

RfG System Management Requirements

	Articles	TO	SO	DNO	Comments
1	Power Generating Module Type A System Management Requirements Automatic Reconnection - (Article 13(7))	NA	Any party (Transmission or Distribution connected) captured by the Grid Code requirements will be reconnected by NG instruction (automatic reconnection will not be permitted) <u>It is acknowledged that in general Type A and B generators will not be caught by the requirement of the Grid Code. The impact of automatic reconnection of large volumes of embedded generation requires further consideration</u>	G59 specifies this.	Wider concern of implication on the system as a result of the high volumes of embedded generation. This is likely to require further work in the future as part of a GB specific workgroup
2	Power Generating Module Type B System Management Requirements (Automatic reconnection / Control Schemes) (Article 14(4) and Article 14(5))	NA	Any party (Transmission or Distribution connected) captured by the Grid Code requirements will be reconnected by NG instruction (automatic reconnection will not be permitted) <u>Same as above</u>	G59 specifies this. G99 will apply current approach to all D connected generation – or possibly for A to C, not D.	Wider concern of implication on the system as a result of the high volumes of embedded generation. This is likely to require further work in the future as part of a GB specific workgroup
3	Power Generating Module Type B System Management Requirements Protection (1) – Article 14(5)(b)(i) and (ii)	NA <u>TO's will have to specify the schemes and settings for directly connected if different from the current GB practice</u>	<u>High level requirements to be captured in the Grid Code. Local arrangements could be done through bilateral agreement.</u>	Provisions in DPC4.4.4. and DPC 7.4.3 are generally the same as required in the RfG	
4	Power Generating Module Type B System Management Requirements Protection (2) - (Article 14(5)(b)(iii))	TO's will have to specify the schemes and settings for directly connected if different from the current GB practice	Update the Grid Code as necessary	Provisions in DPC4.4.4. and DPC 7.4.3 are generally the same as required in the RfG	
5	Power Generating Module Type B System Management Requirements Protection (3) - (Article 14(5)(b)(iv) and 14(c))	<u>Any changes to protection settings will need to be agreed with the TO for transmission connection</u> NA	Doesn't need to be specified but needs a bit of thinking <u>NA</u>	ditto <u>Any changes to protection settings will need to be agreed with the DNO for distribution connection</u>	
6	Power Generating Module Type B System Management Requirements Operational Metering - (Article 14(5)(d) (i) and (ii))	Same as current GB practice for Generators currently caught by the requirements of the Grid Code.	Same as current GB practice for Generators currently caught by the requirements of the Grid Code. (No change required)	DNO will have to specify the requirements for Type B/C and how it will be implemented. <u>Needs to be joined up with GC0095</u>	
7	Power Generating Module Type C System Management Requirements FSM Monitoring / Automatic Disconnection at specified voltages	TO's will have to amend the Electrical Standards. For NGET its RES-TS_3-24.95 that would need amending (FSM Monitoring) – Electrical Standards documents to be updated by the relevant TO	NA	Dependent on TSOG Art 50 plus DNOs own requirements (if any).	
8	Power Generating Module Type C System Management Requirements - Automatic Disconnection at specified voltages	NA	Current Scottish voltage ranges can be used. CC.6.3.15.3. Code change required	DNOs will not use this save for the equivalence with the over and under voltage protection in	

Comment [NG1]: Under DNO Column it refers to Type A generators, however Article 14 does not apply to type A generators

				G99.	
9	Power Generating Module Type C System Management Requirements Robustness Article 15(4)(a) – (c)	NA	Same as current GB practice. No change required	TSO requirement. To be implemented. To be reflected in D Code/G99	
10	Power Generating Module Type C System Management Requirements 15(6)(a)	TO to consider in coordination with the SO and may have to specify the requirements if required	If a generator wishes to install the equipment then the requirements will be specified through bilateral requirements Specified through bilateral agreement if required by TO.	NG needs to decide what to do about this. Or stay with current D Code drafting DPC7.4.2.1 & DPC7.4.5	
11	Power Generating Module Type C System Management Requirements Monitoring (Article 15(6)(b)(i) - (iv))	RES (TS_3_24_70 Dynamic System Monitoring) needs to be updated TS.3.24.69 Fault Recording – Not part of RES? Quality of Supply – Is this captured under the bilateral agreement? TOs will have to identify other documents that need to become part of RES-Electrical Standards documents to be updated by the relevant TO	Grid Code change may be required	DNO's need to consider and specify this requirement	
12	Power Generating Module Type C System Management Requirements Simulation / Models (1) (Article 15(6)(c)(i) and (ii))	NA	No new requirement. No change required	NA	Model isn't proven until the end of the test result
13	Power Generating Module Type C System Management Requirements Simulation / Other Issues (2) (Article 15(6)(c)(iii),(d),(e) and (f))	NA	No change to the current requirements	DNOs and SO requirement to be the same as far as possible	
14	Power Generating Module Type D System Management Requirements Synchronising (Article 16(4))	Electrical Standards documents to be updated by the relevant TO RES change will be required. TS.3.24.60_RES (TGN 55) TO will have to specify the requirement	NA	DNOs and SO requirement to be the same as far as possible. (For LEEMPS synchronisation arrangements will be the same as any other embedded generator)	
15	Type D Synchronous Power Generating Modules and Type C PPM's Angular Stability under fault conditions / POD (Art 19(3) / Art 21(3)(f)) Other Issues	NA	NA	Current D Code drafting DPC7.4.2.1 & DPC7.4.5	
16	Derogations / Emerging Technology	NA	NA	NA	

Comment [NG2]: Is the current requirement sufficient