NY-SUN Performance Based (>200 kW) Program Draft Program Design

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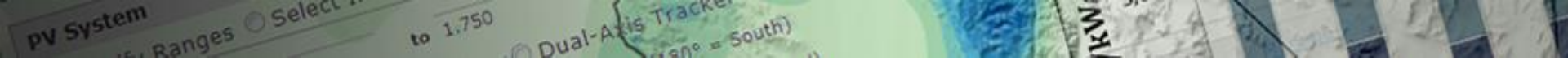
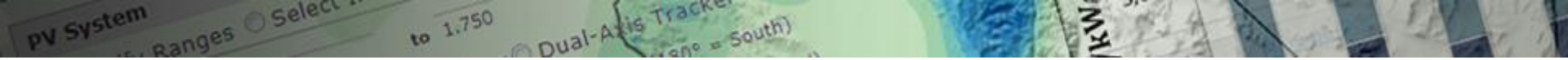
Prepared for
NYSERDA

Prepared by
Clean Power Research



Program Design Challenges

- Reduction of the federal investment tax credit (ITC) significantly affects the market dynamics
- Potential changes to electric rate structures (e.g. net metering, demand charges) will affect customer cost effectiveness
- Ensuring stable market growth
- Exhaust program budget at moment of grid parity

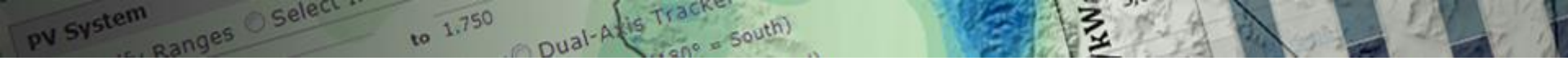


Key Program Design Assumptions

- Program budget of $425 million and installed PV capacity of 1.5 GW
- Program attrition rate of 20%

Assumption	ConEd	ROS
Program Budget	$125 million	$300 million
2014 Installed PV Cost	$3.00 per W-dc	$2.15 per W-dc
2014 Bill Savings	$0.125 per kWh	$0.090 per kWh
Customer Cost-Effectiveness	10-year simple payback*	10.5-year simple payback
2014 PV Commitment Rate	35 MW-dc per year	200 MW-dc per year

*Corresponds to target 12% IRR

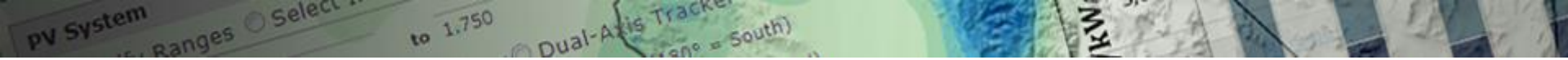


Additional Program Design Assumptions

- Avoided bill savings increases 1% annually
- The ITC is reduced from 30% to 10% on Jan 1, 2017

	Annual Change in PV Installed Cost[2]
Year	**ConEd and ROS**
2015	3%
2016	3%
2017	10% Step, 5% Annual
2018	5%
2019	5%
2020	5%
2021	5%
2022	5%
2023	5%
2024	5%

[2]http://www.nrel.gov/docs/fy13osti/60207.pdf

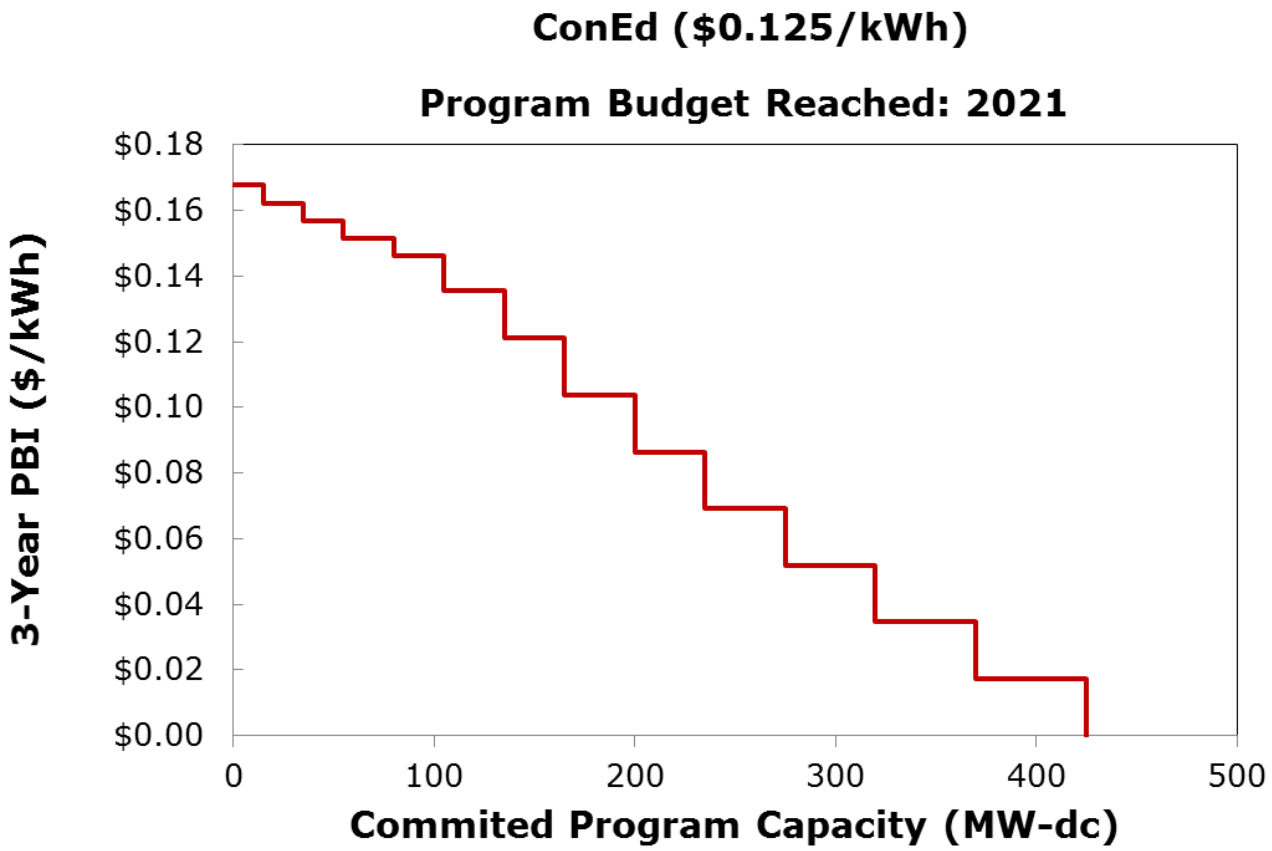


Grid Parity Assumption

- Grid parity occurs when the calculated simple payback is equal to the targeted simple payback (10 years) without any incentive from the NY-Sun Initiative
- When calculating the simple payback, the federal investment tax credit will be assumed to be 30% prior to Jan 1, 2017 and 10% thereafter
- The main factors determining the date at which grid parity occurs are the PV installed cost ($/W), the customer bill savings ($/kWh), and their respective rates of decrease (installed cost) and increase (bill savings)

ConEd MW Block Structure

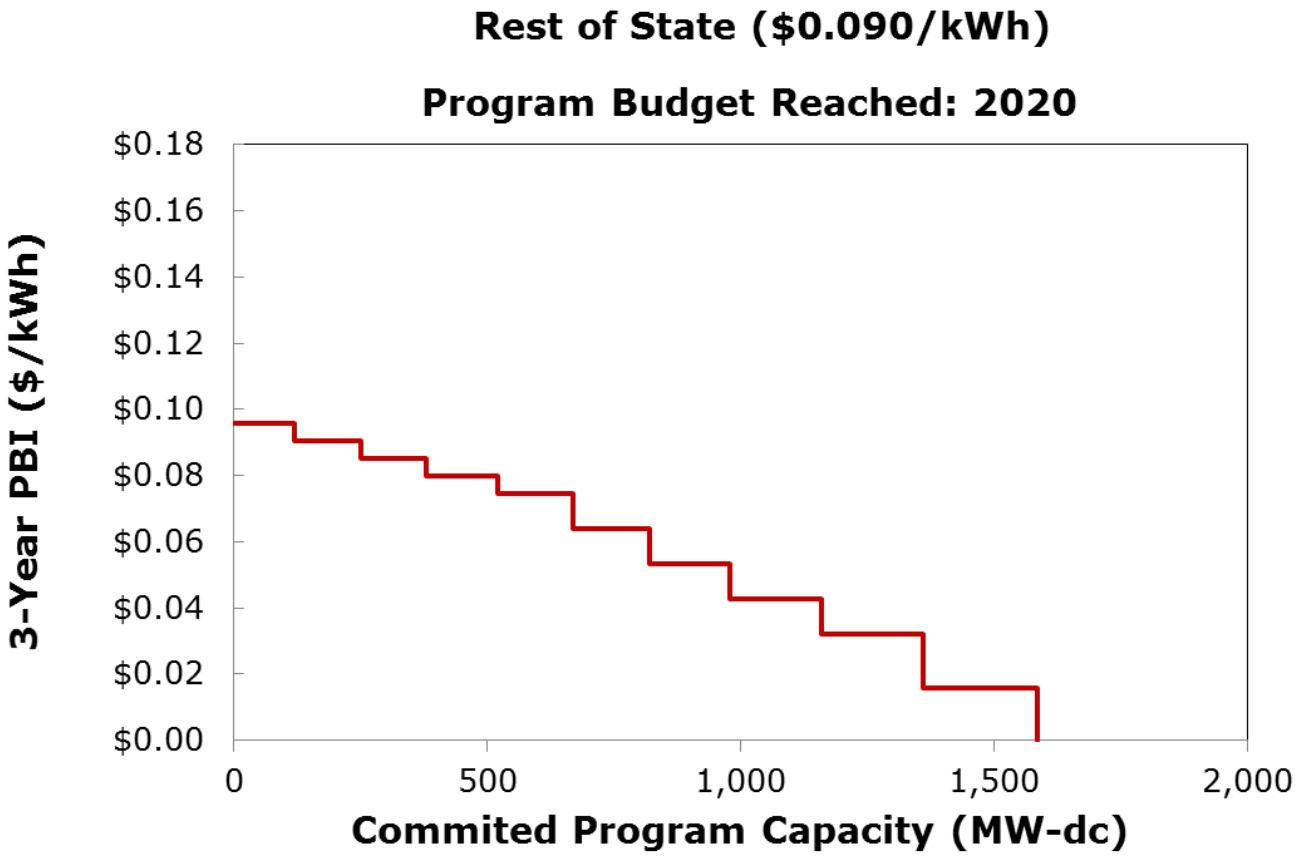
- Program budget of $125 M, installed capacity of 340 MW



Block #	PBI ($/W)	Block Volume (MW-dc)
1	$0.63	15
2	$0.61	20
3	$0.59	20
4	$0.57	25
5	$0.55	25
6	$0.51	30
7	$0.46	30
8	$0.39	35
9	$0.33	35
10	$0.26	40
11	$0.20	45
12	$0.13	50
13	$0.07	55

ROS MW Block Structure

- Program budget of $300 M, installed capacity of 1270 MW



Block #	PBI ($/W)	Block Volume (MW-dc)
1	$0.36	120
2	$0.34	130
3	$0.32	130
4	$0.30	140
5	$0.28	150
6	$0.24	150
7	$0.20	160
8	$0.16	180
9	$0.12	200
10	$0.06	225