national**grid**

Load-Frequency Control and Reserves Issues Log

Last updated: 21 March 2013

Issues numbered 7 to 23 were captured at the JESG LFCR Technical Workshop on 19/20 March 2013.

Issue	Issue	NGET View
<u>No</u> 1.	How will the LFR&C Network Code implement sharing of reserves between Synchronous Areas?	The LFR&C Network Code will specify the exchange capability and limits for exchange between synchronous areas and will apply to all HVDC links. The products, market structure and any financial vehicles will be defined in the Balancing Network Code.
2.	Are criteria for determining a credible loss to be included in the Network Code?	The Code places an obligation on the TSO to publish high level methodology statements for determining reserve dimensioning and holding; the current NETSO's operational approach of continual assessment of holding based on risk/cost is expected to continue.
3.	Does this code use the term "Significant Grid User" and what are the obligations on providers in terms of for example categories of generator defined in the RfG?	This Code does not use the term 'Significant Grid User' it uses "Reserve Provider". For some reserve categories there are obligations, for example in terms of detailed information for those units which are reserve providing units greater than 1MW in size. The determination of who qualifies or whether the service is mandatory or optional is not defined in this code. There may be some changes in the data items and frequency of data provision within the code.
4.	Which Grid Users will be captured as being required to comply with the requirements of the LFR&C	The term 'Reserve Provider' is used. There is a prequalification process and items are inferred from the RFG and DCC, but it is acknowledged that it is not explicitly defined. As in Q3 above, the code does not define any obligations and this is left to either the balancing code, local implementation considerations.
5.	Implementation in GB. Appropriate terminology needs to be found in the Network Code to either reflect the single NETSO / multiple TSO arrangement in GB, or to ensure the wording is sufficiently high level to allow the GB model to operate within the constraints of the Network Code.	Noted. National Grid agrees with the position of the JESG. This is a common issue with many Codes & it may be better to be considered by GB at a higher level to achieve a single cross-codes position. Solutions could be: - Satisfy with text in the code - Address during national implementation - Seek a generic solution across all codes
6.	When will detailed methodology statements for the principles outlined in the code Articles be developed?	There is a requirement from ACER for the code drafting teams to develop high-level methodology statements in parallel to the code drafting and supporting document development. In practice due to the time constraints this will not be done until after the public consultation. It is not clear at this time how detailed or how publicly visible these statements will be. NG expects and hopes that there will be room to develop appropriate local methods in conjunction with industry and regulator.

lssue No	Issue	NGET View
7.	NRA approval should be required for each area of the code to be further defined on a national level after entry into force.	NG has no issue with this. Might be neater to do as a blanket clause in the general provisions chapter rather than on each instance in the text.
8.	Putting GB / member state specific numbers into the code means that amending these could only be done by amending the code. Needs to be a clear mechanism for affecting changes to the code.	Agreed. This again is an issue with all codes and also represents the conflict between putting detail into a code and leaving it out.
9.	Performance against the numbers given in the code would be useful.	There are some statistics to monitor (eg arts 10, 12) but could be drawn out in supporting documents. Performance against the numbers does drive investment in the network and operational costs.
10.	Can you highlight the values in art 9 table 1 that are already in GB codes and where?	The values do generally come from current practice. Details to confirm.
11.	The parameters in the code(s) will be used to specify equipment with a 40-60 year life. In some instances the information is not sufficient and in art 9(4) the ability to change frequency quality parameters needs clarification and should mention CBA & NRA approval.	More detail will be provided during national implementation (see pt 8 above). CBA is inherent in all retrospective application. NRA approval – see pt 7.
12.	Art 9(4)(d) Excludes IRE & GB. Why & what equivalent covers GB ?	This is because other areas take a very different approach to reserve holding with these being evaluated much more coarsely on an annual basis rather than continually as in GB. A 1 in 20 year approach does not work for GB.
13.	Applicability – the code needs to clarify application to different generator types in RfG and DCC terminology, also application to new and existing.	Agreed on RfG and DCC. Retrospectivity will only apply with CBA.
14.	Art 15 – Mitigation procedures. Poor drafting in this article which appears to place lower obligations on TSOs compared to Grid Users.	 Feed into redrafting from GB will look at: Enforceability TSO obligations Payments for services Technical feasibility of actions
	TSO roles – requirement for clarity to resolve where requirements are on a NETSO and where on a TSO. (and see pt 5 above)	Solutions could be: - Satisfy with text in the code - Address during national implementation - Seek a generic solution across all codes Mark Copley suspects way round this may be through designation from member states.
16.	Will GB use ACE or LFC error? Needs alignment and consistency. (see arts 20 & 10)	GB does not use ACE or k-factor. NG operates the system on the basis of controlling frequency deviation.
	Can all obligations on providers be put in a particular place?	Probably not practical to achieve this – a list of references could be provided in the supporting documents.
18.	Art 27 – State figure for reference incident.	Likely to be in supporting document; for GB this will be 1800MW (single largest infrequent infeed loss).

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19.	Art 28 – FCR Technical Minimum Requirements. Can this be aligned with RfG? GB users did not support this article as drafted which also seems to exclude domestic providers and smaller generators.	For GB, time categorisations are all within the activation time. There could be requirements for a range of products across timeframes; rather than breaking these down the code specifies a minimum requirement but has not factored in current & future provisions and is written around larger generators. GB is market based for these services whereas in Europe there may be statutory obligations.
20.	Art 30 – FRR. What are the figures based on?	To put in supporting documents.
21.	Art 33 – RR What are the RR dimensioning rules? Also, how do you activate RR? (no equivalent of arts 29 / 32 for FCR and FRR respectively).	To follow up.
22.	Art 37 – Exchange of FRR and RR. Could this sterilise interconnector capacity? Needs NRA oversight to ensure this is not used up.	Needs to facilitate sharing but define limits to assure security. Needs a mechanism to demonstrate social welfare – which is in Balancing.
23.	 The TSOs should have an obligation to: measure the quality of supply and report on it control the rate of change of frequency, to avoid and protect against large/significant variations in system frequency. 	TBC