

12th March, 2015

Mr. Paul Brandon,
Commission for Energy Regulation,
The Exchange,
Belgard Square North,
Tallaght,
Dublin 24,
Ireland.

Mr. Colin Broomfield,
Utility Regulator,
Queens House,
14 Queen Street,
Belfast,
BT1 6ED,
Northern Ireland.

RE: Demand Side Unit (DSU) Congestion Issues and Next Steps in the Application Process

Dear Paul, Colin,

The TSOs, EirGrid plc. (“EirGrid”) and SONI Limited (“SONI”), and the DSOs, ESB Networks (“ESBN”) and Northern Ireland Electricity (“NIE”), would like to bring to the attention of both the CER and NIAUR concerns that have arisen regarding Demand Side Units in Ireland and Northern Ireland. A Demand Side Unit (DSU) is the aggregation of a number of individual demand sites (or a single demand site) that is registered in the Single Electricity Market (SEM) and can reduce its electricity consumption when instructed by the TSOs. The vast majority of Individual Demand Sites (IDS) are located on the distribution network.

Overview of Issue:

Following discussions between the TSOs and the DSOs, both DSOs have raised concerns that IDSs acting in unison as part of a DSU may lead to overloading and voltage issues on the distribution networks. At present the TSOs do not have any concerns about the impact of DSUs on the transmission network. The possibility of DSU congestion on the distribution network is a complex situation that encompasses both network and market issues. Thus the TSOs and DSOs are jointly writing to inform the RAs of the approach that we propose to take and ask that you come back with any comments or concerns.

Under license and statute, the TSOs must operate the transmission system in a manner that does not compromise the stability and security of the distribution network. Consequently, the TSOs will not dispatch a DSU registered in the market if the relevant DSO has informed the TSOs that doing so may cause security or safety issues on the distribution network. However, the DSU industry has raised concerns regarding the TSOs stopping an IDS from becoming part of a

DSU if the IDS, in reducing its load, is operating within its Connection Agreement. Similarly, the DSU industry has raised objections regarding the DSOs' right to act upon analysis assessing the impact of IDSs on their distribution network once the IDSs are operating within their Connection Agreement. This leads to a potential scenario whereby an entire DSU may be available in the market and receiving capacity and constraint payments but could not be dispatched for network reasons related to a subset of IDSs within that DSU.

This undesirable scenario is not in the public interest and is of obvious concern to the TSOs and DSOs. This issue has the potential to significantly hinder the delivery of the SEM Committee's *'Demand Side Vision for 2020'* and could ultimately lead to a situation where the electricity consumer in Ireland and Northern Ireland is incurring costs for no realisable system benefit.

Urgency of the Issue

In Northern Ireland, the recent decision on DSU and AGU licensing arrangements has heightened the urgency of this issue as a significant barrier to DSU operation has now been removed. It is now expected that a large number of DSU applications will be made in Northern Ireland. As a result of increased incentivisation and connection of small scale generation (SSG) since 2010, distribution network saturation is already a major issue for NIE, with many areas already at or approaching network capacity limits. The approach to address future network investment or potential alternative connection methodologies to deal with network saturation was agreed with the Utility Regulator on 15th August 2014, and will apply to DSU and AGU applications. NIE have discussed the potential for significant difficulties in providing connection agreements for DSU/AGU applicants at a recent CBI Northern Ireland event attended by the DSU/AGU community, large businesses and the Utility Regulator.

In Ireland, ESBN sent a letter to both EirGrid and the CER on 14th November, 2014 which highlighted that approximately 21% of existing IDSs which comprise DSUs may cause congestion issues from March 2015 onwards. As the level of DSU applications is rapidly growing and this problem could become binding in March, we are therefore writing to both regulators to inform you of the transitional approach that we propose to adopt in order to ensure that customers only pay for services that can be delivered without compromising the network. The development of a longer term solution is also necessary but, given the urgency of this issue, needs to be addressed separately.

DSU Congestion Issues and Proposed TSO-DSO Solutions

As stated above, the DSU industry has raised concerns regarding the TSOs stopping an IDS from becoming part of a DSU if the IDS, in reducing its load, is operating within its Connection Agreement. At a meeting on 23rd January, 2015 the TSOs and DSOs discussed these issues and this letter outlines an agreed TSO-DSO approach to addressing this pressing issue.

Transitional Arrangements for existing IDSs operating as part of a DSU¹

The EirGrid's and ESBN's propose to adopt the following transitional approach:

- Following an ESBN planning study, existing DSUs identified as including problematic IDSs will be informed and told not to dispatch these specific sites should they receive a Dispatch Instruction (DI) from EirGrid. In turn, the Control Centre would not dispatch this DSU above the total MW number of non-problematic IDSs.
- DSUs would be given a 6-month grace period to engage with the DSO on potential solutions – thereafter, if no remedy is found, EirGrid would reject DSU availability declarations that include the problem IDSs. If the congestion issue is resolved, the declared availability would be accepted again. For the avoidance of doubt, during the grace period, EirGrid will continue to submit the declared availability for DSUs identified as including problematic IDSs, which means that they would continue to receive capacity payments for a higher volume of demand reduction that they could actually deliver.

It is proposed that this approach would only be adopted by EirGrid if and when the ESBN were to confirm, in writing, the presence of a distribution congestion issue for a particular IDS or IDSs. Finally, EirGrid will assume IDSs which currently form part of DSUs and which have not been studied by ESBN do not pose congestion issues on the distribution network unless otherwise informed by ESBN.

This transitional approach has been agreed in principal by EirGrid and ESBN and is based on:

1. The DSOs' right to act upon analysis assessing the impact of IDSs on their distribution network, in accordance with their general duties to secure the safe operation of the system.

¹ Not applicable to Northern Ireland as there are presently no existing IDSs operating as part of a DSU.

2. Transitional commercial arrangements which would allow for a grace period following notification of congestion issue, with continued access after this period only if the congestion is resolved. This attempts to balance the commercial expectations of the DSUs with the wider public interest.

We ask that you would inform us as soon as possible if you have any concerns with this transitional approach or at the latest by **May 1st, 2015**.

New Applications:

Going forward, in both jurisdictions the TSOs and DSOs propose the following:

- All new DSUs registering with the TSO or existing DSUs applying to include a new IDS must provide evidence in their application that a planning study by the DSO has been undertaken on each of the IDSs included in the application and that no congestion problems were identified.
- In the absence of such evidence being provided for a particular IDS, that IDS cannot become part of a DSU due to concerns that it would cause distribution network congestion issues as identified by the relevant DSO.

It has also been suggested that this process in Northern Ireland may require modifications to existing connection agreements for all potential IDSs applying to be included as part of a DSU.

Proposed DSU All-Island Application Process

A proposed all-island DSU Application process was presented to industry via the DSU Joint Grid Code Working Group on 8th July 2014. This process has now been aligned in Ireland and Northern Ireland and the TSOs and DSOs agree in principal to the proposed all-island process whereby an IDS wishing to operate as part of a DSU will be subject to a DSO planning study in the first instance. Following a successful study confirming that there are no congestion issues, only then will a DSU Operator be allowed to include the IDS in question in their application to the TSOs.

This application process will be presented to the DSU Joint Grid Code Working Group at its next meeting, which will ideally be held before the end of March 2015. A flowchart outlining the proposed All-Island DSU Application Process is attached to this letter.

We ask that you would inform us as soon as possible if you have any concerns with this application process.

[Request for Regulatory Guidance](#)

In summary, the TSOs and DSOs agree on the approaches outlined above. The proposed transitional and future approaches ensure the security of the distribution network and protect the electricity consumers in Ireland and Northern Ireland.

Additionally it is important to note the following:

- The TSOs and DSOs in Ireland and Northern Ireland agree that the process for new applications should be implemented from **May 1st, 2015**
- This process is subject (1) to a DSU Joint Grid Code Working Group meeting being held whereby this process will be presented to industry in advance of implementation and (2) the date from which a licence is issued to prospective DSUs in Northern Ireland

The TSOs and DSOs in Ireland and Northern Ireland agree that the process for new applications is a short term solution and would suggest that this process be revisited within a 6 – 12 month time frame where a more enduring solution will be developed after consideration of any changes to distribution codes, grid codes and other documentation. Such a solution will require further industry engagement and may take the form of an industry consultation.

It is recognised that this is a complex situation that encompasses both network and market issues and thus the TSOs and DSOs propose to facilitate an all-island workshop as soon as possible with the relevant network and market experts within the CER and NIAUR in order to discuss these solutions and to get agreement on the path forward.

Finally, for information, the industry was briefed on these challenges at a high-level at the Ireland and Northern Ireland GCRP meetings which were held in Dublin on February 11th, 2015.

We welcome any comments you have on our approach to resolving this issue, and are happy to address any concerns or questions that you might have.

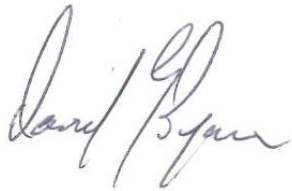
Yours sincerely,



Louis Fisher
Manager, Sustainable Power Systems, EirGrid



Brendan Woods
Manager, Near Time, SONI

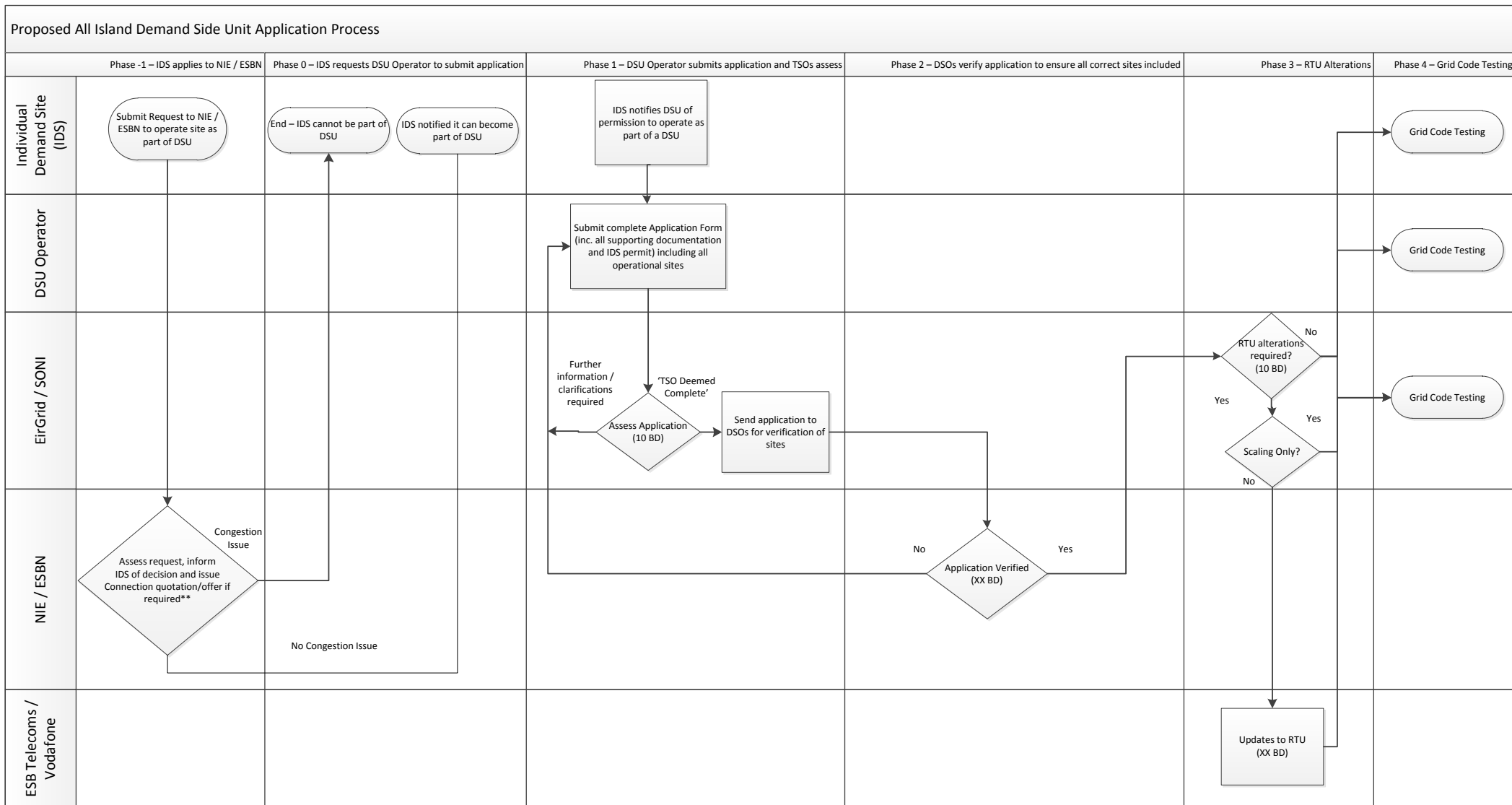


Dave Byrne
Manager, Investments, ESB Networks



Denis Kelly
Manager, Network Development, NIE

Flowchart outlining proposed All Island Application Process



*NIE license obligation for processing applications is 90 Calendar Days
 *ESBN license obligation for processing applications is 90 Business Days
 *In issuing a connection quotation/offer, each DSO will follow their own specific connection processes