

Energy Services for Tomorrow – The Future of DSM

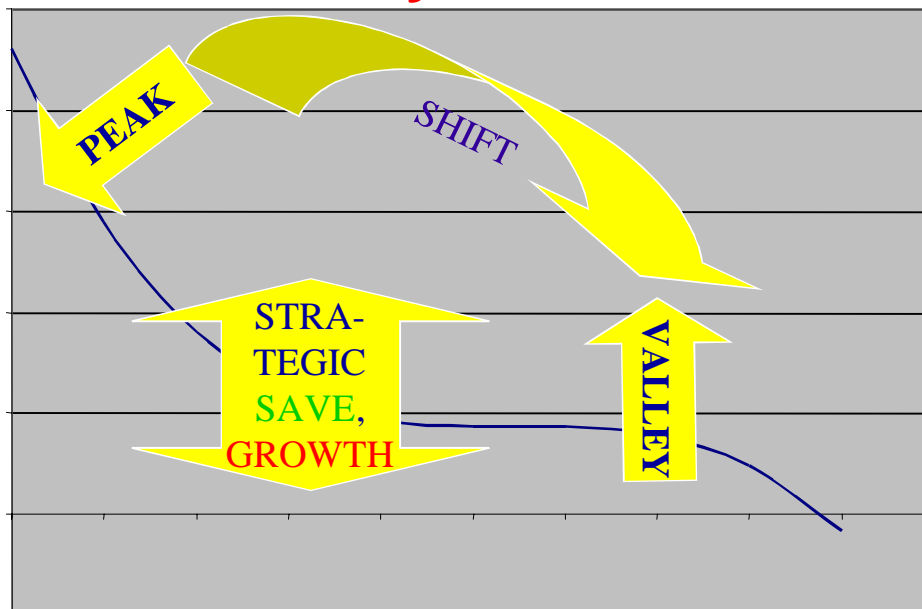
Workshop in Graz October 2, 2002, 14.00-18.00

place: Hotel Weitzer, Grieskai 12-14, A-8011 Graz (www.weitzer.com)

room: Salon "Nikolai", no. 11

The IEA Demand-Side Management Programme is an international collaboration with 17 IEA Member countries and the European Commission, working to clarify and promote opportunities for energy services by use and development of “Demand-Side Management”, (DSM). For the purposes of this Programme, DSM is defined to include a variety of purposes such as load management, energy efficiency, strategic conservation and the activities related to achieve these purposes, see figure below. The IEA Programme is developed to cover such needs under different regulatory regimes and market structures since the basic need to ensure an optimal function of the energy system is common throughout the world. Through co-operative activities, participants will collaborate to help DSM technologies to reach their full market potential, thereby allowing energy systems to function more effectively and giving energy system investments enhanced value for gas and electricity customers. This IEA programme is about to take stock of its activities during the past five and prepare for the next five years and invites you to a discussion about what needs to be done next.

DSM a tool for optimisation of systems



The IEA Demand Side Management Programme has for many years developed tools and

delivered solutions so that the DSM concept can be used under different regulatory regimes, not the least of which is in liberalized markets. Thus whoever wants to develop or use Demand Side activities or related policies and for whatever purposes, the IEA DSM Programme should be the natural first resource to consult to make use of experiences gained. With this perspective, the programme, based on its sound foundations and its ongoing activities should be able to continue and grow. The Executive Committee of the Programme has therefore decided to invite several new countries to participate.

Looking ahead

It is also time to look further in terms of substance and opportunities. When the Programme started it had three main areas of work – Policy (analysis of applications), Technology and Measures. The exchange of experiences gained from these three categories is crucial if we want to make the best of our resources:

- The special workshop on certificate trading in Milan at the ExCo meeting in April 2002 (see www.dsm.iea.org) provided such an opportunity.
- Relation to other so-called Building Related Implementing Agreements¹ where we can reach out with our products and find partners or shape new collaborations and disseminate our products.
- DSM should be examined more in terms of security of supply for energy systems since the ability to manage the system is what security requires.
- Energy systems balance and control has been the subject for studies in the DSM-bidding activities and could be further generalised and dealt with in co-operation with those responsible for power systems functions.
- Green public procurement is on the agenda for both policy making and design as well as a practical reality for municipalities and for companies.
- Development of new products and services and ways to pave the way for new players is important and interesting.
- The European Union development of a corresponding directive could provide both a carrot and a stick.²

Events of the latest year seem to have given some new breath to the DSM concept. First of all were the close calls showing that energy systems both in a technical and in an institutional sense, and sometimes both, are vulnerable. California was the most spectacular example. Secondly the concerns over environment and climate has made it obvious that, as far as energy impact goes, measures must cover both supply and demand side and that simultaneous treatment of the opportunities opens for better solutions. Since the DSM concept is built on

¹ The Seven Building Related Implementing Agreements are:

- Building and Community Systems;
- DSM;
- District Heating and Cooling;
- Energy Storage;
- Heat Pumping Technologies;
- Solar Heating and Cooling;
- Photovoltaic Power Systems.

² See COM(2001) 580 “Implementation of the first phase of the European Climate Change Plan”.

the interaction between the two, it also offers some good "readymade" chances for analysis and measures.

Some examples of how the DSM concept have been implemented :

- Utilities and administrations investigate Energy Services as "ancillary services" (especially concerning power) as means for security and as products to the customers
- Decentralised power production and new relations to IPP also cover aspects of DSM and Load Management
- Regulators consider DSM as part of a legal system to secure that customer treatment is fair and service reliability upheld

In all there seems to be several reasons to ensure that the DSM concept is developed in light of new tasks and new institutional arrangements. This workshop will be structured to deal with and develop the views on these issues.

Workshop Programme

Position of DSM in the Energy marketplace

- **The Logic** (to recall the DSM concept and show the width of the subject and that it fits not only into thinking about least cost resources but also into issues of systems reliability, energy security, global environment etc, and that the delivery of DSM is not uniquely utilities).....*Hans Nilsson*
- **The EC proposal** (aim, issues, standing etc). EC projects..... *Randall Bowie, European Commission,*
- **The SAVE-projects** (results and new aims)..... *Lars Nilsson, University of Lund*
- **The US situation** (demand Response is a hot topic)
- **The Austrian Experience**.....*Herbert Lechner, Energieverwertungsagentur (E.V.A.)*
- **DSM applied in reality (EPC a highway to sustainability, experiences from both sides and the importance of the balance of customer and ESCO interests)**.....*Karl Heinz Lesch, City of Graz, environmental department*
- **Other regions or other relevant work** (testimonies from the EXCO delegates)

Opportunities for the Future / Re-thinking DSM:

- To **improve reliability** (relevance, instruments) (affects peaks and dispatching).....*Michael Jones, IEA Secretariat*
Mr Jones will present the IEA project on Demand Response and discuss the opportunities for a collaboration between the DSM-Programme and the IEA secretariat on these issues.
- To **improve security and diversification** (affects the level of demand),*Linda Hull, EA technology*
- To **reach Kyoto** (affects endurance and type of activities undertaken)
- **As a commodity***Richard Formby, EA Technology and Hans Westling, Promandat AB*
- And its **impact on market organisation** (c.f. the Italian and UK schemes for trading)