



Karen Shiels

Utility Regulator
Queens House
14 Queen Street
Belfast
BT1 6ED

Thomas Quinn

Commission for Energy Regulation
The Exchange Belgard Square
North Tallaght
Dublin 24

BY EMAIL

5 October, 2016

Dear Karen and Thomas

**Re: I-SEM Capacity Requirement and De-rating Factor Methodology
(Detailed Design) Consultation Paper (SEM-16-051)**

Empower Generation Limited operates an Aggregated Generator Unit (AGU) in the Northern Ireland jurisdiction. Our response to SEM-16-051 is well-reflected in the DRAI letter issued today, especially the latter part that relates more particularly to specific AGU issues. We therefore seek to avoid repeating here the same points, except to amplify a few key issues, and it is assumed that the DRAI response has already been read.

The crucial difference in technology-type between AGUs and DSUs concerns LOAD-DEPENDENCE. In order to gain the increased reliability and availability of load-independence, the AGU and/or its clients typically has had to make substantial capital investments, often over an extended period, involving:

1. DNO study of systems capacity to handle reverse power flows and formalise Maximum Export Capacity (MEC) for the site, with a very low success rate
2. Payment for DNO SCADA infrastructure
3. Installation of NVD protection, usually with a Voltage Transformer installed at 11Kv Transformer, on top of G59 synchronisation
4. Occasionally upgrades to 33kV substation to handle reverse power flows.

This is a very different, slower and much more expensive process than offering demand reduction only. AGUs are not able to offer demand reduction; the MEC is key to their operation.

The end-result is a reliable source of embedded distributed generation, properly assessed to avoid destabilising the local network and capable of operation independent of local load. Because it has its own meter there is no uncertainty or assumption about the benefit delivered. And because it is distributed in small units, the risk of outage is extremely low. With no daily, weekly or seasonal fluctuation to worry

about, AGU capacity is ideally suited to the needs of the CRM, offering a Reliability Option consistently available 24/7, all year round.

Finally, AGUs are sited in Northern Ireland, where there is a relatively capacity shortage in prospect, depending on the North-South interconnector timetable. It is important to incentivise and support diverse power sources in this jurisdiction. AGUs are part of the solution to the risk of power outage in Northern Ireland.

Empower welcomes the opportunity to input to the CRM development process. I trust you find this contribution useful.

Thank you for your assistance.

Yours sincerely

A handwritten signature in black ink, appearing to read "Michael Bambrick". The signature is written in a cursive style with a large initial 'M'.

MICHAEL BAMBRICK
Managing Director