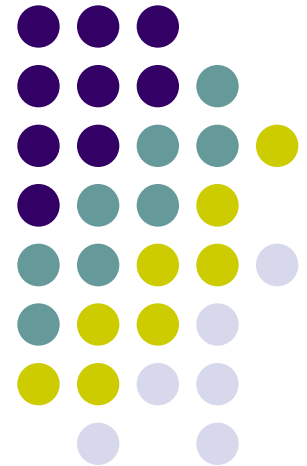


# Proposal for clean power plant solicitation

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**William P. Short III**



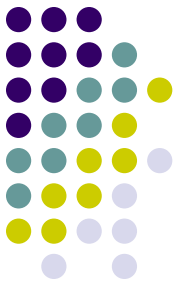


# The Problem

- Energy market revenues are insufficient
- Existing non-carbon emitting resources cannot operate profitably

# What's needed?

- Competitive market mechanism to increase revenues for qualified resources.



## How to?

- **Qualified** generators competitively bid based on reduction in FCM payments
- **Selected** generators awarded payments equal to operating cost less energy & REC revenue
- **Give Back** payments by generators as energy prices increase



# Qualified Generators

- Day-ahead bidder for 100% production at \$0.00/MWh
- FCM Participant w/CSO for 100% of unit capacity
- Located on PTF & built to full integration standard
- Located in ISO-NE Control Area
- No actual carbon emissions



# The Terms of the Deal

<b>Duration</b>	3-year minimum; 1-year renewal option (max. 7 years)
<b>Give back</b>	50% of the energy revenues above the operating costs until all subsidy payments are repaid
<b>Selection Criteria</b>	Greatest percentage reduction in FCM payments on a MW basis over the term of the agreement
<b>Source of Funds</b>	Payments to winning generators collected by ISO-NE from network load. Repayments from to winning generators paid back to network load by ISO-NE
<b>RFP Size</b>	Up to 4,100 MW



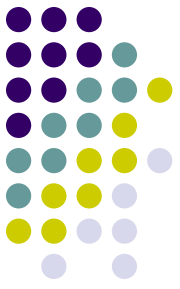
# Potential Costs

Plant Size (MW)	Annual Operating Cost (\$/MWh) (a)	Average Energy Cost (\$/MWh) (b)	Subsidy <sup>1,2</sup> (a-b)	Annual Production (TWh)	Subsidy <sup>3</sup> (\$'mil)
700	\$46	\$25	\$21	5.0	\$105
1,250	\$35	\$25	\$10	9.5	\$95.0
2,150	\$30	\$25	\$5	17.5	\$87.5
4,100				32.0	\$287.5

<sup>1</sup> Less FCM reduction

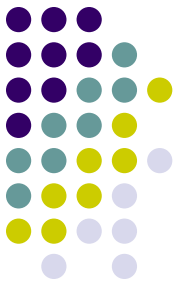
<sup>2</sup> If \$0 or negative, generator initiates Give Back

<sup>3</sup> Cost per MWh to network electric load ~ \$2.25/MWh



# The Benefits

- Preserves 4,100 MW of existing non-carbon emitting resources yielding annually:
  - 1) 32 million MWh of price suppression electrical energy (~25% region load)
  - 2) Reduction of 12.9 million RGGI allowances (43% of New England usage for 2016)
- Short-term policy with payback requirement
- No apparent need for State legislative or regulatory action



# The Alternatives

Replace these EXISTING resources with:

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WIND: 12,200 MW (30% CF)

-or-

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SOLAR: 25,000 MW (14% CF)

High costs include (*NEWIS report*):

- Miles of new transmission
- Above-market rates “locked-in” long-term
- Possible added capacity payments to reliable generators





# Questions