Public Workshop on Frequency Stability Parameters for Connection Network Code Implementation

Date: 9 March 2017
Time: 10:30 -16:30
Place: Hilton Brussels Grand Place, Carrefour de l' Europe 3, 1000 Brussels

AGENDA

No	Subject	Duration	Time	Lead
1.	**Welcome and introduction**	10 min	10:30-10:40	**Ralph Pfeiffer** ENTSO-E Convenor of the Working Group Connection Network Codes
2.	**Future system challenges ahead with high penetration of non-synchronous generation:** - Penetration levels in ENTSO-E scenarios by SA and Country - development of inertia by SA and country until 2030 and beyond - holistic approach to mitigate challenges to dynamic system performance - Path to allow up to 100% penetration of power electronics interfaced power sources	20 min	10:40-11:00	**Helge Urdal** ENTSO-E Project Team Leader of the Connection Network Codes Implementation
3.	**Coordination on parameters of frequency stability requirements in CNCs coordination:** - Requirements in RfG, DCC and HVDC. Capabilities in terms of parameters and ranges - Items seen as critical to define to facilitate procurement of plant & timeline - technical capabilities with relevance to plant to be determined during CNC implementation, parameter values with relevance to operational performance determined up front at operational timescales and to be re-selected over time.	20 min	11:00-11:20	**Jonathan Sprooten** Working Group Connection Network Codes
4.	**Specific challenges on frequency stability and related studies per synchronous area** - relevant reference incidents (loss of largest generator, system split, etc.) - Focus on real time knowledge of inertia	120 min	11:20 – 11:45 11:45 – 12:10 12:10 – 12:35	**Representatives from the following synchronous areas:** **Walter Sattinger** Continental Europe **Knud Johansen** Nordic **Antony Johnson**

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

	- Studies done to date (e.g. including system splits regarding RoCoF & required inertia) and intermediate/final results - Process, further studies and timeline ahead - requests for stakeholder input		12:35 – 13:00 13:00 – 13:20	Great Britain **John Ging** Ireland **Jako Kilter** Baltic
5.	*Lunch*	*60 min*	*13:30-14:30*	
6.	Break-out session - work in 2 subgroups on: - General question: What are specific challenges on frequency stability requirements and its parameters; which feedback/input shall be given for consideration in studies and parameter determination? Group 1: (large) synchronous generators Group 2: non-synchronously connected generators (Power Park Modules) and HVDC	60 min	14:30-15:30	**All**
7.	Coffee break	15 min	15:30-15:45	
8.	Outcomes from thematic sessions and plenum discussions	30 min	15:45-16:15	**One representative from each session**
9.	Conclusions and next steps	15 min	16:15-16:30	**Ralph Pfeiffer** ENTSO-E Convenor of the Working Group Connection Network Codes

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu