

PV Development Today: Rapid Growth but Facing New Challenges

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Agenda

Massachusetts

- Example Development-Scale Systems
- Policy Check
- Outlook
- Initiatives

Pittsfield, MA 1.6 MW



Acton, MA 104 KW



**103.7 kW Solar PV Array
Acton-Boxborough Regional Junior High School
Acton, MA
Installed by Nexamp, Inc.**

Whitinsville, MA 1 MW



**1 MW Solar PV Array
National Grid's New England
Distribution Center
Whitinsville, MA
Installed by Nexamp, Inc**

Massachusetts: Good Flight Path, But... Needs More Runway

Issues	Rooftop	<2 MW	2-6 MW
Building Code	Yellow	Green	Green
Permit Fees	Yellow	Yellow	Yellow
Interconnection	Green	Yellow	Yellow
Net Metering Policy	Green	Yellow	Yellow
SREC	Yellow	Yellow	Yellow
Sales Tax	Yellow	Yellow	Yellow
Investor Confidence (for next 3-18 months)	Green	Red	Red

Building Code

- Transition from 6th to 7th Edition, 2009: Very Rocky
 - Snow Loads
 - New triggers for analysis; Earthquake considerationsResult: An amendment by BBRS to address typical solar array
- IEBC was promulgated in Aug 2010
- Fees for permits should be based on services rendered
 - For issues of excessive permitting fees contact the BBRS at (617) 660-4600 for clarification.

Net Metering Issues

- Uncertainty
 - Is MA net metering compliant with federal law?
 - How will the net metering queue be defined and administered?
- Revenue
 - Potential course of action: Determine the technology specific avoided cost for solar?
- Delay of Market
 - How long will the net metering issues take to resolve?
 - Administrative
 - Queue
 - Net metering rate

SREC Issues

Pricing before and after ACP Change

Contract Length	2011 ACP - \$600 Indicative Pricing	2011 ACP - \$550 Indicative Pricing
3yr	\$400/MWH	\$375/MWH
4yr	\$390	\$365
5yr	\$375	\$???
Spot	\$550	\$500

Sales Tax

- Consult your qualified tax advisor, BUT...
 - Sales and Use tax exemptions for residential solar, manufacturers, etc. are clearly defined on the ST-12
 - Recent letter rulings may exempt IPP entities for “...furnishing...electricity when delivered to consumers through...lines...”
 - Otherwise, a 6.25% sales tax should be applied to most elements of a solar plant.

Investor Confidence

Couple perspectives on Utility Scale projects:

- 1) Conservative institutional finance: Wait 6-12 months and see if SREC policy is stabilized and cleaned up, Net Metering ruling is made or avoided cost structure recognized. Don't be the first one in.
- 2) Opportunistic developer with equity: Put my project into the queue, understand the likely worst case scenario (SREC Floor and avoided wholesale costs), and construction completion in 2012.

18 Month Outlook

3-6 Month Issues

- Interconnection Queue definition
- Interconnection processing time
- Clarification of “Municipal” projects and regulations
- Net Metering opinion of FERC compliance by State (confirm status quo); or

6-18 Month Issues

- Formulate an avoided cost structure for solar
- Increase Net Metering cap to achieve objectives (4-5%)

What Next

- Industry focus: Please consider joining and supporting the Solar Energy Business Association of New England (SEBANE) to focus the industry's messaging:
 - DPU Proceedings
 - EEA/DOER Discussions
 - Utility Discussions
 - Legislative efforts
 - Visit www.SEANE.org for all other activities and to join!