Renewable Energy Policy Incentives and Programs Toolbox

Renewing Facilities Through Clean Energy Strategies

Paul R. Michaud, Esq.
860-240-6131 | pmichaud@murthalaw.com

June 27, 2013

Toolbox Items

- Renewable Energy Credits
- Z-REC & L-REC Program
- Property Tax Exemption
- Net Metering & Virtual Net Metering
- Submetering

Renewable Energy Credits ("RECs")

Renewable Portfolio Standard

- Each year a certain percentage of total retail energy sales of the utilities must be purchased from eligible renewable energy sources

Energy

RECs

REC

=

All of the environmental attributes associated with one megawatt hour of energy produced by an eligible renewable energy generating facility in a specified vintage year or quarter

Z-REC & L-REC Program

- CL&P and UI are required to purchase RECs produced by “zero” or “low” emissions projects under long-term contracts
  - $1 billion in contract commitments over a 6-year period
  - Provides projects with predictable, financeable, 15-year revenue streams for the RECs produced by the projects

Z-REC & L-REC Program – *continued*

General Project Eligibility

- Project must be located behind the utility distribution meter
- Project must not have received funding/grants from Clean Energy Finance Investment Authority
- Project must be in service on, or after, July 1, 2011
- CL&P and UI will only contract for projects within their respective service territories

Z-REC & L-REC Program – *continued*

Specific Project Eligibility

Z-REC Projects:

- Class I Renewable with Zero Emissions
- No larger than 1,000 kW (1 MW)
- May include solar, small hydro and wind

L-REC Projects:

- Class I Renewable with Low Emissions
- No larger than 2,000 kW (2 MW)
- May include fuel cells and other low emissions Class I resources, as well as all zero emission Class I resources

Z-REC & L-REC Program – *continued*

Project Bid Selection Process

- Project bids are ranked by REC price, with the lowest bid REC price ranked first
- Projects are selected until the annual ZREC and LREC Program budgets are met for each utility:
  - Large ZREC Project (250 kW to 1,000 kW) Budget: $2.7 million
  - Medium ZREC Project (101 kW to 249 kW) Budget: $2.7 million
  - LREC Project (1 kW to 2,000 kW) Budget: $4.0 million
  - Small ZREC Project (1 kW to 100 kW) Budget: $2.7 million
    - Separate Solicitation under a utility tariff rider

Z-REC & L-REC Program – *continued*

Project Incentive Example

- 1,000 kW Solar Project
- 1,288 Z-RECs Produced/Year
- $100 Z-REC Bid
- $128,800 annually
- $1,932,000 over the life of the ZREC contract

RECs

Property Tax Exemption

- **Local municipality may opt to abate up to 100% of the personal property taxes on renewable energy systems that:**
  - Are installed between January 1, 2010 and December 31, 2013;
  - Are a Class I, Class II hydropower or solar thermal resource;
  - Are located behind the commercial or industrial customer meter; and
  - Have a nameplate capacity that does not exceed the location's load.

Property Tax Exemption – *continued*

"New Haven Rule"

- **There is a 100% personal property tax exemption on renewable energy systems that:**
  - Were, or will be, installed on or after January 1, 2010;
  - Are a Class I, Class II hydropower or solar thermal resource;
  - Are located behind the commercial or industrial customer meter;
  - Have a nameplate capacity does not exceed the location's load; and
  - Are located in a distressed municipality with a population of 125,000 to 135,000.

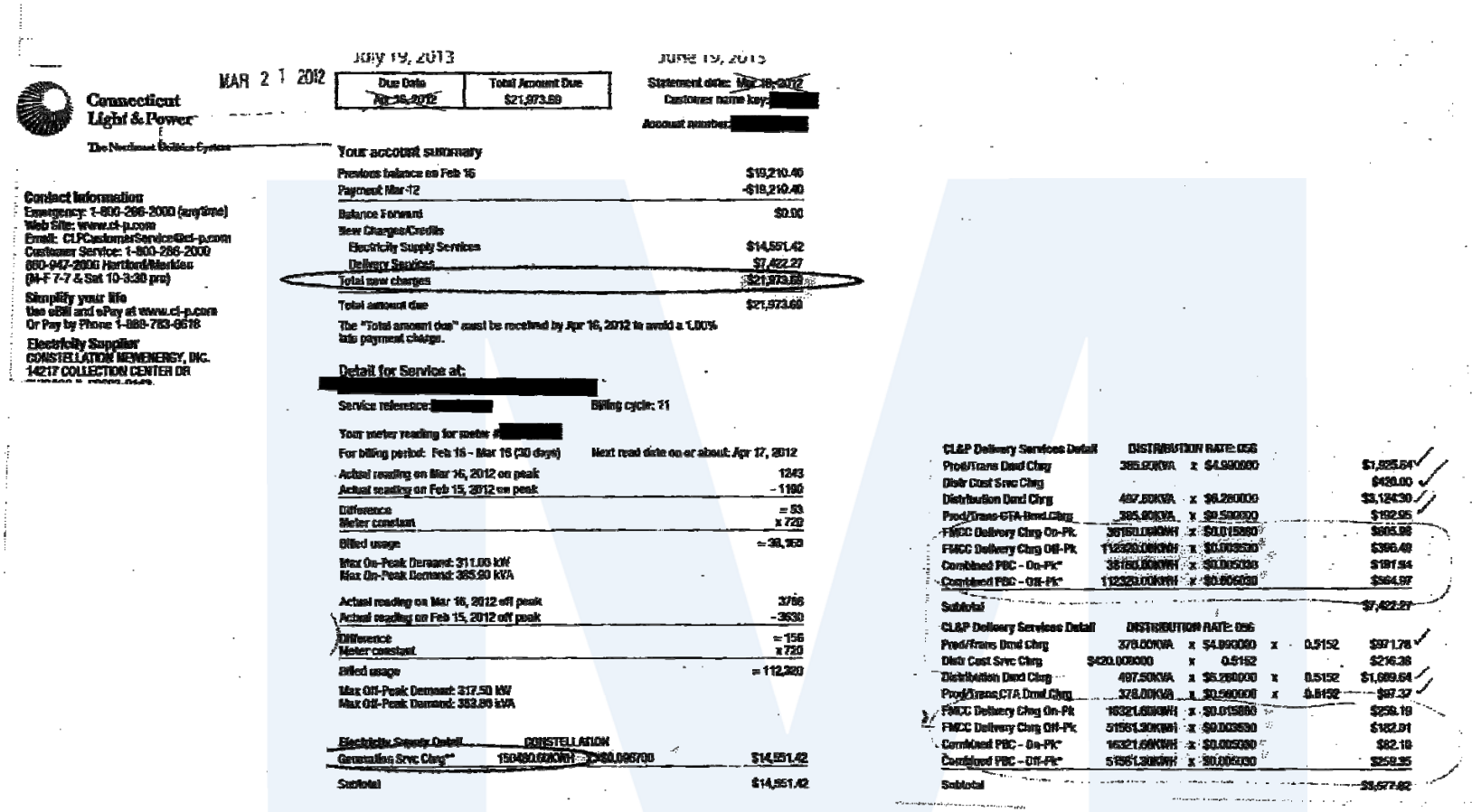
Property Tax Exemption – *continued*

- **There will be a 100% personal property tax exemption for renewable energy systems that:**
  - Are installed on or after January 1, 2014;
  - Are a Class I, Class II hydropower or solar thermal resource;
  - Are located behind the commercial or industrial customer meter; and
  - Have a nameplate capacity that does not exceed the location's load.
  - Note: The term "installed" is not defined

Net Metering

- Net Metering is a state policy incentive to encourage customers to install distributed renewable energy generation at their place of business
- Customers offset own electricity usage with on-site renewable generation
- If monthly generation exceeds consumption, the net excess generation (surplus amount) is credited to customer's next bill at retail rate, excess reconciled annually at either the avoided-cost rate or time-of-use generation rate (Solar PV only)
- Some delivery (kWh) charges are reduced by the amount of on-site renewable generation
- The system capacity limit is 2 MW

CL&P "Sample" Bill



Connecticut Light & Power

MAR 2 1 2012

Due Date	Total Amount Due
Apr 16, 2012	$21,973.69

Statement date: Mar 30, 2012
Customer name key: [redacted]
Account number: [redacted]

Contact Information
Emergency: 1-800-286-2000 (anytime)
Web Site: www.cl-p.com
Email: CLPCustomerService@cl-p.com
Customer Service: 1-800-286-2000
860-947-2000 Hartford/Meriden
(M-F 7-7 & Sat 10-3:30 pm)

Simplify your life
Use eBill and ePay at www.cl-p.com
Or Pay by Phone 1-888-783-6678

Electricity Supplier
CONSTELLATION NEWENERGY, INC.
14217 COLLECTION CENTER DR

Your account summary

Previous balance on Feb 16	$19,210.40
Payment Mar 12	-$19,210.40
Balance Forward	$0.00
New Charges/Credits	
Electricity Supply Services	$14,551.42
Delivery Services	$7,422.27
Total new charges	$21,973.69
Total amount due	$21,973.69

The "Total amount due" must be received by Apr 16, 2012 to avoid a 1.00% late payment charge.

Detail for Service at: [redacted]

Service reference: [redacted] Billing cycle: 11

Your meter reading for meter # [redacted]

For billing period: Feb 16 - Mar 16 (30 days) Next read date on or about: Apr 17, 2012

Actual reading on Mar 16, 2012 on peak	1243
Actual reading on Feb 15, 2012 on peak	- 1190
Difference	= 53
Meter constant	x 720
Billed usage	= 38,160

Max On-Peak Demand: 311.00 kW
Max On-Peak Demand: 385.00 kVA

Actual reading on Mar 16, 2012 off peak	3766
Actual reading on Feb 15, 2012 off peak	- 3630
Difference	= 136
Meter constant	x 720
Billed usage	= 112,320

Max Off-Peak Demand: 317.50 kW
Max Off-Peak Demand: 393.80 kVA

Electricity Supply Detail	CONSTELLATION	
Generation Srvc Chrg**	150480.00KWH @ $0.096700	$14,551.42
Subtotal		$14,551.42

CL&P Delivery Services Detail	DISTRIBUTION RATE: 056				
Prod/Trans Dmd Chrg	385.00KVA	x	$4.990000		$1,925.64
Distr Cust Srvc Chrg					$420.00
Distribution Dmd Chrg	497.50KVA	x	$6.260000		$3,124.30
Prod/Trans-CTA-Dmd Chrg	385.00KVA	x	$0.590000		$182.95
FMCC Delivery Chg On-Pk	38160.00KWH	x	$0.015880		$605.96
FMCC Delivery Chg Off-Pk	112320.00KWH	x	$0.003530		$396.49
Combined PBC - On-Pk*	38160.00KWH	x	$0.005030		$191.94
Combined PBC - Off-Pk*	112320.00KWH	x	$0.005030		$564.97
Subtotal					$7,422.27

CL&P Delivery Services Detail	DISTRIBUTION RATE: 056					
Prod/Trans Dmd Chrg	378.00KVA	x	$4.990000	x	0.5152	$971.78
Distr Cust Srvc Chrg	$420.000000	x	0.5152			$216.38
Distribution Dmd Chrg	497.50KVA	x	$6.260000	x	0.5152	$1,609.64
Prod/Trans-CTA-Dmd Chrg	378.00KVA	x	$0.590000	x	0.5152	$97.37
FMCC Delivery Chg On-Pk	16321.68KWH	x	$0.015880			$259.19
FMCC Delivery Chg Off-Pk	51561.30KWH	x	$0.003530			$182.01
Combined PBC - On-Pk*	16321.68KWH	x	$0.005030			$82.10
Combined PBC - Off-Pk*	51561.30KWH	x	$0.005030			$259.35
Subtotal						$3,677.82

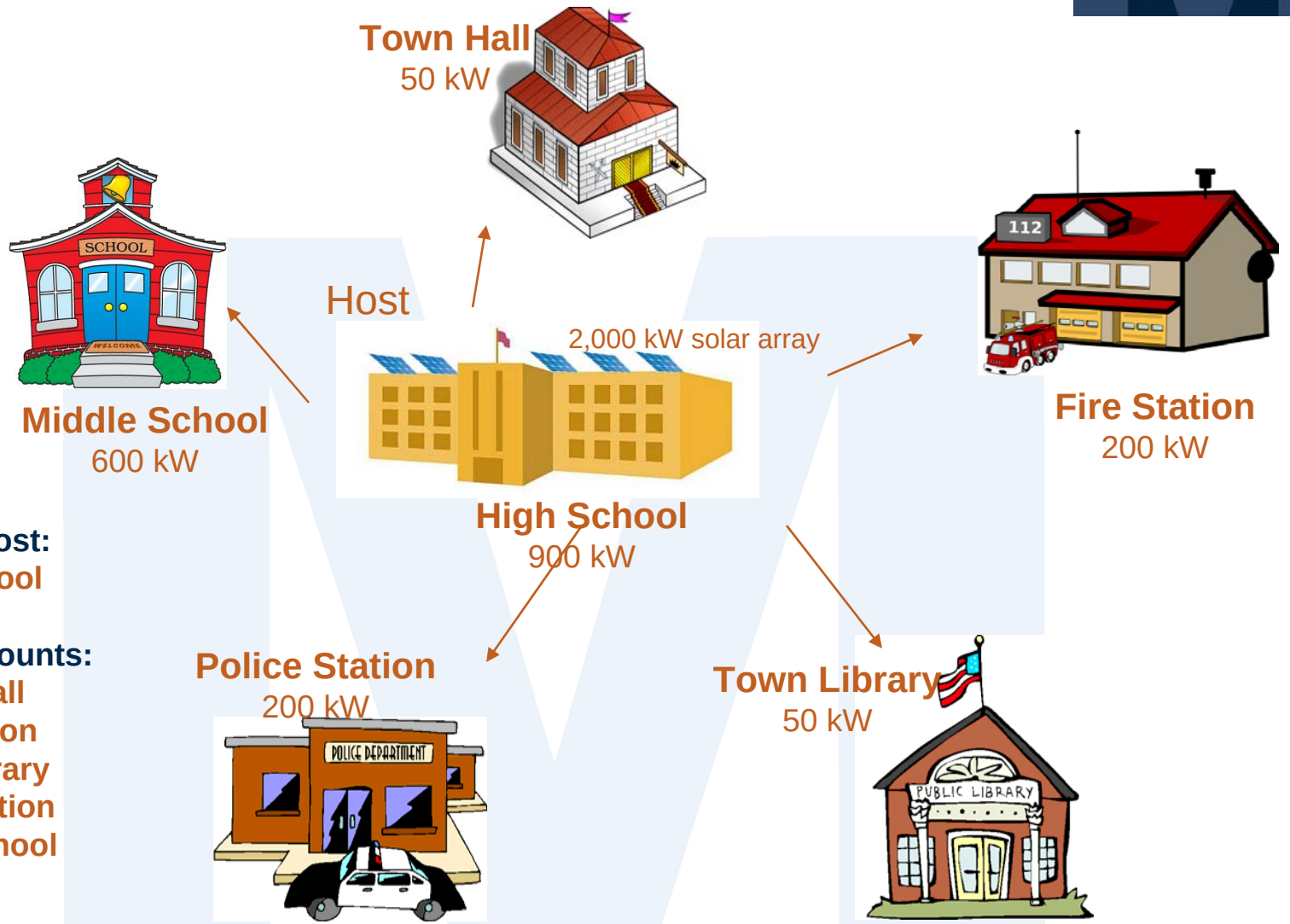
Virtual Net Metering (VNM)

- Applies to municipalities, state & agricultural customer hosts
- VNM facilities can be sized up to 3 MW
- Customer host account aggregation allowed
- VNM facility must be at the agricultural host site = yes
- VNM facility must be at the state and municipality host site = maybe not
- $10,000,000 VNM money cap (annual)
  - No more than 40% of the cap can go to any municipal, state agency or agricultural customer host in the aggregate.

Virtual Net Metering – *continued*

- Virtual Net Metering Bill Credit
  - Generation Service Charge (GSC)
    - 100% allocation based on energy produced by the renewable energy system
  - Distribution & Transmission Charges (D&T)
    - 80% allocation – Operational Year 1
    - 60% allocation – Operational Year 2
    - 40% allocation starting on and after Operational Year 3

Virtual Net Metering – *continued*



Customer Host:
- **High School**

Beneficial Accounts:
- **Town Hall**
- **Fire Station**
- **Town Library**
- **Policy Station**
- **Middle School**

Virtual Net Metering – *continued*

- **Municipal & State Customer Hosts:**
  - VNM facility can be a Class I Renewable Resource
  - VNM facility can be a Class III Renewable Resource (cogeneration)
  - Customer host can own, lease or enter into a long-term contract (Power Purchase Agreement) for the VNM facility
  - Generally, customer hosts can serve up to 5 beneficial accounts
    - Microgrid exception:
      - Customer Host can serve an additional 5 non-municipal and non-state "critical facility" accounts if connected to the microgrid

Virtual Net Metering – *continued*

- **Agricultural Customer Hosts:**
  - VNM facility can be a Class I Resource
  - VNM facility can not be a Class III Renewable Resource
  - Customer must own the VNM Facility
  - Customer host can serve up to 10 beneficial accounts, including:
    - Agricultural accounts;
    - Municipal accounts; and
    - Non-commercial “critical facilities” connected to microgrid

Submetering

Background

- What is submetering?
- Submetering has been traditionally allowed only at campgrounds, slips at marinas and where allowed by Public Utilities Regulatory Authority (PURA)
- Why submeter?
  - Getting behind one meter instead of dozens (e.g. large apartment buildings)
  - Holds end users financially accountable for their usage
- Contrast Master Metering

Submetering - *continued*

- Now allowed for commercial buildings, industrial buildings, multi-family residential, and mixed-use buildings where the electric power or thermal energy is provided by a Class I renewable source
- Each submetering entity must provide electricity produced by the Class I facility to customers at a rate no greater than the rate charged to the customer class from the service territory where the facility is located
- Public Utilities Regulatory Authority (PURA) approval required for each project

Thank You!

Paul Michaud is an accomplished energy and utility attorney with over eighteen years of combined law firm and in-house regulatory and transactional experience. He has extensive regulatory experience representing utility and energy clients in rate-related, rule-making and site permitting matters before various state public utility commissions and other regulatory agencies and tribunals. Mr. Michaud has considerable renewable energy project development experience, and demonstrated experience drafting and negotiating complex solar and fuel cell power purchase agreements, site leases, interconnection agreements, renewable energy certificate (REC) commodity agreements, solar photovoltaic (PV) panel supply agreements, solar PV system construction agreements, and wind farm and solar easement agreements for renewable energy projects located in Connecticut, Massachusetts, New York, New Jersey, Wisconsin and Arizona. He has extensive energy efficiency and demand-side-management (DSM) experience, and demonstrated experience drafting energy performance contracts. Mr. Michaud is the founder and Executive Director of the Renewable Energy and Efficiency Business Association, Inc. (REEBA).

PMichaud@murthalaw.com | 860.240.6131