

ACER

By Email to: LFCR_NC@acer.europa.eu

8 August 2013

The Network Code on Load-Frequency Control and Reserves

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

In general we support the draft code but make the following points:

- Frequency management is a key issue; it is critical both to generators and to consumers, especially medical and process industries, that the frequency range in synchronous areas should not be allowed to degrade without clear justification;
- We do not think it is feasible or appropriate to target the costs of reserves and managing frequency in an effective manner on specific parties.

Our detailed responses are set out in the annex to this letter. Should you wish to discuss any of the issues raised in our response or have any queries, please contact Nigel Edwards on +44 20 3126 2506, or myself.

I confirm that this letter may be published.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Angela Pearce'.

Angela Pearce
Corporate Policy and Regulation Director

Annex

- Overall, we welcome the embodiment of strong frequency quality targets, which are critical both to generators and to consumers, especially medical and process industries. However, we would like more text about the actions to be taken when these targets are not met. It is important that system frequency is not something that degrades over time as the connected generators change in their collective nature. Therefore, the “default” values in tables 1, 2 and 3 of Article 19, should be enduring values – they must not be allowed to degrade over time.
- Indeed, we propose the addition of extra frequency quality targets: (for example) In GB we have an extra target that the Transmission System Operator (TSO) aims to limit the number of excursions outside operational limits (49.5 to 50.5Hz) to less than 1,500 such incidents p.a., and to ensure that standard deviation of 5 minute spot values of system frequency does not exceed 0.07Hz. This GB target is not reflected in the proposed LFCR targets; it does represent a useful additional measure of frequency quality to users, and could usefully be included with appropriate default values, for all synchronous areas.
- Given the differing levels of collective generation inertia of individual synchronous areas, we welcome the implicit recognition that each synchronous area should have its own frequency quality parameters. However, there should be no scope for the local TSO to degrade the quality criteria in these tables in the future.
- In case of insufficient reserves, causing frequency to go out of specification, LFCR Article 11 and Article 46(4) state that each TSO in a synchronous area must have escalation procedures that are to be agreed and drafted as an Agreement with other TSOs in the same synchronous area. The code should be clear on these escalation procedures, given the gravity of such an incident and the seriousness with which this is to be treated. Certainly, for a significant quality breach, the TSO(s) should be mandated to issue a statement quickly, e.g. within 24 hours, disclosing the basic circumstances that have occurred, followed by a full investigation with a full report with recommendations to avoid recurrence, say within one month.
- Article 3 paragraph 1: we agree with the statement that there should be a principle of non-discrimination. However, the statement in the final part of paragraph 2: regarding “the assignment to the real originator of the costs” is simply not practical, or correct, to apply in the realm of frequency response. We note that this statement is not mentioned elsewhere and does not feature in Article 6 (cost allocation), is not practical. Reserve and frequency response, along with other system services such as black start and reactive power, are held to maintain system quality to the benefit of all system users, and there are very many, very complex, underlying drivers to the amounts and types of reserve and frequency response held that are able to respond on various timescales, sometimes in specific wide-areas within a synchronous zone, due to constraints.

- Article 19 vs Article 20 – parameter terminology: the standard frequency range and the maximum steady-state frequency deviation as described in Article 19 and its tables, appear to have the same meaning as “Level 1 FRCE Range” and “Level 2 FRCE Range” respectively, in Article 20. It would be better to refer to use consistent terms across the Code, to avoid possible confusion caused by more than one term for a single concept.
- Definitions (Article 2): there is no definition of Frequency Containment Reserve (FCR). One can infer from the table in Article 44 that it must be delivered within 10 seconds; hence, that could be included in its definition in Article 2. Article 2 also does not have a definition of “FRCE” in terms of its meaning, nor are the initials spelt out. An attempted definition is given in section 5.1.3 of the official supporting paper to LFCR, but it does not work for GB, and in any event, is preceded by a paragraph saying that those words do not, anyway, apply to GB. It is only in Article 34 section 2 part (b), that FRCE is defined as, effectively, the instantaneous frequency error. We suggest the definition be brought into Article 2.

EDF Energy
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