



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

**Capacity Remuneration Mechanism  
Capacity Market Code**

**Consultation Paper**

**SEM-17-004**

**12 January 2017**

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## 1. THE PROCESS TO DATE

### 1.1 Background and Decision Papers

The SEM Committee (SEMC) is committed to implementing the Integrated Single Electricity Market (I-SEM) that will replace the current Single Electricity Market (SEM) arrangements. Following extensive consultation over 2014, (including an Impact Assessment) the SEM Committee published the Decision Paper on the High Level Design (HLD) for the I-SEM in keeping with its statutory objectives. Namely, the SEM Committee HLD Decision seeks to maximise benefits for consumers in the short-term and long-term, while ensuring security of supply and meeting environmental requirements.

Subsequently, the Detailed Design Phase of the I-SEM commenced and a number of workstreams were established including the Capacity Remuneration Mechanism (CRM) workstream. The detailed design of the I-SEM Capacity Remuneration Mechanism (CRM) policy has been set out in a series of decision papers,

- CRM Decision 1 (SEM-15-103),
- CRM Decision 2 (SEM-16-022),
- CRM Decision 3 (SEM-16-039)
- CRM Locational Issues Decision (SEM-16-081)
- CRM Capacity Requirement and De-rating Methodology Decision (SEM-16-082)
- CRM Parameters Consultation (SEM-16-073) – the decision due to be published in April 2017

These detailed design decisions then had to be transitioned into a set of detailed rules and formed the basis of the work undertaken in developing the draft Capacity Market Code on which the SEMC is now consulting. The I-SEM Rules Working Group (RWG) was established in order to develop this set of detailed legal market rules.

### 1.2 THE I-SEM RULES WORKING GROUP

The I-SEM Rules Working Group was established to allow industry participants, the RAs, SEMO and TSOs to consult on the drafting of I-SEM Capacity Market rules required to implement the market design. The Working Group did not have the power to change policy decisions already taken by the SEMC but part of its remit was to identify any areas of inconsistency or uncertainty within or across these policy decisions and, where required, to formulate possible solutions.

The first meeting of the I-SEM Rules Working Group was held in October 2015. Subsequent meetings were held every five weeks thereafter, with the location of the meetings alternating between Belfast

and Dublin. The Working Group was engaged over a period of six months, and five meetings were held, in order to support the development of draft text for the Capacity Market Code required to implement the I-SEM arrangements.

The development of the Capacity Market Code went through a multi-stage process in which topics were developed, issues were identified, discussed and resolved, and legal drafting of the Capacity Market Code was carried out. This work occurred over a number of months facilitated through the Rules Working Group. The key milestones are outlined below:

- July 2016 - the first plain English version of the Capacity Market Code was circulated and discussed at meeting 9 of the Rules Working Group;
- September 2016 - the second plain English version of the Capacity Market Code was circulated and discussed at meeting 10 of the Rules Working Group;
- October 2016 - the initial legal draft version of the Capacity Market Code was circulated and discussed at meeting 11 of the Rules Working Group;
- November 2016 - the second legal draft version of the Capacity Market Code was further developed and discussed at meeting 12 of the Rules Working Group;
- December 2016 - the detailed auction rules, incorporating the Locational Issues Decision, and the Agreed Procedures of the Capacity Market Code were circulated and discussed at meeting 13 of the Rules Working Group.

The initial design proposal/position papers were developed within the Project Team (which included SMO, the TSOs and the RAs). These design proposal/position papers were circulated to Working Group members prior to the relevant Working Group meeting for their review and to aid their preparation for the meeting. After discussion and consideration at the relevant meeting, members had one week following the meeting to provide formal feedback. Feedback from participants at the meeting itself and subsequent formal feedback informed the subsequent drafting of the relevant section of the market rules by the Project Team.

Formal feedback from Working Group members was recorded in a Comments Log, capturing observations, comments and queries from Working Group Members, covering both the Capacity Market Code, and the Trading and Settlement Code was maintained by the Project Team. The Comments Log was updated and circulated to the Market Rules Working Group periodically, with issues closed after resolution.

The consolidated Capacity Market Code was delivered to the SEMC in January 2017.

## 2. OBJECTIVES AND SCOPE OF THIS CONSULTATION

### 2.1 OBJECTIVES OF THIS CONSULTATION

This consultation on the Capacity Market Code allows all market participants and other interested parties to carry out their own detailed review of the provisions of the Capacity Market Code and the SEMC welcomes feedback on the proposed drafting in the form indicated in Appendix A of this paper.

The RAs will consult separately on the terms of modifications to the System Operator licences. Those modifications will include provisions allowing the RAs to direct that the System Operators to administer and maintain in force the Capacity Market Code in order to implement the I-SEM arrangements.

The RAs, in reaching their decision on the terms of the Capacity Market Code, will be cognisant of the consultative process that has occurred through the I-SEM Rules Working Group over the last number of months.

### 2.2 SCOPE OF THIS CONSULTATION

The Capacity Market Code has been the subject of extensive consultative development as outlined above. The SEM Committee anticipate that comments in response to this consultation will likely focus on the detail of the legal drafting for the Capacity Market Code. In this context, respondents should note:

- the I-SEM HLD and Detailed Design decisions were extensively consulted on in 2014, 2015 and primarily in 2016 and the Code has been developed to be in line with the market design decisions (see previous section of this paper on background, and the process to date);
- as the Capacity Market Code is now presented as full legal drafting the SEM Committee is particularly interested in detailed comment, for example identifying potential drafting errors and suggesting specific revisions;
- the Capacity Market Code is an entirely new document developed to reflect major changes in the market design between the SEM capacity market and I-SEM capacity market.

While the RAs welcome feedback on any part of the Capacity Market Code, there are a number of specific areas which responses are sought.

There are some areas of the code which have been modified following the Capacity Requirement and De-Rating Decision (SEM-16-082) and the Locational Issues Decision (SEM-16-081). A first draft of the changes arising from the Locational Issues Decision was discussed at meeting 13 of the RWG, but in general these drafting changes have had less review through the RWG process than the rest of the Code. In addition, there are a number of other areas where a review has indicated that the Code may benefit from additional consideration. These issues are described in greater detail in Section 3 and the RAs welcome response in respect of these issues.

Following the Stock-take exercise, the RAs have reviewed the timing of the first transitional T-1 and T-4 auctions and the treatment of the first, partial Capacity Year. Section 4 gives details of this review and the RAs minded-to position.

Section 5 gives a summary of the overall structure of the Capacity Market Code.

### 3. SPECIFIC AREAS FOR CONSULTATION RESPONSE

#### 3.1 INTRODUCTION

- 3.1.1 This section sets out specific areas of the CMC for which the RAs would be particularly interested in responses from this consultation.

#### 3.2 CONSEQUENCES OF THE CAPACITY REQUIREMENT AND DE-RATING METHODOLOGY DECISION (SEM-16-082)

- 3.2.1 The SEM Committee consulted separately on the Capacity Requirement and De-Rating Methodology in August 2016 (SEM-16-051) and the decision was published on 8 December 2016 (SEM-16-082).
- 3.2.2 The changes to the CMC required from SEM-16-082 are only modest and relate to the following main areas:
- the Initial Capacity of Interconnectors;
  - The use of a Unit Specific Price Cap for Autoproducer Units; and
  - The use of a Unit Specific Price Cap for Dual-Rated Units
- as laid it out in paragraph 3.5.1 of the Decision Paper. Drafting for these changes have not previously been circulated to or discussed at the RWG.
- 3.2.3 These changes have largely been implemented through drafting changes to Chapters C and E of the CMC.
- 3.2.4 The RAs note that the full changes needed to implement the use of Unit Specific Price Caps for some capacity on Autoproducer and Dual-Rated Units are complex and there has not been time to complete them for this consultation. In particular, for both types of unit, the Unit Specific Price Cap does not apply to all capacity but only to that which lies between the two Registered Capacities for a Dual-Rated Unit or which could only be delivered by demand reduction for an Autoproducer Unit. Further changes will be needed to the treatment of Capacity Auction Offers (F.7) and to the data recorded in the Qualification Capacity Register (Appendix E).
- 3.2.5 The RAs invite responses on these changes.

#### 3.3 CONSEQUENCES OF THE LOCATIONAL ISSUES DECISION (SEM-16-081)

- 3.3.1 The SEM Committee consulted separately on Locational Issues in August 2016 (SEM-16-052) and the decision was published on 8 December 2016 (SEM-16-081). The drafting to cover the outcomes from the decision have been incorporated into the CMC. This drafting was circulated to RWG13, but there has been less opportunity for RWG input than for the rest of



the CMC. The RAs will consider any feedback from RWG13 in conjunction with any responses to this consultation.

- 3.3.2 Drafting for the enduring, combinatorial auction solution (Option D from the consultation and decision papers) mainly falls within Chapter F (Capacity Auctions) of the CMC.
- 3.3.3 Drafting for the interim auction solution (Option B from the consultation and decision papers) mainly falls within Chapter M (Interim Arrangements) of the CMC.

### 3.4 USE OF DIRECTOR'S CERTIFICATES TO SUPPORT INFORMATION SUBMITTED UNDER THE CMC

- 3.4.1 The CMC requires Participants to provide Directors' certification as part of several submissions under the CMC, e.g. Opt-out Notifications in Chapter E and Implementation Plans in Chapter J.
- 3.4.2 The RAs consider there may be other occasions for which Directors' certification would be appropriate. One example would be a statement that the Party will not participate in market manipulation as is required via a Certificate of Conduct in GB. We would welcome responses on any further occasions where such certification would be beneficial or any issues that extending the requirement for such certification might cause.

### 3.5 THE DISPUTES PROCESS

- 3.5.1 The RAs recognise that there is a need to streamline the disputes process for Qualification and Auction Disputes relative to that shown in this version of the CMC. This is needed to ensure that the auction can be performed in a timely manner and that secondary trading can commence promptly. In both cases, a continuing active dispute would be problematic and could necessitate a delay to the auction. This is particularly apparent for a Capacity Auction, if a Qualification dispute were to prevent a 10 year Capacity Award being made. A similar expedited disputes process is used in GB to tackle the same potential issues.
- 3.5.2 As part of this change to the Disputes process, the RAs would plan to remove the requirement for the RAs to approve Provisional Qualification Decisions in E.9.2.3 (see section 3.10 below). This would allow the standard Review Process followed by an expedited Disputes Process to run before the RAs make their approval decision on the Final Qualification Decisions in E.9.3.
- 3.5.3 The RAs invite responses on this issue.

### 3.6 STATE AID APPROVAL

- 3.6.1 As drafted, the Capacity Market Code comes into force on the Capacity Market Commencement Date. At this point the Code comes into force in its entirety, but as modified by the Interim Arrangements set out in Chapter M.
- 3.6.2 The RAs recognise that the timing around State Aid Approval is uncertain and that in order to keep to the timetable laid out in the Stocktake Decision (SEM-16-078b) it may be necessary to perform some activities under the CMC, e.g. Accession, Registration and Qualification, in advance of State Aid Approval.
- 3.6.3 The RAs do not consider that it would be appropriate to circulate the final Auction Information Pack, require submission of auction offers or perform a Capacity Auction before State Aid Approval has been achieved.
- 3.6.4 In consequence, the RAs are considering an extension to the drafting of the Interim Arrangement (Chapter M) to allow the CMC to come into force in two phases. In the first phase, only those processes up to Qualification would be active with the full CMC coming into force once State Aid Approval has been achieved. Were State Aid Approval be further delayed, it may become necessary to delay the first transitional T-1 auction.

### 3.7 MARKET MANIPULATION

- 3.7.1 The RAs recognise that there are particular issues raised by market manipulation in the context of the CMC. A single instance of manipulation can affect revenues to capacity providers, effectively locking Participants out of the market for a period of years or raise costs to consumers for a whole year. Impacts could potentially last for a decade.
- 3.7.2 The RAs are looking to enhance the drafting around market manipulation throughout the CMC to strengthen its provisions. The primary impact would be to sub-section B.9, but it may also be appropriate to enhance the drafting elsewhere in the Code, e.g. requiring Directors' certification as set out above.
- 3.7.3 The RAs would be interested in responses as to areas where protections against market manipulation could be strengthened in the CMC.

### 3.8 THE MODIFICATION PROCESS FOR AGREED PROCEDURES

- 3.8.1 At meeting 13 of the RWG, the TSOs discussed using an alternative process for Modifications to the Agreed Procedures to the CMC. The only feedback following the presentation was positive. This proposal has been incorporated into the CMC in section B12.12 (Modifications to Agreed Procedures). The RAs would welcome responses to the detailed drafting of the TSOs proposed approach.

### 3.9 CROSS-CODE ISSUES

- 3.9.1 The RAs recognise that there are a number of area where the CMC has an impact on the TSC and vice versa. In some cases, this involves the passing of variable data between the two Codes, e.g. details of primary and secondary auction trades from the CMC to the TSC. However, there are circumstances where an action under the CMC will affect the TSC or vice versa.
- 3.9.2 A specific issue which the RAs intend to address in the final draft of the CMC is the impact of default, suspension or termination in the TSC on the CMC (and vice versa) to ensure that processing of the events is robust and produces sensible outcomes, in line with the relevant Code Objectives, in all cases.
- 3.9.3 There are no known issues in this area, but with both Codes out for consultation it will be important to ensure that there are no “cross-code” issues. The RAs invite responses identifying any other areas where reading across the two Codes suggests there may be issues in the consulted draft of the CMC (or TSC).

### 3.10 RESPONSIBILITIES OF THE REGULATORY AUTHORITIES AND SYSTEM OPERATORS

- 3.10.1 In drafting the CMC, an attempt has been made to include the need for approval by the RAs only where this is required to further the Code Objectives. In general, RA approval is sought where there will be a material impact on the market or a change to policy and the SOs are allowed discretion in purely operational matters. While this avoids unnecessarily delaying processes under the CMC, it does leave a degree of discretion with the System Operators.
- 3.10.2 The RAs have identified a number of specific areas where the current balance of responsibilities may not be appropriate:
- determination of whether a unit is on long-term planned outage or has been mothballed (E.3.1.1(b)) might sit more comfortably with the SOs than the RAs;
  - as noted above (see section 3.5), RA approval of the Provisional Qualification Results (E.8.2.3) should be removed to allow the review and disputes processes to operate;
  - if the RAs do not provide the Demand Curve as required (F.3.1.7) it may not be appropriate that the auction is automatically cancelled: deferral or substitution may be a better option;
  - changes to the Allowed Timeframe for auction solution (F8.4.8/9) are likely to need stronger governance given the potential impact on auction outcomes;
  - the design, review, variation and suspension of the products traded through Secondary Auctions (sub-section H.2) would reasonably require RA approval in H.3.1.6;

- RA oversight of changes to the calendar for Secondary Trade Auctions (H.4.1.2) may be appropriate;
- RA oversight of the waiving of milestones in the Implementation Plan (J.2.1.4) may be appropriate;
- the requirement to provide additional information in J.4.3.6 should be subject to the request being reasonable;
- consultation with the RAs before terminating Awarded New Capacity (J.6.1.5) may not offer sufficient oversight; and
- the freedom of the SOs to re-determine exchange rates in K.1.2.8 may be too great.

3.10.3 The RAs seek responses on any of the specific areas listed above or any others where consultees believe the balance between the need for RA approval and the use of the System Operators' discretion should be revised.

### 3.11 FORCE MAJEURE

3.11.1 The RAs note that it is typical for Force Majeure provisions to have a time limit, with some form of termination occurring once this limit is achieved.

3.11.2 The current drafting of unlimited Force Majeure events potentially impacts the CMC in three ways:

- For existing units, in the near-term, Force Majeure can be managed via secondary trading. However, if the force majeure event was very long running a Participant may want to terminate the Awarded Capacity.
- For a new unit, force majeure events could impact the ability of a proposed Capacity Market Unit to meet the milestones set out in its Implementation Plan. Force majeure relief could allow delay of these milestones leading to capacity not being delivered as contracted and compromising the SEM Security Standard.

3.11.3 The RAs can see some benefit to inclusion of a limit on the duration of a force majeure event, with termination of an affected reliability option occurring once this limit was reached. The RAs invite comments on such an approach and any proposals as to the extent of such a limit and how termination following its expiration should be handled, including any termination fee to be charged.

### 3.12 SUSPENSION OR ANNULMENT OF AN AUCTION

3.12.1 The RAs have the power to set and alter the Auction Timetable set out in Section D.2. They have the power to oversee and, if necessary, modify the Auction Results as set out in sub-section F.9. There is some scope to delay an auction under sub-section L.4 if there has been a failure of the Capacity Market Systems.

3.12.2 Despite the above, there still seem to be gaps in the coverage of the RAs ability to delay or annul an auction in exceptional circumstances. Such circumstances could include:

- if there has been an irregularity in relation to the Capacity Auction and it affects the clearing price or otherwise the irregularity had an effect on the outcome;
- identification by the Capacity Auction Monitor or the SOs of non-compliance with the Capacity Auction rules;
- if there is potential State Aid breach; or
- if the capacity auction cannot be conducted fairly because of a failure of the auction system or any other exceptional circumstances.

3.12.3 If one of the circumstances set out in 3.12.2 occurs and this is identified before the auction takes place, then the RAs will direct that the Auction be delayed to permit resolution of the issue(s), e.g. by extending the window for submission of bids or re-running the bid submission process. The delay would be the minimum required to resolve the issue(s) and no more of the Qualification Process or Auction Process will be re-run than is required to resolve the issue(s) or to account for the delay to the timing of the auction. The RAs will specify the details of those processes to be repeated as part of their direction to run the delayed Auction. An updated Auction Timetable would be re-issued as soon as practicable covering all the processes to be re-run. The process followed would be broadly in line with that used for other auction delays as set out in AP6.

3.12.4 If one of the circumstances in 3.12.2 occurs and this is identified within 5 Working Days<sup>1</sup> of the auction taking place then the RAs will annul the results of the affected auction. Once the issue(s) have been resolved, the RAs will either direct that the Auction be repeated or cancel the Auction. If the Auction is to be repeated, only those parts of the Qualification Process or Auction Process will be repeated that are required to take account of the issue(s) resolution and any delay to the timing of the auction that has occurred. The RAs will specify the details of those processes to be repeated as part of their direction to re-run the annulled Auction. An updated Auction Timetable would be re-issued as soon as practicable covering all the processes to be re-run.

3.12.5 The RAs would provide reasons for any directions in respect of delayed, cancelled, annulled or repeated auctions made under the previous two paragraphs.

3.12.6 The RAs welcome feedback on the circumstances under which a Capacity Auction should be delayed or annulled and the process which should then be followed.

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<sup>1</sup> This is the period laid out in the CMC for the RAs to approve, reject or modify the results of the auction before they become final.

## 4. CONSEQUENCES OF STOCK TAKE DECISIONS

### 4.1 OVERVIEW

4.1.1 Following the announcement that the I-SEM go-live will be postponed to 23 May 2018 (see Stocktake Summary SEM-16-078a), the SEM Committee is considering making some changes to the auction timetable, and extending the transitional period to include the Capacity Year (CY) 2021/22. The SEM Committee is now planning the following:

- **Transitional Auctions:** hold a single capacity auction in December 2017 to cover the period from go-live to 30 September 2019. This is anticipated to cover a period of just over 16 months; and
- **T-4 auctions:** The first T-4 auction is due to be held in August/September 2018, and relate to CY 2022/23 (from 1 October 2022 to 30 September 2023).

4.1.2 If the SEM Committee had decided to have a Transitional Auction for the remainder of CY 2017/18 as soon as reasonably practical (December 2017), and followed it up with a T-4 auction for CY 2021/22 and a further Transitional Auction for CY2018/19 in accordance with the standard timescales set out in the current CMC draft, this would have required:

- A T-4 auction for CY 2021/22 by no later than March 2018<sup>2</sup>; and
- A T-1 transitional auction by August 2018 for the 2018/19 Capacity Year<sup>3</sup>.

4.1.3 Such a timetable would not be ideal for a number of reasons including:

- It creates a very crowded auction timetable (with auctions in early/mid December 2017, March 2018 and August 2018) which is likely to require multiple overlapping auction preparation tasks (Qualification, parameter setting) for different delivery periods in a short space of time;
- It does not allow much time for incorporating learning from the first auction in subsequent auctions; and
- It will not allow much time for clarification of the situation with respect to transmission constraint solutions (e.g. new investment, locational price signals) before we need to conduct the first T-4 auction.

4.1.4 This section sets out further details of these changes and their implications, and seeks consultation feedback on these proposals.

4.1.5 As set out in Section 4.2, these proposals will require some changes to the drafting of the CMC as issued as part of this consultation, since these proposed timings had not been communicated to the TSOs and the Rules Working Group in time to make the relevant CMC drafting changes, we are consulting on these proposals via this document. We do not believe that these proposals require any consequential changes to the current drafting of the TSC, but seek consultation feedback on that point.

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<sup>2</sup> 3 years 6 months before the start of the delivery period

<sup>3</sup> no later than 2 months before the start of the delivery period

## 4.2 TRANSITIONAL AUCTIONS

4.2.1 The SEM Committee proposes to have a single auction with a single Qualification process for the approximately 16-month period from go-live (anticipated 23 May 2018) to 30 September 2019. Key features are:

- There will be a single Qualification process. Capacity providers must Qualify for both the 4-month period from go-live to the end of CY2017/18 and CY2018/19, or opt out of both periods;
- The RAs will define a single set of Auction Parameters, appropriate for CY2018/19;
- Bidders will submit a single offer price for both periods; and
- There will be the same clearing price for both CYs, and the same volume of Reliability Options will be awarded to the same bidders in CY2017/18 (a 4-month Reliability Option) and CY2018/19 (a 12-month Reliability Option).

4.2.2 The approach of making a 4-month and a 12-month Capacity Award, as opposed to a single 16-month Capacity Award, is proposed in order to minimise the scale of drafting changes necessary to the TSC and the CMC. Permitting a 16-month CY would require some drafting changes to the TSC to support settlement of a 16-month Capacity Award<sup>4</sup>, which would be desirable to avoid at this stage in the process, not least given the TSC changes were issued for consultation on 15 November 2016 (see SEM-16-075), i.e. before the results of the Stocktake were announced. By contrast, we believe that limited if any TSC drafting changes would be required to support the proposed approach. However, we seek feedback on whether stakeholders believe changes are required to the TSC to accommodate this approach.

4.2.3 The changes required to the CMC to accommodate this approach have not yet been incorporated in the draft of the CMC issued as part of this consultation, since we have not consulted on this approach previously, or discussed fully with the TSOs or RWG. We therefore ask stakeholders to consider necessary changes to accommodate this approach as part of their responses to this CMC consultation.

4.2.4 The SEM Committee recognises that this approach may be construed as a deviation from the wording of CRM Decision 2 (see SEM-16-022, p105), which says, *"In the transition period, the required capacity will be procured through annual auctions that procure each year separately"*, since we are jointly procuring for the 4-month remaining period of CY2017/18 and CY2018/19, and effectively procuring these two "years" as a block. However, the SEM Committee considers that this change is justified on grounds of the practicality/cost assessment criteria - one of the seven key criteria against which the I-SEM design is judged - and has no significant negative effect against the other six criteria, given that CY2017/18 has become a period of just over 4-months.

4.2.5 The SEM Committee notes that if the Auction Parameters, such as the Auction Price Cap (APC) and the Existing Capacity Price Cap (ECPC) for CY2017/18 and CY2018/19, are based on

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<sup>4</sup> E.g. in relation to stop-loss limits and aggregation of Imbalance Settlement Period variables relating to Capacity Payments and Charges to the Capacity Billing Period level

CY2018/19 (rather than an averaging of values over a 16-month period), Capacity Providers will receive fees over the 4 summer months of CY2017/18, despite being at significantly reduced risk of having to make difference payments. Despite this, the SEM Committee does not intend to base parameters for this auction on a 16-month period, which would contain two summers and one winter. Such an approach would be expected, all other things being equal, to lead to a lower APC and ECPC, but the SEM Committee proposes to calculate the parameters appropriate to CY2018/19 on grounds of practicality/cost and simplicity, with no material impact on other I-SEM criteria.

4.2.6 We note that our proposed approach will result in the same option fee per month being payable to Capacity Providers in the 4 and a bit months of CY2017/18 as in the 12 months of CY2018/19 - since Option Fees are structured as a flat €/kW or £/kW value across the year as set out in the TSC. As customers' consumption is lower in summer than winter, this is likely to result in slightly higher Supplier charges in the remainder of CY2017/18 than in CY2018/19. We have considered averaging the Supplier charge over the 16-month period, but are minded not to make this change because the proposed approach:

- should still see Supplier charges drop immediately after the introduction of the I-SEM (due to the introduction of competition between Capacity Providers) and our analysis shows that the CY2017/18 tariff might be only 5% higher than an averaged 16-month tariff, given different lower levels of consumption in the period June to September compared to the annual average level; and
- is preferable from a cashflow perspective, as there will be a reduced probability of a deficit arising from the seasonal recovery of supplier charges.

## 4.3 T-4 AUCTIONS

4.3.1 Following the delay to go-live, the SEM Committee proposes to make CY2021/22 a transitional year. The implications of this proposal are that:

- **The first T-4 auction will be in respect of CY2022/23, and would be held just over 4 years in advance of the start of the CY, in late August 2018 or early September 2018.**
- **We would not hold a T-4 auction for CY2021/22 but would most likely procure all capacity for CY2021/22 through a transitional T-1 auction.** However, in line with previous CRM decisions, we would retain the option of holding the CY2021/22 ahead of T-1 timeframes, but would plan to hold the CY2021/22 auction in sequence with the CY2020/21 auction instead of in advance of it.

4.3.2 Prior to the announcement of the delay to I-SEM go-live, although no definite decision had been made, the working assumption had been that the transitional period would cover CY2017/18 to CY2020/21 inclusive, and that the first T-4 auction would be for CY2021/22 (see for instance CRM Consultation 2, SEM-15-014, Figure 15). However, the proposal to include CY2021/22 as a transitional year and to make the first T-4 auction for CY2022/23 delivery is a natural consequence of the delay to the I-SEM go-live, which is of the order of 8 months.



- 4.3.3 If a T-4 auction were held for CY2021/22, and the standard timescales set out in the CMC draft<sup>5</sup> were used, the auction would need to be held no later than the end of March 2018, only 3 months after the first transitional auction. This means that we would need to consult on parameters for the CY2021/22 auction and run the Qualification processes concurrently with holding the first transitional auction. Given the workload across the industry, it is highly undesirable to have processes to support the main CY2021/22 auction happening whilst attention is still focused on the first transitional auction.
- 4.3.4 The SEM Committee also considered the option of having a T-3 auction instead of a T-4 auction for CY2021/22 or making CY2021/22 a transitional year, which would allow the CY2021/22 auction to happen later in 2018 or in early 2019. However, during CRM Consultation 2 and 3 we received representation from certain potential new entrants (such as some new storage plant) who argued that shorter lead times would favour new entry from more conventional technologies (e.g. CCGTs, OCGTs) and have an adverse effect on their ability to compete, skewing competition in favour of CCGTs and against storage technologies which may deliver environmental benefits. These potential new entrants also expressed concerns that the first T-3/T-4 auction might be by far the best opportunity that a new entrant will have to enter the market for a number of years<sup>6</sup>, so if we have the first non-transitional auction as a T-3 auction this may limit some new entrants ability to compete in the market for several years.
- 4.3.5 The key advantages of the proposed approach are that:
- It means that the process of preparing for the first T-4 auction does not have to happen in parallel with the conduct of the first transitional auction;
  - It allows about 8 or 9 months for lessons to be learnt from the first transitional auction to be reflected in the first T-4 auction, including sufficient time to make any appropriate modifications to the CMC and to incorporate some system changes if appropriate<sup>7</sup>. This is particularly important, since it is less likely that new investment will be brought forth in transitional auctions<sup>8</sup>, and the first T-4 auction is quite likely to be the first auction where longer Reliability Options are awarded;
  - Delaying the first T-4 auction to late August / early September 2018 and making it for CY 2022/23 increases the probability that more options for addressing locational constraints can be taken into consideration:
    - It allows more time for a review of locational signals;
    - more information on the status of the key North-South interconnector upgrade may be available; and

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<sup>5</sup> which are in line with CRM Decision 3, SEM-16-039

<sup>6</sup> the all-island market is small, however generation unit sizes are large in relation to market size and demand growth, so new generation will not be required to meet the Capacity Requirement every year. Whilst efficient new build plant could out compete existing plant in a CRM auction, it will have to factor its capital cost into its bid, whereas an existing plant's previous capital costs are considered a "sunk cost".

<sup>7</sup> Though 8 months does not necessarily allow enough time for all systems changes to be implemented and fully tested

<sup>8</sup> Because of lead times involved

- It allows more time to consult on whether to include transmission constraints in the T-4 auctions, in line with the CRM Decision on Locational Issues (SEM-16-081, p50).

4.3.6 One implication of extending the transition period to include CY2021/22 is that the Capacity Requirement for each of the transitional years CY2018/19 to CY2021/22 would be based on demand forecasts for CY2021/22, which means that the Capacity Requirement will be higher in each of CY2017/18 to CY2020/21 as a result. This follows the decision to base the Capacity Requirement for each of the transitional years on the demand forecast for the last transitional year. In practice, the impact on the amount of additional capacity bought would depend upon which scenario was reflected in the Least Worst Regret (LWR) approach. As indicated in Figure 1 below, this might add of the order of 100-150MW to the Capacity Requirement (based on the 2016 GCS). This might be expected to cost consumers around €3.5 to €6m p.a. if the auction clears at around the expected Existing Capacity Price Cap (0.5 x Net CONE) and €7m to €12m if the auction clears at Net CONE. Clearly however, to the extent that we procure more capacity in all the transitional years, there is also an increase in security of supply.

Figure 1: TER Peak MW projection from 2016 Generation Capacity Statement

		2017	2021	2022	2023
Medium Scenario	projection	6888	7089	7174	7264
	increase over previous year			85	90
High Scenario	projection	6917	7340	7494	7653
	increase over previous year			154	159

## 4.4 RESULTING INDICATIVE AUCTION TIME TABLE

4.4.1 Based on these proposals, the indicative auction timetable for the first few auctions would be as follows:

- December 2017: Transitional Auction for CY2017/18 and CY2018/19;
- August /September 2018: T-4 Auction for CY2022/23; and
- March 2019: Transitional Auction for CY2019/20.

4.4.2 We would then expect to hold:

- Transitional auctions for each of the remaining transitional years on an annual basis in advance of the relevant CY. These may be consistent with T-1 auction timeframes for each CY, but in line with CRM Decision 3 (SEM-16-039), once lessons learnt from the first transitional auction have been appropriately reflected, the SEM Committee will consider further the possibility of holding subsequent transitional auctions in sequence at an earlier stage; and
- T-4 and T-1 auction for each subsequent year in line with the standard timeframes set out in the current CMC draft.

- 4.4.3 Holding these transitional and T-4 auctions in this sequence, and in accordance with this timetable will be more practical than the alternative approaches considered. It will reduce operational risk associated with conducting auction processes for different auctions concurrently, and allow lessons learnt to be incorporated in subsequent auctions. It also strikes a balance between allowing new entrants to compete as soon as reasonably practical, but also allowing new entrants with different build lead times to compete on a relatively equal footing.

## 4.5 CMC AND TSC DRAFTING IMPLICATIONS

4.5.1 As discussed above, we envisage that:

- TSC: On the basis of an initial high level review, we do not believe that there are any consequential changes to the TSC. However, we seek feedback on this point;
- CMC: It is likely that some changes will be needed to the current draft of the CMC (circulated under this cover) in order to accommodate the proposals set out in this section relating to the transitional auctions. We envisage that the bulk of the changes will be implemented by change modifications or additions to the drafting of the Interim Arrangement for Transitional Auctions (as set out in sub-section M.3). However, we also seek feedback on this point

## 4.6 CONSULTATION QUESTIONS

4.6.1 We seek feedback from stakeholders on all aspects of the proposals set out in this section, particularly:

- Do you have any issues with the proposed auction timetable set out in this section?
- Are any drafting changes required to the CMC to accommodate these proposals, and do you have any specific proposals in this regard?

## 5. CHAPTERS OF THE CAPACITY MARKET CODE

For the purpose of this consultation, the Capacity Market Code is structured as follows:

- A. Introduction and Interpretation
- B. Legal and Governance
- C. De-rating and Capacity Concepts
- D. Pre Capacity Auction Processes
- E. Qualification
- F. Capacity Auctions
- G. Registries and Settlement Data
- H. Secondary Trading
- I. Obligations Associated with Awarded Capacity
- J. Delivery of Awarded New Capacity
- K. Exchange Rates
- L. Data and Information systems
- M. Interim Arrangements

Glossary

Appendix A - List of Agreed Procedures

Appendix B – Template for Dispute Resolution Agreement

Appendix C – Capacity Auction Timetable

Appendix D – Qualification Data

Appendix E – Capacity Auction Clearing

Appendix F – Qualification Capacity Register Data

Appendix G – Capacity and Trade Register Data

Appendix H – Data Publication

Appendix I – Template of Letter of Credit

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Agreed Procedures:

AP1 - Registration

AP2 - Default and Suspension

AP3 - Qualification and Auction Process

AP4 - Communication Channel Qualification

AP5 – System Operation, Testing, Upgrading and Support

AP6 – System and Communication Failures

The following section provides a short summary of the high-level content of each chapter of the draft Capacity Market Code. Where the RAs are aware of any specific issues or potential issues in the CMC and are seeking input from industry, these are identified with the relevant chapter.

## 5.1 CHAPTER A –INTRODUCTION AND INTERPRETATION

Chapter A specifies the scope, objectives and interpretation of Capacity Market Code. It sets out the requirement within the Transmission System Operator licences to administer and maintain the Capacity Market Code and how it fits into the wider legal and regulatory framework that governs the trading arrangements in the Single Electricity Market.

## 5.2 CHAPTER B – LEGAL AND GOVERNANCE

Chapter B sets out provisions relating to the governance and administration of the Code, specifying various provisions including:

- Liability limitation, governing law, jurisdiction, priority of documents;
- Becoming a party to the CMC;
- Registration of Participants;
- Role of the System Operators and fees;
- Obligations on Parties;
- Prohibition on Market Manipulation;
- Capacity Auction Monitor and Capacity Market Auditor;
- Modifications;
- Default, suspension and termination
- Dispute Resolution;
- Force Majeure;
- Assignment; and
- Publication of the Code and data management.

The drafting in Chapter B is based on the equivalent drafting in the Trading and Settlement Code Section B. However, it has been significantly developed to reflect the specific requirements of the Capacity Market.

## 5.3 CHAPTER C – DE-RATING AND CAPACITY CONCEPTS

This Chapter describes concepts used in determining de-rated capacity values. These concepts include:

- Existing Capacity i.e. that which has been commissioned
- New Capacity i.e. that which has not yet been commissioned
- Grouping of Capacity by technology classes
- Initial Capacity i.e. available capacity prior to applying a De-Rating factor
- The SEM Security Standard which is the number of hours per year for which load curtailment may occur when demand exceeds Capacity Requirement
- A De-Rating Capacity Factor which is a factor between 0 and 1 which lowers the capacity available from a technology class to account for periods of unavailability
- A Capacity Requirement that reflects the quantity of de-rated capacity required to satisfy the SEM Security Standard

## 5.4 CHAPTER D – PRE CAPACITY AUCTION PROCESSES

Chapter D specifies the processes which take place in advance of the Capacity Auction, including publication of a timetable and auction information pack. It outlines the requirement for the System Operators to publish the auction information pack which will include:

- (a) De-Rating Curves, describing De-Rating Factors by unit Initial Capacity and by Technology Class (including for Interconnectors);
- (b) the Capacity Requirement for the Capacity Year;
- (c) how much Awarded Capacity has already been procured for the relevant Capacity Year;
- (d) the Auction Price Cap;
- (e) the Existing Capacity Price Cap;
- (f) the €/MW rate of the New Capacity Investment Rate Threshold;
- (g) the Annual Stop Loss Limits applicable to the Capacity Year;
- (h) the Billing Period Stop Loss Limits applicable to the Capacity Year;
- (i) indicative Annual Capacity Payment Exchange Rate applicable to Awarded Capacity in the Auction;
- (j) the allowed tolerances that may be applied by a Participant in its Qualification Application to Capacity Market Unit de-ratings;

- (k) the level of Performance Security and the timeframes for providing them;
- (l) the €/MW rates for calculating Termination Fees;
- (m) the Full Administered Scarcity Price and the Reserve Scarcity Price Curve applicable to the Capacity Year; and
- (n) the Capacity Auction Timetable (at least for events after the publication of the Capacity Auction Information Pack).
- (o) Details of Local Constraints

## 5.5 CHAPTER E – QUALIFICATION

Chapter E sets out the process by which the System Operators determine if a Capacity Market Unit satisfies the requirements to qualify for the Capacity Auction and the Secondary Trade Auction. The application process, the qualification calculations and the notification of qualification processes can also be found in this Chapter.

A review of the provisional and final qualification decisions may be requested by any participant. The process is detailed in chapter E along with the process where a participant may make an application for extended qualification.

## 5.6 CHAPTER F – CAPACITY AUCTIONS

Chapter F covers the operation, conduct and participation in the Capacity Auction. The purpose of the Capacity Auction is to:

- (a) procure capacity from Capacity Market Units on a competitive basis;
- (b) allow Participants in the Capacity Auction to specify the price they wish to be paid for Awarded Capacity and to establish the duration of Awarded Capacity;
- (c) limit the Awarded Capacity to the Net De-Rated Capacity of a Capacity Market Unit in respect of each of the Existing Capacity and New Capacity associated with that Capacity Market Unit;
- (d) limit the duration of Awarded Capacity to the Maximum Capacity Duration in respect of each of Existing Capacity and New Capacity; and
- (e) detail the enduring auction process and the measures to manage local capacity constraints;
- (f) determine the prices to be paid for Awarded Capacity.

The chapter also focuses on the requirements when determining the demand curve and sets out how this will be calculated by the RAs. Guidance on how Capacity Auction Offers should be submitted and how these offers will be treated is also covered in Chapter F.

## 5.7 CHAPTER G – REGISTRIES AND SETTLEMENT

The System Operators are responsible for creating and maintaining two registers which will capture information relating to each Capacity Market unit and each quantity of capacity awarded as part of the Capacity Auction or Secondary Auction Trade.

The Qualification Capacity Register is a record of all Generator Units and Interconnectors that have submitted an application to qualify for any Capacity Auction. It will contain information relating to opt-out notifications, applications for qualification and qualification results.

The Capacity and Trade Register will contain information relating to each quantity of Awarded Capacity allocated to each Capacity Market Unit as a result of a Capacity Auction or a Secondary Trade Auction. This register will form the basis of the settlement of the Capacity Market under the Trading and Settlement Code. It will detail the Initial Capacity of each Market Unit determined at the time of qualification.

## 5.8 CHAPTER H – SECONDARY TRADING

Secondary trading allows a Participant for a Capacity Market Unit that is undergoing an Outage, to purchase a Product through a Secondary Trade Auction that will allow it to offset Awarded Capacity. It sets out the role of the System Operators which includes:

- (a) designing types of Products;
- (b) providing facilities for the receipt and processing of Secondary Auction Bids and Secondary Auction Offers;
- (c) validating Secondary Auction Bids and Secondary Auction Offers;
- (d) providing and managing a platform for the purpose of Secondary Trade Auctions; and
- (e) determining and publishing Secondary Trade Auction outcomes, including Awarded Capacity and prices.

Secondary Trading is defined in Chapter H and descriptions of the product design and price caps are also included. Similar to the Market Capacity Auction chapter, the Secondary Trade Auction timeline and details of the information pack are set out in this chapter.

A Participant's eligibility to participate in Secondary Trade auctions is detailed along with the treatment of auction bids and offers. Restrictions on the eligibility of both buyers and sellers to participate in Secondary Trade Auctions and limits on their maximum level of trade are also detailed in this chapter.



The way in which Secondary Trade Auction clearing is executed is set out, including details on the manner in which System Operators should notify Participants of results.

## 5.9 CHAPTER I – OBLIGATIONS ASSOCIATED WITH AWARDED CAPACITY

This Chapter sets out how the obligated capacity quantity is calculated for a period and the obligations associated with that awarded capacity. These include requirements around implementation and performance of the Capacity Market Unit and what is expected from the Capacity Market Unit in each Imbalance Settlement Period each year.

## 5.10 CHAPTER J – DELIVERY OF AWARDED NEW CAPACITY

This Chapter sets out the implementation arrangements for Awarded New Capacity, to ensure that it is delivered in time for the relevant Capacity Years. It details the major milestones within the Implementation Plan and the expected timeframes for achievement of the milestones. New Capacity participants are also required to submit Implementation progress reports to the TSOs. The requirements of these reports are also set out in Chapter J.

The Performance Security, which acts as credit support for any Termination Fees which may become payable by the Participant, are also outlined in this chapter. It includes the form which the security should take and the acceptable credit rating required from a financial institution providing the credit. There is a section in this chapter called Remedial Action which covers circumstances such as when there is a change in the engineering, procurement and construction contract, if there is a requirement to extend a date previously agreed as part of the Implementation Plan or there is a change to the Participant who is providing the New Capacity.

The circumstances in which the TSOs may terminate the awarded new capacity in respect of a generator are captured within the chapter. This includes details on how this notice would be served by the System Operators and what information would be included in the notice. Further to this there is an outline of when the termination fees would be applied and also how the fees are calculated.

## 5.11 CHAPTER K – EXCHANGE RATES

Chapter K determines the exchange rates which are to be used in the CMC.

## 5.12 CHAPTER L – DATA AND INFORMATION SYSTEMS

This chapter sets out the rules around the systems and procedures for the communication of Data Transactions and REMIT Data Transactions between the System Operators and Market Participants. It also covers the rules around the publication of data and information relating to arrangements under the Capacity Market Code.

The chapter describes the system interfaces required; the submission, validation and rejection of data transactions; communication failures; data publication and the use of information. Participants may also appoint the TSOs to provide data required under the REMIT scheme. Details of how this can be done are included in chapter L.

## 5.13 CHAPTER M – TRANSITIONAL ARRANGEMENTS

This Chapter sets out the transition to the new rules for the Capacity Market auctions in I-SEM. It specifies interim arrangements that will apply in respect of the Capacity Market following the Capacity Market Commencement Date for the transitional auction years. Secondary Trading arrangements are also set out in this chapter which includes the interim requirements for the Capacity and Trade Register which is to be maintained by the System Operators.

The modification process is outlined and the process by which the RAs or the TSOs will determine parameters and other decisions required prior to the Capacity Market Commencement Date is also covered in this chapter. There is also a paragraph detailing the period of the first Capacity Market Audit.

Chapter M also allows for determinations made in line with the CMC, but before the Capacity Market Commencement Date, to be adopted.

## 5.14 APPENDICES

Along with the Chapters referred to above, a number of Appendices are included as part of this Consultation process for industry consideration.

Appendix A - List of Agreed Procedures

Appendix B – Template for Dispute Resolution Agreement

Appendix C – Capacity Auction Timetable

Appendix D – Qualification Data

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Appendix G – Capacity and Trade Register Data

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## 6. SUBMISSION OF RESPONSES

It is considered likely that the SEMC may receive a significant number of detailed responses to this consultation. In order to facilitate these being considered and addressed within the timescales for the publication of the SEMC decision, a response template is being provided in Appendix A of this paper and the SEMC request that all specific comments on sections of the Capacity Market Code are contained within this template form.

The response template includes the following columns:

- I-SEM CMC reference;
- Title of the comment;
- Detailed commentary / explanation;
- Suggested drafting / proposed amendment for the I-SEM CMC; and
- Consequential impacts on other sections of the CMC (with cross referencing of changes in the participant response).

As part of the review and response process, it is likely that responses will be shared with the TSOs for comment. However, respondents can make their responses confidential to the RAs if they so wish.

## 7. NEXT STEPS

Interested parties are invited to respond to this consultation on the draft Capacity Market Code and the issues raised in this paper, where appropriate, by presenting their views in the response template provided. The RAs will consider all responses received.

The SEM Committee intends to make a decision in June 2017 on the Capacity Market Code as covered in this consultation paper.

Responses to this consultation paper should be sent to **both** Thomas Quinn [tquinn@cer.ie](mailto:tquinn@cer.ie) and Karen Shiels [karen.shiels@uregni.gov.uk](mailto:karen.shiels@uregni.gov.uk) by 17:00 on 24 February 2017.

Please note that we intend to publish all responses unless marked confidential. While respondents may wish to identify some aspects of their responses as confidential, we request that non-confidential versions are also provided, or that the confidential information is provided in a separate annex. Please note that both Regulatory Authorities are subject to Freedom of Information legislation.

## APPENDIX A RESPONSE TEMPLATE

### SUMMARY INFORMATION

<b>Respondent's Name</b>	e.g. XYZ Power Inc.
<b>Type of Stakeholder</b>	Generator
<b>Contact name (for any queries)</b>	John Doe
<b>Contact Email Address</b>	<u>JD@XYZ.COM</u>
<b>Contact Telephone Number</b>	123 456 789

### I-SEM CMC COMMENTS

<b>ID</b>	<b>I-SEM CMC Reference</b>	<b>Short Title</b>	<b>Commentary / Explanation</b>	<b>Suggested Drafting Change to the CMC</b>	<b>Relevant Cross-Reference for any impacted section</b>
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

NB please add extra rows as needed.