



Smart Energy Demand Coalition



Mag. Marko Svetina, Executive Board Member February, 2012 Smart Energy Demand Coalition



Our Membership



Smart Energy Demand Coalition

The SEDC is an not-for-profit industry group, representing the requirements of programs involving Smart Energy Demand

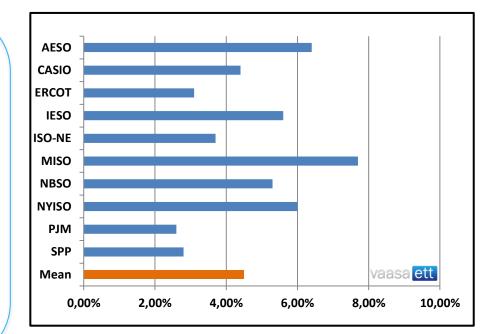
in order to support the 2020 objectives, further the development of the Smart Grid and ensure improved end-consumer benefits



Demand Response = Growing Potential Globally

Why Care? \$6 billion in annual turnover after only 5 years market access USA.

- USA \$6 Billion Business Direct Revenue
- + avoided investments Generation, T&D
- Demand Response "took off" in 2005 with Demand Side access to capacity markets
- Average estimate peak clipping 8-11% US
- Average estimate peak clipping 6-13% Europe
- Developing nations looking at DR for peak clipping purposes. India, Brazil, China etc



Actual Peak Clipping USA 2010 C&I + Residential Demand Response. Source FERC



Demand Response "Snap Shot"

"A Demand Response Snap Shot"

- How it is now for companies creating Demand Response programs in Europe right now
- Look at cost effective demand response programs
 - Meant concentrated on Commercial Industrial Demand Response (C&I DR)
 - 1. Describe program
 - 2. Describe main regulatory enablers and barriers.
 - 3. Describe main technological or investment enablers or barriers
 - 4. Provide pro-active suggestions for solutions



Main Positive Findings

- Demand Response can reduce European Peak Consumption by 6 -11%
- 1) No need for large public investment in technological rollout.
- 1) Immediate earning potential
- Demand Response directly pays end-consumers. These earning equal 100 of millions in direct revenue per year to local businesses



Main Negative Findings

A Repeated pattern of regulatory barriers stretching across most of the European Union

1)Historical tender requirements by TSOs for bidding into the wholesale energy markets are written for generation – not demand side resources. Block demand side resources entering the markets

2) The markets have been set up for valuing energy. Demand response's value lies in capacity and capacity is undervalued in the markets. No availability payments or capacity payments



Main Negative Findings

Only 3 EU Member States Enabling C&I DR by Third Parties

GB: Tender Requirements & (soon) Capacity Market

France: Developing Tender Requirements Capacity Market (2016)

Ireland: Tender Requirements



Over 20 out of 27 Member States decisive barriers to open markets competition



How to get there?

- Tender requirements to enter the organized energy markets must be made compatible with demand side resources rather than only generation. Equal access to market and free competition should be required
 - •Capacity's value should become transparent and equally accessible to all parties.
 - Availability payments, Reserves payments, capacity markets or access to existing capacity markets should be required.

Article 12 should refer specifically to Demand Response and support these developments



SEDC Current Actions

- Support the Energy Efficiency Directive within the EU Parliament and the Member States and add amendments to Article 12.
- Publication and release of 80,000 page SEDC Demand Side Research Library
- Sharing Research JRC: Continuous collection and comparison of Dynamic Pricing and Feedback Pilots
 - Over 100 analysed. Sharing these results and the library with the JRC
- "A Demand Response Snap Shot"
 - How it is now for companies creating Demand Response programs in Europe right now and what are their main regulatory barriers.
 - Provide pro-active suggestions for solutions
- Increase awareness of the need for Capacity Mechanisms in the wholesale markets structure where energy savings can be sold reflecting real market values.







THANK YOU

http://sedc-coalition.eu/