

Mid-Atlantic Distributed Resource Initiative (MADRI)

NARUC Committee on Electricity and Energy Resources
and the Environment

Richard Sedano

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The Regulatory Assistance Project

*50 State Street, Suite 3
Montpelier, Vermont USA 05602
Tel: 802.223.8199
Fax: 802.223.8172*

*177 Water St.
Gardiner, Maine USA 04345
Tel: 207.582.1135
Fax: 207.582.1176*

Website:

<http://www.raponline.org>



Introduction

Regulatory Assistance Project

RAP is a non-profit organization, formed in 1992, that provides workshops and education assistance to state government officials on electric utility regulation. RAP is funded by the Energy Foundation, the US EPA and the US DOE.

Richard Sedano was Commissioner of the Vermont Department of Public Service, 1991-2001, and is facilitator of the MADRI process



What is MADRI?

- A stakeholder process, open meetings
- How to improve the effectiveness of deployment of distributed resources?
 - ❖ Distributed generation
 - ❖ Demand response
 - ❖ Energy efficiency
- Geography: “Classic PJM” with input from neighbors
- Principal financial support: DOE EERE and OTD



MADRI Principle

- More deployment of distributed resources could improve electric grid reliability & reduce costs.

Institutional barriers appear to be slowing deployment of cost-effective distributed resources



MADRI Objectives

- Educate stakeholders, especially state officials, on distributed resource opportunities, barriers, and solutions
- Develop alternative solutions for states and others to implement
- Pursue consensus on preferred solutions

MADRI builds on New England Demand Response Initiative, yet has a distinct agenda for a distinct region



Stakeholders & Participants

- PUCs
- Energy Offices
- Environmental Regulators
- FERC
- DOE
- EPA
- Utilities
- PJM
- Equipment manufacturers
- Advocates

*Steering Committee oversees direction
– Rick Morgan, DC PSC, is chair*

*Sub-groups formed
to work deeper on
some key issues*

*Steering Committee includes
Commissioners Thomas (PA)
McRae (DE), Curran (MD)
and Fox (NJ)*

MADRI Working Group Activities

Focus Area	Potential Near Term Activities	Status	Items for Consideration - Long Term
Coordination of Regional Policies & Technical Standards	Evaluate the opportunity for developing a Mid-Atlantic interconnection standard for small generators based on the PJM small generator standard	Sub-group meeting 12/04	Develop regional communications and advanced metering standards.
Metering	Identify ways that advanced metering can be more widely deployed to better enable DR	Survey being developed	Examine the potential for using PJM's "mini scada" as a standard communications network for DG and DR
Pricing Policies	Incorporate dynamic pricing options in SOS offerings as they come up for renewal and assess effects of administratively set rates on customer behavior	Discussion underway	Explore opportunities for: public benefit funding; establishing wholesale tariffs for distributed resources; rate base treatment of DR & DG infrastructure - e.g. metering & communications
Regulatory Framework for Distribution Companies	(1) Develop incentives to keep ALM programs in place. (2) Evaluate alternatives that diminish the effect of thru-put based rates. (3) Ensure rate recovery is reasonably available for prudent cost-effective investments in the system, even if rate caps are in effect.	Discussion underway	<ul style="list-style-type: none"> o Evaluate sustained alternatives to distribution thru-put based rates o Develop DR & DG incentive programs for 3rd parties and distribution companies o Explore ways to improve T&D planning to identify high avoided cost areas -- target DER at peak applications/high maintenance areas o Remove regulatory disincentives to distributed resources
Market Demonstration	Identify high potential areas for DR in PJM and develop business models to evaluate the potential for future DR pilot programs	Sub-group meeting 12/04	Develop pilot market demonstrations to demonstrate the benefits of DR
Environmental	Explore options for using DR during PJM designated system emergencies.	Sub-group formed	Foster regional consistency in environmental requirements for DR.
Development of Tradable Commodity Markets	Establish Forward Energy Reserve (Demand Response Call Option)	PJM defining potential product	<ul style="list-style-type: none"> o Accept DR as reserves in ancillary services markets o Standardize DR products independent of supply or demand o Facilitate aggregation of small resources o Develop a user friendly bidding system



Presentation Topics

- Connecticut Air Quality Rules for DG
- Gridwise
- LBNL: Real time pricing, NEDRI Lessons
- PJM: Forward Energy Reserve, Advanced Metering Survey, planning
- ORNL, RAP: regulatory and market issues

Themes: make markets and regulation work, eliminate barriers



Status of MADRI

- Four Working Group meetings (Sept-Jan)
 - ❖ Presentation and discussion of all identified issues
 - ❖ Web site <http://www.energetics.com/madri/>
- Beginning to develop consensus opportunities and solution options
- Meetings every 5-6 weeks (next: 3/3 in DC)
- Special meetings on specific issues
- Aiming to conclude ~ Fall 05



Thanks for your attention

- ❖ rapsedano@aol.com
- ❖ <http://www.raponline.org>
- ❖ RAP Mission: *RAP is committed to fostering regulatory policies for the electric industry that encourage economic efficiency, protect environmental quality, assure system reliability, and allocate system benefits fairly to all customers.*