Demand Response Dispatcher™

Volume 1, Issue 1 Newsletter of the IEA DSM Task XIII Project

"Connecting Electricity Customers to Markets"

Task XIII Overview

How to Plan for Economic Reliability with DRR

Danger! Danger! Danger! The computer screen flashes red indicating a severe congestion problem in the northern region. The control room operator jumps into action and activates the local demand response resources (DRR). These resources have been properly trained and well coordinated for several years, so they know just what to do when asked. A few consumers reduce their loads and others turn on a facility generator. As all of this is taking place, the control room operator watches the congestion problem disappear. But they were not really concerned; they've seen the DRR spring into action before.

The International Energy Agency's Demand Side Management Programme (IEA-DSM) established Task XIII to evaluate DRR practices around the world and develop recommendations on best practices for integrating DRR into regular market activities. Task XIII was formally approved at the DSM Executive Committee meeting on April 15, 2004. Ross Malme (USA), President & CEO of RETX Energy Services, Inc. and Chairman of the Peak Load Management Alliance (a USA DRR trade association), was inducted as the Operating Agent for Task XIII at the October 15th meeting of the IEA DSM ExCO.

Ross Malme
Operating Agent

DRR is a tool needed by any electricity system to adequately, economically and reliably carry out its planning and operation responsibilities.

Demand Response Resources (DRR) has been defined as load response called for by others and price response managed by end-use customers. Inclusion of DRR in energy markets can take the form of reduced energy costs, direct payments for energy "not consumed," and/or a reservation payment for being available to reduce consumption upon request. This view of DRR as a resource can be taken within any structure, ranging from a totally liberalized electricity market for all customers to a still-regulated regime where one provider is charged with meeting customer needs and providing customers with choices in ways that are the lowest cost and most reliable. DRR is a tool needed by any electricity system to adequately, economically and reliably carry out its planning and operation responsibilities. *continued on page 2*

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DRR has seen many different incarnations over the years. There have been traditional utility driven curtailment tariffs, direct load control programs, direct participation in wholesale markets by consumers just to name a few. But as energy markets drive towards more liberalization, new challenges have been seen. In some extremes, entire DRR capability is erased because of new competitive market rules. In other cases, the resources are being redeployed in new ways such as targeting specific congestion problems. The great benefit of Task XIII is that many nations will work together to share their experiences. This cooperation will provide a framework for gathering pertinent information to assess the various market impacts of recommend a set of best practices. Of course, all practices may not be ideal in all market situations, but the information should provide a strong benchmark to evaluate individual situations.

In order for any product to have long-term economic viability, it must survive the economic reality of its given market. There are many places throughout the world where DRR is strongly desired (e.g. Ontario Canada is pressing to develop a “Conservation Culture”), but the market economics do not provide the necessary incentives for long-term capital and resource investment. It is difficult for reasonable business people to commit significant time and effort without a fair return on investment. DRR should be considered as a capacity resource and included in long-term planning models on par with alternative generation sources. Unfortunately, most DRR assessments look to the past to assess their market impacts. Whereas, if proper tools are developed to assess DRR’s impact on things like reliability planning, its value can be modified from “I’m glad we had it when we needed it” to “I know we got it so we are in very good shape.” The later should yield economic opportunity where prudent business people will be willing to invest.

Our job with Task XIII is to listen to your collective experiences, analyze the information provided, and develop a set of recommend best practices. The key project objectives are:

A	Identify and develop the country-specific information needed to establish the existing stock of and potential for demand response.
B	Perform the market and institutional assessment needed to set realistic goals for the contribution of DRR to sector objectives.
C	Mobilize technical and analytic resources needed to complete the project.

At the end of this process, we hope to provide a methodology that will help each participant integrate DRR into its energy market. It's fairly clear that DRR can have significant impact during high cost, low probability events. It's also fairly clear that DRR can be obtained at one of the lowest, if not the lowest, cost per KW. But many times DRR is not considered until a crisis is imminent or has recently occurred. This invariably causes DRR to go through wild boom and bust cycles (sometimes within the same calendar year). Again, this creates problems from an economic incentive perspective. Our goal is to create a methodology that will help assess the long-term impacts of DRR on system reliability. This will help ensure that DRR is considered during long-term planning discussions.

But we cannot do any of this alone. We are very excited that Task XIII has received strong participation from many nations. We have developed a process in which we will work with the various nation experts to elicit the appropriate information. We will go through this process with each Country Expert at the upcoming Experts Workshop in Valencia, Spain. Your participation is very much appreciated. In the end, you will be the beneficiaries of the work we will do together.

Experts Workshop in Beautiful Spain

Task XIII is gaining a full head of steam. The first Experts Workshop is scheduled for May 10-11 in Valencia, Spain. We wish to thank our most gracious hosts at Polytechnic University of Spain for allowing us to use their facility for this important event. We also extend special thanks to Carmen Rodriquez Villagarcia of Red Electrica and Carlos Alvarez of UVP for helping to facilitate the workshop logistics.

During this workshop, we hope to: (a) meet with each nation to discuss their goals and objectives with Task XIII; (b) create a forum for sharing experiences; and (c) discuss the Task XIII task plan and implementation process. This workshop will be the official "kick off" for Task XIII. We have a lot of information to cover in a short period of time. We have attempted to structure the workshop in such a way that it combines a good mix of project planning, group discussions, and one-on-one strategy/process discussions with each Country Expert.

This should be a very productive meeting. We hope those that attend enjoy their visit to Valencia and leave the meeting with a clear understanding of Task XIII and a mission to accomplish its tasks.

Summit Blue Consulting
Joins the Task XIII Project Team

We are pleased to announce that **Summit Blue Consulting** (www.summitblue.com) was selected through a competitive bid process to assist the Operating Agent with the econometric elements of Task XIII.

The project team intends to develop economic models that can be used by Country Experts to assess DRR in their nation. We expect to provide methodologies for assessing DRR's market potential and long-term valuation. The combination of these elements will help enable the inclusion of DRR into long-term system reliability planning. Thus far in many markets, this has been a missing ingredient that has caused DRR to be instituted when (or after) an emergency is seen. We hope that the creation and utilization of econometric tools will help the industry, regulators, and consumers embrace the benefits DRR can provide.

Summit Blue Consulting (SB) is a leading utility industry professional service firm specializing in DRR. SB provides a variety of energy - and other utility - related services that help clients compete and succeed in the fields of energy efficiency and demand response, energy resource procurement and related business pursuits. SB has provided services to firms like Enbridge in Ontario, NSTAR in Boston, Cinergy in Ohio, and the Netherlands Energy Research Foundation EC to name a few.

Daniel Violette, PhD. is a Principal at SB and will be their lead project team member. With over 20 years' experience in the power and networked industries, Daniel Violette is a recognized industry leader in the development of effective market strategies, the use of quantitative methods to support utility decisions and providing executive-level management consulting. Dr. Violette most recently managed the retail strategy practice at PHB Hagler Bailly Consulting. One of the founders of Hagler Bailly, he led the firm's utility practice for over a decade holding the positions of senior vice president and director. Dr. Violette has also held SVP positions with Electronic Data Solutions (EDS Management Consultants) and XENERGY, where he managed operations in five offices and led a national consulting practice focused on retail markets.
We are very exited to have SB on the Task XIII Project Team. Please join us in welcoming them.

Keys to Success: A Country Stakeholder Group

In each issue of this newsletter, we will recommend some *Keys to Success* for Task XIII. We hope that this section will provide insight into ways to compete various tasks and/or share information we've learned from other project participants. We'll bring the best advice possible to help your country succeed, but some solutions might be more applicable for an individual country than others. As always, our *Keys to Success* goals are to provide useful information to successfully complete Task XIII and provide insights into how the results of the project can be incorporated into your markets.

Given that this is the first newsletter and the first Experts' Workshop is scheduled for May 10th, our first *Key to Success* is focused on where you, as the Country Expert, might want to start. This is a very important decision and it is not as easy as it might sound. Your starting point can impact the subsequent paths you follow throughout the project. Course corrections are always possible (and generally expected), but a strong starting point can help to mitigate future project challenges.

The United States has created a model that other nations may wish to consider for their starting point. The US Department of Energy has helped to create the US Demand Response Coordination Committee (US DRCC).

The US DRCC consists of industry stakeholders throughout the United States to help guide the US involvement in Task XIII. The stakeholders consist of Independent System Operators, utilities, DRR product vendors, and trade associations. This group will help establish US goals and objectives, assist the US Country Expert with the project tasks, and provide insights into project recommendations. US DRCC members are asked to contribute financially to the group to help cover operating expenses.

However, we believe that this is a powerful first step and a strong key to success because it helps to ensure that input is received from all key stakeholders. The US DRCC will help the US Country Expert make sure that appropriate information is gathered and analyzed. This will help to ensure that the project recommendations are relevant and useful. But we expect that the most important benefit the US DRCC can provide will occur at the end of the project. Recommendations have no real value if they fall on deaf ears. We anticipate that the US DRCC will work together throughout the project and leave with some consensus. Industry agreement and common vision will be invaluable when it comes time to implement solutions. We expect that this will be easier to accomplish given that the group will have been

working together for some time.

Dan Delurey has been appointed Acting Executive Director of the US DRCC. He is a respected member of the DRR industry and has been working to promote DRR's benefits for many years. Mr. Delurey will be attending the Experts Workshop in Spain. He will be hosting a Power Breakfast discussion on his experience with creating the US DRCC. We hope you will have an opportunity to join him in this discussion.

Participating Countries in Task XIII

and How to Join the Task XIII Project Team

Participating Countries:

Australia
Denmark
Finland
Italy
Korea
Japan
Norway
Spain
Sweden
USA

To find out more information about the IEA DSM Programe visit their website at http://dsm.iea.org/. To find out more information about the Demand Response Resources project visit the project Internet Portal at http://drrtask13.retxbeta.com/ or contact the Ross Malme, the project Operating Agent at malme@retx.com or call him at 770-390-8510.