

Citizens Energy Pilot Agreement

Review of Agreement



City of Amesbury

Finance Committee Meeting,

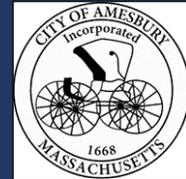
March 24, 2015

Office of Community and Economic Development



The Site

Using a site that lacks other options



172 Acres
30 Acres
Planned for Solar

Citizens Amesbury Site Project Status

- Project Size: 4.5 MW-AC / 6.0 MW-DC
- Land Lease: Citizens has 100% site control through a Land Lease with Waste Management.
- Interconnection: An Interconnection Services Agreement has been executed with National Grid.
- Permit Status: We have received Planning Board approval and DEP is in the late stages of reviewing our Post Closure Use Permit application.
- Construction: Construction could commence as early as this summer, and as late as next summer, depending on the state's solar incentive program.

3

Citizens Solar Experience

- 40MW developed, installed, and operational
 - 9MW of MA solar landfill
- Financed \$100 million dollars of solar to date
- MA Municipal contracts to date:
 - City of Westfield Solar Landfill, Lease
 - Town of Norton Solar Landfill, Lease & NMA
 - Agawam Sheriff's Department, NMA
 - City of Brockton, NMA
- 18MW worth \$100 million, of MA landfill solar pipeline



Agawam Landfill 1.8 MW



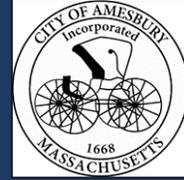
EBZ Solar, 3.0 MW



Bliss Dairy Solar, 2.6 MW

Pilot Explained

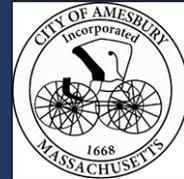
Contract Taxation



A PILOT (Payment In Lieu of Taxes) agreement is a contract between the municipality and the developer, in which both sides agree to an alternative tax payment structure that reasonably approximates what the taxes would otherwise be over the term of the agreement.

Pilot Explained

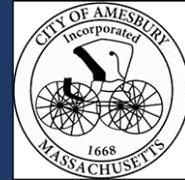
Not a Tax Break



The purpose of PILOT agreements is not to provide an exemption or reduced tax rate, but is instead to allow the City and taxpayer to restructure the course of payments over time to facilitate the project to the benefit of both parties. (the "if not for.." clause)

Pilot Explained

Scheduled Taxation



PILOTs can provide payment predictability for project owners and revenue stream stability for municipalities. This is done in by providing a flat or scheduled payments over the life of the agreement.

This allows a project clear taxation, and it provides a City a uniform payment with no reduction on out years.

Pilot Explained

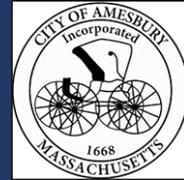
Limited to Generation companies



Municipalities have been entering into such agreements under the authority provided by M.G.L. c. 59, § 38H(b), which provides that: A **generation company or wholesale generation company** . . . may, in order to comply with its property tax liability obligation, execute an agreement for the payment in lieu of taxes with the municipality in which such generation facility is sited, and said company shall be exempt from property taxes, in whole or in part, as provided in any such agreements during the terms thereof.

Pilot Explained

Common Approach



There are over 550 solar projects in Massachusetts with DC ratings of over 1 MW and approximately 90% of these are or will be subject to some form of PILOT agreement.

Agreement Source

City Attorney Template Proven

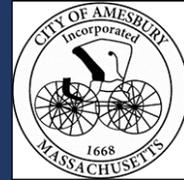


The agreement sent to the Committee is representative of a template agreement used by the City's Attorney for over six other like agreements in other municipalities. The City Attorney and the Proponent have been negotiating amendments to the agreement which are represented in the following slides.

This presentation will not address the agreement in detail as the Ordinance Committee has reviewed the document and will report to the full Council.

The Numbers

Analysis Approach

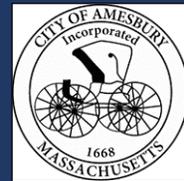


What we have found:

- No common methodology
- Keep it simple, its just an annual payment.
- Many common agreements.
- No PILOT No Project
- Amesbury Citizens project one of the few larger projects in comparisons.
- Run the numbers then check the market for a baseline.

The Numbers

start with typical tax

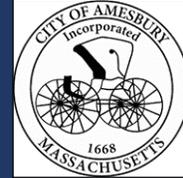


The City cannot arbitrarily determine the Pilot, we must begin with the normal tax value then create the annualized number, usually by dividing the bottom line by the term. The typical measurement of the Pilot is the value per AC Megawatt.

Example:

- Normal tax schedule might earn up to \$1.2 million with a depreciated and declining tax after 20 years.
- Divided by 20 years for an equal payment of \$60,000.
- If the project was 4.5 Megawatt then the value per AC MW would be \$13,333
- Can add escalation.

The Numbers - The Proposal



PILOT Calculation Spreadsheet- Straight Line Depreciation

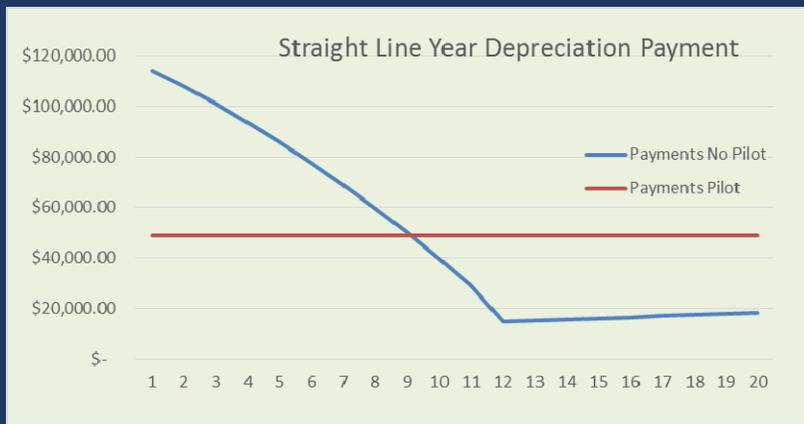
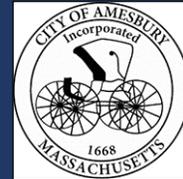
Cost Basis	\$ 5,557,500.00								
2015 Tax Rate	\$ 20.54								
Annual Tax Increase	102.5%								
Year	Project Value	Tax Rate	Depreciation	Depreciation Value	Tax Due	Accrual Tax	PILOT Value	Accrual PILOT	Payment Delta
1	\$ 5,557,500.00	20.54	100%	\$ 5,557,500.00	\$ 114,151.05	\$ 114,151.05	\$ 70,582.72	\$ 70,582.72	\$ 43,568.33
2	\$ 5,557,500.00	21.05	95%	\$ 5,279,625.00	\$ 111,154.58	\$ 225,305.63	\$ 70,582.72	\$ 141,165.45	\$ 40,571.86
3	\$ 5,557,500.00	21.58	90%	\$ 5,001,750.00	\$ 107,936.95	\$ 333,242.59	\$ 70,582.72	\$ 211,748.17	\$ 37,354.23
4	\$ 5,557,500.00	22.12	85%	\$ 4,723,875.00	\$ 104,488.97	\$ 437,731.55	\$ 70,582.72	\$ 282,330.89	\$ 33,906.24
5	\$ 5,557,500.00	22.67	80%	\$ 4,446,000.00	\$ 100,801.12	\$ 538,532.67	\$ 70,582.72	\$ 352,913.61	\$ 30,218.40
6	\$ 5,557,500.00	23.24	75%	\$ 4,168,125.00	\$ 96,863.58	\$ 635,396.25	\$ 70,582.72	\$ 423,496.34	\$ 26,280.85
7	\$ 5,557,500.00	23.82	70%	\$ 3,890,250.00	\$ 92,666.15	\$ 728,062.41	\$ 70,582.72	\$ 494,079.06	\$ 22,083.43
8	\$ 5,557,500.00	24.42	65%	\$ 3,612,375.00	\$ 88,198.32	\$ 816,260.73	\$ 70,582.72	\$ 564,661.78	\$ 17,615.60
9	\$ 5,557,500.00	25.03	60%	\$ 3,334,500.00	\$ 83,449.18	\$ 899,709.91	\$ 70,582.72	\$ 635,244.50	\$ 12,866.46
10	\$ 5,557,500.00	25.65	55%	\$ 3,056,625.00	\$ 78,407.46	\$ 978,117.37	\$ 70,582.72	\$ 705,827.23	\$ 7,824.74
11	\$ 5,557,500.00	26.29	50%	\$ 2,778,750.00	\$ 73,061.50	\$ 1,051,178.87	\$ 70,582.72	\$ 776,409.95	\$ 2,478.77
12	\$ 5,557,500.00	26.95	45%	\$ 2,500,875.00	\$ 67,399.23	\$ 1,118,578.10	\$ 70,582.72	\$ 846,992.67	\$ (3,183.49)
13	\$ 5,557,500.00	27.62	40%	\$ 2,223,000.00	\$ 61,408.19	\$ 1,179,986.29	\$ 70,582.72	\$ 917,575.39	\$ (9,174.53)
14	\$ 5,557,500.00	28.31	35%	\$ 1,945,125.00	\$ 55,075.47	\$ 1,235,061.76	\$ 70,582.72	\$ 988,158.12	\$ (15,507.25)
15	\$ 5,557,500.00	29.02	30%	\$ 1,667,250.00	\$ 48,387.73	\$ 1,283,449.49	\$ 70,582.72	\$ 1,058,740.84	\$ (22,194.99)
16	\$ 5,557,500.00	29.75	25%	\$ 1,389,375.00	\$ 41,331.19	\$ 1,324,780.68	\$ 70,582.72	\$ 1,129,323.56	\$ (29,251.53)
17	\$ 5,557,500.00	30.49	20%	\$ 1,111,500.00	\$ 33,891.58	\$ 1,358,672.25	\$ 70,582.72	\$ 1,199,906.28	\$ (36,691.15)
18	\$ 5,557,500.00	31.25	15%	\$ 833,625.00	\$ 26,054.15	\$ 1,384,726.40	\$ 70,582.72	\$ 1,270,489.01	\$ (44,528.57)
19	\$ 5,557,500.00	32.04	10%	\$ 555,750.00	\$ 17,803.67	\$ 1,402,530.07	\$ 70,582.72	\$ 1,341,071.73	\$ (52,779.05)
20	\$ 5,557,500.00	32.84	5%	\$ 277,875.00	\$ 9,124.38	\$ 1,411,654.45	\$ 70,582.72	\$ 1,411,654.45	\$ (61,458.34)
Total Payments					\$ 1,411,654.45	A	\$ 1,411,654.45		
Average / Yr				A/20 years=PILOT Value	\$ 70,582.72	B			
AC System Size					4,500.00	C			
\$ / MW (AC)					\$ 15,685.05	D	B/C= D (MW AC Charge)		

Proposal Per MW/AC
\$15,685.05

Proposal After 20 years
\$1,411,654.45

Proposal Per Year
\$70,582.72

The Numbers The Proposal

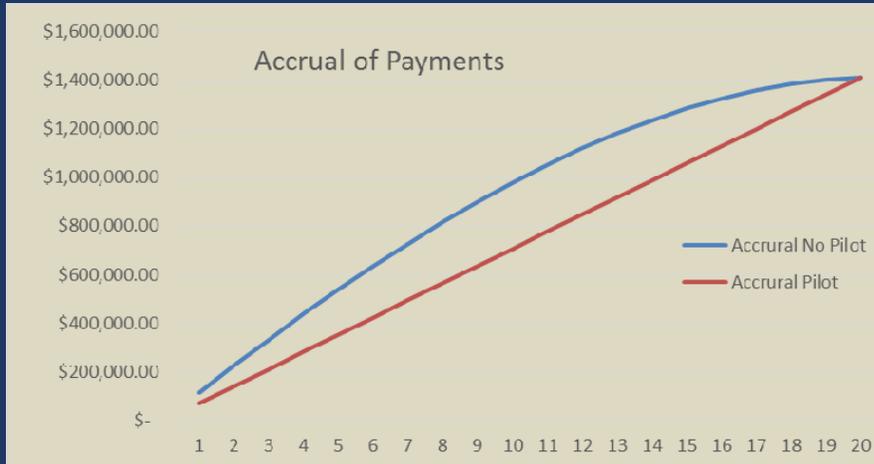
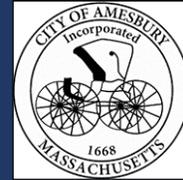


Proposal Per MW/AC
\$15,685.05

Comparison Per MW/AC
Low \$5,000
High \$28,459
Mean \$14,711
Median \$14,000



The Numbers The Proposal



**Proposal
Per MW/AC**

\$15,685.05

**Comparison
Per MW/AC**

Low \$5,000

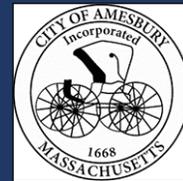
High \$28,459

Mean \$14,711

Median \$14,000

The Numbers a Comparison

Summary of Selected PILOT Agreements in Massachusetts
(Based on files sent to GES from the MA DOR)



Date	Town	Developer	MW (DC)	MW (AC)	Term (Yrs)	PILOT Annual	PILOT \$/MW
8/5/2013	Belchertown	Nexamp Belchertown Solar, LLC	1.53	1.30	20	\$10,455	\$13,400
5/28/2013	Billerica	UGT Corp.	6.24	5.30	25	\$118,267	\$22,315
12/6/2011	Douglas	Douglas Solar, LLC	2.00	1.72	20	\$48,950	\$28,459
12/8/2011	East Bridgewater	Earth Wind Energy LLC	2.94	2.50	25	\$33,559	\$13,424
6/4/13	Grafton	SunEdisonOrigination LLC	4.50	3.83	20	\$45,762	\$11,964
6/5/2013	Hadley	Nexamp Hadley Solar, LLC	3.06	2.60	20	\$22,950	\$7,500
no date	HG&E	Holyoke Solar, LLC	4.52	3.85	20	\$19,227	\$5,000
no date	Leicester	Mass PV 7, LLC	6.00	5.10	20	\$90,000	\$17,647
4/25/2013	Marshfield	No Fossil Fuel, LLC	3.99	3.39	20	\$51,828	\$15,282
10/23/2012	Millbury	Mass PV 4, LLC	6.00	5.10	20	\$62,047	\$12,166
6/19/2012	Northbridge	Northbridge Solar, LLC	2.35	2.00	20	\$39,213	\$19,607
12/2/2014	Plymouth	SunE Solar XV Lessor, LLC	5.01	4.26	20	\$59,640	\$14,000
10/1/2013	Plymouth	EDF Lepomis Solar, LLC	5.29	4.50	25	\$54,000	\$12,000
9/10/12	Plympton	Borrego Solar Systems, Inc.	4.00	3.40	20	\$65,000	\$19,118
11/13/12	Rutland	Mercury Solar Systems Inc.	2.00	1.70	20	\$24,000	\$14,118
11/13/12	Rutland	Nexamp, Inc.	6.00	5.10	20	\$72,000	\$14,118
5/29/2012	Shrewsbury	Shrewsbury Solar, LLC	3.33	2.83	20	\$37,424	\$13,238
9/30/2011	Uxbridge	Constellation Solar Net Metering, LLC	0.90	0.77	20	\$15,300	\$20,000
2/26/2013	Whately	Nexamp Fairview Farms Solar, LLC	2.40	2.04	25	\$12,546	\$6,150

**Proposal
Cost Per**

MW/AC

\$15,685.05

Comparison

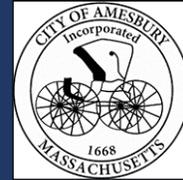
Cost per MW/AC

Low \$5,000

High \$28,459

Mean \$14,711

Median \$14,000



The Numbers Comparison



Proposal
Per MW/AC
4.5 MW/AC

Comparison
Per MW/AC
Low 0.765
High 5.30
Mean 3.25
Median 3.39

What are the numbers for project size from the comparisons?

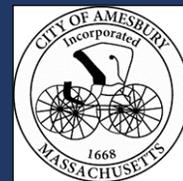
The Numbers Comparison

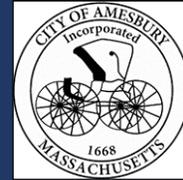


Proposal
Annual Fee
\$70,582.72

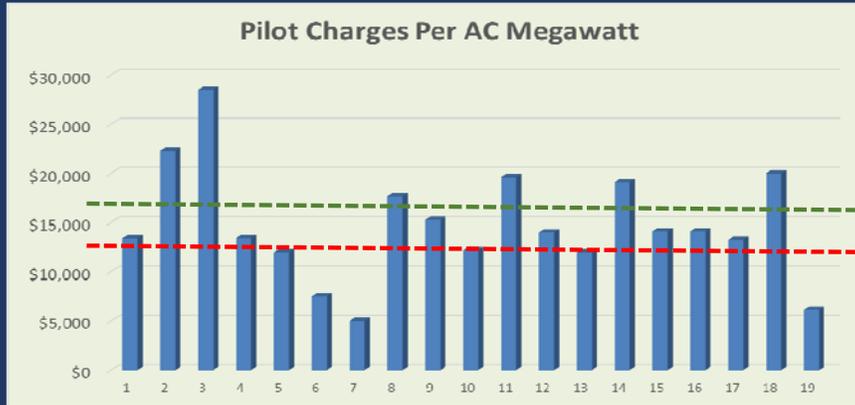
Comparison
Annual Fee
Low \$10,455
High \$118,267
Mean \$46,430
Median \$45,672

Not a direct comparison because of differing project scale.





The Numbers Comparison

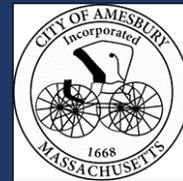


**Proposal
Cost Per
MW/AC**
\$15,685.05

**Comparison
Cost per MW/AC**
Low \$5,000
High \$28,459
Mean \$14,711
Median \$14,000

The Numbers a Comparison

Summary of Selected PILOT Agreements in Massachusetts
(Based on files sent to GES from the MA DOR)

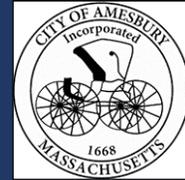


Date	Town	Developer	MW (DC)	MW (AC)	Term (Yrs)	PILOT Annual	PILOT \$/MW
8/5/2013	Belchertown	Nexamp Belchertown Solar, LLC	1.53	1.30	20	\$10,455	\$13,400
5/28/2013	Billerica	UGT Corp.	6.24	5.30	25	\$118,267	\$22,315
12/6/2011	Douglas	Douglas Solar, LLC	2.00	1.72	20	\$48,950	\$28,459
12/8/2011	East Bridgewater	Earth Wind Energy LLC	2.94	2.50	25	\$33,559	\$13,424
6/4/13	Grafton	SunEdison Origination LLC	4.50	3.83	20	\$45,762	\$11,964
6/5/2013	Hadley	Nexamp Hadley Solar, LLC	3.06	2.60	20	\$22,950	\$7,500
no date	HG&E	Holyoke Solar, LLC	4.52	3.85	20	\$19,227	\$5,000
no date	Leicester	Mass PV 7, LLC	6.00	5.10	20	\$90,000	\$17,647
4/25/2013	Marshfield	No Fossil Fuel, LLC	3.99	3.39	20	\$51,828	\$15,282
10/23/2012	Millbury	Mass PV 4, LLC	6.00	5.10	20	\$62,047	\$12,166
6/19/2012	Northbridge	Northbridge Solar, LLC	2.35	2.00	20	\$39,213	\$19,607
12/2/2014	Plymouth	SunE Solar XV Lessor, LLC	5.01	4.26	20	\$59,640	\$14,000
10/1/2013	Plymouth	EDF Lepomis Solar, LLC	5.29	4.50	25	\$54,000	\$12,000
9/10/12	Plympton	Borrego Solar Systems, Inc.	4.00	3.40	20	\$65,000	\$19,118
11/13/12	Rutland	Mercury Solar Systems Inc.	2.00	1.70	20	\$24,000	\$14,118
11/13/12	Rutland	Nexamp, Inc.	6.00	5.10	20	\$72,000	\$14,118
5/29/2012	Shrewsbury	Shrewsbury Solar, LLC	3.33	2.83	20	\$37,424	\$13,238
9/30/2011	Uxbridge	Constellation Solar Net Metering, LLC	0.90	0.77	20	\$15,300	\$20,000
2/26/2013	Whately	Nexamp Fairview Farms Solar, LLC	2.40	2.04	25	\$12,546	\$6,150

What is the comparison of like sized projects to the Amesbury Citizens Project?

**MW/AC
3.85 to 6+
projects.**

The Numbers “in the ballpark”



Comparison of Projects 3.85 to above 6+ MW/AC in Size

	MW/DC	Proposal MW/DC	Proposal MW/AC	Proposal MW/AC	Annual Fee	Proposal Annual Fee	Fee MW/AC	Proposal MA/AC	
Low		4.52	3.85		\$ 19,227.00		\$ 5,000.00		
High		6.24	5.30		\$ 118,267.00		\$ 22,314.53		
Mean		5.58	6.00	4.74	4.50	\$ 67,883.00	\$70,582.72	\$ 13,830.66	\$15,685.00
Median		6.00	5.10		\$ 62,047.00		\$ 13,700.00		

Next Steps



- Completed Agreement Edits per Ordinance Committee
- Arrived at Numbers with Proponent
- Finish tables and applicable Attachments to Agreement
- Full Council Packet April 7th
- City Council Hearing April 14th