

Demand Response Resources



Demand Response Resources IEA DSM Task XIII

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Presented at:



Demand Response Resources



Introduction to IEA DRR Project

- Vision:
 - Promote the development of Demand Response Resources (DRR) by providing a roadmap for integrating DRR into liberalized markets.
- Initiated by ExCo in 4/03
- Work Plan and budget approved 10/03
- Work commenced in 4/04
- RETX CEO is Operating Agent



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Focus of the IEA DSM Task XIII Project

- Market Characterization
- DR Potential
- DR Valuation
- Enabling Technologies
- Market and Program Design
- Building the Business Case for DR



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US Participation in Project

- DRCC
 - AEP
 - AREVA
 - ISO New England
 - National Grid
 - NYISO
 - Southern Company
 - PIER Demand Response Research Center (DRRC)
 - Salt River Project
 - PJM
 - SCE
 - SDG&E
 - PG&E

PLUS

FERC



DOE



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International Participation

- Countries Participating
 - Australia, Denmark, Finland, Italy, Japan, Korea, Netherlands, Norway, Spain, Sweden, USA
- Countries Pending
 - Canada, Mexico
- Countries Interested
 - China, India, South Africa, Kenya, Tanzania, Zimbabwe, Thailand



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December 2004 Deliverables

- Market Characterization Toolkit
 - Process Guide (Chapter 3 of Guidebook)
 - Templates and Forms
 - Comparison Report of Participating Countries
- Communications Toolkit
 - Process Guide (Appendix 3 of Guidebook)
 - Templates and Questionnaire
 - Case Studies and Sample Materials
- Research Library
 - White papers, case studies, articles and websites
 - Organized by topic and country of origin



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Next Deliverables in 2005

- DR Potential Toolkit
- DR Valuation Toolkit
- Additions to Market Characterization Toolkit
- Additions to Communication Toolkit
- Expanded research library with search function



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DR Valuation is Critical

- The most significant new ground being broken by the project is the forward looking valuation modeling of DR assets
 - Previous work has focused on past value
 - Real value of DR is not complete until you factor in the once in 10 years event
 - Examples from latest study:
 - Northwest Power Planning Council Study (2005)
 - DRR has a huge impact over 15 year study



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NWPPC Predicted Value of DRR

- According to the model simulations:
 - DRR is used in 89% of the years
 - < 1% of DRR capacity used in 79% of years.
 - < 10% of DRR capacity used in 90% of years.
 - Few years show DRR used at full capacity.
- Overall value:
 - Without DRR, the expected net present value increase in system costs is \$100 million, while system risk increases by \$500 million.
 - For constant levels of risk, the loss of DRR increases expected costs by about \$300 to \$500 million.
 - Without DRR, risks increase in the range of \$400 million to \$1 billion at given levels of expected cost.
- Policy recommendations
 - Develop 500 MW of DR over the next five years; and,
 - Develop up to 2,000 MW of DRR over the 20-year period.

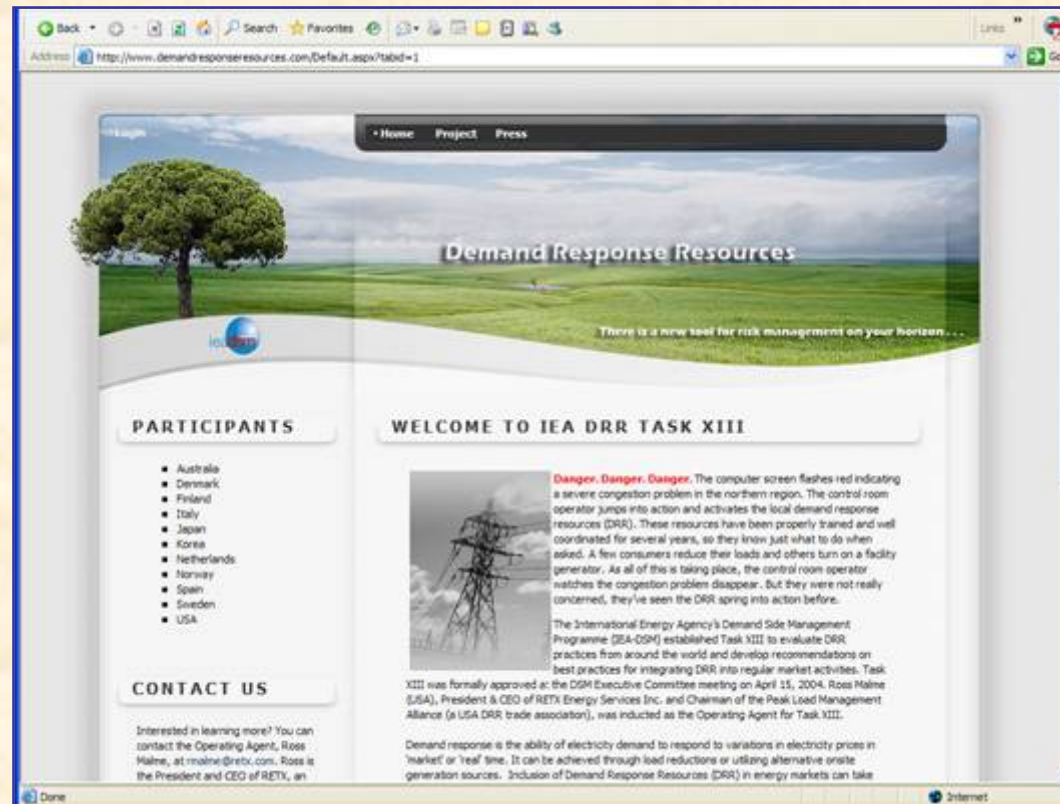


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Project Management

- Collaboration

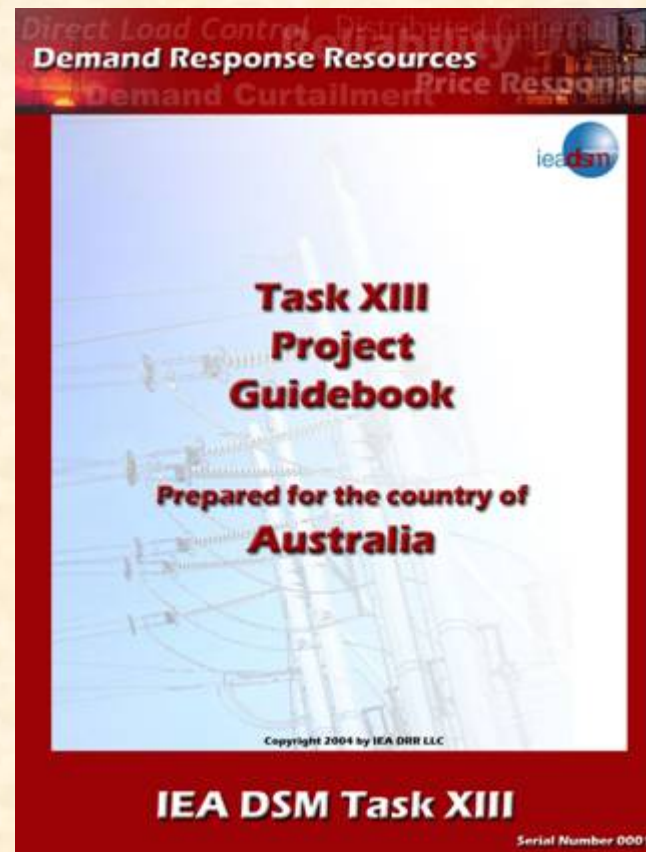


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Project Management

- Actionable Toolkits



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Project Management

- Communication

Task XIII Teleconference - Live Meeting

File Edit View Insert Help

Microsoft Office Live Meeting

ACCUTEL

Meeting Information

New Presentation

Presentation

Task XIII Tele... Slide 1/26

- Wellcome to the 2nd Monthly T...
- Agenda
- Homework Assignment #3
- Workgroup Enrollment
- Update on Valuation and DRP...
- DR Valuation and Planning Activi...
- DR Valuation and Planning Activi...
- US Utility Demand Response Sur...
- Project Summary
- Survey Purposes
- Submit Feedback Here

Attendees

Find Attendees Matching

Attendees Found: 1 of 1

- Name
- Mark Wright

Popularity Information - Not in 2004 mode Page 1

Seating Chart

Questions and Answers (No Questions)

Feedback to Presenter Proceed

Attendees: 1 Not Recording No Questions

Connected

Demand Response Dispatcher

Volume 1, Issue 1 Newsletter of the ICA DSM Task XII Project

How Healthy is Your Risk Management Portfolio?

by Mark Wright

This month in Florida: Hurricane Charley took approximately nine hours to traverse the Florida peninsula. From the strongest hurricane to make landfall in the state since Hurricane Andrew in 1992. Just under 36 hours prior to Charley's landfall, Tropical Storm Bonnie struck the Florida Panhandle near Apalachicola. Not since 1995 have two storms struck the state of Florida so close together. People who live in Florida know that preparedness is the key to quick recovery - and sometimes even to survival - in the event of catastrophic storms. It's worth the investment in portable generators, water supply equipment, emergency lighting, and storm shutters to deal with an emergency if it comes. And it's money well invested whether you actually have to use your storm gear or not - it's all about managing risk.

This month in Atlanta: Why's Atlanta spending more than \$1 billion on Olympic security, and will it pay for itself? The Atlanta Olympic security and recovery help from NATO. This might have been the most peaceful, successful Olympics in history - or it might have been an international disaster. Atlanta, and the state of Florida to show together. The hurricanes before them, have chosen to spend ever increasing millions on managing risk. In their value equation, it's money well spent to deal with the possibilities of what might happen and most will not consider it a waste if Atlanta turns out to be the safest and most successful Olympics in memory. Increased risks sometimes call for significant investment that may not be utilized - but it is still prudent to make the investment.

This month in the Oil Market: One might think that recent crude oil prices are hitting all time highs and wonder what industry and government have done to mitigate their risk. But a quick look at crude oil history will show that we have traveled this road before. Where prices will peak is anyone's guess.

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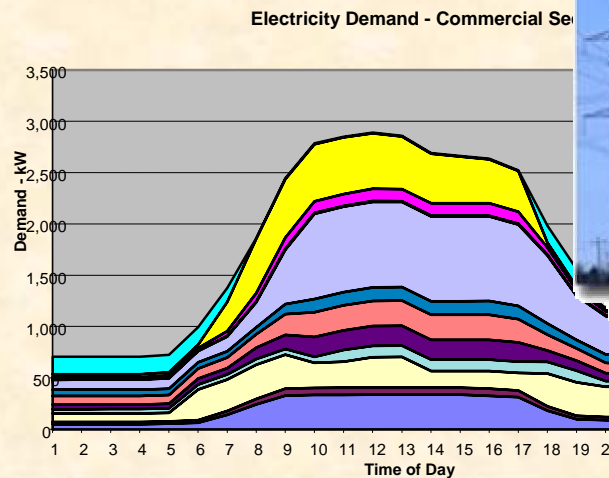


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Project Management

- Shared World Wide Experience



EU-DEEP



European Distributed Energy Partnership
for the Large-Scale Implementation
of Distributed Energy
Resources in Europe



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Country Responsibilities

- Funding
- Experts
- Country Participation Plan



Demand Response Price Response Reliability

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Value to NARUC Participants

- Toolkits
- Working Groups



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Business Plan Development

- Each Country to develop Business Plan
- Presentation to Policymakers in each country or region
- Expect US to be facilitated by FERC and DOE
- Would like to do in conjunction with NARUC in Winter/Spring 2006
- Expect development of regional DR plans, vision, strategy and portfolio
- Implementation of toolkits



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Action Items

1. Coordinate with FERC/DOE to organize
2. Establish dates for business plan presentations



Jump on in –
the water is fine!

