



An Coimisiún
um Rialáil Fónais
**Commission for
Regulation of Utilities**



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Network Charges for Commercial Storage Units Interim Solution

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Decision Paper

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1. Introduction

Under the current tariff arrangements storage providers pay both demand related network charges (DTUoS) and generation related network charges (GTUoS) because they both import and export electricity, the network is developed to ensure they are capable of doing both. The current arrangements have been in place before the recent growth in the development of storage projects, and therefore storage provision was not specifically envisaged in the current tariff arrangements.

The CRU is of the view that these arrangements may not accurately reflect the costs imposed on the network by storage providers. The introduction of storage units to the system presents benefits in terms of security of supply through System Service provision, and the current arrangements may be a barrier to entry for storage providers.

The CRU considers it important to facilitate the introduction of storage units given the potential benefits in supporting the energy transition. In recent years the CRU has taken steps to encourage the introduction of storage units. This has included an Information Paper in 2019 (CRU/19/034), confirming that commercial storage units would only be required to pay the PSO levy on their house load; and also the reservation of up to 400MW for prospective DS3 service providers, including storage, in the ECP1 Process (CRU/18/058).

Additionally, the SEM Committee introduced Fixed Contracts Arrangements for System Services, where a competitive procurement process resulted in 3 storage providers totalling 110 MW successfully securing six-year contracts for the provision of a selection of System Services. In 2019 an information paper was published providing more details of the outcomes of the Fixed Contracts Procurement (SEM/19/062). The CRU will continue to seek to coordinate with the UR on storage matters where appropriate.

It is further noted that tariff arrangements for energy storage are also being considered in other jurisdictions and have been considered at the European level. The need for regulatory frameworks to facilitate the participation of storage in the energy market is stated in the European Commission's Communication on the European Green Deal¹, this builds upon the measures set out in the Clean Energy Package relating to storage.

Additionally, a recent EU study² identified the system security benefits of electricity storage and set out views on barriers to entry for storage providers. One such barrier identified in the paper was the imposition of network tariffs when storage units were both charging and discharging. The study stated that this is especially detrimental to the development of storage and should be eliminated.

¹ https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

² <https://op.europa.eu/en/publication-detail/-/publication/a6eba083-932e-11ea-aac4-01aa75ed71a1/language-en>

A full review of the network tariff structure would be required to develop an enduring tariff for commercial storage. While the CRU intends to commence a review of network tariffs in 2020, it considers that there may be a consumer benefit to implementing an interim solution in advance of any findings of this piece of work taking effect. Accordingly, on 24 June 2020 the CRU published a consultation setting out a proposed interim approach. The consultation set out a proposed position to cease charging commercial storage units GTUoS, and to charge DTUoS to these units.

The consultation closed on 6 August, and 12 responses were received. While all respondents welcomed the CRU's proposal to introduce an interim solution to network charging for commercial storage, there were differing views on what this solution should be. In this document, the CRU sets out some of the key points made by respondents, its response, and the decision on the interim solution.

2. Legal Background

Under the Electricity Regulation Act, 1999 (as amended), the CRU is the independent body responsible for overseeing the regulation of Ireland's electricity sector. Section 35 of the Electricity Regulation Act 1999 ("the Act"), provides the CRU the legal basis to approve charges for the use of the electricity system in Ireland.

3. Consultation Responses

As an interim solution, the CRU considered charging one of either DTUoS or GTUoS or treating storage units similar to how Autoproducers are treated³. In the consultation paper, the CRU set out merits in arguments for all options, and ultimately determined that, given the readily available options, on balance D-TUoS seems to provide the most benefit in delivering the system needs until an enduring solution can be developed.

As mentioned, 12 responses were received to the consultation and all welcomed the proposal to implement an interim solution. Of these responses seven supported or did not oppose the CRU's proposed interim solution, three preferred the GTUoS option, one preferred the Autoproducer option, and one did not indicate a preference. The main points raised by respondents are set out below. This section is structured by reference to the options set out in the consultation

3.1. GTUoS

Three respondents indicated a preference to charge only GTUoS, or to charge GTUoS and household DTUoS. The main points raised are set out below.

³ Autoproducers pay one of either DTUoS or GTUoS based on which is the larger of their Maximum Import Capacity (MIC) or Maximum Export Capacity (MEC).

3.1.1. Treatment of storage units as generators across other charges

One point raised is that to charge storage units DTUoS only would be inconsistent with their treatment in terms of connection charges and the PSO Levy. For connection charges storage units are treated similar to a standard generating unit, in that each unit pays for the entirety of its connection charge, whereas demand units pay for 50%, with the TUoS customer funding the remaining 50%. Respondents argued that there is a double charging issue here as units would pay the entirety of their own connection charge and still be contributing to the connection charges for demand units through paying DTUoS.

Additionally, respondents noted a preference to align this interim solution with the recent decision on treatment of storage units in relation to the PSO Levy.

CRU Response

The CRU acknowledges that there may be some inconsistency across the various tariffs and charges as these were developed at a time where a number of new technology types coming on to the grid currently, and in the coming years, were not considered. The review of network tariffs will look to ensure that there is a tariffing framework which apportions the cost of network charges across the various technology types in an equitable manner.

3.1.2. Minimizing MIC may not always be the best approach for meeting system needs

A further point raised is that the CRU's consideration of the merits of seeking to disincentivise high MIC. The responses notes that storage units may play a beneficial role in supporting power-transfer capacity needs, and additionally that it would be reasonable to assume that it would not be financially viable for storage units to import energy at times of high system need.

CRU Response

The CRU's view is that over the coming years storage units will be predominantly providing System Services under the Regulated Arrangements. Seeking to minimise MIC may not always be the best approach, however on balance the majority of services these units are currently providing under System Services would provide a greater benefit to the transmission system, and a relative positive influence on associated costs, with a higher MEC. While the nature of storage providers behaviour on the system may change in the coming years alongside changes in the general makeup of technologies and system needs, the CRU anticipates having completed its review of network tariffs in that timeframe.

3.1.3. Other jurisdictions have adopted an approach that treats storage units similar to generators

Additionally, respondents noted that a number of other jurisdictions have adopted an approach that treats storage units as generators.

CRU Response

The CRU is aware of the adoption by other jurisdictions of a variety of approaches to treating storage units. The majority of these approaches are more enduring in nature however, and the CRU will give this consideration when developing its own thinking on an enduring approach with respect to network tariffs.

3.2. DTUoS

The majority (seven) of respondents supported DTUoS as being the best pragmatic option of those available as it provides the best economic signals for maximising the benefits of energy storage on the grid. All respondents who supported the adoption of DTUoS noted that this was on the understanding that this is an interim solution and that a more tailored enduring solution will be developed as part of the wider tariff review.

CRU Response

CRU notes the points made by respondents regarding DTUoS providing the best economic signals for maximising the benefits of energy storage on the grid. While none of the options presented represent an ideal solution, the CRU acknowledges that DTUoS may be the best pragmatic solution available in the interim. As was previously noted by the CRU this is intended only as an interim solution, a more enduring solution will be developed as part of the wider tariff review to take place in 2021.

3.3. Autoproducer approach

One respondent supported the Autoproducer as, in their view, it is not inconsistent with the principles of an efficient competitive market for the CRU to suggest the use of a tariff to drive a specific commercial activity. The respondent therefore concluded that the most impartial and unobtrusive approach at this time would be to adopt the Autoproducer approach as it has no direct influence on the commercial prerogative for storage units.

CRU Response

The CRU would clarify that it is not seeking to influence the commercial behaviour of storage providers through this interim solution. The transmission network charges are designed to recover the cost of developing, maintaining and operating the transmission system. The split of GTUoS and DTUoS is designed to ensure that generators and demand users contribute to a proportionate share of these costs. While the CRU acknowledges that none of the three options are a perfect fit for storage units, having consulted with the TSO, the CRU considers charging DTUoS as the most appropriate in the interim as it more closely reflects the costs to the transmission system.

Additionally, having consulted with the TSO, the CRU considers that the Autoproducer approach may also influence MIC and MEC, given the differential in GTUoS and DTUoS. When the Autoproducer arrangements were put in place it was not envisaged that they would apply to sites that would operate in the manner that a storage unit operates. Given that the

Autoproducer approach may alter the incentives faced by a storage operator when choosing their MEC and MIC in ways that would not necessarily reflect the relative costs to the system, the CRU considers that this is not an appropriate approach for an interim solution.

3.4. Additional Points

A large number of respondents provided several helpful points in relation to considerations for the wider tariff review. The CRU will take these on board and will welcome active involvement from all interested stakeholders in the wider tariff review when this commences.

4. Decision

Having considered all responses along with its own considerations, the CRU's decision is to apply D-TUoS and cease charging G-TUoS to commercial storage providers as an interim approach to network charges for storage. While none of the options represents an ideal solution, given the expedited nature of this interim decision on balance the CRU considers charging DTUoS to be the best pragmatic approach. The CRU, having consulted with the TSO, considers charging DTUoS as the most appropriate in the interim as it has the potential to unlock the most value in terms of costs to the transmission system.

The CRU reiterates that this decision should not be construed as a CRU position that storage providers should not be charged for the network costs associated with exporting energy. Rather the CRU views this proposal as a pragmatic interim approach which may provide consumer benefits in advance of a full review of the costs associated with storage providers' use of the network.

5. Next Steps

The CRU has instructed EirGrid to cease charging commercial storage units on their GTUoS from 1 October 2020.

Consideration of tariffs which reflect new technology types will be assessed as part of the wider tariff review expected to take place in 2021.