

NY-Sun Stakeholder Meeting MW Block Redesign

December 14, 2017

New York State Energy Research and Development Authority

Stakeholder Meeting Agenda

- Introductions
- Timeline
- NY-Sun Program Update
- Program Rule Revisions
- Incentive Structure Revisions
- Next Steps



Introductions



Timeline



Timeline





Project data analysis complete



Stakeholder meeting
1



Stakeholder comment period ends



Stakeholder meeting 2 - present draft of program



Present draft memo to DPS

Nov 10 Dec 14 Jan 12 Jan 25 Feb 1



Timeline





Program Update



3 GW Capacity Targets by Sector / Region (MW)

| Region | Residential (up to 25 kW) | Small Non- Residential (up to 200 kW) | Commercial& Industrial (greater than 200 kW) | Total |
|------------------------|------------------------------|---|---|-------|
| ConEd | 302 | 303 | 300 | 905 |
| ROS | 444 | 451 | 1200 | 2095 |
| Subtotal | 746 | 754 | 1500 | 3000 |
| Long Island | 122 | 58 | - | 180 |
| Total Statewide | 868 | 812 | 1500 | 3180 |



ConEdison (MW)

| Sector | Pipeline | Completed | Total | Goal | Remaining Capacity | Pipeline/ Completed % of Goal |
|-----------|----------|-----------|-------|------|-----------------------|-------------------------------------|
| ConEd SC | 18 | 12 | 30 | 303 | 273 | 10% |
| ConEd C&I | 16 | 9 | 25 | 300 | 275 | 8% |
| Total | 34 | 21 | 55 | 603 | 548 | 9% |



OPPORTUNITY.

ConEdison Project Trend



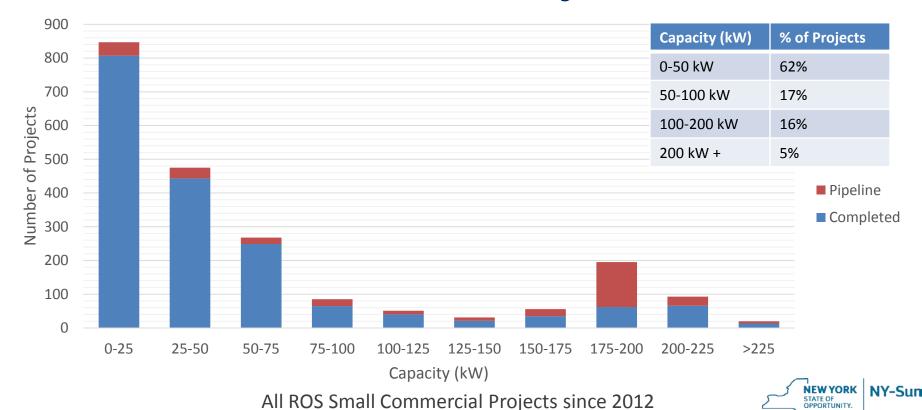
ROS Small Commercial (MW)

| Pipeline | Completed | Total | Goal | Missing Capacity | Pipeline + Completed % of Goal |
|----------|-----------|-------|------|---------------------|--------------------------------------|
| 42 | 57 | 99 | 451 | 352 | 22% |



OPPORTUNITY.

ROS Small Commercial Project Trend



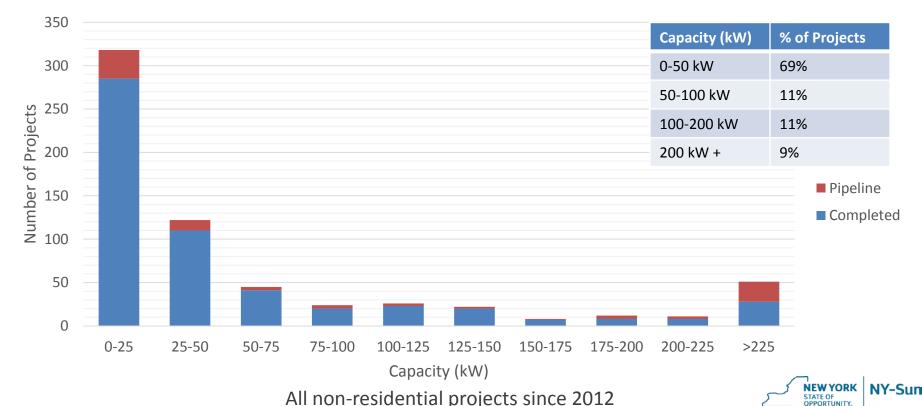
Long Island Small Commercial (MW)

| Pipeline | Completed | Total | Goal | Missing Capacity | Pipeline + Completed % of Goal |
|----------|-----------|-------|------|------------------|--------------------------------------|
| 15 | 19 | 34 | 58 | 24 | 59% |



OPPORTUNITY.

Long Island Non-Residential Project Trend



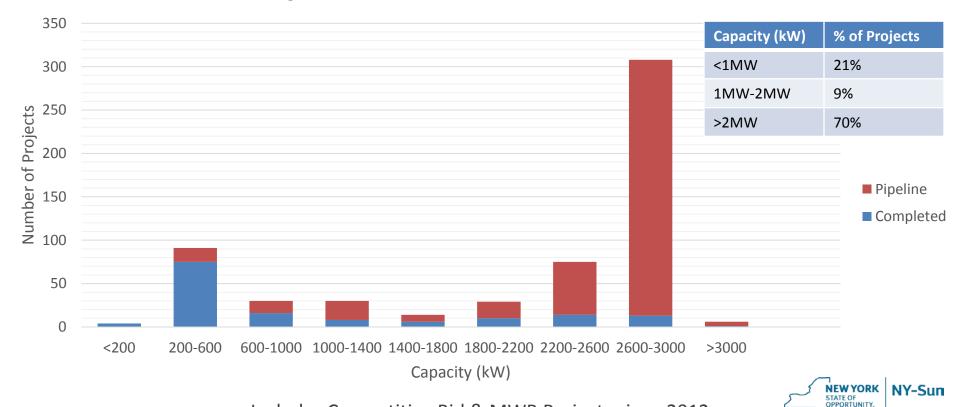
ROS Commercial & Industrial (MW)

| Sector | Pipeline | Completed | Total | Goal | Missing Capacity | Pipeline + Completed % of Goal |
|---------|----------|-----------|-------|------|---------------------|--------------------------------------|
| ROS C&I | 969 | 38 | 1007 | 1200 | 193 | 84% |
| *ROS CB | 81 | 61 | 142 | - | - | |
| Total | 1,050 | 99 | 1,149 | 1200 | 51 | 96% |



^{*}Competitive bid projects are included in the target capacity

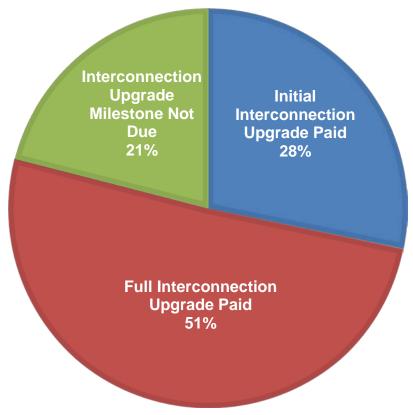
ROS C&I Project Trend



Includes Competitive Bid & MWB Projects since 2012

Interconnection Milestone Status - All C&I

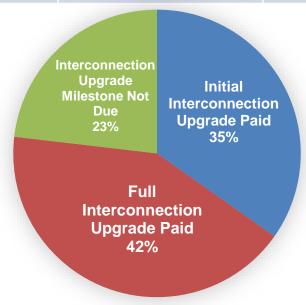
Pipeline





Interconnection Milestone Status - ROS CDG

| | Initial Interconnection Upgrade Paid | Full Interconnection Upgrade Paid | Interconnection Upgrade Milestone Not Due |
|---------------|--|-----------------------------------|--|
| Capacity (MW) | 263 | 318 | 175 |





Program Rule Revisions



Small Commercial

ROS

- Increase system cap from 200kW to 750kW
- 100% payment at PTO
- Increase project maturity requirements
- Eliminate blended incentive
- Potential adders

ConEd

- Consider combining both commercial programs
- Potential adders

LI

Potential adders



Commercial & Industrial

ROS

- Increase minimum system size to 750kW
- Exclude new CDG applications in O&R
- Increase project maturity to 25% interconnection upgrade payment
- Eliminate Strategic Location, battery, energy efficiency adders
- Eliminate Track 2 project maturity
- Accelerate performance payment from 25/25/25 to 50/25/25
- Consider full assignment of project
- Limit DC to AC ratio

ConEd

- Consider combining both commercial programs
- Eliminate Strategic Location, battery and efficiency adders
- Eliminate Track 2 project maturity
- Accelerate performance payment from 25/25/25/25 to 50/25/25



Incentive Structure Revisions



Revision Purpose

- Determine incentive rates with more precision and greater synergies with VDER
- Revise approach to project maturity for a more stable MWB program
- Accelerate PBI incentive payments to lower financing cost
- Encourage certain types of projects with adders in response to market constraints
- Accelerate NYC solar market with richer and more simplified incentive structure



Rest of State Small Commercial

Current Block

| Block | CBI (\$/W) <50kW 50-200kW | | Block Volume (MW-dc) |
|-------|------------------------------|------|-------------------------|
| 1 | 1 | 0.6 | 35 |
| 2 | 0.9 | 0.55 | 8 |
| 3 | 0.8 | 0.5 | 10 |
| 4 | 0.7 | 0.45 | 12 |
| 5 | 0.6 | 0.4 | 18 |
| 6 | 0.5 | 0.35 | 23 |
| 7 | 0.4 | 0.3 | 59 |
| 8 | 0.3 | 0.25 | 77 |
| 9 | 0.2 | 0.2 | 95 |
| 10 | 0.15 | 0.15 | 145 |

Proposed Option

| Block | CBI (\$/W) | Block Volume (MW-dc) |
|-------|------------|-------------------------|
| 8 | 0.45 | 40 |
| 9 | 0.35 | 65 |
| 10 | 0.25 | 90 |
| 11 | 0.15 | 157 |



Rest of State C&I

Current Block

| Block | PBI (\$/W) | | Block Volume (MW-dc) |
|-------|------------|----------|-------------------------|
| | Volumetric | Monetary | |
| 1 | 0.4 | 0.35 | 120 |
| 2 | 0.39 | 0.3 | 120 |
| 3 | 0.38 | 0.24 | 130 |
| 4 | 0.37 | 0.18 | 130 |
| 5 | 0.36 | 0.11 | 140 |
| 6 | 0.34 | 0.06 | 140 |
| 7 | 0.32 | 0.05 | 150 |
| 8 | 0.28 | 0.04 | 150 |
| 9 | 0.22 | 0.02 | 160 |
| 10 | 0.16 | 0.01 | 170 |
| 11 | 0.09 | 0.01 | 180 |

Proposed Options

| Option 1 | | |
|----------|------------|-------------------------|
| Block | PBI (\$/W) | Block Volume (MW-dc) |
| 12 | 0.28 | 90 |
| 13 | 0.23 | 110 |

| Option 2 | | |
|----------|------------|-------------------------|
| Block | PBI (\$/W) | Block Volume (MW-dc) |
| 12 | 0.25 | 205 |



ConEd Commercial

Current Blocks

| | Commercial Industrial | | | | |
|-------|-----------------------|-------------------------|--|--|--|
| 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 | | | |

| Small Commercial | | | | | |
|------------------|------------|------|-------------------------|--|--|
| Block | CBI (\$/W) | | Block Volume (MW-dc) | | |
| 1 | 1 | 0.6 | 6 | | |
| 2 | 0.9 | 0.55 | 4 | | |
| 3 | 0.8 | 0.5 | 7.5 | | |
| 4 | 0.7 | 0.45 | 15 | | |
| 5 | 0.6 | 0.4 | 10 | | |
| 6 | 0.5 | 0.35 | 15 | | |
| 7 | 0.4 | 0.3 | 35 | | |
| 8 | 0.3 | 0.25 | 45 | | |
| 9 | 0.2 | 0.2 | 73 | | |
| 10 | 0.15 | 0.15 | 101 | | |



ConEd Commercial - Combining SC and C&I into a Single MW Block Structure

Proposed Options

| Option 1 | | | | | |
|----------|------------|-------------------------|--|--|--|
| Block | CBI (\$/W) | Block Volume (MW-dc) | | | |
| 6 | 0.6 | 28 | | | |
| 7 | 0.5 | 50 | | | |
| 8 | 0.4 | 55 | | | |
| 9 | 0.3 | 70 | | | |
| 10 | 0.2 | 80 | | | |
| 11 | 0.15 | 108 | | | |
| Total | | 391 | | | |

| Option 2 - Capacity-based payment if under 200kW, performance-based if >200kW | | | | | |
|--|--------|------------|-------------------------|--|--|
| Block | (\$/W) | PBI (\$/W) | Block Volume (MW-dc) | | |
| 6 | 0.6 | 0.4 | 28 | | |
| 7 | 0.5 | 0.35 | 50 | | |
| 8 | 0.4 | 0.3 | 55 | | |
| 9 | 0.3 | 0.25 | 70 | | |
| 10 | 0.2 | 0.2 | 80 | | |
| 11 | 0.15 | 0.15 | 108 | | |
| Total | | | 391 | | |

Adders for parking canopies, landfills, brownfields, and affordable housing



Proposed Incentive Adders

- Brownfields/Landfills: Additional 20% of applicable block incentive rate
- Affordable Housing: TBD
- Parking canopies (ConEdison and Long Island): Additional 50% of applicable block incentive rate



Next Steps

- Today's presentation is for discussion purposes and informational feedback only
- Please provide comment and feedback on the presentation provided today to <u>commercial.industrialpv@nyserda.ny.gov</u> by January 12
- NYSERDA will review comments and present the revised proposal as soon as possible thereafter in January
- Given time limitations on today's meeting, we are asking for developer suggestions and thoughts on the following slide:



Submit Your Ideas

Program Rules:

- Increase project maturity requirements in all programs (Increase project maturity to 25% interconnection upgrade payment)
- System size modifications (ROS Small Commercial Increase system cap from 200kW to 750kW)
- Accelerate performance payment from 25/25/25/25 to 50/25/25 in C&I
- Incentive Cap in C&I (DC to AC ratio)
- Combining both ConEd commercial programs
- Eliminate blended incentive in ROS Small Commercial

• Program Structure:

- Types of adders (Brownfields, Landfills, Building Mounted, Solar Canopies, Affordable housing, Solar + Storage) and their respective amounts
- Incentive rates and block sizes
- Should rates vary by metering type (CDG, RNM, on-site) and/or amongst the utilities service territories
- Incentive structures (Declining blocks or single incentive rate in ROS)
- Transition mechanics and implementation processes
 - Projects that already have a NY-Sun award can't drop out of program and reapply to get a richer incentive



Thank you for your participation!

Stakeholder documents and information:

http://ny-sun.ny.gov/About/Stakeholder-Meetings.aspx

