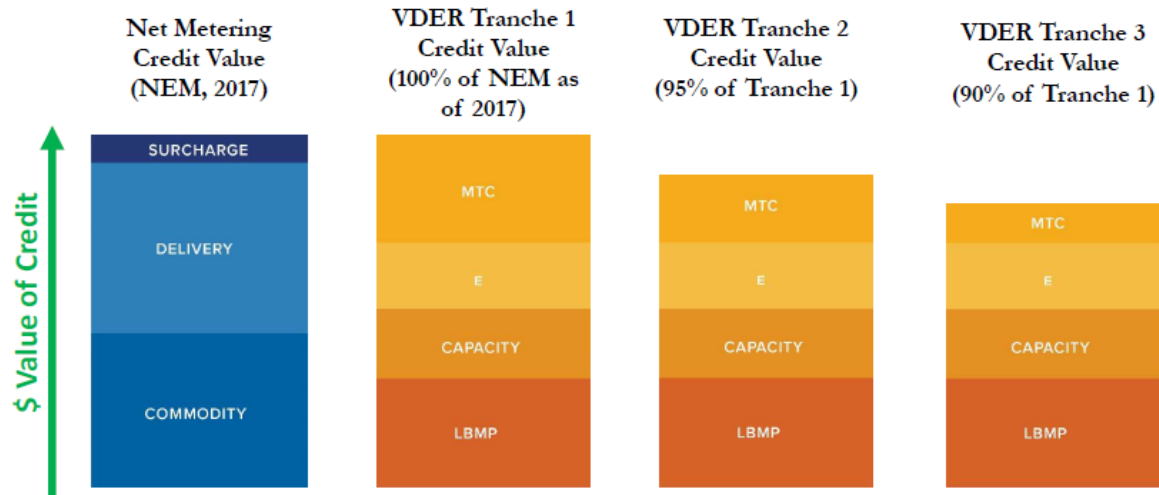# NY Mooers IV, LLC
CCIDA Financial Aid Application

This document contains information which supplements the application for financial assistance from the Clinton County Industrial Development Agency.

Attachment for Section C, Question 11(a): Revenue Decrease Explanation

Since Delaware River Solar ("DRS") began operating, the compensation system through which solar projects generate revenue has fundamentally changed, resulting in DRS seeing a significant decrease in the expected value of a large subset of projects under development. Prior to 2017, the New York State program which allowed solar projects to generate revenue was Net Metering ("NEM"), under which a solar array injected energy into the grid and was given "kWh credits" by the utility. These credits were sold to customers, generating revenue for the solar projects; for each kWh credit a customer purchased, the customer's bill decreased by that number of kWhs. During 2017, the Value of Distributed Energy Resources ("VDER") program replaced the NEM program.
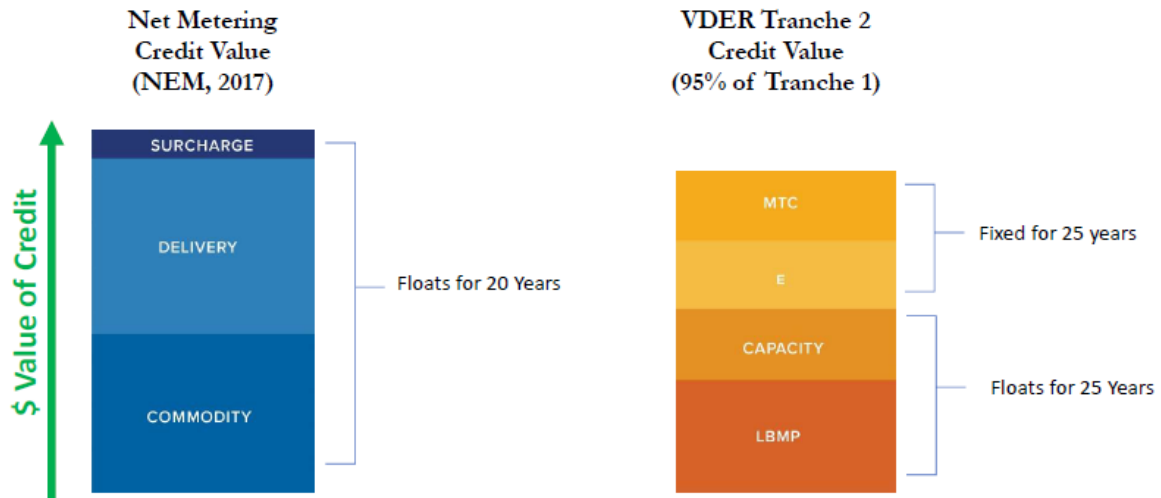
Under the VDER program, when a solar array provides energy into the grid, it is no longer given kWh credits. Instead, the utility uses a formula to calculate a dollar-valued credit given to the array, which are then purchased by the customer at a discount to the credit's face value and used to reduce the customers' bills dollar for dollar. The value of the VDER credit is determined by a formula that adds together multiple values into a "value stack" which is the dollar value assigned to credits produced by the solar array. The value represents the benefits that are produced by the array, including the avoided cost of energy purchases by the utility, environmental benefits, and avoided investment cost for the utility. This formula makes the total dollar-value of the credit less than the dollar/kWh rate being charged by the utility, and therefore less than the NEM credit value. As a temporary fix for this, the VDER system introduced an additional value called the MTC. This was temporary due to the use of tranches of specific MW sized, which would fill as more projects entered the VDER system (*see Exhibit 1 below*). The MTC decreased in value for every tranche.

Exhibit 1 (Referenced in Answer to Section C, Question 11a):

In addition, not all of the components of the VDER float over time, as they do in the NEM program (*see Exhibit 2 below*). DRS expects the VDER to escalate at a rate between 1% and 2%, whereas the NEM escalated between 2% and 3%.

Exhibit 2 (Referenced in Answer to Section C, Question 11a):

Due to the VDER, the proposed project (Boas #4) will earn 11% less revenue in year one and 18% less revenue over 20 years than it would have operating under the NEM program (*see Exhibit 3 below*). Because of this lower revenue, Boas #4 will yield a significantly higher expense ratio of 38.6%, when compared to 31.9% for an identical NEM project. With no PILOT payments at all, the VDER still would yield a 32.3% expense ratio (*see Exhibit 4 below*).

Exhibit 3 (Referenced in Answer to Section C, Question 11a):

NEM Project: Boas #1, #2, or #3

Year	$ per kWh	kWh	Revenue
1	0.0908	673,265	61,123
2	0.0926	3,482,580	322,649
3	0.0950	3,465,150	329,060
4	0.0973	3,447,720	335,590
5	0.0998	3,430,291	342,241
6	0.1023	3,412,861	349,015
7	0.1048	3,395,431	355,913
8	0.1074	3,378,002	362,938
9	0.1101	3,360,572	370,092
10	0.1129	3,343,142	377,377
11	0.1157	3,325,712	384,795
12	0.1186	3,308,283	392,347
13	0.1216	3,290,853	400,037
14	0.1246	3,273,423	407,867
15	0.1277	3,255,993	415,837
16	0.1309	3,238,564	423,951
17	0.1342	3,221,134	432,211
18	0.1375	3,203,704	440,620
19	0.1410	3,186,274	449,178
20	0.1445	3,168,845	457,889
Sum		63,861,799	7,410,732

VDER Tranche 2 Project: Boas #4

Year	$ per kWh	kWh	Revenue	VDER Revenue / NEM Revenue	
1	0.0809	673,265	54,449	89%	<- Y1 Revenue Difference
2	0.0816	3,482,580	284,247	88%	
3	0.0828	3,465,150	287,087	87%	
4	0.0841	3,447,720	290,055	86%	
5	0.0855	3,430,291	293,153	86%	
6	0.0868	3,412,861	296,387	85%	
7	0.0883	3,395,431	299,761	84%	
8	0.0898	3,378,002	303,279	84%	
9	0.0913	3,360,572	306,945	83%	
10	0.0930	3,343,142	310,766	82%	
11	0.0946	3,325,712	314,746	82%	
12	0.0964	3,308,283	318,890	81%	
13	0.0982	3,290,853	323,203	81%	
14	0.1001	3,273,423	327,691	80%	
15	0.1021	3,255,993	332,360	80%	
16	0.1041	3,238,564	337,216	80%	
17	0.1063	3,221,134	342,264	79%	
18	0.1085	3,203,704	347,511	79%	
19	0.1108	3,186,274	352,962	79%	
20	0.1132	3,168,845	358,626	78%	
Sum		63,861,799	6,081,598	82%	<- Total Revenue Difference

Exhibit 4 (Referenced in Answer to Section C, Question 11a):

NEM Tranche 0 Project
Including Tranche 0 PILOT

Average Expense Ratio	31.9%

Year	Revenue	Project Expenses Inc. PILOT	Expenses as a % of Revenue
1	61,123	(26,934)	44.1%
2	322,649	(107,942)	33.5%
3	329,060	(109,184)	33.2%
4	335,590	(110,450)	32.9%
5	342,241	(111,741)	32.6%
6	349,015	(113,058)	32.4%
7	355,913	(114,402)	32.1%
8	362,938	(115,773)	31.9%
9	370,092	(117,170)	31.7%
10	377,377	(118,596)	31.4%
11	384,795	(120,051)	31.2%
12	392,347	(121,534)	31.0%
13	400,037	(123,047)	30.8%
14	407,867	(124,591)	30.5%
15	415,837	(126,165)	30.3%
16	423,951	(127,771)	30.1%
17	432,211	(129,408)	29.9%
18	440,620	(131,079)	29.7%
19	449,178	(132,783)	29.6%
20	457,889	(134,521)	29.4%

VDER Tranche 2 Project
Including Tranche 0 PILOT

Average Expense Ratio	38.6%

Revenue	Project Expenses Inc. PILOT	Expenses as a % of Revenue
54,449	(26,934)	49.5%
284,247	(107,942)	38.0%
287,087	(109,184)	38.0%
290,055	(110,450)	38.1%
293,153	(111,741)	38.1%
296,387	(113,058)	38.1%
299,761	(114,402)	38.2%
303,279	(115,773)	38.2%
306,945	(117,170)	38.2%
310,766	(118,596)	38.2%
314,746	(120,051)	38.1%
318,890	(121,534)	38.1%
323,203	(123,047)	38.1%
327,691	(124,591)	38.0%
332,360	(126,165)	38.0%
337,216	(127,771)	37.9%
342,264	(129,408)	37.8%
347,511	(131,079)	37.7%
352,962	(132,783)	37.6%
358,626	(134,521)	37.5%

VDER Tranche 2 Project
With No PILOT

Average Expense Ratio	32.3%

Revenue	Project Expenses Inc. PILOT	Expenses as a % of Revenue
54,449	(22,134)	40.7%
284,247	(88,742)	31.2%
287,087	(89,984)	31.3%
290,055	(91,250)	31.5%
293,153	(92,541)	31.6%
296,387	(93,858)	31.7%
299,761	(95,202)	31.8%
303,279	(96,573)	31.8%
306,945	(97,970)	31.9%
310,766	(99,396)	32.0%
314,746	(100,851)	32.0%
318,890	(102,334)	32.1%
323,203	(103,847)	32.1%
327,691	(105,391)	32.2%
332,360	(106,965)	32.2%
337,216	(108,571)	32.2%
342,264	(110,208)	32.2%
347,511	(111,879)	32.2%
352,962	(113,583)	32.2%
358,626	(115,321)	32.2%

Attachment for Section F, Question 1: PILOT Reduction Request

DRS is requesting a PILOT reduction of 50%. This will bring average cost expense ratios from 38.6% to 35.5%, which is still higher than the 31.9% average under the NEM program (*see Exhibit 5 below*). A 50% reduction in the PILOT will improve the economic viability of constructing and operating projects under the VDER program. In summary, the revenue available to support operating expenses under the VDER program is significantly lower than those under the NEM program. The primary drivers of this are the lower credit value under the VDER program and the fixed components that make up the "value stack," which result in lower-than-inflation revenue escalation.

Exhibit 5 (Referenced in Answer to Section F, Question 1):

NEM Tranche 0 Project
Including Tranche 0 PILOT

Average Expense Ratio	31.9%

Year	Revenue	Project Expenses Inc. PILOT	Expenses as a % of Revenue
1	61,123	(26,934)	44.1%
2	322,649	(107,942)	33.5%
3	329,060	(109,184)	33.2%
4	335,590	(110,450)	32.9%
5	342,241	(111,741)	32.6%
6	349,015	(113,058)	32.4%
7	355,913	(114,402)	32.1%
8	362,938	(115,773)	31.9%
9	370,092	(117,170)	31.7%
10	377,377	(118,596)	31.4%
11	384,795	(120,051)	31.2%
12	392,347	(121,534)	31.0%
13	400,037	(123,047)	30.8%
14	407,867	(124,591)	30.5%
15	415,837	(126,165)	30.3%
16	423,951	(127,771)	30.1%
17	432,211	(129,408)	29.9%
18	440,620	(131,079)	29.7%
19	449,178	(132,783)	29.6%
20	457,889	(134,521)	29.4%

VDER Tranche 2 Project
Including Requested VDER PILOT

Average Expense Ratio	35.5%

Revenue	Project Expenses Inc. PILOT	Expenses as a % of Revenue
54,449	(24,534)	45.1%
284,247	(98,342)	34.6%
287,087	(99,584)	34.7%
290,055	(100,850)	34.8%
293,153	(102,141)	34.8%
296,387	(103,458)	34.9%
299,761	(104,802)	35.0%
303,279	(106,173)	35.0%
306,945	(107,570)	35.0%
310,766	(108,996)	35.1%
314,746	(110,451)	35.1%
318,890	(111,934)	35.1%
323,203	(113,447)	35.1%
327,691	(114,991)	35.1%
332,360	(116,565)	35.1%
337,216	(118,171)	35.0%
342,264	(119,808)	35.0%
347,511	(121,479)	35.0%
352,962	(123,183)	34.9%
358,626	(124,921)	34.8%

Program PILOT Comparison

NEM Tranche 0 PILOT	Requested VDER PILOT	Requested VDER PILOT
(4,800)	(2,400)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%
(19,200)	(9,600)	-50.0%