| From: | Calvert, Peter [pcalvert@ajpower.net] |
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| Sent: | 04 September 2014 13:31 |
| То: | Craig, Joe |
| Subject: | UR Consultation on Licensing to facilitate Participation in the Wholesale |
| | Market |
| Attachments: | IET Working with Wind Article.pdf; 04302790.pdf |
| | |

Importance:

High

For the attention of: Mr Joe Craig, Wholesale Markets, Utility Regulator, Queen's House, 14 Queen Street, Belfast, BT1 6ER Tel: 028 9031 6321

re: Your consultation documents <u>AGU/DSU licensing consultation paper</u> <u>Appendix 1 Electricity Generation Licence for Generator Aggregator</u> <u>Appendix 2 Electricity Generation Licence for Dispatchable Demand Customer</u>

Joe

We comment on the abovementioned, as below, and confirm that we (and our University colleagues) are available for further discussion. Regards Peter

CONTEXT

1. In 2015 Ballylumford will decommission 550MW of generating capacity, because of EU emissions legislation.

2. The Moyle Interconnector is running at half capacity.

3. Progress on the North–South Synchronous Link seems to be stalled by planning problems.

4. There are also issues with the continued growth (encouraged by government targets) in stochastic (non-deterministic) generation, predominately Wind.

5. In addition, the loss of an interconnector, such as the EWIC outage that occurred on 16 Apr 2013, can cause very sizable system disturbances, sufficient to cause the loss of active generation. With even greater interconnection envisaged across Europe, such events could become more commonplace and potentially dramatic due to cascade tripping. Each of the above suggests greater uncertainty about the security of supply in Northern Ireland. Large industries and those that require a high continuity of supply could be adversely affected by the abovementioned threats. This will further underline the unattractiveness of NI PLC as a preferred location for inward investment. Never mind the indigenous entrepreneurs who might be tempted to locate or relocate elsewhere, such as in bordering jurisdictions.

OUR CURRENT TRAJECTORY

Currently, the core business of AJ Power is to export 95% of their production. However, the aforementioned context provides a sound business case to grow the domestic market.

As a complementary scenario, however, we would be keen to work closely with the system operators to develop improved fit-for-purpose ancillary services. This would offer greater security of supply to all users but also facilitate greater renewable penetration, as explained in more detail in the attached papers:

- Kennedy J, Fox B, Morrow DJ, Working with Wind, IET Engineering & Technology Magazine, 23 Feb 2008, pp 52-55 (Invited paper).

- Kennedy J, Fox B, Morrow DJ, Distributed Generation as a Balancing Response for Wind Generation, IET Renewable Power Generation, Vol 1, No 3, Sep 2007, pp 167-174.

PROPOSALS IN RESPECT OF ANCILLARY SERVICES

Voltage Support

We suggest that you consider the value of reactive power despatch for voltage support, and to augment the requirement for plant such as static compensation.

Design for Purpose

In recent years, grid code requirements have been liberalised and now require plant to operate under a wider range of frequencies and higher rates of change. Existing plant, with retrofitted controls, are unlikely to meet these requirements and their ability to offer support at times when the system is under stress would be compromised. However, new plant, designed to meet the requirements as part of their specification, would offer reliable support at such times.

Implement STOR

The required DSU response time is typically one hour, whereas the STAR (short term active response) is two seconds. We would submit that STOR (short term operating reserve) type arrangements, as instigated by NG (National Grid), offer a practical solution to this issue. Plants that AJ Power has already supplied for STOR projects in GB have delivered start times of less than thirty seconds. This is a valuable technical capability that should be rewarded appropriately.

REQUESTS

We suggest that you recognise the difference between 4MW and 4GW and keep the paperwork in proportion.

We think that you should encourage the development of a suitable reward mechanisms for ancillary services, such as the proposals we have set out above.

We trust that you will give due consideration to the issues outlined above.



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