



**STATE TECHNICAL FORUM ON EE/RE**  
Call #6 Summary – March 17, 2005  
**Clean Distributed Generation**

**Participants:** 28 state officials participated in the call (see the attached participant list)

**Key Issues Discussed:**

- Net metering policies
- Balancing policies promoting clean DG and preventing increased emissions from high-emitting DG
- Rate design and interconnection standards
- DG as part of utility clean energy portfolio requirements

**Summary of Presentations & Discussion:**

**I. Overview** (See also Background and Discussion questions, PQA)

**II. New York's Approach to Encouraging Clean DG: Jim Gallagher, NY Public Service Commission** (See PowerPoint presentation,)

NY has adopted a number of policies to encourage clean DG through a collaborative process:

- DG interconnection standards:
  - Minimal **and standardized** technical requirements
  - Standardized fees **and contracts**
  - Preapproval of standardized package units
- Electric and gas rates to encourage DG
  - Cost-based stand-by rates exemption for renewables **and efficient combined heat and power systems of less than one MW** if regular tariff is more advantageous)
  - Negotiated contract demand charge **based on projected usage (primarily dist. system costs)**
  - On-peak daily **actual** demand charge for stand-by **based on shared system costs (primarily transmission related)**
  - Phase-in of rates to avoid adverse rate impacts
- Net metering regulations adopted to reduce metering costs for smaller DG
- RPS provides incentives for small and large renewable projects; includes incentives for customer-sited, small off-grid generation

**III. Connecticut & DG/CHP Emission Standards: Chris James, CT Department of Environmental Protection** (See CT Fact Sheet)

- Emission Standards are based on Regulatory Assistance Project's Model DG Emissions Rule (more stringent than OTC model rule after Jan 2005)
  - Does not apply to emergency DG (which are allowed to operate only during pending outages)
  - Does apply to non-emergency DG on both sides of the meter

- Output-based emission standards designed to recognize efficiency; “dove-tail” with rest of the region
  - Covers NO<sub>x</sub>, PM, CO, CO<sub>2</sub>
  - SO<sub>2</sub> addressed through fuel specifications
- Glide-path to increasingly stringent emissions to give manufacturers a long-term outlook
- Compliant DG sources receive streamlined permitting – exempt from New Source Review permit
- Incentives to locate in congested areas (e.g. SW CT)
- CHP is eligible for emissions credits for relevant pollutants: CHP must meet minimum power to heat ratios -- At least twenty percent (20%) of the fuel’s total recovered energy shall be thermal and at least thirteen percent (13%) shall be electric.
- DG participating in demand response programs are subject to emissions stds.

#### **IV. Pennsylvania’s Alternative Energy Portfolio Standard & DG: Joe Sherrick, PA Office of Energy & Technology** (See PA Fact Sheet)

- AEPS has two tiers: (CHP is included in two places)
  - Tier I: Solar, wind, fuel cells, coal mine methane, low-impact hydro, biomass, geothermal
  - Tier II: Waste Coal, Distributed Generation Systems (**CHP only**), Demand Side Management (**including CHP**), Large Scale Hydropower, Municipal Solid Waste, Electricity Generation from by-products pulping and wood manufacturing, Integrated Combined Coal Gasification Technology
- Draft guidance on eligibility requirements :  
<http://www.dep.state.pa.us/dep/deputate/pollprev/PDF/Section%202%20Technical%20Guidance%20Final.pdf>
- (Proposal to change definition of DG in Tier II as only renewable DG)
- Net metering rule under consideration that is modeled after NJ’s with annual true-up of sales/purchases – still being hotly debated
- Technical standards will be consistent with PJM regional recommendations
- Incentive for CHP in Philadelphia non-attainment area: Clean DG can use NO<sub>x</sub> credits to comply with emission levels. Not part of a set-aside program and not yet approved by EPA.

#### **V. New Jersey’s Incentive Programs for DG: Mike Winka, NJ Board of Public Utilities** (See PowerPoint presentation)

- Approach recognizes the need to tie all the programs and polices together to reduce barriers.
- Net metering designed to reduce technical requirements
- Rate design includes demand charges that encourage operation on-peak to reduce impact of ratchet (ratchet demand charges are based on the highest hourly demand during a specified billing period which may be several months or annual),
- State is looking at decoupling throughput from service rates – “Breaking that link between the utility's commodity sales and revenues, removes both the incentive to increase electricity sales and the disincentive to run effective energy efficiency programs or invest in other activities that may reduce load.” Sheryl Carter, NRDC, “Breaking the Consumption Habit,” Dec. 2001.  
<http://www.nrdc.org/air/energy/abreaking.asp>
- Financial Incentives:

- Cost/Benefit evaluation estimates including environmental externalities predict 2-3 yr payback of incentive programs
- Rebates on capital cost – varies by size and technologies; highest for solar
- \$5 million in CHP project rebates
- Looking at PA’s AEPS as model for energy efficiency portfolio standard to include DG and CHP
- Large demand for CHP and RE rebates; Demand far exceeds supply of incentive funds
- RPS helps drive RE supply; provides additional revenue through renewable energy credit market
  - \$4 to \$15/MWh for RECs and \$175/MWh for Solar RECs
- Accelerated tax structure can reduce payback time
- Net metering law is in place

## **VI. Discussion & Questions**

### ***A. What is the first priority in promoting clean DG?***

- Get the rates right first
- Support feasibility studies for DG/CHP
- Decouple rates from throughput (see NARUC website and NRDC & EEI Resolution supporting decoupling)

### ***B. What advice do you have for states that are facing resistance to implementation to net metering?***

- Get stakeholder input; use a collaborative process in development of regulations.
- Need to address revenue loss from net metering.

### ***C. What can states do that do not have budgets to support financial incentives?***

- Revolving loan funds could reduce the need for annual funding source
- Performance-based contracting encourages third-party investors to provide the capital in return for a portion of the project savings over a period of time.

D. Other resources: US CHP Association, see [www.USCHPA.org](http://www.USCHPA.org)

## **VII. Results of Peer Evaluation:**

Catherine reviewed the results of the web-based Peer Review (see detailed results below). Comments received indicated an interest in more information and/or technical assistance in the following areas:






- EE/RE credits in SIPS
- Tools for calculating environmental benefits
- RPS and REC markets
- Monitoring and Verification
- Utility rates and efficiency
- Use of EE/RE in GHG reduction programs
- How EE/RE can be integrated with new air quality regulations





## State EE/RE Technical Forum Peer Review





Report created on: Friday, March 25, 2005 10:47:00 AM





Email Invites	123
Visits	32 (26%)
Partials	0 (0%)
Completes	17 (14%)





Responses:  Completes only  Partials only  Completes & Partials

1. Which of the following State EE/RE Technical Forum Calls have you participated in? Check all that apply.	Number of Responses	Response Ratio
Nov. 4th: Kick-off Call 	5	29%
Nov. 18th: EE/RE Allowance Set-Aside in NOx Budget 	9	53%
Dec. 16th: third Party Monitoring and Verification of EE 	8	47%
Jan. 19th: RPS and Renewable Energy Certificate Tracking Systems 	10	59%
Feb. 28th: Supplemental Environmental Projects 	11	65%

2. Please rate your satisfaction with the State Technical Forum on EE/RE Allowance Set-Aside in the NOX Budget in terms of information you learned that is helpful to your state.	Number of Responses	Response Ratio
Extremely Unsatisfied	0	0%
Unsatisfied 	1	6%
Satisfied 	5	29%
Extremely Satisfied 	3	18%
Did not participate 	8	47%
<b>Total</b>	17	100%

3. Please rate your satisfaction with the State Technical Forum on Third Party M&V for Energy Efficiency in terms of information you learned that is helpful to your state.			Number of Responses	Response Ratio
Poor			0	0%
Fair			1	6%
Good			4	24%
Excellent			3	18%
Did not participate			9	53%
<b>Total</b>			17	100%

4. Please rate your satisfaction with the State Technical Forum on Renewable Portfolio Standards and REC Markets in terms of information you learned that is helpful to your state.			Number of Responses	Response Ratio
Poor			0	0%
Fair			2	12%
Good			1	6%
Excellent			7	41%
Did not participate			7	41%
<b>Total</b>			17	100%

5. Please rate your satisfaction with the State Technical Forum on Supplemental Environmental Projects in terms of information you learned that is helpful to your state.			Number of Responses	Response Ratio
Poor			0	0%
Fair			3	18%
Good			5	29%
Excellent			4	24%
Did not participate			5	29%
<b>Total</b>			17	100%

Overall, please rate your level of satisfaction with each of the following in terms of its effectiveness in providing useful information:

	1 Extremely Unsatisfied	2 Unsatisfied	3 Satisfied	4 Extremely Satisfied
1. Background Materials	0% 0	0% 0	71% 12	29% 5
2. Formal Presentations	0% 0	0% 0	75% 12	25% 4
3. Informal discussion	0% 0	20% 3	47% 7	33% 5
4. Call Wrap-up	0% 0	13% 2	73% 11	13% 2
5. Meeting Summary	0% 0	0% 0	86% 12	14% 2
6. Follow-up to questions	0% 0	17% 2	67% 8	17% 2

[VIEW](#) 2 Responses

Would you recommend that other states or agencies in your state participate in future State EE/RE Technical Forum calls?

	Number of Responses	Response Ratio
Absolutely	5	29%
Very likely	9	53%
Unlikely	1	6%
Absolutely not	0	0%
Not sure	1	6%
<a href="#">VIEW</a> Comments:	1	6%
<b>Total</b>	17	100%

The calls have been designed for one and a half hours each month. Please respond about whether the frequency and length of the calls are appropriate. Check two.

	Number of Responses	Response Ratio
Length of calls is appropriate	13	76%
Length of calls is too long	4	24%

Length of calls is not long enough	0	0%
Frequency of calls is appropriate	11	65%
Frequency of calls is too often	0	0%
Frequency of calls is not often enough	0	0%

**9. Please check the topics below that are of interest to you for future State Technical Forum calls. Check all that apply.**

	Number of Responses	Response Ratio
Energy Efficiency Portfolio Standards	14	82%
Public benefit funds	6	35%
Appliance standards	5	29%
Building codes	5	29%
Interconnection standards and transmission pricing for renewable generation	10	59%
Output-based standards for CHP	8	47%
Electricity Rate design structure and its impact on EE/RE	9	53%
<a href="#">VIEW</a> Other, Please Specify	2	12%

**10. Would you like to participate in future State EE/RE Forums that are more in-depth discussion of topics already covered? Check all that apply.**





	Number of Responses	Response Ratio
EE/RE credits in SIPS	13	81%
Monitoring and Verification of EE/RE	10	63%
RPS and REC markets	10	63%
Supplemental Environmental Projects & EE/RE	6	38%
<a href="#">VIEW</a> What specific aspects of these topics?	2	13%

**11. Would you be interested in a face-to-face workshop for state energy, environment and utility officials on these and related topics?**










	Number of Responses	Response Ratio

Yes		13	81%
No		2	13%
<a href="#">VIEW</a> Comments/Suggestions		3	19%



12. If so, what time of year and how many days would you prefer? (Check all that apply.)	Number of Responses	Response Ratio
Fall 2005		6 46%
Winter 2005/06		6 46%
Spring 2006		3 23%
Summer 2006		0 0%
<a href="#">VIEW</a> Length of Meeting (days):		11 85%



13. Check any of the following areas of technical assistance that you would find helpful.	Number of Responses	Response Ratio
Program/policy design		9 64%
Modeling emissions benefits		6 43%
Program/policy implementation		9 64%
Analysis of impacts to costs, jobs, health		7 50%
Information on and demonstration of tools for calculating environmental benefits of EE/RE		11 79%
Energy planning process		6 43%
Air quality planning process		3 21%
Tutorial on state energy programs/policies/terms related to EE/RE		9 64%
Tutorial on state environmental programs/policies/terms related to EE/RE		10 71%
<a href="#">VIEW</a> Other, Please Specify		0 0%



Thank you for your feedback.