



Department
of Public Service

Key State Policies Supporting Distributed Generation in New York

NYS PSC's Reforming the Energy Vision Proceeding (14-M-0101) is About:



Empowering
Customers to Better
Manage Their Energy
Use...



...through Animating
Markets for Distributed
Energy Resources...



...to Achieve Higher
System Efficiency, Lower
Environmental Impacts and
Increased Affordability.

REV's regulatory process is a component of New York's overall energy plan; a transformational program for NY



Overall REV Targets

- 40% reduction in GHG emissions from 1990 levels
- 50% electricity supply from renewable sources by 2030
- 600 trillion Btu increase in statewide energy efficiency from 2012 levels

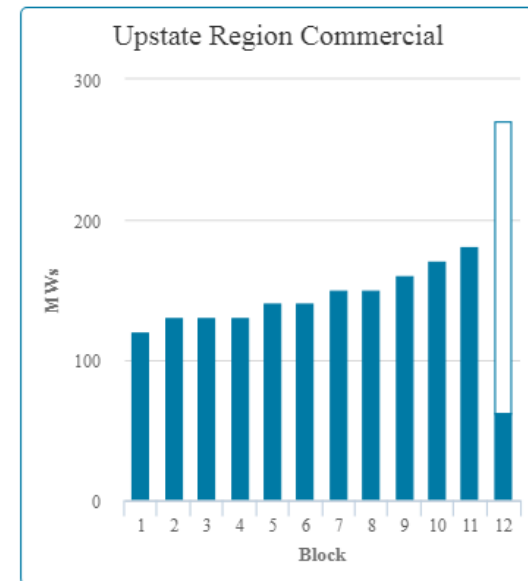
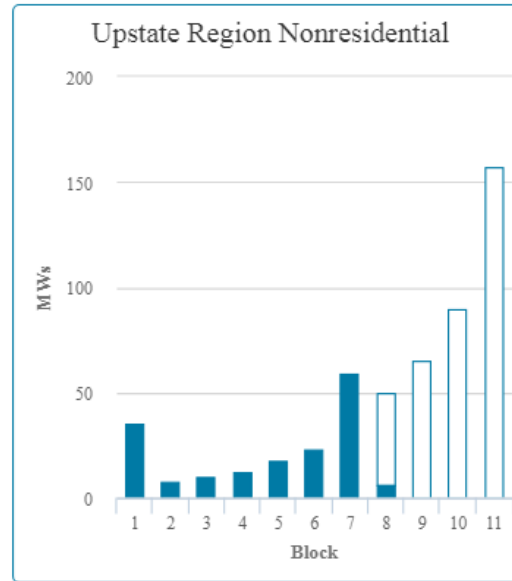
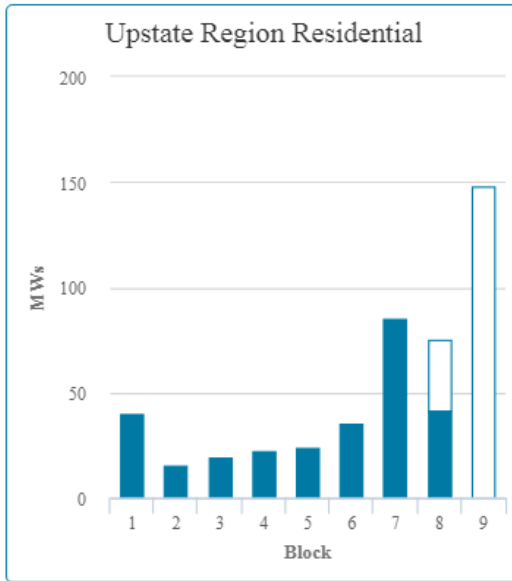
Storage Roadmap

- 1.5 GW by 2025
- The Staff Roadmap describes various options and pathways to this goal
- Under review with the Commission now

NY-Sun Program

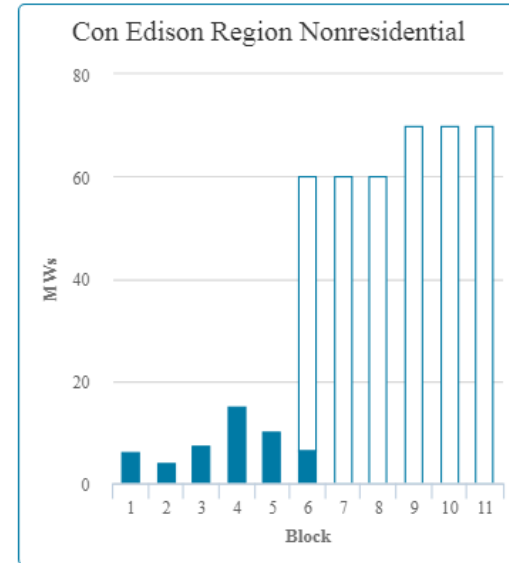
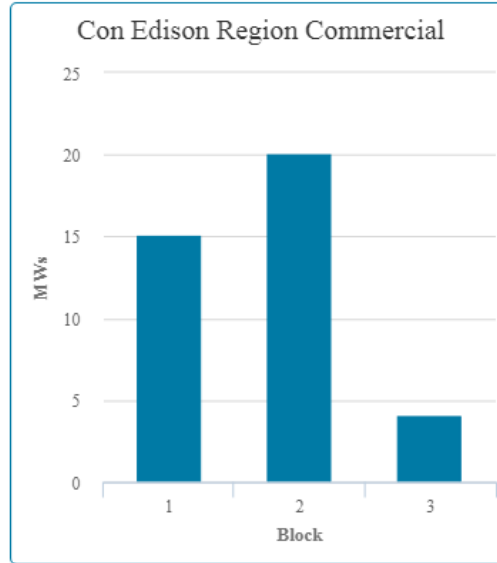
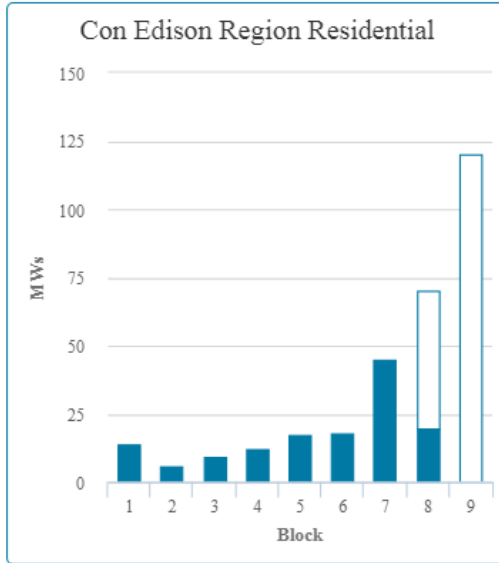
- NY-Sun offers incentives for commercial and residential solar
- \$1B budget
- Goals include: expand solar capacity, attract private investment, improve reliability
- Statewide goal of 3 GW by 2023

NY-Sun Upstate Dashboard



- Incentives step down over time as capacity goals are achieved
- Real-time dashboard provides transparency and predictability
- Incentives move separately per sector and geographic region, based on actual market activity

NY-Sun Con Edison Dashboard



NY-Sun Installation to Date

- Data from NYSERDA's NY-Sun Quarterly Performance Report (August 2018):
- NY-Sun supported installation of 619 MW of solar through June 30, 2018
- Installs for all NYSERDA-funded solar total 1117 MW through that date
- NY-Sun pipeline shows 975 MW “in the works”

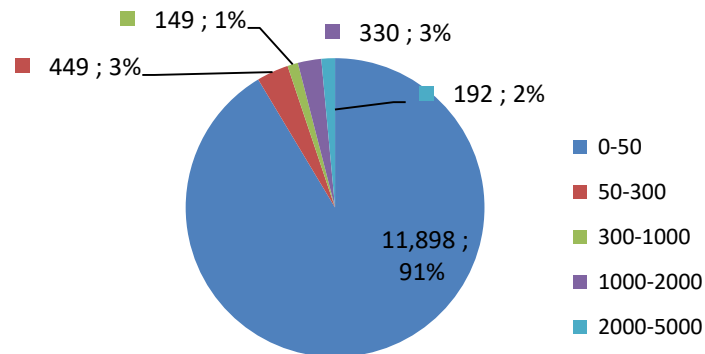
The SIR Interconnection Queue

- DPS consolidates utility queue data for distribution-level project proposals
- All applications, all programs and incentives
- Posted at [DPS SIR Inventory site](#)
- Updated roughly every month, with a lag
 - Today's data current through August 2018
- Data also available on utility web sites

PV Projects by kW Range

Company	kW Range					Total Projects	Total kW
	0-50	50-300	300-1000	1000-2000	2000-5000		
National Grid	1,350	109	31	76	115	1,681	731,112
Con Edison	3,523	136	37	8	3	3,707	85,992
Central Hudson	237	20	7	63	12	339	186,026
Orange and Rockland	414	13	9	53	6	495	141,120
NYSEG	350	43	8	94	36	531	351,638
RGE	77	6	1	30	20	134	140,646
PSEG	5,947	122	56	6	-	6,131	103,881
Total	11,898	449	149	330	192	13,018	1,740,414

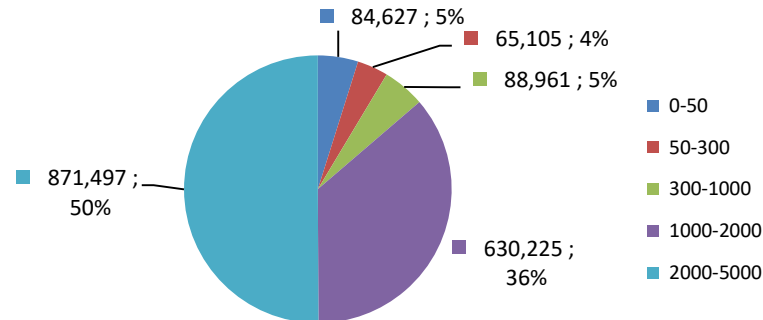
of Projects in Queue by kW Range (PV Only)



Number of kW (PV) by kW Range

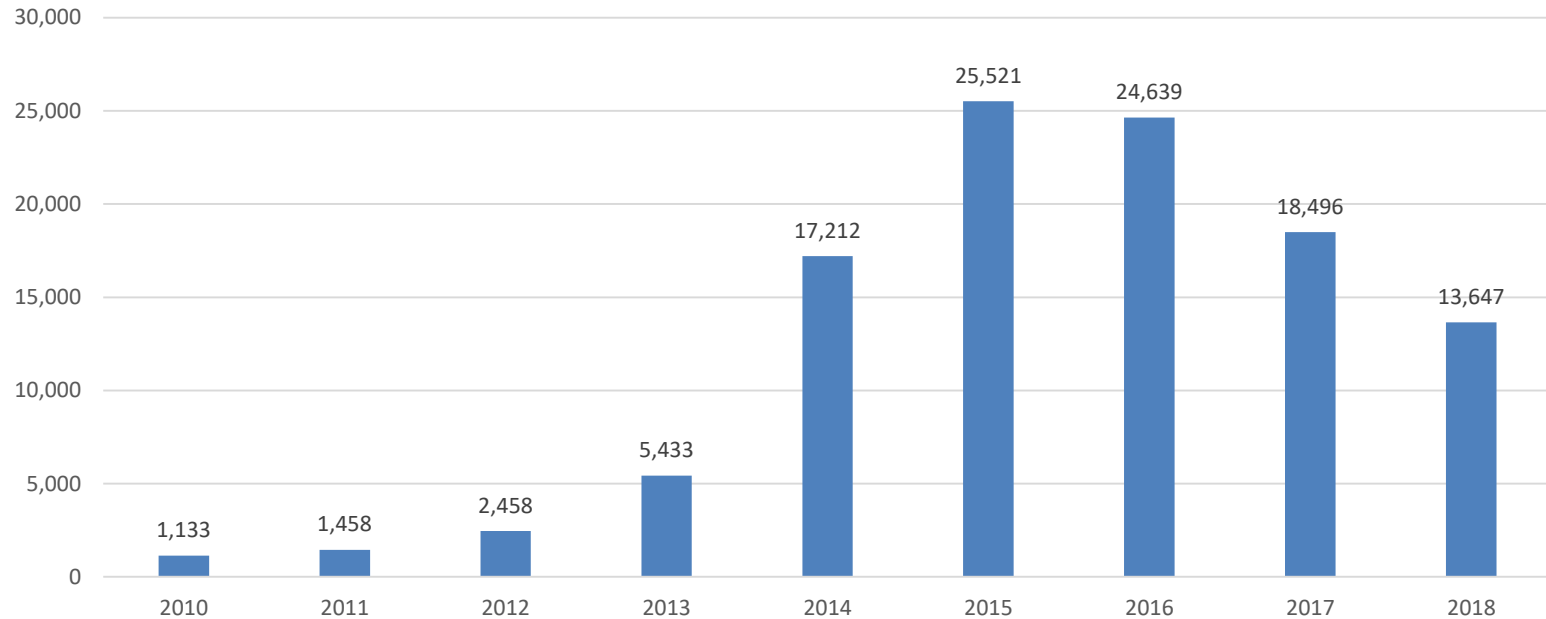
Company	kW Range					Total kW
	0-50	50-300	300-1000	1000-2000	2000-5000	
National Grid	11,353	17,469	18,088	142,685	541,517	731,112
Con Edison	21,775	15,958	21,984	13,815	12,460	85,992
Central Hudson	2,154	2,834	3,265	123,679	54,094	186,026
Orange and Rockland	3,162	1,748	4,915	102,825	28,470	141,120
NYSEG	2,987	6,969	6,687	181,544	153,451	351,638
RGE	700	957	912	56,572	81,505	140,646
PSEG	42,496	19,169	33,111	9,105	-	103,881
Total	84,627	65,105	88,961	630,225	871,497	1,740,414

Total kW in Queue by kW Range (PV Only)



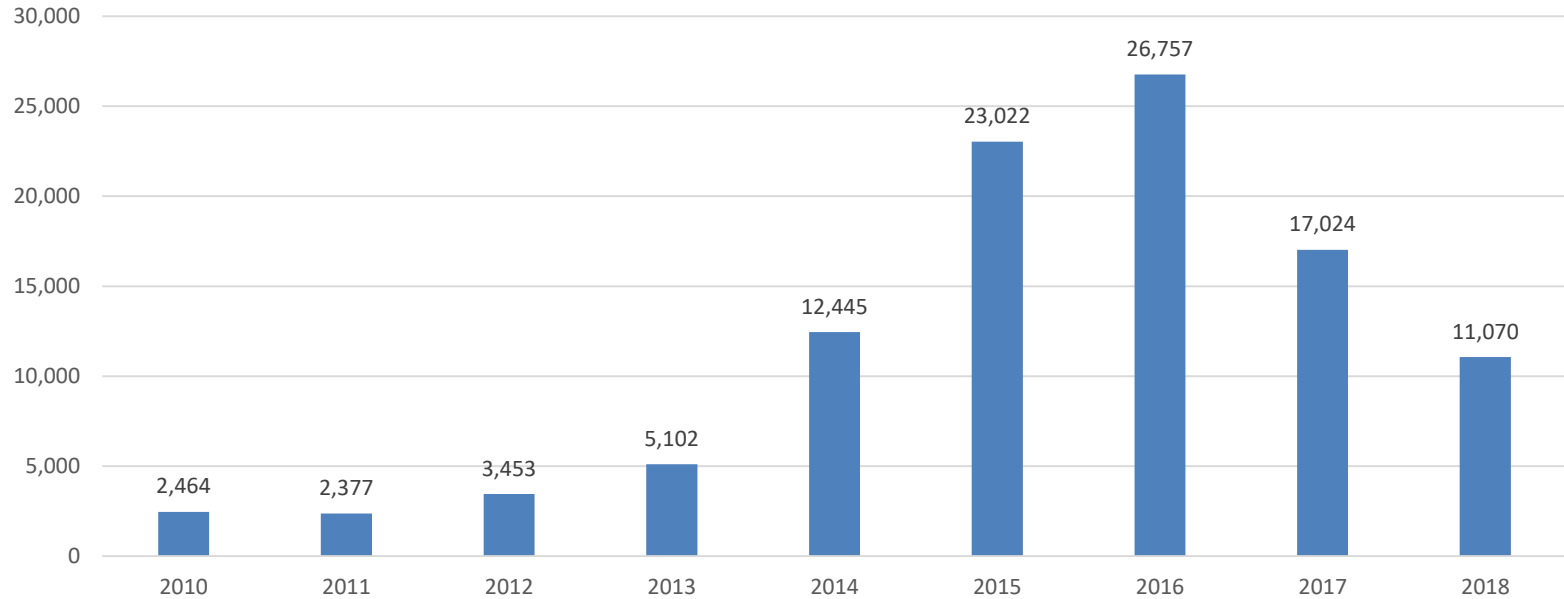
SIR Applications 2010-2018

PV ONLY - # Applications Submitted for ALL Companies



Projects In-Service 2010-2018

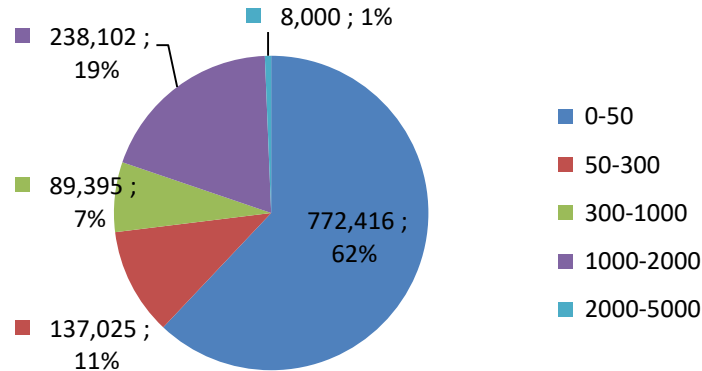
PV ONLY - # of Applications Completed - ALL Companies



MW In-Service to Date

Company	PV ONLY - Completed by kW Range (kW) to Date					Total
	0-50	50-300	300-1000	1000-2000	2000-5000	
National Grid	149,113	49,594	20,154	135,636	-	354,496
Con Edison	140,880	33,711	26,109	6,312	-	207,012
Central Hudson	62,618	6,259	6,094	6,295	-	81,266
Orange and Rockland	48,226	3,437	2,653	16,544	-	70,859
NYSEG	60,512	12,477	8,718	37,502	-	119,208
RGE	11,138	4,307	6,366	22,498	-	44,310
PSEG	299,930	27,241	19,301	13,316	8,000	367,788
Total	772,416	137,025	89,395	238,102	8,000	1,244,938

Completed by kW Range (kW)



Protecting Reliability

- Utility distribution planning
- Interconnection process
- Technical Working Group

Utility Distribution Planning

- Utilities are required to integrate distributed resources in their distribution planning
- Utilities have mapped their “hosting capacity”
 - Maps are available to project developers to guide them in selecting sites
- Increasing hosting capacity may be recognized in distribution system investment proposals
- More information is available in the utilities’ Distributed System Implementation Plans

Project Level Analysis

- New York Standardized Interconnection Requirements (SIR) apply to
 - New DG facilities sized up to 5 MW AC nameplate aggregated on the customer side of the PCC;
 - New energy storage, stand alone or combined with DG, also limited to 5 MW;
 - Modifications to an existing facility that affect the interface at the PCC.

SIR - Basic Process

- Developer submits application
- Utility conducts preliminary and supplemental screens
- Parties review results and make adjustments
- If no solution at screening stage, project proceeds to a full impact study = Coordinated Electric System Interconnection Review (CESIR)

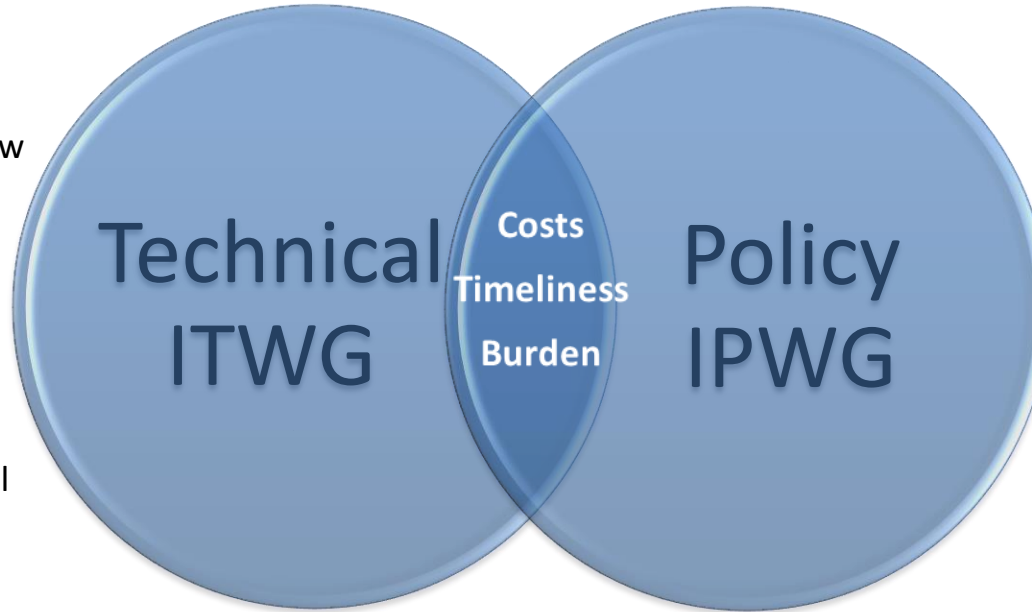
SIR - System Impact Study

- Goal of the CESIR is to identify impacts to utility system and determine the system modifications that are necessary to complete the interconnection
- Utility also develops cost estimates for system modifications
- Developer bears cost for modifications required to interconnect its project
- Developer has up to 180 business days to make payment or withdraw the application

Interconnection Working Groups

Technical

- Technical barriers & new technologies
- Consultants – EPRI & Pterra
- SIR screening
- Islanding Protection
- Monitoring and Control
- Voltage Flicker
- Energy Storage
- Metering Configurations



Policy

- Queue management methodology
- Communication
- Policy interpretation, timelines, and stage gates
- VDER / NEM grandfathering
- Cost allocation

DPS Website for DG / DER

[Department of Public Service – DG Page](#)

[http://www.dps.ny.gov/Electric/
DistributedGeneration](http://www.dps.ny.gov/Electric/DistributedGeneration)

More Info



Distributed Generation Information

New York State Standardized Interconnection Requirements

NYS Standardized Interconnection Requirements (Latest Version)
Equipment Certified Since 2011
Equipment Certified Prior to 2011

EPRI Report – Interconnection of DG in NY State (September 2015)
IOAP Report and Functional Specification (September 2016)
VDER Phase One CDG Tranches

[Interconnection Technical Working Group Information](#)

[Interconnection Policy Working Group Information](#)

[Interconnection Ombuds Information](#)

[SIR Inventory Information](#)

[Utility Red Zone Maps and Other Useful Links](#)

NYS Interconnection Team

Interconnection Technical Working Group Issues:

Jason Pause (DPS)

518-486-2889

jason.pause@dps.ny.gov

Dave Crudele (NYSERDA)

518-862-1090

dave.crudele@nyserda.ny.gov

Interconnection Ombudsperson(s) & Policy Working Group Issues:

Elizabeth Grisaru (DPS)

518-486-2653

elizabeth.grisaru@dps.ny.gov

Houtan Moaveni (NYSERDA)

718 744-4106

houtan.moaveni@nyserda.ny.gov