

PROPOSAL FOR CREATION OF A NEW WORKING GROUP

WG C6.09	Name of Convenor : Alex Baitch (AUSTRALIA)
Title of the Group : DEMAND SIDE RESPONSE	
<p>Scope, deliverables and proposed time schedule of the Group :</p> <p>Background</p> <p>The pressure of increased consumption of electricity manifests itself in many ways. The electrical infrastructure installed to meet the required demand must be adequate within the generation, transmission and distribution systems to supply the requirements in a safe, secure and economical manner.</p> <p>Demand Side Management / Demand Side Response initiatives (terminology is still under discussion) are increasingly being examined with a view to lower customer energy costs and reduce impact on the environment, with a view to minimising the extent of the traditional expansion of the generation, transmission and distribution systems on a build basis.</p> <p>The drivers for demand side response are essentially grouped into four categories:</p> <ul style="list-style-type: none"> a) Environment : reduction of energy consumption, improvement of efficiency and reduction of greenhouse gases. b) Network : capacity of generation and constraints of network c) Economical : inclusion of demand in the deregulated market to help avoid high pool prices and price spikes. d) Customer choice: ability of customers to have flexibility in demand, possibly in combination with Distributed Energy Resources, to locally trade their energy needs in a deregulated environment (Local Trading Strategy) <p>As demand on network elements approach their rated capacity, the reliability and quality of supply deteriorates. When demand approaches the capacity of the network, either investment in additional capacity or some form of Demand Side Response initiative needs to be activated in order to ensure maintenance of service standards. To date, very little has been done to attempt to influence demand side behaviour of the market.</p> <p>Scope :</p> <ol style="list-style-type: none"> 1. Investigate and describe in detail the various drivers associated with various forms of demand side response initiatives that are being utilised in various countries. 2. Describe the role of dispersed generation options that are being utilised or proposed to be utilised in various countries to affect the impact of the various drivers of demand side response initiatives. 3. Investigate the role and importance of Information and Communication Technology as being investigated by WG C6.03 with respect to implementation of demand side response initiatives. 4. Describe the various forms of demand side response initiatives and the extent of their impact on the various drivers for demand side response. In this regard issues such as load interruptability, generation or cogeneration on customers premises, energy efficient devices, 	

fuel switching and load shifting will be examined.

5. Investigate the available knowledge of demand elasticity and the extent to which price signals have an impact on demand. In that regard investigate the extent to which price signal feedback is required to affect demand.
6. Investigate the role and responsibilities that networks owners and operators should have in ensuring the effective implementation of demand side response initiatives. In that regard, examine the extend to which regulatory support and economic drivers are required for networks to undertake such responsibilities.
7. Investigate what changes need to be implemented within distribution network planning processes to take account of Demand Side Response initiatives.

Deliverables : Technical brochure with summary in Electra

Time Schedule : start January 2005

Final report : 2007

Comments from Chairmen of SCs concerned :

Approval by Technical Committee Chairman : A. Bolza

Date : October 12, 2004