

Commissioner Judith Judson  
Massachusetts Department of Energy Resources  
100 Cambridge Street, Suite 1020  
Boston, MA 02116

9/27/2019

**RE: Comments regarding SMART 400MW Review**

Dear Commissioner Judson:

Please accept these comments in response to DOER's 400 MW Review of the Solar Massachusetts Renewable Target (SMART) program. Zero-Point is a Massachusetts based, family-owned solar development company committed to advancing renewable energy solutions as a viable alternative energy resource for all consumers in the United States. Having successfully developed and installed over 115MW, DC of solar capacity in the Commonwealth since 2011, we believe strongly in the independent and sustainable energy production capacity of the Commonwealth. Below we suggest several critical improvements to the SMART program that we hope you will adopt in the implementation of the 400MW Review process. Continued growth of solar industry is a critical piece to the Massachusetts economy and reaching the Renewable Energy goals the Commonwealth has set forth.

**Executive Summary**

1. As of September 2018, National Grid recorded 1,200MW of Complex Studies (500kW and larger) as shown on Exhibit A. We believe that the DOER should increase the SMART Program by 3,200MW to 4,800MW in total to account for the pending capacity. This would provide approximately 1,350MW of available capacity for Large Projects proposed in National Grid's territory.
2. Due to the uncertainty surrounding interconnection cost and timing for STGU's participating in the ISO-Study, we are proposing the DOER provide an "Interconnection Cost Adder" that is a function of the interconnection cost per Watt DC of the STGU. We have determined that an Interconnection Cost Adder of \$0.004/kWh for every \$100,000 of interconnection cost above a "Base Interconnection Cost" of \$0.15/W DC would be sufficient to offset the increasing interconnection costs and incremental transmission costs that may be accessed as part of the ISO-Study.
3. We believe that the economics for Large Scale Ground Mounted arrays (500kW or larger) after Block 5 have been seriously impacted by tariffs, increased interconnection costs, and the significant delays imposed by the EDCs related to ongoing transmission studies. We believe a thorough analysis of the economics of these later block projects similar to the

analysis completed by DOER related to increasing the Greenfield Subtractor and the Public Entity Adder would result in the same determination, that most of the projects in Blocks 6-8 (and any additional blocks beyond that) are not financeable. To address this, we believe DOER should decrease the Base Incentive Rate by 4% in Blocks 2 through 5, 1% in Blocks 6 through 8 and hold the Base Incentive Rate constant in Blocks 9 through 12, as shown on Exhibit B.

4. We believe that the Land Use Subtractor in Greenfield STGU's should not apply to projects with:
  - a. A Statement of Qualification; or
  - b. Site Control; and
  - c. Non-Ministerial Permits; and
  - d. Evidence that the project is participating in a Cluster Study.

The projects currently involved in the Cluster Studies have been in the interconnection queue for twelve months or longer and represent a significant investment made by developers in the Commonwealth. Moreover, developers who have obtained the necessary non-ministerial permits have already addressed the areas of concern of the towns that DOER is trying to address.

5. The Pollinator Adder should be increased from \$0.0025/kWh to \$0.005/kWh if a STGU Owner can provide evidence that Honeybee Hives have been cultivated on the property.
6. We agree with DOER's determination that it is very difficult to finance projects that serve Public Entities as the program is currently constructed. We believe that changing the definition of Public Entity Solar Tariff Generation Unit as follows would result in many more Public Entities having access to the benefits of the SMART program:
  - a. An array may also qualify as a Public Entity Solar Tariff Generation Unit if sited on Private Land so long as 100% of its output is allocated to one or more Public Entities (this matches the Net Metering structure under the SREC Program).
7. The compensation for Public Entity Solar Tariff Generation Unit should be expanded as follows:
  - a. Public Entity Solar Tariff Generation Unit sited on property owned by a Municipality or Other Governmental Entity = \$0.04/kWh
  - b. Public Entity Solar Tariff Generation Unit sited on Private Property and 100% of its output is allocated to Public Entity = \$0.03/kWh
  - c. Public Entity Solar Tariff Generation Unit sited on Private Property and up to 50% of its output is allocated to Public Entity and the remaining capacity allocated in 25 kW increments to Public or Private entities = \$0.045/kWh

8. DOER is proposing to add abandoned Community Solar Adder capacity into the current open Block. DOER should allow the adder capacity to remain in its current Block and move STGU's up in line. Additionally, DOER should not decline the incentive payment for Community Shared Solar Adder.
9. We believe the existing or substantially similar structure National Grid has in place in Rhode Island under the Renewable Energy Growth (REG) Program (shown in Exhibit E) of allocating net metering credits onto customers accounts should be implemented in Massachusetts and used as a means to qualify a STGU for Low Income CSS. We feel DOER should implement a standard discount of 10% of the AOBC value.

The remainder of this document has been drafted for your reference and to further explain our position. Thank you for your work to continue Massachusetts' solar leadership. We appreciate the opportunity to comment on the SMART program and hope you will make these fundamental changes.

Sincerely,



Brendan Gove  
President & CEO  
6 Park Avenue  
Worcester, MA 01605

## Section 1 – Expansion of the SMART Program

During the 400MW Review Presentation on September 9, 2019, DOER accurately described the cause and effect of the large submission of applications that were submitted in the opening week of the SMART Program in November 2018. We believe that the capacity had accumulated between the time the SREC-II Program became fully subscribed and the SMART Program going into effect. The slide below was taken from the 400MW Review Presentation, which shows that DOER concluded the rate of Large Applications applied at a rate of 47MWs per month.


### Program Expansion Capacity Blocks by Service Territory

Distribution Company	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12	Total
Unitil	3.947	3.947	3.947	3.947	3.947	3.947	N/A	N/A	N/A	N/A	N/A	N/A	23.682
National Grid (Massachusetts Electric)	90.022	90.022	90.022	90.022	90.022	90.022	90.022	90.022	90.022	90.022	90.022	90.022	1,080.266
National Grid (Nantucket Electric)	3.021	3.021	3.021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.063
Eversource (East)	91.514	91.514	91.514	91.514	91.514	91.514	91.514	91.514	107.249	107.249	107.249	107.249	1,286.988
Eversource (West)	15.735	15.735	15.735	15.735	15.735	15.735	15.735	15.735					
Total Capacity	204.239	204.239	204.239	201.218	201.218	201.218	197.271	197.271	197.271	197.271	197.271	197.271	2,400.000

- **Anticipating market response and subsequent increase in application numbers, DOER expects expansion to allow program to last around 5 years**
- Large applications have applied at a pace of about **47 MW per month**. Assuming applications continue at this pace, DOER estimates:
  - The current remaining capacity, combined with an 800 MW expansion, should last around 82 months, or around 7 years
- Small Applications have applied at a pace of about 8 MW per month
  - The current remaining capacity, combined with an 800 MW expansion, should last around 66 months, or around 5.5 years

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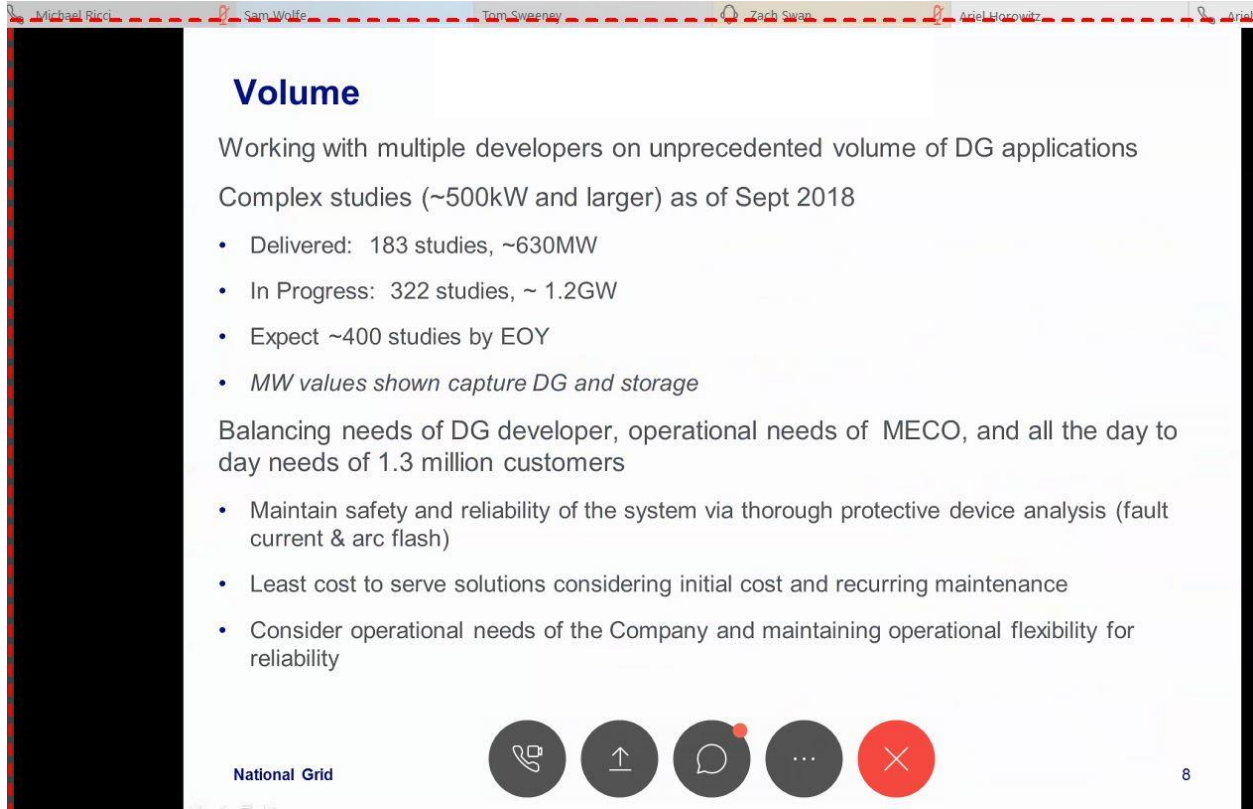
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Massachusetts Department  
of Energy Resources

We believe that it is inaccurate for DOER to assume that this submission rate will continue at this pace for one key reason – Utility ISO-Studies. We understand that interconnection cost and timeframe are a problem potentially being addressed at 19-55 under the

jurisdiction of the DPU. However, National Grid hosted a Stakeholder Meeting in September 2019. The slide below was taken from this presentation (as shown in Exhibit B).



**Volume**

Working with multiple developers on unprecedented volume of DG applications

Complex studies (~500kW and larger) as of Sept 2018

- Delivered: 183 studies, ~630MW
- In Progress: 322 studies, ~ 1.2GW
- Expect ~400 studies by EOY
- *MW values shown capture DG and storage*

Balancing needs of DG developer, operational needs of MECO, and all the day to day needs of 1.3 million customers

- Maintain safety and reliability of the system via thorough protective device analysis (fault current & arc flash)
- Least cost to serve solutions considering initial cost and recurring maintenance
- Consider operational needs of the Company and maintaining operational flexibility for reliability

National Grid

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As you can see, National Grid has 1.2GW of 500KW or larger projects, all of which are part of the ISO-Study. Although we COMMEND National Grid for its tireless efforts to find creative solutions to the ISO-Study log jam that we are currently stuck in, we feel it is only natural for National Grid to de-prioritize finding a solution for trouble STGU's that currently cannot and will not qualify under the SMART Program due to a lack of available capacity and Program Incentive Payments that does not support the cost to install the STGU's. Furthermore, if DOER were to assume this 1.2GW of capacity was submitted evenly on a monthly basis over the past eight months, we expect that rate would increase from 47MW per month to approximately 200MW per month (equal to  $[376\text{MW} + 1,200\text{MW}] \div 8 \text{ months} = 197\text{MW/month}$ ).

Because of this, we feel it is appropriate for DOER to increase the overall Program Size to 4,800MW, providing approximately 1,350 MWs of available capacity for Large Projects

proposed in National Grid's territory, thereby allowing STGU's stuck in the ISO-Study, which otherwise would already have an ISA and be able to submit into the Program if not for the ISO-Study, to qualify under the Program.

Again, we understand that interconnection cost and timeframe is a problem potentially being addressed at 19-55 under the jurisdiction of the DPU. However, we feel it is imperative DOER understands the current environment with the "Cluster Study" as it has serious impacts on the future of the SMART Program and have provided the following explanation:

1. There are two parts to the "**ISO-Study**" that is currently being completed:
  - a. Part I – "**Transmission Study**" – this initial phase of the study, also referred by National Grid as the "Base Case Study," focuses on projects with executed ISA's which fall under three categories:
    - i. Category I – projects with executed ISA's that are Mechanically Complete and awaiting Authority to Interconnect (ATI);
    - ii. Category II – projects with executed ISA's that are under construction and have made 100% of their ISA payments and could easily be connected without the need for the Transmission Study being complete. For example, if a project has made 100% of their ISA payments and have an ISA ATI date in 2019, this project would fall under Category II; and
    - iii. Category III – projects with executed ISA's that are under construction, may have paid their 25% payment but might not have an ISA ATI date in 2019.
  - b. Part II – "**Cluster Study**" – this is the "Part II" of the ISO-Study (not to be confused with Part I, Category II or III in the Transmission Study).

We feel it is important that DOER understand the dynamics of the interconnection environment for the following reasons:

1. As it pertains to STGU's in the Transmission Study, the reason why DOER is seeing a lack of large STGU's being built is because of the possible impact to interconnection cost as a result of the Transmission Study has paralyzed investors. Institutional lenders have no idea how to account for a potential change in interconnection cost that could result in a

massive upgrade cost that makes the economics of the STGU unfinanceable. It makes Tax Equity investors, who require developers to deliver STGU's within a certain calendar year, force developers to guarantee the delivery of the STGU within that calendar year. Not knowing the results of the Transmission Study, which was originally supposed to be released in August but has not slipped to September/October, and the Utility refusing to provide ATI for STGU's that are mechanically complete and awaiting Witness Test has completely frozen investors. This continues to erode economics (which is discussed in further detail in Section 2) by making developers carry Construction Loans longer and increasing the cost of capital due to the perceived risk with the investment.

2. We believe DOER has an opportunity to neutralize this issue of uncertainty surrounding interconnection cost and timing for STGU's participating in the ISO-Study. Providing an "Interconnection Cost Adder" that is a function of the interconnection cost per Watt DC of the STGU provides an offset to unexpected, unanticipated and unknown interconnection costs that may result from the ISO-Study. We have determined that an Interconnection Cost Adder of \$0.004/kWh for every \$100,000 of interconnection cost above a "Base Interconnection Cost" of \$0.15/W DC (based on the SEA report provided to DOER, discussed in Section 3 below) would be sufficient to offset increasing interconnection cost prices and incremental interconnection costs that may be accessed as part of the ISO-Study. The benefit to structuring the Interconnection Cost Adder as a ratio of interconnection cost in excess of \$0.15/W DC is that the STGU is eligible for the adder naturally and only if interconnection costs exceed an unfinanceable threshold.
3. As outlined in detail in Section 3 below, we are experiencing a substantial increase in interconnection cost for STGU's under the SMART Program relative to past Programs. The Interconnection Cost Adder proposed above provides sufficient economic support to offset rising interconnection costs as well.



## Section 2 – Economic Analysis of Base Incentive Payment

We feel that the economics of the Program are insufficient to support the continued growth of the Program. We feel that the Declining Block structure of the Program decreases economics for Large Scale STGU's too aggressively and to a point where STGU economics cannot be supported beyond Block 6. A large factor contributing to this trend is the rise in Interconnection Cost. Under the SREC-I and SCEC-II Programs between 2012 and 2016, we experienced Interconnection Costs averaging \$0.075/W DC.

This is in line with the October 11, 2016 report titled "Developing a Post-1,600 MW Solar Incentive Program: Evaluating Needed Incentive Levels and Potential Policy Alternatives" prepared for DOER by Sustainable Energy Advantage, LLC. Table 18 of the report below shows the Interconnection cost ranging between \$0.070/W to \$0.245/W with a medium cost of \$0.158/W.

**Table 18 – 2016 Assumed \$/kW-DC Interconnection Costs**

Project Description	Modeled Project Size (kW DC)	Low Cost	Medium Cost	High Cost
Residential Roof Mount	7	\$10	\$29	\$48
Small Commercial Roof Mount	15	\$10	\$29	\$48
Commercial Lot Canopy	100		\$151	
Campus Lot Canopy	1000		\$139	
Community Shared Solar	1000	\$53	\$141	\$230
On-Site LIH	100		\$136	
Low Cost VNM LIH	1000	\$53	\$141	\$230
Small Building Mounted	100		\$128	
Medium Building Mounted	500		\$95	
Large Building Mounted	1000		\$95	
Medium Ground Mount BTM	500		\$95	
Large Ground Mount BTM	2000		\$95	
Small Landfill	500		\$109	
Medium Landfill	1000		\$109	
Large Landfill	4000		\$114	
Small Brownfield	500		\$120	
Medium Brownfield	1000		\$120	
Large Brownfield	4000		\$95	
Medium Ground Mount VNM	500		\$133	
Medium Managed Growth	1000	\$78	\$133	\$188
Large Managed Growth	4000	\$70	\$158	\$245

Average  
Interconnection Cost  
used to determine  
"Base  
Interconnection  
Cost"



Under the SMART Program, we are experiencing Interconnection Costs nearly three times the average in 2016, averaging \$0.30/W, DC.

Under the SMART Program, we are experiencing Interconnection Costs averaging \$0.40/W DC. The following Financial Analysis is being provided to help substantiate the economic position for these STGU's. It should be noted that this Financial Analysis was derived using a proprietary Shared Pro Forma Model created between Zero-Point and its investors. We believe that our financing structure represents a lean, vertically integrated approach to financing solar arrays in the Commonwealth that results in the best possible scenario for Developer economics which may not be true for other developers.

The following chart (as shown in Exhibit C) summarizes the key inputs used in this modeling exercise:

	Modeling Inputs					
Modeling Inputs by System Size	Case #1 - 498KW, AC	Case #2 - 998KW, AC	Case #3 - 2,000KW, AC	Case #4 - 3,000KW, AC	Case #5 - 4,000KW, AC	Case #6 - 5,000KW, AC
System Size (kW, AC)	500	1,000	2,000	3,000	4,000	5,000
System (kW, DC)	703.8	1,407.6	2,815.2	4,222.8	5,630.4	7,038.0
EPC Price (\$/W)	\$1.80	\$1.75	\$1.65	\$1.55	\$1.40	\$1.40
Interconnection Price (\$/W, DC)	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
ITC Ineligible Basis Percentage	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Commercial Operation Date	1/9/2020	1/9/2020	1/9/2020	1/9/2020	1/9/2020	1/9/2020
Decomm. Bond	6,448.57	12,897.14	25,794.27	38,691.41	51,588.54	64,485.68
PILOT (\$/MW, AC)	4,574.7	9,149.4	18,298.8	27,448.2	36,597.6	45,747.0
Energy Yield (kWh/kW DC)	1,285	1,285	1,285	1,285	1,285	1,285
Site Lease (\$/MW, AC)	\$8,250	\$16,500	\$33,000	\$49,500	\$66,000	\$82,500
Site Lease Escalator	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%

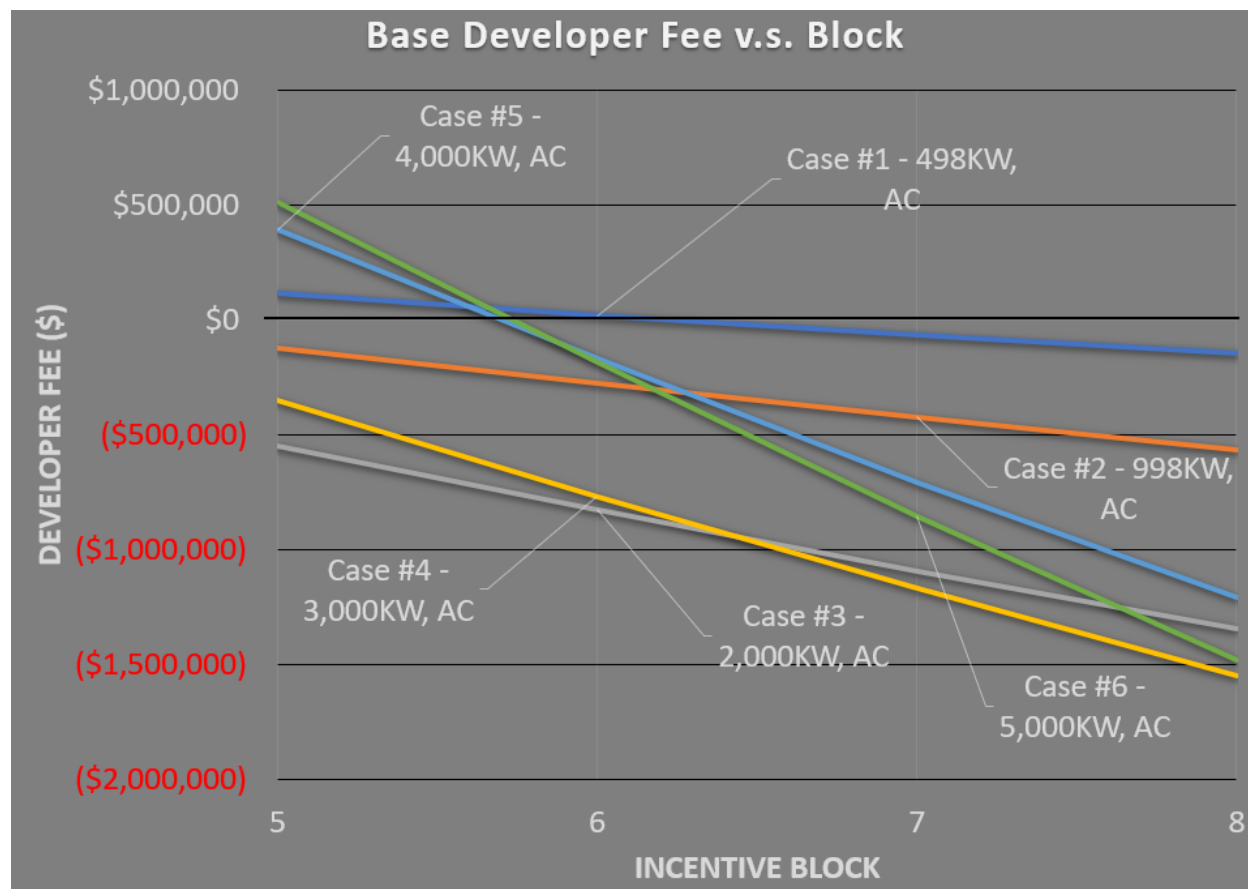
  

	ECONOMIC ADJUSTMENTS					
	Project #1 - 500KW, AC	Project #2 - 1,000KW, AC	Project #3 - 2,000KW, AC	Project #4 - 3,000KW, AC	Project #5 - 4,000KW, AC	Project #6 - 5,000KW, AC
Dev. Cost (\$0.05/W, DC)	(35,190)	(70,380)	(140,760)	(211,140)	(281,520)	(351,900)
Closing Costs (\$0.015/W, DC)	(10,557)	(21,114)	(42,228)	(63,342)	(84,456)	(105,570)
Tax Credit Elig. Adj. (\$0.05/W, DC)	(35,190)	(70,380)	(140,760)	(211,140)	(281,520)	(351,900)
COD Adjustment (\$0.015/W, DC)	(10,557)	(21,114)	(42,228)	(63,342)	(84,456)	(105,570)
BSS Cost to EPC (\$/W, DC)	N/A	N/A	0.29	0.29	0.29	0.29
CS Customer Acq. Fee (\$0.010/W, DC)	(70,380)	(140,760)	(281,520)	(422,280)	(563,040)	(703,800)

The following chart (as shown in Exhibit D) shows the results in this modeling exercise:

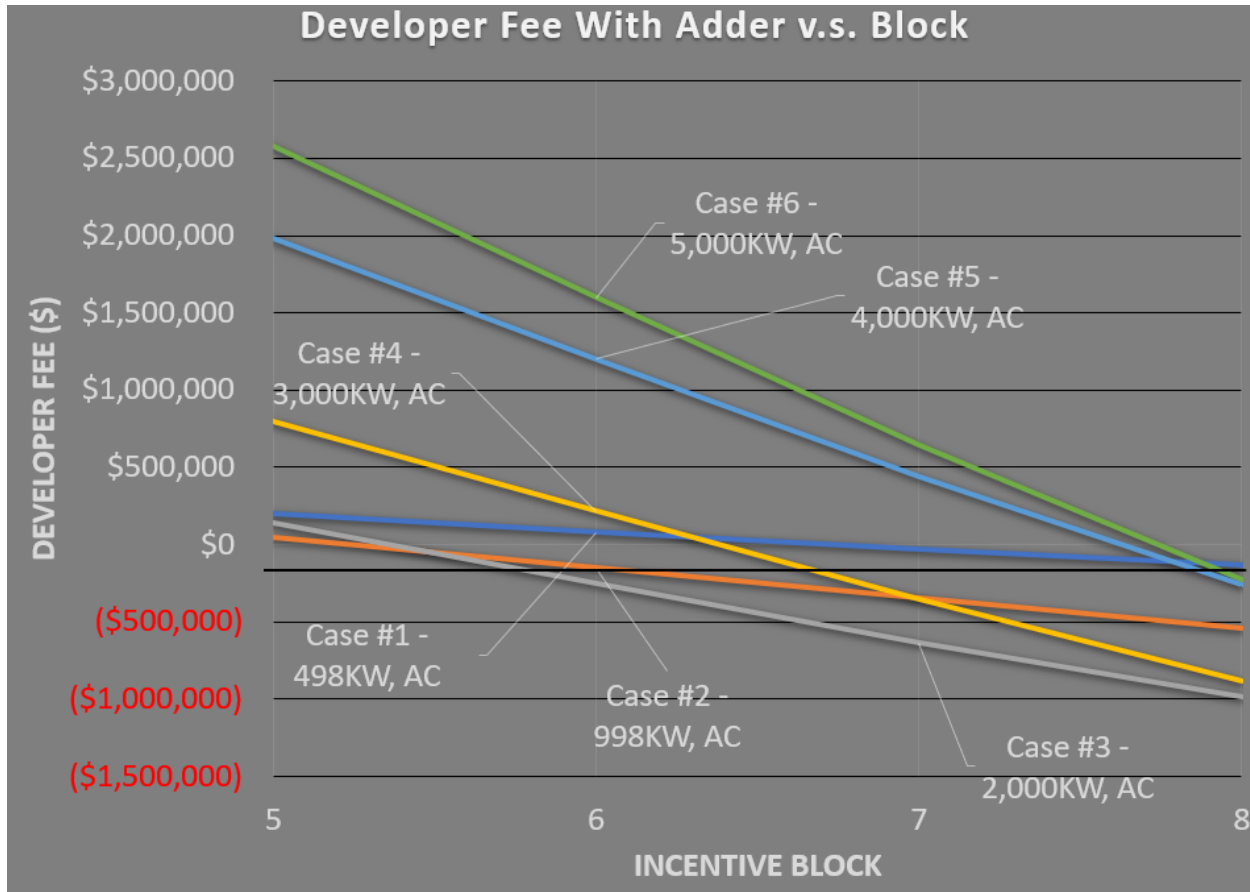
MODELING RESULTS										
Project	Block #	A Base Dev Fee, (\$/W,	B Base Dev Fee, (\$	C Storage Fee, (\$/W,	D Comm. Solar (\$/W, DC)	E = A+C+D Subtotal Development Fee (\$/W, DC)	F Development Fee (\$)	G Development Expenses, (\$)	H = F+G Net Development Fee (\$/W, DC)	I Net Development Fee (\$)
Case #1 - 498KW, AC	5	\$0.169	\$118,942	\$0.00	\$0.1730	\$0.3420	\$240,700	-\$35,190	\$205,510	\$0.2920
	6	\$0.028	\$19,706	\$0.00	\$0.1380	\$0.1660	\$116,831	-\$35,190	\$81,641	\$0.1160
	7	-\$0.091	-\$64,046	\$0.00	\$0.1030	\$0.0120	\$8,446	-\$35,190	-\$26,744	-\$0.0380
	8	-\$0.203	-\$142,871	\$0.00	\$0.0680	-\$0.1350	-\$95,013	-\$35,190	-\$130,203	-\$0.1850
Case #2 - 998KW, AC	5	-\$0.086	-\$121,054	\$0.00	\$0.1730	\$0.0870	\$122,461	-\$70,380	\$52,081	\$0.0353
	6	-\$0.194	-\$273,074	\$0.00	\$0.1380	-\$0.0560	-\$78,826	-\$70,380	-\$149,206	-\$0.1011
	7	-\$0.300	-\$422,280	\$0.00	\$0.1030	-\$0.1970	-\$277,297	-\$70,380	-\$347,677	-\$0.2356
	8	-\$0.400	-\$563,040	\$0.00	\$0.0680	-\$0.3320	-\$467,323	-\$70,380	-\$537,703	-\$0.3643
Case #3 - 2,000KW, AC	5	-\$0.194	-\$546,149	\$0.120	\$0.1730	\$0.0990	\$278,705	-\$140,760	\$137,945	\$0.0490
	6	-\$0.293	-\$824,854	\$0.115	\$0.1380	-\$0.0400	-\$112,608	-\$140,760	-\$253,368	-\$0.0900
	7	-\$0.389	-\$1,095,113	\$0.110	\$0.1030	-\$0.1760	-\$495,475	-\$140,760	-\$636,235	-\$0.2260
	8	-\$0.478	-\$1,345,666	\$0.110	\$0.0680	-\$0.3000	-\$844,560	-\$140,760	-\$985,320	-\$0.3500
Case #4 - 3,000KW, AC	5	-\$0.083	-\$350,492	\$0.150	\$0.1730	\$0.2400	\$1,013,472	-\$211,140	\$802,332	\$0.1900
	6	-\$0.182	-\$768,550	\$0.145	\$0.1380	\$0.1010	\$426,503	-\$211,140	\$215,363	\$0.0510
	7	-\$0.277	-\$1,169,716	\$0.140	\$0.1030	-\$0.0340	-\$143,575	-\$211,140	-\$354,715	-\$0.0840
	8	-\$0.367	-\$1,549,768	\$0.140	\$0.0680	-\$0.1590	-\$671,425	-\$211,140	-\$882,565	-\$0.2090
Case #5 - 4,000KW, AC	5	\$0.070	\$394,128	\$0.160	\$0.1730	\$0.4030	\$2,269,051	-\$281,520	\$1,987,531	\$0.3530
	6	-\$0.030	-\$168,912	\$0.155	\$0.1380	\$0.2630	\$1,480,795	-\$281,520	\$1,199,275	\$0.2130
	7	-\$0.125	-\$703,800	\$0.150	\$0.1030	\$0.1280	\$720,691	-\$281,520	\$439,171	\$0.0780
	8	-\$0.214	-\$1,204,906	\$0.150	\$0.0680	\$0.0040	\$22,522	-\$281,520	-\$258,998	-\$0.0460
Case #6 - 5,000KW, AC	5	\$0.073	\$513,774	\$0.170	\$0.1730	\$0.4160	\$2,927,808	-\$351,900	\$2,575,908	\$0.3660
	6	-\$0.026	-\$182,988	\$0.165	\$0.1380	\$0.2770	\$1,949,526	-\$351,900	\$1,597,626	\$0.2270
	7	-\$0.121	-\$851,598	\$0.160	\$0.1030	\$0.1420	\$999,396	-\$351,900	\$647,496	\$0.0920
	8	-\$0.210	-\$1,477,980	\$0.160	\$0.0680	\$0.0180	\$126,684	-\$351,900	-\$225,216	-\$0.0320
Notes										
Base SMART rate multiplied by 1.25										
No Storage										
Base SMART rate multiplied by 1.10										
No Storage										
Using Level 1 Storage #'s										
Using Level 1 Storage #'s										
Using Level 1 Storage #'s										
Using Level 1 Storage #'s										

The following graphs plots the Base Developer Fee with respect to System Size and Block Position:



As you can see, economics for STGU's of all system sizes are not supported beyond Block 5 in some cases and 6 in all cases.

The following graph plots the Developer Fee with respect to System Size and Block Position and includes economics for CSS Adder and BESS Adder:



As you can see, economics for projects between 500KW and 3,000KW are not supported beyond Block 7. It is also important to note the following:

1. There is an important, non-linear relationship between Interconnection Cost and System Size. Interconnection Costs are considered ineligible for ITC eligibility, meaning a STGU's Tax Credit calculation cannot include interconnection cost towards its basis. Furthermore, Non-ITC eligible project expenses affect a financial model differently than regular expenses. In our case, the Developer Fee decreases by \$1.40 for every \$1.00 of Non-ITC eligible expense. This makes economics for smaller projects more sensitive to higher interconnection costs.

2. The calculation of the Developer Fee accounts for EPC costs including battery equipment procurement and installation and acquisition cost of Community Solar Customers. The modeling does not include:
  - a. Cost of development capitol;
  - b. Soft costs for development;
  - c. Risk profile for the development period of the investment;
  - d. Loss of revenue for failed projects (we experience about 35% attrition rate); and
  - e. Loss of revenue for cost of capital for extended interconnection timeframes and costs (Interconnection timeframes have increases from an average of nine months during SREC-I and SREC-II to over twenty-four months in SMART).
3. The Battery Storage Adder was not included for STGU's with capacity equal to or under 1MW. This is because the value of the adder does not justify the cost to install the equipment with required data monitoring devices.

In effort to help further substantiate our claim that the economics for large STGU's erode quicker than DOER anticipated when creating the program, please consider a STGU we have under development with the following details:

1. The STGU has an interconnection cost of \$6,889,206. The STGU has a project capacity of 2MW AC or about 2.8MW DC. This brings the interconnection cost only to \$2.46/W DC. The STGU has received a SQ in Block 5. When running the financial analysis of this Project using the same model used for the financial analysis above, we quickly determine the project is substantially in the red an unfinanceable.

As it stands right now, we understand DOER is forced to assume STGU's that have submitted and received a SQ did so knowing the economic situation and if they submitted for a SQ, the economics were good enough to support the installation of the array.

**I am here to tell you, that could not be further from the truth.**

Take this STGU with a \$6,889,206 Interconnection Cost for example. This STGU is proposed to interconnect to a feeder connected to a specific substation. Over eight months after submitting the initial interconnection application, one of the first steps in the process of developing a solar array, National Grid determined that the connecting substation received so many applications after our STGU submitted an application and during the System Impact Study phase, that the substation and potentially transmission line feeding the substation may need to be upgraded.

Because National Grid did not and still does not know what upgrades, if any, will actually be required to interconnect my STGU and cost share upgrade costs with other STGU's (the quantity and capacity of which are unknown), National Grid applied the entire potential upgrade cost onto our STGU's ISA and immediately put our STGU on Utility Hold until the Cluster Study (that being the second phase of the ISO-Study which completion date has not been announced) is completed.

The point being, the interconnection cost for our STGU truly is not \$6,889,206, it is some fraction of \$6,889,206 that will be determined with cost sharing between some unknown quantity of other STGU's that will be defined sometime in the future once the Cluster Study is complete.

We need DOER to understand that a Developer's decision to submit and receive a SQ does not mean the STGU is economically financeable. There is no defined event that will occur within a known amount of time that would define whether the STGU is financeable, other than the completion of the cost sharing analysis by the EDC. Developers have no choice but to submit to receive a SQ to hold a place in line for as long as possible and until the Utilities determine what upgrades need to occur, Distribution or Transmission, if any.

In addition, many STGU's participating in the ISO-Study would have been able to submit to receive a SQ in week one had it not been for the interconnection process delays created by the ISO-Study. DOER has provided a clear and consistent message to developers since

the inception of the Green Communities Acts in 2008 – that DOER understands a healthy investment environment is critical to the overall success of the industry, where investors do not become paranoid that incentive policy deficiencies will render renewable energy assets stranded and unfinanceable (as what has occurred in New Jersey and other states).

Developers have maintained faith that DOER was committed to creating a financeable Program, and further understood that the amount by which the Base Incentive Rate declines was in their control and would most likely be adjusted at the 400MW Review in order to maintain the viability of later block projects if necessary. We proceeded to obtain SQ's with that understanding.

2. Similarly, Zero-Point has a 900KW STGU with Block 7 Base allocation, Block 9 CSS Adder allocation and Block 4 BESS Adder allocation. The economics of the project yield a developer fee of **negative \$0.045/W, DC** and the project has an interconnection cost of \$308,163, which is approximately \$0.18/W, DC. In order to increase the economics of this STGU, we will be forced to withdraw from the CSS Adder in order to lower our cost of capital (institutional lenders are requiring a higher interest rate on lending for Community Solar due to the perceived increased risk of customer default and its impact on cash flow) to allow the STGU economics to break even.

This is a perfect example that is representative of a large group of STGU's with similarly situated, if not substantially worse, economics. It is our opinion that removing CSS Adder and eliminating the benefit Community Solar provides to the rate payers in order to make project economics pencil is not the intent of the SMART Program.

3. Zero-Point not only develops STGU's but also acquires STGU's from other developers. We have seen or been exposed to over 225MW AC of large STGU's with interconnection costs that make the projects unfinanceable. Although we cannot disclose the exact specifics of each STGU for confidentiality reasons, we hope this statistic is received as factual and accounted for appropriately in the implementation of the 400MW Review Results.



In an effort to help support economics for later Block position STGU's, we proposed DOER adjust the declining Block Schedule as follows (as shown in Exhibit B):

Block	% Decline
1	0%
2	4%
3	4%
4	4%
5	4%
6	1%
7	1%
8	1%
9	0%
10	0%
11	0%
12	0%

### **Section 3 – Land Use Subtractor**

Section 1 and 2 above discuss the interconnection environment in detail. STGU's are experiencing unprecedented delays with the interconnection process, and many STGU's have been pulled into various levels of the ISO-Study for infrastructure upgrades not triggered by that STGU's capacity, but from capacity associated with STGU's that may have submitted interconnection applications weeks or months afterwards. Currently there are over 500MW of large STGU's with allocated capacity under the SMART Program. We are estimating that over 50% of these STGU's are not financeable as it currently stands. Further decreasing economics for these STGU's by implementing a subtractor only compounds the problem. As such, we are proposing DOER implement an increased subtractor on future Greenfield Development but allow Developers that have invested in developing STGU's an exemption from the subtractor entirely if they can provide the following by the Filing of the of the Emergency Regulation:

1. A Statement of Qualification; or
2. Site Control; and
3. Non-Ministerial Permits; and
4. Evidence that the project is participating in a Cluster Study.

## **Section 4 – Pollinator Adder**

We feel the Pollinator Adder is a phenomenal method of providing additional services to the Commonwealth. The Pollinator Adder could be enhanced by providing incentive for Developers to cultivate honeybee hives on site as well. As such, we are proposing DOER increase the Pollinator Adder from \$0.0025/kWh to \$0.005/kWh if a STGU Owner can provide evidence that honeybee hives have been cultivated on the property.

## Section 5 – Public Entity Solar Tariff Generation Unit

We agree with DOER that the original incentive payment structure under the original SMART Program was insufficient to support development of STGU's on Public Property. However, we feel that Public Entities are still being underserved with the current proposal to simply increase the Public Adder from \$0.02/kWh to \$0.04/kWh. Many Public Entities that were not targeted under the SREC Programs, mainly located in the SEMA/NEMA load zones, do not have land or roof space to host a STGU. With the current proposal, these Public Entities would still be left without a way to benefit from the SMART Program. As such, we are proposing DOER change and expand the definition of Public Entity Solar Tariff Generation Unit as follows:

1. The definition of Public Entity Solar Tariff Generation Unit should be revised as follows:
  - a. An array may qualify as a Public Entity Solar Tariff Generation Unit if sited on Private Land so long as 100% of its output is allocated to Public Entity.
2. The compensation for Public Entity Solar Tariff Generation Unit should be expanded as follows:
  - a. Public Entity Solar Tariff Generation Unit sited on property owned by a Municipality or Other Governmental Entity = \$0.04/kWh
  - b. Public Entity Solar Tariff Generation Unit sited on Private Property and 100% of its output is allocated to Public Entity = \$0.03/kWh
3. We propose DOER incorporate a new Adder called "Public CSS STGU." In order to qualify as a Public CSS STGU, the STGU must:
  - a. Be sited on Public or Private Property; and
  - b. Up to 50% of the STGU's output must be allocated to Public Entity and the remaining capacity allocated in 25 kW increments to Public or Private entities.

We propose the Public CSS STGU adder be set to \$0.045/kWh and would be in exchange for the existing CSS Adder. This would be beneficial for creating a new tranche with additional adder capacity. The logic behind creating a new adder is to recognize the value of providing a Public Entity as Tier 1 which would come with a higher customer acquisition cost versus Private entities, matching the logic of providing additional value for Low Income Customers.

## **Section 6 – Community Solar Adder**

We feel the original structure for developers to elect to receive a Community Solar adder under the original SMART Program was flawed. This is because DOER set no prerequisite for a Developer to elect and received Community Shared Solar capacity when submitting to receive a Statement of Qualification. Even if a Developer had no intention or did not possess the capability of actually qualifying the STGU for the CSS Adder, there was no cost or penalty to elect to receive the CSS Adder. Conversely, in order for a Developer to be eligible to receive a BESS Adder, the Developer must obtain an ISA from the Utility which allows BESS to be installed which requires time, money and experience to meet that threshold. There was no threshold for a Developer to receive CSS Adder allocation and therefore, we feel it is appropriate if Developers elect to withdraw their CSS Adder allocation. DOER should allow the abandoned capacity to remain in the current Block and not add the capacity to the existing Block.

Finally, we have determined that economic value for a Developer to qualify and participate in the Program in Block 10 provides an economic value of under \$0.02/W DC, which is an insufficient incentive for Developers to pursue CSS. To account for this, we feel DOER must remove the Declining Block structure for Community Solar.

## **Section 7 – National Grid’s Rhode Island Renewable Energy Growth (REG) Program**

We support DOER’s effort to increase access for Low Income Customer’s participation in the SMART Program. We feel that the EDC’s are best situated to increase Low Income Customer’s participation in the Program and suggest DOER allow the EDC’s to implement a substantially similar structure to what National Grid is currently doing in Rhode Island. In Rhode Island, National Grid has implemented the Renewable Energy Growth (REG) Program where Customers elect to Opt-In to receive discounted credits to offset a portion of there utility expense. A Summary of the Program is shown in Exhibit E showing the Payment Credit Transfer Form National Grid currently uses under this Program.

Theoretically, there should be no incremental cost for National Grid to administer a similar Program in Massachusetts. Under the SMART Program, the EDC’s are required to transfer AOBC’s from STGU accounts to Customer accounts by way of Schedule Z or Customer Disclosure Form. Under the existing SMART Program structure, the following things occur:

1. The Customer signs a separate Agreement with the STGU Owner to pay some discounted value of the AOBC’s the Customer receives;
2. The EDC transfers the full value of the credit to individual customer accounts as prescribed on the Customer Authorization Form;
3. The STGU Owner sends each Customer individual bills, in addition to the normal Utility Bill the Customer already receives, for the discounted value of the AOBC’s the Customer received;
4. The Customer pays both Utility and AOBC bill;
5. The EDC makes Incentive Payments to the STGU Owner’s utility account.

If the Rhode Island REG Program structure were to be implemented in Massachusetts, there would be one major difference. Rather than the EDC allocating the full value of the Credit

onto the Customer's account, the EDC's would allocate only the discount value to the Customer's account and would pay the difference to the STGU Owner. For example, if the STGU generated \$100 of AOBC's and the STGU Owner had an agreement with a Customer to provide the Customer AOBC's at a 10% discount, the EDC would only allocate \$10 onto the Customer's account and would pay the STGU \$90. Conversely, under the existing structure, the EDC's allocate the full \$100 onto the Customer's account, the STGU Owner sends the Customer an invoice for \$90 and the Customer pays the STGU owner, allowing the Customer to keep the same \$10 benefit.

Under the Payment of Receivables, or "POR" structure in Massachusetts, the EDC's are already allowed to rate base Low-Income customers payments that go into default. Using this structure to reduce Low Income Customer's utility bills only decreases the burden defaulting customers have on the rate payers of Massachusetts. The EDC's have the Low-Income Customer base defined by rate class and could easily implement a similar structure to Rhode Island's REG Program.



## Conclusion

In Conclusion, we feel that DOER and the EDC's have done a tremendous job leading Massachusetts through an exciting and challenging time under the SREC and SMART Programs to date. We feel there are critical adjustments DOER should implement to the SMART Program to continue the Commonwealth's leadership in renewable energy:

1. We believe DOER should increase the SMART Program by 3,200MW to 4,800MW in total to account for this pending capacity.
2. DOER should incorporate an "Interconnection Cost Adder" of \$0.004/kWh for every \$100,000 of interconnection cost above a "Base Interconnection Cost" of \$0.15/W DC.
3. We believe that DOER should decrease the Base Incentive Rate by 4% in Blocks 2 through 5, 1% in Blocks 6 through 8 and hold the Base Incentive Rate constant in Blocks 9 through 12, as shown on Exhibit B.
4. We believe that the Land Use Subtractor in Greenfield STGU's should not apply to projects with:
  - a. A Statement of Qualification; or
  - b. Site Control; and
  - c. Non-Ministerial Permits; and
  - d. Evidence that the project is participating in a Cluster Study.
5. The Pollinator Adder should be increased from \$0.0025/kWh to \$0.005/kWh if a STGU Owner can provide evidence that Honeybee Hives have been cultivated on the property.
6. We believe DOER should change the definition of Public Entity Solar Tariff Generation Unit as follows: An array may qualify as a Public Entity Solar Tariff Generation Unit if sited on Private Land so long as 100% of its output is allocated to one or more Public Entities.
7. The compensation for Public Entity Solar Tariff Generation Unit should be expanded as follows:
  - a. Public Entity Solar Tariff Generation Unit sited on property owned by a Municipality or Other Governmental Entity = \$0.04/kWh
  - b. Public Entity Solar Tariff Generation Unit sited on Private Property and 100% of its output is allocated to Public Entity = \$0.03/kWh

- c. Public Entity Solar Tariff Generation Unit sited on Private Property and up to 50% of its output is allocated to Public Entity and the remaining capacity allocated in 25 kW increments to Public or Private entities = \$0.045/kWh
- 8. We believe DOER should allow the adder capacity to remain in its current Block and move STGU's up in line. Additionally, DOER should not decline the incentive payment for Community Shared Solar.
- 9. We believe the existing or substantially similar structure National Grid has in place in Rhode Island under the REG Program should implement a standard discount of 10% of the AOBC value and be used to qualify a STGU for Low Income CSS.

The implementation of all these adjustments to the SMART Program is necessary for the Commonwealth's Renewable Energy Industry to grow and thrive and will serve an important contribution for the State meeting its aggressive Renewable Targets.

## Exhibit A – National Grid Volume

Michael Ricci Sam Wolfe Tom Sweeney Zach Swan Ariel Horowitz Ariel

### Volume

Working with multiple developers on unprecedented volume of DG applications  
Complex studies (~500kW and larger) as of Sept 2018

- Delivered: 183 studies, ~630MW
- In Progress: 322 studies, ~ 1.2GW
- Expect ~400 studies by EOY
- *MW values shown capture DG and storage*

Balancing needs of DG developer, operational needs of MECO, and all the day to day needs of 1.3 million customers

- Maintain safety and reliability of the system via thorough protective device analysis (fault current & arc flash)
- Least cost to serve solutions considering initial cost and recurring maintenance
- Consider operational needs of the Company and maintaining operational flexibility for reliability

National Grid

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Exhibit B – Proposed Base Incentive Payment Rate Declining Block Schedule

Block	% Decline
1	0%
2	4%
3	4%
4	4%
5	4%
6	1%
7	1%
8	1%
9	0%
10	0%
11	0%
12	0%

## Exhibit C – Modeling Inputs

	Modeling Inputs					
Modeling Inputs by System Size	Case #1 - 498KW, AC	Case #2 - 998KW, AC	Case #3 - 2,000KW, AC	Case #4 - 3,000KW, AC	Case #5 - 4,000KW, AC	Case #6 - 5,000KW, AC
System Size (kW, AC)	500	1,000	2,000	3,000	4,000	5,000
System (kW, DC)	703.8	1,407.6	2,815.2	4,222.8	5,630.4	7,038.0
EPC Price (\$/W)	\$1.80	\$1.75	\$1.65	\$1.55	\$1.40	\$1.40
Interconnection Price (\$/W, DC)	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
ITC Ineligible Basis Percentage	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Commercial Operation Date	1/9/2020	1/9/2020	1/9/2020	1/9/2020	1/9/2020	1/9/2020
Decomm. Bond	6,448.57	12,897.14	25,794.27	38,691.41	51,588.54	64,485.68
PILOT (\$/MW, AC)	4,574.7	9,149.4	18,298.8	27,448.2	36,597.6	45,747.0
Energy Yield (kWh/KW DC)	1,285	1,285	1,285	1,285	1,285	1,285
Site Lease (\$/MW, AC)	\$8,250	\$16,500	\$33,000	\$49,500	\$66,000	\$82,500
Site Lease Escalator	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%

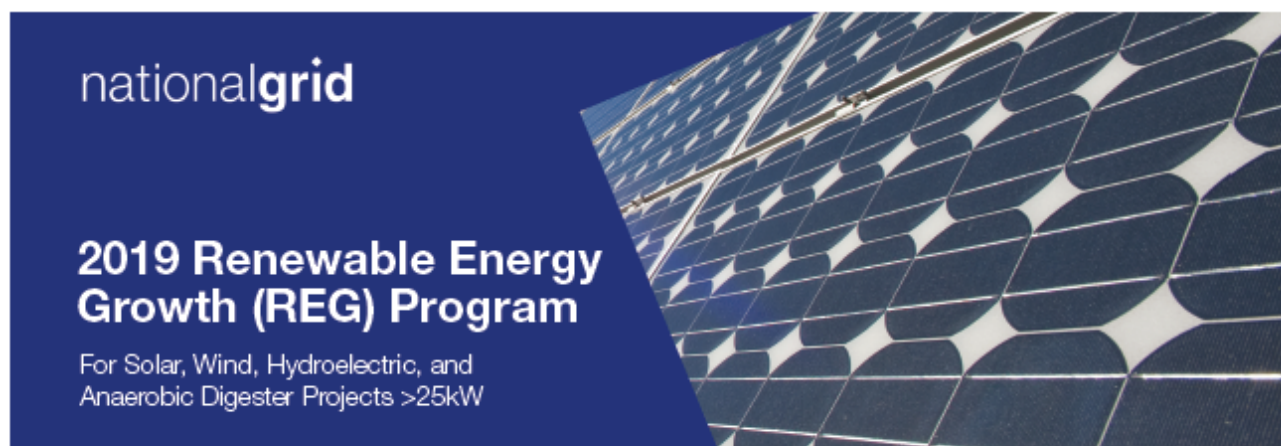
	ECONOMIC ADJUSTMENTS					
	Project #1 - 500KW, AC	Project #2 - 1,000KW, AC	Project #3 - 2,000KW, AC	Project #4 - 3,000KW, AC	Project #5 - 4,000KW, AC	Project #6 - 5,000KW, AC
Dev. Cost (\$0.05/W, DC)	(35,190)	(70,380)	(140,760)	(211,140)	(281,520)	(351,900)
Closing Costs (\$0.015/W, DC)	(10,557)	(21,114)	(42,228)	(63,342)	(84,456)	(105,570)
Tax Credit Elig. Adj. (\$0.05/W, DC)	(35,190)	(70,380)	(140,760)	(211,140)	(281,520)	(351,900)
COD Adjustment (\$0.015/W, DC)	(10,557)	(21,114)	(42,228)	(63,342)	(84,456)	(105,570)
BSS Cost to EPC (\$/W, DC)	N/A	N/A	0.29	0.29	0.29	0.29
CS Customer Acq. Fee (\$0.010/W, DC)	(70,380)	(140,760)	(281,520)	(422,280)	(563,040)	(703,800)

## Exhibit D – Modeling Results

MODELING RESULTS										
Project	Block #	A	B	C	D	E = A+C+D	F	G	H = F+G	I
		Base Dev Fee, (\$/W,	Base Dev Fee, (\$)	Storage Fee, (\$/W,	Comm. Solar (\$/W, DC)	Subtotal Development Fee (\$/W, DC)	(\$)	Development Expenses, (\$)	Net Development Fee (\$/W, DC)	(\$)
Case #1 - 498KW, AC	5	\$0.169	\$118,942	\$0.00	\$0.1730	\$0.3420	\$240,700	-\$35,190	\$205,510	\$0.2920
	6	\$0.028	\$19,706	\$0.00	\$0.1380	\$0.1660	\$116,831	-\$35,190	\$81,641	\$0.1160
	7	-\$0.091	-\$64,046	\$0.00	\$0.1030	\$0.0120	\$8,446	-\$35,190	-\$26,744	-\$0.0380
	8	-\$0.203	-\$142,871	\$0.00	\$0.0680	-\$0.1350	-\$95,013	-\$35,190	-\$130,203	-\$0.1850
Case #2 - 998KW, AC	5	-\$0.086	-\$121,054	\$0.00	\$0.1730	\$0.0870	\$122,461	-\$70,380	\$52,081	\$0.0353
	6	-\$0.194	-\$273,074	\$0.00	\$0.1380	-\$0.0560	-\$78,826	-\$70,380	-\$149,206	-\$0.1011
	7	-\$0.300	-\$422,280	\$0.00	\$0.1030	-\$0.1970	-\$277,297	-\$70,380	-\$347,677	-\$0.2356
	8	-\$0.400	-\$563,040	\$0.00	\$0.0680	-\$0.3320	-\$467,323	-\$70,380	-\$537,703	-\$0.3643
Case #3 - 2,000KW, AC	5	-\$0.194	-\$546,149	\$0.120	\$0.1730	\$0.0990	\$278,705	-\$140,760	\$137,945	\$0.0490
	6	-\$0.293	-\$824,854	\$0.115	\$0.1380	-\$0.0400	-\$112,608	-\$140,760	-\$253,368	-\$0.0900
	7	-\$0.389	-\$1,095,113	\$0.110	\$0.1030	-\$0.1760	-\$495,475	-\$140,760	-\$636,235	-\$0.2260
	8	-\$0.478	-\$1,345,666	\$0.110	\$0.0680	-\$0.3000	-\$844,560	-\$140,760	-\$985,320	-\$0.3500
Case #4 - 3,000KW, AC	5	-\$0.083	-\$350,492	\$0.150	\$0.1730	\$0.2400	\$1,013,472	-\$211,140	\$802,332	\$0.1900
	6	-\$0.182	-\$768,550	\$0.145	\$0.1380	\$0.1010	\$426,503	-\$211,140	\$215,363	\$0.0510
	7	-\$0.277	-\$1,169,716	\$0.140	\$0.1030	-\$0.0340	-\$143,575	-\$211,140	-\$354,715	-\$0.0840
	8	-\$0.367	-\$1,549,768	\$0.140	\$0.0680	-\$0.1590	-\$671,425	-\$211,140	-\$882,565	-\$0.2090
Case #5 - 4,000KW, AC	5	\$0.070	\$394,128	\$0.160	\$0.1730	\$0.4030	\$2,269,051	-\$281,520	\$1,987,531	\$0.3530
	6	-\$0.030	-\$168,912	\$0.155	\$0.1380	\$0.2630	\$1,480,795	-\$281,520	\$1,199,275	\$0.2130
	7	-\$0.125	-\$703,800	\$0.150	\$0.1030	\$0.1280	\$720,691	-\$281,520	\$439,171	\$0.0780
	8	-\$0.214	-\$1,204,906	\$0.150	\$0.0680	\$0.0040	\$22,522	-\$281,520	-\$258,998	-\$0.0460
Case #6 - 5,000KW, AC	5	\$0.073	\$513,774	\$0.170	\$0.1730	\$0.4160	\$2,927,808	-\$351,900	\$2,575,908	\$0.3660
	6	-\$0.026	-\$182,988	\$0.165	\$0.1380	\$0.2770	\$1,949,526	-\$351,900	\$1,597,626	\$0.2270
	7	-\$0.121	-\$851,598	\$0.160	\$0.1030	\$0.1420	\$999,396	-\$351,900	\$647,496	\$0.0920
	8	-\$0.210	-\$1,477,980	\$0.160	\$0.0680	\$0.0180	\$126,684	-\$351,900	-\$225,216	-\$0.0320
Notes										
Base SMART rate multiplied by 1.25										
No Storage										
Base SMART rate multiplied by 1.10										
No Storage										
Using Level 1 Storage #'s										
Using Level 1 Storage #'s										
Using Level 1 Storage #'s										
Using Level 1 Storage #'s										



## Exhibit E - Renewable Energy Growth (REG) Program



### **The Renewable Energy Growth Program seeks 560 MW of nameplate capacity by the end of 2029 in specific technology and size classes.**

#### **How To Enroll:**

- Information on the application process, current classes, ceiling prices, current enrollment rules and official tariffs are available on our website: [ngrid.com/REGrowth](http://ngrid.com/REGrowth)
- Prior to the enrollment period, applicants must receive an Impact Study for Renewable Distributed Generation (ISR DG) or an Interconnection Services Agreement (ISA) from Nation Grid.

#### **Competitive enrollments will be open three times this year:**

- ▶ 4/15/19 - 4/26/19
- ▶ 7/15/19 - 7/26/19
- ▶ 10/7/19 - 10/18/19

#### **How It Works:**

- >25kW solar and other technologies must submit bids that are at or below "ceiling prices" set by the RI Distributed Generation Board.
- Enrolled projects sell to National Grid all generated energy, Renewable Energy Certificates, and other environmental attributes and electricity market products.
- Successful enrollees may choose to be paid directly for all output, or through bill credits plus the remainder in direct payment. All payments are guaranteed through approved 20-year term tariffs, rather than through contracts.
- National Grid will require W-9s from all participants and will issue 1099s to non-exempt recipients of Performance Based Incentive\* (PBI) payments and bill credits.
- All projects must be constructed and operational within 24, 36, or 48 months - depending on renewable technology.

\*Payments for qualified generation are made using a Performance Based Incentive (PBI). PBIs are set by the RI Distributed Generation Board, approved by the RI Public Utilities Commission and applicable from 4/1/19 – 3/31/20.



## Exhibit F – Payment Credit Transfer Form



### Rhode Island Renewable Energy Growth Program

#### Payment Credit Transfer Form

*All other RE Growth applicants must provide this form and required documentation as a condition of initiating payments under the program. RE Growth Small Solar Program applicants must provide this form and required documentation at the time of application for interconnection.*

*For convenience, please send this document and related supporting documents, such as signed and scanned W-9s, to the following:*

For Small Solar ( $\leq 25$  kW DC): [Distributed.Generation@nationalgrid.com](mailto:Distributed.Generation@nationalgrid.com)

For all others, please send this to your point of contact in Customer Energy Integration.

*To ensure the highest level of identity security, please feel free to mail this form and/or W-9s to us physically at:*

**National Grid**  
40 Sylvan Road  
Second Floor East, E2.577  
Waltham MA 02451  
Attn: RE Growth Applications

This Application is being submitted for the following project type (please select one):

- ☐ Single residential customer system   ☐ Commercial customer system   ☐ Stand-alone generator  
☐ Shared Solar system   ☐ Community Remote Distributed Generation system

The information is for the following circumstance (please select all that apply):

- ☐ New system application   ☐ Change in system ownership   ☐ Change in occupant at premise  
☐ Change in Shared Solar or Community Remote Distributed Generation subscribers

#### New Applicant Information

RE Growth Applicant Name (legal name): Click here to enter text.

Street Address: Click here to enter text.

City: Click here to enter text. State: Click here to enter text. ZIP: Click here to enter text.

Contact Name (if different from legal name): Click here to enter text.

Telephone: Click here to enter text. Email(s): Click here to enter text.

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If this is for a change in ownership, who is the former Applicant Owner?

Former RE Growth Applicant Name (legal name): Click here to enter text.

Street Address: Click here to enter text.

City: Click here to enter text. State: Click here to enter text. ZIP: Click here to enter text.

Contact Name (if different from legal name): Click here to enter text.

Telephone: Click here to enter text. Email(s): Click here to enter text.

Facility Location (if different from above):

Street Address: Click here to enter text.

City: Click here to enter text. State: Rhode Island ZIP: Click here to enter text.

Interconnection Application Number/Work Order: Click here to enter text.

Host Facility National Grid Electric Account Number: Click here to enter text.

## Payment Information

Payments of all Performance Based Incentives will be attributed to the Applicant of Record under the legal name above for tax purposes. The payments may be sent to the Applicant or their account, or another recipient as indicated.

All Applicants must provide a Form W-9 to National Grid per the National Grid RE Growth Tax Policy Statement. The Applicant Name and the Legal Name information on the W-9 must match. Please provide instructions below on where National Grid should send the payments.

Send Payment for Performance Based Incentives by: Check ☐ or Electronic Funds Transfer ☐

If by check, does Applicant want check sent to different address than above? Yes ☐ No ☐

If yes, please indicate address:

Location Name: Click here to enter text.

Street Address: Click here to enter text.

City: Click here to enter text. State: Click here to enter text. ZIP: Click here to enter text.

Lock Box, Account Number or Other Note: Click here to enter text.

**If by Electronic Funds Transfer, please complete National Grid's ACH Payment Authorization form.**

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## Credit Transfer Information

RE Growth allows for a portion of the Performance Based Incentive amounts to be transferred to the account of a National Grid customer under certain circumstances, per the terms of the RE Growth Residential and Non-Residential Tariffs. Systems at locations served by a residential rate must transfer bill credits to the customer account at that location.

1. Is the Customer at the location of the facility installation receiving electric service on Basic Residential Rate A-16 or Low Income Rate A-60?

Yes ☐ No ☐

If yes to 1, the Customer at the location of the facility installation does not need to provide a W-9 to National Grid if they are not the Applicant.

2. If this facility will be served under a National Grid Rhode Island commercial electric service account, does the Applicant choose to transfer bill credits to a customer account at the same premise?

Yes ☐ No ☐

If yes to 2 (a commercial account system choosing bill credits), and the bill credit recipient is not the applicant, the bill credit recipient must also provide a Form W-9 to National Grid.

Payments will not be provided for output of the system until all required W-9 forms have been received. Residential customers that are not the Applicant for the facility do not need to submit a W-9 and will not be issued Forms 1099 for bill credits.

New Recipient Name (on account): [Click here to enter text.](#)

Customer Account Number: [Click here to enter text.](#)

Customer Legal Name (if different, on W-9): [Click here to enter text.](#)

Customer Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Total output from the facility annually in kWh (same as on Interconnection App.): [Click here to enter text.](#)

If this is for a change in Bill Credit Recipient, who was the former Bill Credit Recipient at this location?

Old Recipient Name (on account): [Click here to enter text.](#)

Customer Account Number: [Click here to enter text.](#)

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## Shared Solar

If this facility is enrolling as a Shared Solar generator, please use the PCT-2 form to list all credit recipients and required information. Output of Shared Solar facilities must be 100% enrolled upon application. Please use as many copies of the form as needed to list all of the recipients, or the available Excel spreadsheet form. The total output of the facility cannot be greater than the sum of all recipients' 3-year annual average usage, and no recipient may receive greater than their 3-year annual average usage.

## Community Remote Distributed Generation

Please use the PCT-2 form to list all credit recipients to meet the enrollee requirements of the CRDG program. Either the output must be allocated to one or more qualified affordable/low-income housing entity, or must demonstrate that no more than 50% of expected output is allocated to one recipient, and at least 50% is allocated to customers in amounts not greater than the output of the technology rated at 25 kW AC. (For solar PV, this is 35,259 kWh per year. For Community Wind this would be project specific.) Meeting this test is required before final approval to be paid for output under the RE Growth CRDG program.

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IN WITNESS WHEREOF, I certify that the information provided above is true and correct this DATE day of [MONTH] , [YEAR] .

INSERT PROJECT OWNER NAME, as  
APPLICANT/NEW PROJECT OWNER

By: \_\_\_\_\_

Name: [Click here to enter text.](#)

Title: [Click here to enter text.](#)

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### ***For internal use only***

Applicant W-9 Confirmation: ☐

Non-Residential Customer Credit Transfer W-9 Confirmation: ☐

Applicant Vendor ID: [Click here to enter text.](#)

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Customer Vendor ID: [Click here to enter text.](#)

Applicant/Facility SAP ID (check): [Click here to enter text.](#)

Customer (non-residential credit recipient) SAP ID: [Click here to enter text.](#)

Sizing Check: Bill Record [Click here to enter text.](#) Output amount (check) [Click here to enter text.](#)

Date Processed: [Click here to enter a date.](#) Employee: [Click here to enter text.](#)

Facility RE Growth Certificate of Eligibility Number: [Click here to enter text.](#)

Asset Identification Number (ISO-NE/NEPOOL GIS ID): [Click here to enter text.](#)

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## Payment Credit Transfer Form 2 (PCT-2)

Please use this extended form or the available Excel form to list credit recipients for Shared Solar or Community Remote Distributed Generation Credit Recipients. For new recipients, please provide the percentage of output for Shared Solar or CRDG, and the credit value (in \$0.XXXX/kWh to four decimals maximum or "D" for default rate) and term in months for CRDG recipients. If removing recipients, please indicate in the box provided.

**For Applicant Account Number:** [Click here to enter text.](#)

**Applicant Name:** [Click here to enter text.](#)

**Project Work Order:** [Click here to enter text.](#)

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Recipient Name (on account): [Click here to enter text.](#)

Recipient Account Number: [Click here to enter text.](#)

Recipient Legal Name (if different, on W-9): [Click here to enter text.](#)

Recipient Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.](#)%

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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Recipient Name (on account): [Click here to enter text.](#)

Recipient Account Number: [Click here to enter text.](#)

Recipient Legal Name (if different, on W-9): [Click here to enter text.](#)

Recipient Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.](#)%

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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Recipient Name (on account): [Click here to enter text.](#)

Recipient Account Number: [Click here to enter text.](#)

Recipient Legal Name (if different, on W-9): [Click here to enter text.](#)

Recipient Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.](#)%

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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Recipient Name (on account): [Click here to enter text.](#)

Recipient Account Number: [Click here to enter text.](#)

Recipient Legal Name (if different, on W-9): [Click here to enter text.](#)

Recipient Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.%](#)

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.%](#)

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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Recipient Account Number: [Click here to enter text.](#)

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Recipient Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.%](#)

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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Recipient Name (on account): [Click here to enter text.](#)

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Recipient Legal Name (if different, on W-9): [Click here to enter text.](#)

Recipient Account 3-Year Average Billed Usage at Location (in kWh per year): [Click here to enter text.](#)

Percent of project output to be allocated to recipient (to tenth decimal only): [Click here to enter text.%](#)

New Recipient? ☐ Credit Rate (CRDG only): Term (in months): Remove Recipient? ☐

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