

CIGRE Study Committee A1

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

WG* N° A1.42	42 Name of Convenor : Eduardo Guerra (Argentina)											
Technical Issues # (2): X	XXX	Strategic Directions # (3): 2										
The WG applies to distribution networks (4): No												
Title of the Group: Influence of Key Requirements to Optimise the Value of Hydrogenerators												
Scope, deliverables and	Scope, deliverables and proposed time schedule of the Group:											
The conception and desig the value seen from the pe of value for the provider. T properly oriented, optimal the preceding paragraph. supplier so that the require continuation of practices of the field. In particular, the goals of t	in of a hydro gener erspective of the cu he starting point is design resulting fr This project seeks irements contained originated in the pas his WG are:	ator aims to achieve a machine that maximizes astomer and at the same time allow the creation the technical equipment specification, if it is not om it, will not respect the objective set forth in to achieve consensus between customer and in the technical specification are not a mere st and incorporate the current state of the art in										
✓ recognize the key f	factors, according to	o their influence on the cost of the generator;										
$\checkmark$ quantify this impac	t;											
✓ assess the degree	of importance that	the operators give to each of these factors;										
$\checkmark$ analyze the antago	onistic factors arisin	g out of the foregoing;										

✓ identify constraints inherited from previous references that are no longer necessary nowadays, nor for all cases.

The proceeds of this WG would estimate the influence of the parameters to be specified in the value of the machine, thus guiding the specification process.

**Deliverables :** Report to be published in Electra or Technical Brochure with summary in Electra

## Main Tasks and Time Schedule:

					2	01	3		2014																2015							
				Aq	So	041	Nov	Diel	End	Fob	ма	Aba	10:	lur i	Jul	A 41	501	04	No	Die	End	Fol	ма	АЫ	ма	. Ju	Jul	A4	So	00	No	Die
STEP	DESCRIPTION	Start	Finish	1	2	3	4	5	6	7	*	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	34	35
1	Approval of TOR of WG	August 2013	8																													
2	Questionnaire preparation			1					Ì													1		1		l	l	Ì				
3	Recruitment of Collaborators									ļ				Ì		Ì							Ì		Ì		Ì		1			
4	Subbmittal of Questionnaries			1																		1	ļ	1	ļ	1	ļ	1	ļ			
5	Collection of Responses and follow up																															
6	Data Processing																									Ţ		l				
7	First Report Draft Preparation																											I				
8	Submittal of Report and Review		Sep 2015											Î									1				1		1			
Comm	ents from Chairmen of S	Cs coi	ncerne	ed	: 1	à	i	à		à		à		à		à	i						ė		ė			à			i	i



Approval by Technical Committee Chairman : Date : 15/08/2013



(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	Interactive communication with the public and with political decision maker