

# **Legal Pathway for Third Party Ownership of Municipal PV Systems: RFP and PPA Templates**

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## The Goal

- Commonwealth Solar Program
  - Allow communities, businesses and homeowners to take advantage of clean electricity generated by solar photovoltaic (PV) technology
  - \$68 million in funding over the next four years
  - Install 27 MW of PV projects over the next four years



## The Resource

- Utilize municipal-owned rooftop areas and property for the installation of PV
- Estimated municipal-owned roof area available for PV in Massachusetts
  - 2010 – 52 to 86 million ft<sup>2</sup> (533 to 888 MWp)
  - 2025 – 59 to 99 million ft<sup>2</sup> (726 to 1,209 MWp)
  - Sources:
    - *The Energy Foundation & Navigant Consulting, PV Grid Connected Market Potential under a Cost Breakthrough Scenario (Sep. 2004).*
    - *Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey (June 2006).*



# Rooftop Photovoltaic System

## Berkshire Hills Middle School, Great Barrington





## The Challenges for Municipal PV Projects

- High upfront capital equipment, installation, and permitting costs
- Ineligibility for tax incentives and credits
- Inability to take advantage of depreciation
- Time limits under Massachusetts law may restrict the viability of revenue bonds



## The Solution

- Third-party ownership, installation and operation of PV equipment: Turn-Key Project
- Municipal rooftop solar programs
  - San Diego
    - PPA with Sun Edison in 2006 for 5 MW of solar power on Alvarado Water Filtration Plant (\$6.5 million)
  - Boston – *Solar Boston Initiative*
  - Berlin – *Solar Roof Stock Exchange*
  - New York City – *PlaNYC*



## Basic Structure of MTC Municipal-Third Party PV Installer Program

- Procurement
  - Request for proposals (RFP)
- PV system installation and electric purchase
  - Long-term power purchase agreement (PPA)
- Use of municipal property
  - Site license under and for term of the PPA
- Structure works equally well for state agencies, non-profits and private entities
  - Different procurement specifics may be applicable



## Procurement

- Municipal contracts for procurement of “supplies, services or real property” are governed by Mass. Gen. Laws Chapter 30B
  - Site-use licenses not subject to Chapter 30B
  - Electric purchases not subject to Chapter 30B
- *However . . .* the use of a competitive procurement process is *strongly recommended* by the Office of Inspector General





## Request for Proposals: Municipal Components

- Non-price proposal
- Price proposal
- Model power purchase agreement
- Model solar license provisions



## RFP: Non-Price Proposal

- Qualifications, experience, and availability of bidder
- Certification of financial interest and regulatory compliance
- Performance record
- Compliance with prevailing wage laws
- Minimum insurance requirements



## RFP: Price Proposal

- Description of proposed solar PV system
  - Bidder responsible for determining site suitability
  - Bidder takes site “as is”
  - Bidder designs system
- Preliminary project schedule
  - Guaranteed commencement of construction date
  - Guaranteed commencement of commercial operation date



## RFP: Price Proposal

- Solar Power Purchase Provisions
  - Guaranteed annual electric price (\$/kWh)
  - Annual electric price increase factor
  - Maximum electric price
  - Guaranteed system output
  - Annual system degradation factor
  - Ownership of RECs, GHG credits, tax credits
  - Liquidated damages provisions
  - Performance and decommissioning assurances



## PPA – Overview

- Sale of electricity pursuant to PPA
- PPA provisions subject to negotiation
- Third party use of municipal property pursuant to a site license
- Third party participates (on behalf of municipality) in Commonwealth Solar, and uses any incentive payment to offset capital cost of PV system
- Municipal right to acquire system during or after term; otherwise, 3<sup>rd</sup> party removes system



## PPA – System Design

- Third party designs system for site base load
  - Full requirements contract
  - Guaranteed annual electric output, with production shortfall credited at LDC retail rate
  - Annual system degradation factor
  - If net metering, “sale” to LDC for municipality account
  - If no net metering, sale to grid for 3<sup>rd</sup> party account
- Guaranteed dates for commencement of construction and commercial operation
- Use of municipal property under site license



## PPA – Electric Price

- Negotiated initial electric price
- Annual electricity price increase factor
- Maximum electric price
- Production shortfall credited to municipality at LDC retail rate



## PPA – Financial and Environmental Attributes

- Tax credits and incentives, depreciation, and incentive payments (such as Commonwealth Solar) go to 3<sup>rd</sup> party owner, and are reflected in electric price
- Treatment of environmental attributes (e.g., RECs, GHG emission offsets) is subject to negotiation, and is deal-specific





## PPA – System Purchase/Sale

- Municipal purchase option on PV system
  - At end of PPA term
  - Upon default of 3<sup>rd</sup> party owner
- Purchase price
  - Determined by independent appraiser
  - Includes value of environmental attributes
- Time periods established for exercising option and transferring ownership



## PPA – Standard Provisions

- Metering and testing
- Invoicing and payment
- System loss, replacement, and force majeure
- Default, remedies, and termination
  - Municipal right to acquire system or require system removal, plus require payment of liquidated damages
  - 3<sup>rd</sup> party right to remove system and require payment of liquidated damages
- Limitations of remedies, liability, and damages
- Confidentiality
- Dispute resolution and binding arbitration



## PPA – Exhibits

- Description of licensed area
- Description of the PV system
- Pricing and financial assurance provisions
- Solar (site use) license provisions
- Payment schedule for early termination



## Solar (Site Use) License

- “As-is” license to use specified area(s)
- Requires compliance with all applicable laws
- No additional use without municipality consent
- Municipal “step-in” rights
- Performance bond for completion
- Decommissioning assurance for removal
- Insurance requirements
- Provisions for access over municipal property
- Municipal inspection rights
- No liens and subordination of interest
- Indemnification to municipality



## Questions?

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