An Coimisiún um Rialáil Fóntas
Commission for Regulation of Utilities

Dublin Security of Supply: Measures to mitigate the risk of disorderly exit

Information Paper

Reference:	CRU/18/228	Date Published:	05/10/2018	Closing Date:	N/A

The Exchange, Belgard Square North, Tallaght, Dublin 24, Ireland
T +353 1 4000 800 | F +353 1 4000 850 | www.cru.ie

Executive Summary

Background

The CRU's information paper titled 'Regulatory Approach to Maintaining Local Security of Supply in Electricity' (CRU/17/346) sets out the CRU's approach to taking actions to address local security of supply issues, including in the event of a potential disorderly exit. This paper sets out the CRU's response to such an event – the potential disorderly exit of Huntstown Power Company Limited (HNC) and Viridian Power Limited (HN2) (together the "Huntstown Units", or "Viridian" as implied by the context). It should also be noted that the evolving nature of anticipated demand levels in the Dublin Region[1] have also been taken into account, in particular expected demand levels are higher now than they were when the first T-1 auction was run in December 2017.

Ordinarily, a generator that wishes to close will give three-years notice, as required by the Grid Code, and will close in an orderly manner. A generator that is unable to meet this requirement, and wishes to close in advance of this notice period, will submit a closure notice and a derogation request from the Grid Code notice period requirement to EirGrid. However, there may be other instances where, due to the financial circumstances of the generator, a formal notice of closure may initiate a disorderly, and potentially immediate, exit from the market. For such cases CRU/17/346 established that generators in financial distress must demonstrate that there is a demonstrable, material, and imminent likelihood of closure (the DMILC Test). This DMILC Process sits inside the broader framework of the Targeted Contracting Mechanism (TCM) set out in CRU/17/346.

As set out in CRU/17/346 cases where a generator wishes to close in advance of the notice period or where there is a local security of supply issue are considered to be exceptions. For the avoidance of doubt, it should not be assumed that the notice period should only be enforced when there is a pressing security of supply issue. The CRU expects generators to have reasonable foresight of their business and to exercise prudence to ensure that they are in a position to honour their commitments under the Grid Code. It is expected that such considerations by generators would be taken into account prior to making a decision to close and as such to have made appropriate financial arrangements to ensure that the generator remains solvent over the three-year closure period.

However, in the case of the Huntstown Units, Viridian did not have financial resources sufficient to meet its market obligations. Furthermore, Viridian considered that it was unable to submit a formal closure notice and seek a derogation from the three-year notice period, as it would need to report such an action to the markets and due to the financial circumstances of the companies there was a risk that this action would precipitate an immediate and

[1] In this paper the "Dublin Region" refers to the electrical area in and around Dublin and therefore includes areas that are not geographically located in Dublin but are considered electrically inside Dublin.

disorderly exit which Viridian would not have the ability to prevent. Accordingly, Viridian applied to the CRU under the DMILC Process requesting closure by the date of I-SEM go-live.

In January 2018, the CRU decided that the Huntstown Units met the DMILC Test and could enter the DMILC Process; on this basis the Huntstown Units were able to submit a derogation request to EirGrid. EirGrid subsequently submitted its Derogation Report to the CRU, which set out a number of system security issues that could have arisen in the event that derogations were granted. EirGrid recommended that CRU do not grant a derogation to either Huntstown Unit. The CRU, noting the EirGrid recommendation, decided not to grant a derogation to either unit. However, noting that the DMILC Risk (i.e. the risk of the disorderly exit of the Huntstown Units) still existed, the CRU requested EirGrid to examine potential measures, consistent with CRU/17/346, that could mitigate the impact should the risk materialise. In the process of exploring options EirGrid considered a contract with the Huntstown Units as this option would mitigate the likelihood of the DMILC Risk materialising whereas other options would mitigate the impact should the DMILC Risk materialise. Accordingly, EirGrid submitted its Mitigant Measures Report (the "Report") to the CRU. The Report set out a number of feasible and available options; feasible options being ones technically capable of mitigating the risk in the relevant timeframe and available options being those that EirGrid was capable of implementing. A contract with either of the Huntstown Units was not included as an available option as Viridian, at that time, had not agreed to terms which EirGrid considered consistent with CRU/17/346. The CRU instructed EirGrid to progress a number of the mitigant options set out in the Report that were both feasible and available at that time. The CRU also requested that EirGrid submit an Addendum to the Report to provide the CRU with additional information in relation to the options set out in the Report and to, potentially include additional options in the event that any feasible options had subsequently become available. The CRU also reiterated to EirGrid the importance of consistency with CRU/17/346 for any available option. EirGrid subsequently, on 11th August, submitted an Addendum to the Report, the Addendum included, inter alia, an additional feasible and available option – a contract with the Huntstown Units.

Recent Outcomes

This paper sets out the suite of mitigant measures which the CRU decided to progress in response to the DMILC Risk of the Huntstown Units. Other options which have not been progressed are not discussed in this paper as to do so may have an adverse impact on future commercial discussions in relation to any potential future local security of supply issues.

In summary these mitigant measures are:

1. Local Reserve Service Agreements (LRSAs)
2. Additional Service Provision in the Dublin Region
3. Locational Scalars for System Services in the Dublin Region
4. Financial Reporting to mitigate future disorderly exit
5. TSO Operational measures to maintain system security

6. Facilitating generators connecting in the Dublin Region
7. Accelerated transmission reinforcement of the Dublin Region
8. Flexible Demand Contracts in the Dublin Region

The CRU is required by legislation to have regard to security of supply and to take such measures as it considers necessary to protect security of supply. CRU/17/346 sets out the CRU's intended approach to taking such measures in the event of a local security of supply concern, such as the DMILC Risk which is the subject of this paper. As set out in this paper the CRU considers the above suite of measures to be necessary to protect security of supply in the Dublin Region and are consistent with the objectives and principles set out in CRU/17/346.

Next Steps

Several of the measures initiated as part of this DMILC Process will involve further consultation and a period of time to fully implement. However, this paper represents the conclusion of the current phase of DMILC Process, brought about by the risk of disorderly exit of the Huntstown Units, and the DMILC Risk has now been appropriately mitigated by the initiation of the suite of measures discussed in this paper. However, the CRU considers that the Huntstown DMILC Risk will remain extant until the Huntstown Units have successfully exited the DMILC Process on 1st October 2024 and have demonstrated that they are capable of meeting their market obligations, including clause P.C 3.5 of the Grid Code (i.e. the 3 year closure notice period).

The conclusion of this phase of the DMILC Process has also brought about the agreement of the Huntstown Units to the I-SEM related licence modifications. The CRU will now begin a process to introduce the I-SEM related licence modifications for all generators. The SEM Committee will also, as a matter of priority begin a process to implement the BMPCOP. The timing, initiation and nature of these processes will be published separately.

Lastly, the CRU would like to note the contribution of EirGrid in bringing this process successfully to this point under challenging circumstances and ensuring continued security of supply for Dublin.

Public/Customer Impact Statement

On 15 December 2017, the first Capacity Market auction for the Integrated Single Electricity Market (I-SEM) took place. The results of this auction were approved by the Single Electricity Market Committee (SEMC), the cross jurisdictional decision-making authority for all Single Electricity Market (SEM) matters on the island of Ireland.

The key objective of this new capacity mechanism is to deliver a more competitive electricity generation market, focussed on delivering services customers need at the least possible cost and maintaining security of supply. The outcome of the recent auction process will result in savings of approximately €150 million to Irish energy consumers and a further €50 million to Northern Ireland consumers.

Following the completion of the auction, it was expected that generators would receive lower capacity revenues as a result of greater competition. Generators which were unsuccessful in the auction will receive no capacity revenues, reflecting the increase in competition.

It had been expected that this may also result in some generators taking the commercial decision to close particular plants. In the event of this, there remains sufficient generation capacity on the island of Ireland, with some areas of local constraint.

In these areas of local constraint, a process has been put in place to be managed by the Transmission System Operator (EirGrid) to deal with such a scenario to ensure the continued local security of supply. An information paper on this process was published by the CRU on 18 December 2017 (CRU/17/346). This paper included consideration of instances where, due to the financial circumstances of the generator, a formal notice of closure may initiate a disorderly, and potentially immediate, exit from the market. For such cases the CRU established that generators in financial distress must demonstrate that there is a demonstrable, material, and imminent likelihood of closure. Such generators are permitted to enter the process without giving the ordinarily required three-year notice before closing.

The Huntstown generating units, owned by Viridian, entered this process and as a result the CRU has approved a number of measures to reduce the risk of sudden disorderly exit of these units, and mitigate the impact to consumers if the Huntstown units do exit suddenly.

Table of Contents

Glossary of Terms and Abbreviations

Abbreviation or Term	Definition or Meaning
CRM	Capacity Remuneration Mechanism
CRU	Commission for Regulation of Utilities
DMILC	Demonstrable, Material and Imminent Likelihood of Closure
LRSA	Local Reserve Services Arrangement
TCM	Targeted Contracting Mechanism
TSO	Transmission System Operator – EirGrid

1 Introduction

1.1 Commission for Regulation of Utilities

The Commission for Regulation of Utilities (CRU) is Ireland's independent energy and water regulator. Our remit is to regulate water, energy markets, energy networks and energy safety in the public interest.

Further information on the CRU's role and relevant legislation can be found on the CRU's website at www.cru.ie.

1.2 Background

On the 18th December 2017, the CRU published an information paper titled *'Regulatory Approach to Maintaining Local Security of Supply in Electricity'* (CRU/17/346). This paper set out the CRU's objectives, principles and intended approach to maintaining local security of supply in response to significant demand growth or a generator exiting the market. In particular, CRU/17/346 set out how the CRU may intervene, in the event of a generator exiting the market, where it considers that there is a risk to security of supply on all or part of the system.

Local security of supply issues can arise not only due to increases in demand in an area but also due to reductions in generation capacity in a particular area. CRU/17/346 noted that the new I-SEM market arrangements, which came into effect on the 1st October 2018, and in particular, the Capacity Remuneration Mechanism (CRM) may result in some generators leaving the market as only capacity that clears in the auction will receive contracts. The CRM arrangements include a T-1 auction and a T-4 auction, that is an auction for capacity delivery in one year's time and an auction for capacity delivery in four years' time. Both auctions will be run each year. The benefit of holding an auction four years ahead of delivery is that it allows for efficient entry and exit from the market. However, for the transitional period of the I-SEM, i.e. the first four years, there is an increased risk of generator exit with shorter notice periods than would be expected once generators have four-year foresight of their capacity revenues.

As part of the CRM process, EirGrid identified Locational Capacity Constraint Areas for the purposes of the CRM auction (including one covering the Dublin Region[2]). CRU/17/346 set out the CRU's approach to dealing with the potential exit of a generator(s) in constrained areas, such as Dublin.

The current requirements under the Grid Code, which all generators must comply with under their Licences, are that generators above 50MW must give three years notice if they intend to close. This notice period is important for the stability of the market (by giving the market time to respond to exit) and for system security reasons (by giving the TSO time to respond to any system issues). An EirGrid paper setting out their Generation Plant Closure Process was

[2] In this paper the "Dublin Region" refers to the electrical area in and around Dublin and therefore includes areas that are not geographically located in Dublin but are considered electrically inside Dublin.

approved by the CRU and published on the 20th December 2017[3]. The notification of closure from a generator under the Grid Code process will initiate the process set out in the EirGrid paper.

When a generator gives notice that it intends to close, the TSO undertakes analysis to assess the impact, if any, on system security and any actions that may be required. The CRU will review this analysis and issue any necessary approvals or directions. Where there is a potential impact on system security, the CRU will request the TSO to identify the issue and potential solutions. One of these potential solutions may be a form of Targeted Contract – under the Targeted Contract Mechanism - with the generator for the duration of, or a portion of, the three-year notice period, until the appropriate remedial action has been implemented. CRU/17/346 sets out the principles the CRU will apply in determining whether such a contract will be put in place.

However, it should be noted that remedial actions identified by the TSO may take longer than three years to put in place. It is also possible that a generator may consider that it may be unable to give three years notice and may consider that it needs to apply for a derogation to close in a shorter time period. CRU/17/346 noted that, depending on the financial circumstances of the generator, a formal notice of closure may initiate a disorderly, and potentially immediate, exit from the market. Therefore, the CRU may, on a case-by-case basis, take action in the absence of a formal closure notice, where there is a Demonstrable, Material, and Imminent Likelihood of Closure (DMILC). The CRU must be clear, before taking any action, that such action is indeed required and not either a generator's premature concern in response to market trends or an attempt to extract additional, and unnecessary, revenues from the consumer.

It is this DMILC Process, that Viridian initiated due to their financial position and consequent risk of sudden disorderly exit. The CRU and EirGrid followed the process as set out in CRU/17/346.

1.3 Purpose of this Paper

This paper outlines the process carried out by the CRU in response to the DMILC Risk of the potential for the disorderly exit of Huntstown Power Company Limited (HNC) and Viridian Power Limited (HN2), collectively referred to as the "Huntstown Units" or "Viridian", in the context of the CRU's approach to maintaining local security of supply in electricity as set out in CRU/17/346.

[3] EirGrid Information Paper – '*Generation Plant Closure Process'* http://www.eirgridgroup.com/site-files/library/EirGrid/Plant-Closure-Process-(20-December-2017).pdf

1.4 Legal Background

Section 9 of the Electricity Regulation Act, 1999, as amended requires the CRU to have regard to ensuring security of supply. In addition, Regulation 28 of SI 60 of 2005 puts additional security of supply obligations on the CRU and the TSO, including the requirement that "The Commission shall take such measures as it considers necessary to protect security of supply".

Clause PC.4.5 of the Grid Code places an obligation on generators above 50MWs to provide the TSO with three-years notice prior to closing.

In CRU/17/346, the CRU has set out its approach to local security of supply issues in the context of these legislative provisions.

1.5 Structure of this Paper

Section 1 sets out the background and relevant legislation. **Section 2** sets out the CRU's process in response to the Huntstown DMILC Risk. **Section 3** sets out the mitigant measures that the CRU has initiated. **Section 4** sets out the next steps

2 The DMILC Process

This section sets out the process that led the CRU to decide upon the implementation of various mitigant measures, these measures are discussed in section 3 of this paper.

The first T-1 auction was held on the 15th December 2017 and resulted in one of the Huntstown units, HN2, not receiving a CRM contract. The outcome of the first CRM auction, including the fact that one of the Huntstown units had failed to receive a contract, was reported upon in various national media reports. Subsequent to this, as reported in national media, Viridian indicated its intention to close both of the Huntstown units in May 2018 and sought entry into the DMILC Process.

On the 22nd December 2017, Viridian wrote to the CRU stating that both Huntstown units intended to exit the market from the 23rd May 2018 (then the date for I-SEM go-live which was subsequently revised to 1st October 2018). The CRU engaged with Viridian throughout January 2018 and on the 23rd January 2018, taking into account the totality of evidence submitted by Viridian the CRU decided that, in this case and the then current circumstances, the DMILC Test had been met. Accordingly, the CRU issued its decision to Viridian that both units had passed the DMILC Test set out in CRU/17/346. This decision permitted both Huntstown units to request a derogation from the three-year closure notice period requirement in the Grid Code, without having first submitted a formal notice of closure.

On the 22nd January 2018, the Huntstown Units, had submitted applications for derogation from the Grid Code three-year closure notice to EirGrid, indicating a closure date of the 23rd May 2018. On the 23rd January 2018, the CRU advised EirGrid of the Huntstown Units DMILC risk and EirGrid was then able to process the derogation requests.

On 6th February 2018, EirGrid submitted its Derogation Assessment Report, setting out any system security issues that may arise in the event that the CRU granted the requested derogations. EirGrid recommended that the CRU not grant a derogation to either Huntstown Unit. The CRU considered the application in light of EirGrid's recommendation and decided not to grant the requested derogation. Notification of the CRU decision was issued to Viridian on the 23rd February 2018 and was reported subsequently in national media, although the decision had not been published by the CRU or EirGrid.

However, as the Huntstown Units had passed the DMILC Test as provided for in CRU/17/346, and that therefore the risk of a sudden and disorderly exit remained, the CRU requested EirGrid to explore options which would mitigate the system impacts identified in the Derogation Assessment Report and to submit their recommended approaches to the CRU for approval. Accordingly, EirGrid began to explore options that would mitigate the DMILC Risk (i.e. the risk that the Huntstown Units would experience disorderly exit in advance of the Notice Period).

EirGrid submitted its Huntstown Mitigant Measures Report to the CRU on the 15th May 2018 outlining a number of potential mitigant options in the context of the CRU's principles and objectives as set out in CRU/17/346. In the process of exploring options EirGrid considered a contract with the Huntstown Units as this option would mitigate the likelihood of the DMILC Risk materialising whereas other options would mitigate the impact should the DMILC Risk

materialise. The Report set out a number of feasible and available options; feasible options being ones technically capable of mitigating the risk in the relevant timeframe and available options being those that EirGrid was capable of implementing. A contract with either of the Huntstown Units was not included as an available option as Viridian, at that time, did not agree to terms EirGrid considered consistent with CRU/17/346. Having reviewed the Report, On 2nd July 2018 the CRU instructed EirGrid to progress a number of the mitigant measures set out in the Report these measures are discussed further in section 3. These measures included a Local Reserve Service Agreement (LRSA) with a party other than Viridian, providing for additional service provision in the Dublin Region, TSO operational measures, and accelerating transmission reinforcement.

On the 25th May 2018, the CRU requested EirGrid to provide an addendum to its Mitigant Measures Report should there be any updates to the status of the available mitigant options set out in the Report and to potentially include additional options in the event that any feasible options had subsequently also become available. The CRU also reiterated the importance of consistency with CRU/17/346 for any available option. On the 11th August 2018 EirGrid subsequently submitted an Addendum to the Report, the Addendum set out, inter alia, the exploration carried out regarding an LRSA with the Huntstown Units as additional feasible and available option. The Addendum noted further clarity may be beneficial in relation to the provisions necessary to be included in such an agreement in order to maintain consistency with CRU/17/346, in particular provisions in relation to moral hazard. The CRU met with the parties together to provide further clarity on the necessary aspects and requirements which would need to be met to satisfy, in the CRU's view, the requirements of CRU/17/346, and on 22nd August 2018 issued a clarification note to EirGrid. On 23rd August, 2018 following confirmation that Viridian had agreed to the requirements set out in the clarification note the CRU directed EirGrid to enter into heads of terms and required the terms and conditions to be submitted to the CRU by 21st September 2018. EirGrid made a submission on 21st September 2018, and in consideration of which the CRU issued correspondence to EirGrid on the 26th and 30th September 2018. In the context of which and following engagement between the parties, agreements were signed between EirGrid and Viridian on 30th September, 2018.

3 Mitigant Measures

This section sets out the mitigant measures referred to in section 2 that the CRU has approved for progression. Collectively this suite of measures to address the Huntstown DMILC Risk, consistent with CRU/17/346, will ensure that the long-term security of supply of the Dublin Region will be protected. In order to ensure the expeditious implementation of the suite of measures the CRU has already approved allowed revenues related to security of supply in this year's TUoS charges. The mitigant measures are discussed in greater detail in this section, and in summary are set out below:

Mitigant Measures

1. LRSAs
2. Additional Service Provision
3. Locational Scalars for System Services in the Dublin Region
4. Financial Reporting to mitigate future disorderly exit
5. TSO Operational measures to maintain system security
6. Facilitating generators connecting in the Dublin Region
7. Accelerated transmission reinforcement of the Dublin Region
8. Flexible Demand Contracts in the Dublin Region

3.1 Consistency with the Objectives of CRU/17/346

CRU/17/346 set out four objectives that the CRU sought to achieve with its approach to local security of supply. The process seeks to achieve these objectives generally, however, when the outcome of this process, the Huntstown DMILC Risk, is considered, the suite of measures collectively achieves the CRU's objectives. For reference the objectives are:

Objectives

1. To keep the lights on
2. To protect consumers from loss of supply and ensure the most cost effective long-term solution
3. To allow efficient market exit by generators through a managed process that provides sufficient time:
   a. for the market to respond;
   b. for the TSO to update their planned transmission development
   c. to address short-term or local security of supply issues
4. That generators are capable of financing their efficient activities during the exit period

The suite of measures both reduce the probability of the disorderly exit of the Huntstown Units and reduce the impact to consumers should the Huntstown Units experience a sudden disorderly exit notwithstanding this, therefore the first objective is clearly met.

The CRU has had particular regard to balancing the short-term response and the longer-term implications of this DMILC Process. The LRSAs address the acute risk to security of supply brought about by Viridian's financial position and include provisions that will facilitate the entry of new generation into the Dublin Region should Viridian remain unable to meet its market obligations after the end of the LRSA term. The TSO operational measures are directly related to the acute risk to security of supply, however, such measures could also be adapted for application in the event that other local security of supply risks emerge. Financial reporting will help the early identification of future potential DMILC risks before they pose a risk to security of supply and the acceleration of transmission works in the Dublin Region will reduce the local constraint and therefore the impact of the financial failure of any one generator. In addition, the locational scalars for system services and connection policy incentives will incentivise generation capacity in the Dublin Region both in terms of entry and exit. In the context of strong demand growth, independent of the Huntstown DMILC Risk, these measures are important for consumers long-term security of supply. Therefore, the second objective is clearly met. Additionally, the third and fourth objectives are met as an orderly process is now possible during the I-SEM transition phase (i.e. before the first T-4 capacity year).

3.2 The Mitigant Measures

This section will describe the suite of measures and discuss them in the context of the principles set out in CRU/17/346. For reference the principles are:

Principles

1. The CRU will allow the market to work in the first instance
2. Inefficient units should exit the market
3. The established notice periods for closure will be enforced
4. Regulatory intervention will only be taken where necessary to maintain security of supply
5. Insofar as appropriate, the least cost approach for the consumer will be taken
6. Any intervention will be targeted and temporary in nature and will not prevent the eventual closure of any unit that has given notice to close.

3.3 LRSAs

The CRU has approved EirGrid's entering into a number of LRSAs and have approved EirGrid taking steps that would facilitate the entering into LRSAs with other parties were this to become necessary. EirGrid has signed an LRSA with both Huntstown Units and is finalising

an LRSA with another party. In both cases the CRU has decided to trigger the Targeted Contracting Mechanism (TCM) only after the capacity auction had been run and the local security of supply implications had been analysed by the TSO in the context of the DMILC process. Furthermore, it is noted that the TCM forms part of the regulatory framework put in place in the context of the CRM, as noted in the EC decision[4] on this matter. Therefore, the process followed clearly is consistent with the first principle, "The CRU will allow the market to work in the first instance", and the fourth principle "Regulatory intervention will only be taken where necessary to maintain security of supply".

The LRSA with the other party was an available and feasible option presented in EirGrid's Mitigant Measures Report. This contract is progressing towards conclusion with the primary commercial terms previously agreed in advance of EirGrid submitting the Addendum. Engagement between the party and EirGrid, as regards the detailed terms and conditions, is at an advanced stage and further information will be published in the coming weeks. The CRU considers that EirGrid entering into this LRSA is clearly in accordance with the principles of CRU/17/346. The generation currently operates in the market and will be relocated to the Dublin Region. It will operate in the market as it currently does and the change in location will not have any distortionary market impacts, additionally by mitigating the impact of disorderly exit in the region the LRSA may facilitate the exit of inefficient units from the region. Furthermore, notwithstanding the LRSAs now in place with Viridian, the CRU considers that it was prudent and in consumers' best interest to progress with this LRSA for relocation. Firstly, at the time the CRU approved the entering into an LRSA there was no prospect of an LRSA with Viridian becoming an available and feasible option in the context of CRU/17/346. Secondly, given the nature of the DMILC process the CRU must be cognisant of the risk of disorderly exit of the Huntstown Units, notwithstanding the provisions of the LRSAs, until Viridian has come out of the DMILC process and demonstrated that it is capable of fulfilling its market obligations. Thirdly, the CRU's approach provides further protection to security of supply in the context of the continued I-SEM transition phase and rising demand in the Dublin Region (see SEM-18-159). In terms of cost and duration of the contract, the contract is temporary in nature covering the I-SEM transition period and the notice period assessed by EirGrid in the Derogation Assessment Report and, in the CRU's view, appropriately remunerates the party without introducing market distortion. Therefore, the CRU considers that this approach is consistent with principles four, five and six.

As set out above, LRSAs have been entered into by EirGrid with each of the Huntstown Units. The structure of the LRSAs are as follows. Each has a four-year term. The total revenue received under the LRSA equals the strike price minus any revenues from a Reliability Option and less any revenues from locational payments should they be introduced. Both units will be required to bid into the T-1 capacity auctions at their Net Going Forward Costs which will be assessed either through the CRM process or separately by the CRU as appropriate. Where the unit receives an RO, that unit will operate in the market as normal. Where the unit does not receive an RO, that unit will not participate in the day ahead or intra-day markets and must participate in the balancing market using complex three-part bid offer data only (which must

[4] State aid No. SA.44464 (2017/N) – Ireland Irish Capacity Mechanism

reflect short run marginal cost) and comply with the Balancing Market Principles Code of Practice. Both units will also have financial reporting requirements. Reports must be submitted every six months and will commence January 2019. The format of this reporting will be consistent with the process set out in section 3.4 of CRU/17/346 once established for the industry. The purpose of this reporting is to ensure that Viridian improves its financial position such that it can meet its market obligations. A portion of the Huntstown Units firm access quantity will remain at risk from the end of the four-year term until six years from 1st October 2018. The risk to the firm access quantity will be removed if the CRU issues a Direction to EirGrid to do so. In deciding whether to issue such a direction the CRU will take into account the extent to which Viridian has demonstrated that it can meet its market obligations, in particular the three-year notice period as required by the Grid Code.

The terms of the LRSAs are consistent with the principles set out in CRU/17/346. CRU/17/346 established the Targeted Contracting Mechanism, and the processes under which this mechanism would be triggered and ultimately lead to a contract, such as an LRSA. While closure is one circumstance that may trigger the TCM, the risk of disorderly exit, the DMILC process, is another. The financial position of Viridian led to a situation where the Huntstown Units were at risk of experiencing a sudden disorderly exit. This is the risk that EirGrid assessed in its Derogation Assessment Report and Mitigant Measures Report, and is the risk that the CRU sought to protect consumers from. While it is acknowledged that mitigation of this risk does not necessarily require an LRSA with the Huntstown Units the CRU considers that such a mitigation measure is the clearest means of reducing the probability of that risk materialising. In addition, the structure of the contract is such that the CRU has reasonable assurance that the long-term interests of consumers will be met due to the requirement on Viridian to improve its financial position such that it can meet its market obligations. If it is unable to do so by the end of the six-year period, the release of firm capacity will facilitate the entry into the market of new efficient generation. In this way the CRU has ensured that the intervention is targeted at the source of the risk and will leave consumers' security of supply better protected at the end of the process than in December of last year, while minimising the potential for market distortion.

3.4 Additional Service Provision

EirGrid is taking preparatory measures to facilitate the location of additional service provision in the Dublin Region and to enable the wider strategic development of necessary network infrastructure. This process will continue into 2019 and the CRU considers that such preparatory undertakings is prudent in the context of the Huntstown DMILC Risk and the wider context of anticipated increases in demand in the Dublin Region. Therefore, the CRU considers this approach consistent with the above principles, including principle five.

3.5 Locational Scalars for System Services in the Dublin Region

Before the end of 2018, the CRU will consult on the introduction of locational scalars for System Services to apply in the Dublin Region. It is envisaged that a sub-set of services will

have a scalar greater than 1.0 if made available in the Dublin Region. Further detail will be provided in the consultation paper and the CRU will engage with EirGrid to ensure the definition of services and location is appropriate to serve the purpose of increasing the remuneration of services that most contribute to increasing security of supply in that area. These services will be funded jurisdictionally and will therefore not be considered to contribute to the annual all-island cap of €235m for DS3 System Services set by the SEM Committee.

The relative complexity of developing a locational methodology has been noted in previous publications related to system services. While the CRU notes the potential for complexity the CRU will put an emphasis on an approach that can be implemented quickly, is pragmatic, and is fit-for-purpose. Further development to the approach put in place for the Dublin Region may be required later to apply a locational methodology across regions on an enduring basis. However, the CRU will endeavour to structure the approach for the Dublin Region in a manner that delivers appropriate long-term signals and reasonable certainty for market participants.

3.6 Financial Reporting to mitigate future disorderly exit

Before the end of 2018, the CRU will consult on the introduction of reporting as set out in CRU/17/346.

As set out in CRU/17/346 the CRU considers that it is important for security of supply and the ongoing stability of the market that generators are capable of exiting the market in a managed and orderly manner – as required by the Grid Code. As has been shown by the Huntstown Units entry into the DMILC process, a generator's ability to adequately manage their business in a financially prudent manner cannot be taken for granted, particularly in the event of a market shock. Therefore, as set out in CRU/17/346, the CRU considers it prudent to put in place measures to ensure that on an ongoing basis, generators are in a position to provide notice of closure and maintain operations for the full three-year period.

The consultation paper will set out proposed measures requiring generators to demonstrate and report on an annual basis that they are in a position to fulfil their Grid Code obligations, in particular the closure notice period. The details of this requirement in addition to the monitoring and enforcement framework will be set out as part of the consultation process.

3.7 TSO Operational measures to maintain system security

EirGrid set out a number of operational measures that could be implemented in the event that the DMILC risk materialised and the Huntstown Units experienced a sudden disorderly exit. The CRU instructed EirGrid to progress the required preparations so as to be in a position to carry out any operational measures considered necessary, as set out in the Mitigant Measures Report. The CRU considers these mitigant measures to be particularly important due to the fact that as there are lead times associated with other mitigants, as such these measures may need to be implemented at very short notice and remain in place until other mitigants have

been put in place. Notwithstanding the implementation of the other measures set out in this paper the CRU considers it prudent that these preparations are implemented.

3.8 Facilitating generators connecting in the Dublin Region

The ECP1 decision CRU/18/058 noted that, the CRU's information paper (CRU/17/346) highlighted potential threats to security of supply where the same geographical area can experience both local demand growth (e.g. large data centres) and local generation constraints, occurring within a short time span. This is currently the case in the Dublin Region, and if warranted, the CRU reserves the right to direct the system operator to prioritise connections of generation in such region in order to maintain local security of supply. The TSO has made a submission to the CRU in this regard, and the CRU is actively considering the appropriate next steps.

3.9 Accelerated transmission reinforcement of the Dublin Region

The CRU has approved the recovery of efficiently incurred costs by the transmission companies associated with the accelerated development of planned transmission reinforcement works in the Dublin Region. The CRU will continue to monitor the progress of these works and requests the companies carry them out as a matter of urgency.

The CRU, in CRU/17/346, also requested EirGrid to pro-actively examine areas at risk of local security of supply issues under a set of credible scenarios, including demand growth and generator closure. It was stated that such analysis should also include an examination of technical operational constraints and a range of options to relax or resolve them. In the context of the current process the CRU will request EirGrid to include the closure of both Huntstown Units as one such credible scenario and propose the development of reinforcements such a scenario may require.

In CRU/17/346 the CRU set out its view that there may be merit in adopting a strategic approach when considering proposed options to mitigate a potential security of supply risk or local operational constraints. This could involve building transmission infrastructure which is likely to be needed to meet rapid demand growth (seen in some scenarios of EirGrid's Generation Capacity Statement) but which would not be built under usual planning assumptions due to the level of uncertainty around forecasts. The CRU will request that EirGrid develops proposals consistent with CRU/17/346.

3.10 EirGrid Flexible Demand Connection Contracts

The CRU recognises that Ireland is facing a paradigm shift with rapid growth in load requirements in a very short space of time particularly around the greater Dublin region. CRU is working with EirGrid, ESB Networks and other key industry decision makers to look at ways to meet this new challenge. The CRU welcomes the proactive approach EirGrid has taken in

this matter and notes the introduction by EirGrid of flexible demand arrangements for data centre customers to relieve some of the pressure on accommodating new connections in the short to medium term. These arrangements will enable customers to receive a contract for new or increased MIC where EirGrid can reduce their load during outages of key infrastructure and peak loads. EirGrid is currently developing the details of the flexible demand framework and engaging with existing datacentre applicants to recommence issuing connection offers to data centres on this basis. The flexible demand framework will work in parallel with a broader Dublin Demand Strategy to be developed by EirGrid.

Conclusion and Next Steps

The conclusion of this phase of the DMILC process has also brought about the agreement of the Huntstown Units to the I-SEM related licence modifications. The CRU will now begin a process to introduce the I-SEM related licence modifications for all generators. The SEM Committee will also as a matter of priority begin a process to implement the BMPCOP. The timing, initiation and nature of these processes will be published separately.

The CRU will also progress the implementation of each of the mitigant measures set out in this paper. This paper marks the conclusion of this phase of the Huntstown DMILC process. However, the CRU considers that the Huntstown DMILC risk will remain extant until the Huntstown Units have successfully exited the DMILC process on 1st October 2024 and have demonstrated that they are capable of meeting their market obligations, including clause P.C 3.5 of the Grid Code.