2.5 SUMMARY OF THE OPTIONS FOR ENERGY TRADING ARRANGEMENTS (SECTION 5)

Question	Answer
6. What evidence can you provide for the assessment of the HLD options with respect to security of supply, efficiency, and adaptability?	

2.6 ADAPTED DECENTRALISED MARKET (SECTION 6)

Question	Answer
<p>7. Are there any changes you would suggest to make the Adapted Decentralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	
<p>8. Do you agree with the qualitative assessment of the Adapted Decentralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	
<p>9. How does the Adapted Decentralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	

2.7 MANDATORY EX-POST POOL FOR NET VOLUMES (SECTION 7)

Question	Answer
<p>10. Are there any changes you would suggest to make the Mandatory Ex-post Pool for Net Volumes more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	
<p>11. Do you agree with the qualitative assessment of Mandatory Ex-post Pool for Net Volumes against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	
<p>12. How does the Mandatory Ex-post Pool for Net Volumes measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	

2.8 MANDATORY CENTRALISED MARKET (SECTION 8)

Question	Answer
<p>13. Are there any changes you would suggest to make the Mandatory Centralised Market more effective for the I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	
<p>14. Do you agree with the qualitative assessment of Mandatory Centralised Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	
<p>15. How does the Mandatory Centralised Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	

2.9 GROSS POOL – NET SETTLEMENT MARKET (SECTION 9)

Question	Answer
<p>16. Are there any changes you would suggest to make the Gross Pool – Net Settlement Market more effective for the all I-SEM (for instance, a different choice for one or more of the topics or a different topic altogether)?</p>	
<p>17. Do you agree with the qualitative assessment of Gross Pool – Net Settlement Market against the HLD criteria? If not, what changes to the assessment would you suggest (including the relative strengths and weaknesses of an option)?</p>	
<p>18. How does the Gross Pool – Net Settlement Market measure against the SEM Committee’s primary duty to protect the long and short term interests of consumers on the island of Ireland?</p>	

2.10 CAPACITY REMUNERATION MECHANISMS (CHAPTER 10)

Question	Answer
<p>19. What are the rationales for and against the continuation of some form of CRM as part of the revised trading arrangements for the I- SEM?</p>	<p>Encouraging the development of innovative and flexible generating sources is vital to the challenging task of enabling large levels of renewable generation to connect to the system.</p> <p>Without the financial certainty that the CRM provides, developers of flexible generation will find it difficult to obtain capital funding to develop new generations, which in turn will limit the ability of the TSO to adequately manage the system and ensure security of supply requirements.</p>
<p>20. Are these the most important topics for describing the high level design of any future CRM for the I-SEM?</p>	<p>Yes</p>

2.11 STRATEGIC RESERVE (CHAPTER 10.7)

Question	Answer
<p>21. Are there any changes you would suggest to make the design of a Strategic Reserve mechanism more effective for the I-SEM (for instance a different choice for one or more of the topic?)</p>	
<p>22. Do you agree with the initial assessment of the strengths and weaknesses of a Strategic Reserve Mechanism? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	
<p>23. Would a Strategic Reserve Mechanism work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	

2.12 LONG-TERM PRICE-BASED CRM (CHAPTER 10.9)

Question	Answer
<p>24. Are there any changes you would suggest to make the design of a Long-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic?)</p>	
<p>25. Do you agree with the initial assessment of the strengths and weaknesses of a Long-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	<p>Yes</p>
<p>26. Would a Long-term price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	



2.13 SHORT-TERM PRICE-BASED CRM (CHAPTER 10.10)

Question	Answer
<p>27. Are there any changes you would suggest to make the design of a Short-term price-based CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	
<p>28. Do you agree with the initial assessment of the strengths and weaknesses of a Short-term price-based CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	
<p>29. Would a Short-term price-based CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	

2.14 QUANTITY-BASED CAPACITY AUCTION (CHAPTER 10.11)

Question	Answer
<p>30. Are there any changes you would suggest to make the design of a Quantity-based Capacity Auction CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	
<p>31. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Auction CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	
<p>32. Would a Quantity-based Capacity Auction CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	

2.15 QUANTITY-BASED CAPACITY OBLIGATION (CHAPTER 10.12)

Question	Answer
<p>33. Are there any changes you would suggest to make the design of a Quantity-based Capacity Obligation CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	
<p>34. Do you agree with the initial assessment of the strengths and weaknesses of a Quantity-based Capacity Obligation CRM? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	
<p>35. Would a Quantity-based Capacity Obligation CRM work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	

2.16 CENTRALISED RELIABILITY OPTIONS (CHAPTER 10.14)

Question	Answer
<p>36. Are there any changes you would suggest to make the design of a Centralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	
<p>37. Do you agree with the initial assessment of the strengths and weaknesses of a Centralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	
<p>38. Would a Centralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	

2.17 DECENTRALISED RELIABILITY OPTIONS (CHAPTER 10.15)

Question	Answer
<p>39. Are there any changes you would suggest to make the design of a Decentralised Reliability Option CRM effective for the I-SEM (for instance a different choice for one or more of the topic)?</p>	
<p>40. Do you agree with the initial assessment of the strengths and weaknesses of a Decentralised Reliability Option? If not, what changes to the assessment would you suggest (including the strengths and weaknesses of an option relative to the others)?</p>	
<p>41. Would a Decentralised Reliability Option work or fit more effectively with a particular option for the energy trading arrangements. If so, which one and why?</p>	