

PROPOSAL FOR CREATION OF A NEW WORKING GROUP

WG C6.11	Name of Convenor : C. D'Adamo (Italy)
Title of the Group : <i>Development and operation of active distribution networks</i>	
<p>Scope, deliverables and proposed time schedule of the Group</p> <p>Background : The technology development of small size generating systems, the new requirements of efficiency, security and quality of power supply, the liberalisation of the electricity market are driving the evolution of electricity distribution from passive to active distribution networks.</p> <p>The evolution is strictly connected to the possibility to allow Distribution Companies to control, operate and integrate distribution electricity resources (DER) within the network under their responsibility.</p> <p>Distribution Companies may act on both the demand side and the generation side. Demand side Management and Demand Response is already studied by WG C6.09. A new WG has to explore the operation issues of DER fully integrated within LV and MV distribution networks.</p> <p>Scope :</p> <p>This WG aims to assess the various requirements from the Distribution Companies (relevant to control, protection, communication, etc.) to allow and support the transition towards active distribution networks.</p> <p>In particular, strict cooperation among Manufacturers, ITC solutions providers and Distribution Companies will be necessary for the scope of the WG.</p> <p>The WG shall proceed by developing the steps that follow</p> <ul style="list-style-type: none"> • Assessment of network and generators requirements for the integration of DER (e.g., islanded operation criteria, black-start capability, ancillary services, etc.) • Identification of enabling technologies both for demand and generators (e.g., <u>Demand side</u>: electronic meters, flexible tariffs, load reductions; <u>Generators Side</u>: voltage control, p-f regulators, Q regulating generators, etc.) • Definition of limits/barriers (costs, infrastructures, conflict of interest, DG control, investment remuneration,...) • Economic cost/benefit analysis methods (referred to the whole electric systems); • Evolution in regulatory aspects (e.g. possibility to dispatch local energy, Distributor's control on DER and loads, market constraints, etc.). <p>Deliverables: <i>Technical brochure on "Active distribution networks" and summary on ELECTRA</i></p> <p>Time Schedule : Start July 2006 Final Report: June 2009</p>	
Comments from Chairmen of SCs concerned :	
Approval by Technical Committee Chairman :	Date :