

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

WG* N° C5.20	Name of Convenor : David Bowker (Australia) E-mail address: David.Bowker@hydro.com.au	
Technical Issues # (2): 10	Strategic Directions # (3): 2	
The WG applies to distribution networks (4): Yes / No, NO		
Title of the Group: Drivers for Major Changes in Electricity Markets		
Scope, deliverables and proposed time schedule of the Group :		
<p>Background : In order to meet the changing environments in which they exist, energy markets tend to evolve continuously. However, every 5 to 10 years there is typically a major change to the market to address some major issue. These changes can be driven by a variety of possible reasons including political, commercial or technical.</p> <p>Scope :</p> <ol style="list-style-type: none"> 1. This working group will collect information from market operators on major changes to electricity markets in order to understand the purpose of the change, the initiator of the change, the process for selecting the proposed change compared with other possible solutions and the success of the change in meeting it's objective. It will also review the issues around each of these changes and how they were handled. 2. It is proposed to have a clear criterion for selecting the relevant changes and not to use an approach of selecting changes which exhibit specific characteristics. This will mean that, for the markets studied, we will have an impartial dataset which will allow an assessment of the success rate for major changes. 3. The group will define a “materiality” test to select which are “major” changes. We propose to have a time cutoff which we believe will need to be 10 to 15 years in order to have sufficient cases to be meaningful. We expect to include major changes which have been completely designed but are still in the process of implementation to maximize the currency of the report. 4. The outcomes will be an assessment of the overall success of large market change implementations and some understanding of the approaches which can be used to improve the chances of success. <p>Deliverables : A technical brochure with summary in an Electra article</p> <p>Time Schedule : Start: January 2015 Final report March 2017</p> <ul style="list-style-type: none"> • Develop final work plan and recruit members March 2015 • First meeting (in Sweden) with draft information form May 2015 • Finalise information form and approach members September 2015 • Compile data January 2016 • Analyze data March 2016 • Review of Data and develop insights (Paris) August 2016 		

• Draft Report with conclusions	December 2016
• Final report approved	March 2017
Comments from Chairmen of SCs concerned :	
Approval by Technical Committee Chairman : Date : 28/11/2014	

A handwritten signature in black ink, appearing to read "M. Wald", written over the signature line of the approval table.

- (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)

1	Active Distribution Networks resulting in bidirectional flows within distribution level and to the upstream network.
2	The application of advanced metering and resulting massive need for exchange of information.
3	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.
4	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.
5	New concepts for system operation and control to take account of active customer interactions and different generation types.
6	New concepts for protection to respond to the developing grid and different characteristics of generation.
7	New concepts in planning to take into account increasing environmental constraints, and new technology solutions for active and reactive power flow control.
8	New tools for system technical performance assessment, because of new Customer, Generator and Network characteristics.
9	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.
10	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)

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