

**PROPOSAL FOR THE CREATION OF A NEW WORKING GROUP (1)**

<b>WG* N° C5.22</b>	<b>Name of Convenor :</b> David Bowker (Australia) <b>E-mail address:</b> David.Bowker@hydro.com.au	
<b>Technical Issues # (2): 10</b>		<b>Strategic Directions # (3): 2</b>
<b>The WG applies to distribution networks (4): No</b>		
<b>Title of the Group: The Management of Systemic Market Risk in Electricity Markets</b>		
<p><b>Scope, deliverables and proposed time schedule of the Group :</b></p> <p><b>Background :</b>          For the purposes of this project it is proposed to define Systemic Risk in the following way:</p> <p>Systemic risk is the risk of collapse of an entire market, as opposed to risk associated with any one individual entity, group or component of a system that can be contained within the market without harming the entire system. It can be defined as "market <i>system</i> instability, potentially catastrophic, caused or exacerbated by idiosyncratic events or conditions in intermediaries". It refers to the risks imposed by <i>interlinkages</i> and <i>interdependencies</i> in a system or market, where the failure of a single entity or cluster of entities can cause a cascading failure, which could potentially bankrupt or bring down the entire system or market.</p> <p>A couple of examples which we expect to consider are:</p> <ul style="list-style-type: none"> <li>• Where a very large market participant who is too big to fail does fail</li> <li>• A very severe drought in a market heavily dependent on hydro-generation</li> <li>• Market participant financial failure caused by a significant physical system disturbance.</li> </ul> <p><b>Scope :</b>          This working group will collect information from various markets on the way in which systemic market risk is approached. The broad approach will be to assess:</p> <ul style="list-style-type: none"> <li>– Is there a systemic risk in your market?</li> <li>– How is the systemic risk addressed?</li> <li>– Is a central counterparty or clearing house the solution?</li> <li>– What other methods could be used to mitigate the risk?</li> </ul> <p>The outcomes will be an assessment of the overall approaches which have been adopted and an attempt to categorise approaches and link these to basic market, cultural or geographic parameters.</p> <p><b>Deliverables :</b> A technical brochure, summary Electra article, tutorial material if required</p> <p><b>Time Schedule : Start:</b> <span style="float: right;"><b>January 2017</b></span></p> <ul style="list-style-type: none"> <li>• <b>Develop final work plan and recruit members</b> <span style="float: right;"><b>March 2017</b></span></li> <li>• <b>First meeting (in Dublin) to discuss draft information form</b> <span style="float: right;"><b>May 2017</b></span></li> <li>• <b>Finalise information form and approach members</b> <span style="float: right;"><b>October 2017</b></span></li> </ul>		

• <b>Compile data</b>	<b>February 2018</b>
• <b>Analyze data</b>	<b>May 2018</b>
• <b>Review of Data and develop insights (Paris)</b>	<b>August 2018</b>
• <b>Draft Report with conclusions</b>	<b>November 2018</b>
• <b>Final report approved</b>	<b>March 2019</b>
<b>Comments from Chairmen of SCs concerned :</b>	
<b>Approval by Technical Committee Chairman :</b> <b>Date :</b> 01/12/2016	
	

(1) Joint Working Group (JWG) - (2) See attached table 1 – (3) See attached table 2  
(4) Delete as appropriate

**Table 1: Technical Issues of the TC project “Network of the Future” (cf. Electra 256 June 2011)**

<b>1</b>	Active Distribution Networks resulting in bidirectional flows within distribution level and to the upstream network.
<b>2</b>	The application of advanced metering and resulting massive need for exchange of information.
<b>3</b>	The growth in the application of HVDC and power electronics at all voltage levels and its impact on power quality, system control, and system security, and standardisation.
<b>4</b>	The need for the development and massive installation of energy storage systems, and the impact this can have on the power system development and operation.
<b>5</b>	New concepts for system operation and control to take account of active customer interactions and different generation types.
<b>6</b>	New concepts for protection to respond to the developing grid and different characteristics of generation.
<b>7</b>	New concepts in planning to take into account increasing environmental constraints, and new technology solutions for active and reactive power flow control.
<b>8</b>	New tools for system technical performance assessment, because of new Customer, Generator and Network characteristics.
<b>9</b>	Increase of right of way capacity and use of overhead, underground and subsea infrastructure, and its consequence on the technical performance and reliability of the network.
<b>10</b>	An increasing need for keeping Stakeholders aware of the technical and commercial consequences and keeping them engaged during the development of the network of the future.

**Table 2: Strategic directions of the TC (cf. Electra 249 April 2010)**

<b>1</b>	The electrical power system of the future
<b>2</b>	Making the best use of the existing system
<b>3</b>	Focus on the environment and sustainability
<b>4</b>	Preparation of material readable for non technical audience