

Renewable Issues for IRP 2012

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RPS Requirements

- 16-245a (Class I and II);
- 16-243q (Class III)
- 20% of our energy usage covered by Class I RECs by 2020, (9% for 2012)
- Plus, an additional 3% Class I/Class II.
- Plus 4% Class III.
- Not impacted by Public Act 11-80.

RPS is an Energy Measure

- Why does this matter? You need more MWs to get sufficient MWh.
- Capacity Factor of Intermittent Renewables
Wind (30-45%), solar (15-30%).
- Baseload gas, nuclear or biomass (85-90%).
- So you may need 3-4 times as many solar/wind MW to get the same MWh as a baseload plant.

Statement from '10 IRP (EDC Finding)

- “For New England to meet each respective state’s 2020 Class I RPS, the region needs to add approximately **4800 MW** of new renewable generation, **primarily wind**, that will be located in areas distant from load centers, which would require investments of approximately **\$20 billion** in new renewable generation and about **\$10 billion** in investment in transmission resources to access this new renewable generation.”
- We have had great difficulty building even **150 MW** here, so CT’s money about to go north.

ACP Background

- 16-244c(j)(1) allows a supplier to comply with RPS by paying 5.5 cents per kWh instead of supplying RECs. This is called the “Alternative Compliance Payment” or “ACP.”
- Essentially sets a cap on Connecticut REC prices.
- Does not adjust for inflation.
- Money goes to the Clean Energy Fund.

2010 IRP on ACP

- “[T]he ACP in Connecticut is \$55/MWh with no escalation. The ACPs in some New England states are higher than \$55/MWh. **If the market price exceeds \$55/MWh, RECs will migrate to other New England states, Connecticut will face a shortage of Class I RECs and Connecticut suppliers will pay the ACP.**”

Planning Implications of ACP

- If the premium for renewable energy over ordinary energy exceeds 5.5 cents/kWh, we may have massive ACP payments to CEF late in this decade.
- Massive build-ups in funds have a tendency to get raided.
- Is it politically acceptable to adjust ACP upward? If ACP does not lead to much RE development, is that acceptable?

One Last Point re ACP

- Studies of the cost to meet RPS tend to assume that the ACP cap of 5.5 cents/kWh stays in place.
- This analytical approach may dampen the true cost of what it would mean to really have 20% of our energy covered by Class I RECs by 2020.
- EDC finding in 2010 IRP: Landfill gas, biomass, small hydro, and onshore wind are estimated to require REC prices that are below the ACP. However, fuel cells, offshore wind, and solar PV would require payments greater than the ACP.

Potential Contractual Approach

- IF IRP calls for a procurement of renewable energy, consider long-term (15 year?) contracts that have known prices.
- Avoid connecting the payments to LMP as in Project 150.
- To build locally, avoid constitutional concerns by reference to needing local renewables in part for reliability.

2012 Progress, Cont.

- Consider, in return for providing a contractual backstop for financing and a rate of return, whether the ratepayers should receive the value of all electric products from the facility. (Energy, Capacity, RECs, carbon credits, now existing or hereafter arising.)