



# **Initiation of a Proceeding to Investigate Approaches to Mitigate Solar Development Volatility pursuant to N.J.S.A. 48:3-87(d)(3)(a)**

**Charlie Garrison  
December 11, 2012  
Renewable Energy Meeting  
Trenton, NJ**



## Solar Installed Capacity Data

- The preliminary installed solar capacity as of 11/30/12 is approximately 950 MW.
  - Approximately 31 MW installed in current month.
- The preliminary solar capacity project pipeline as of 11/30/12 is approximately 750 MW.
  - The pipeline capacity increased approximately 11 MW from 739 MW on 10/31/12.



# NJCEP Solar Pipeline Plus Installed Projects History

<b>NJCEP Solar Pipeline Plus Installed Projects History as of 11/30/12</b>			
<b>As Of</b>	<b>MW Installed</b>	<b>MW Pipeline</b>	<b>Combined MW</b>
8/31/2011	430.4	541.2	971.6
9/30/2011	447.7	569.3	1,017.0
10/31/2011	490.5	571.7	1,062.2
11/30/2011	531.7	599.4	1,131.1
12/31/2011	565.9	618.7	1,184.6
1/31/2012	649.9	548.0	1,197.1
2/29/2012	688.3	542.3	1,231.4
3/31/2012	730.0	526.1	1,256.5
4/30/2012	770.0	510.0	1,280.0
5/31/2012	802.8	560.7	1,363.5
6/30/2012	831.9	590.3	1,422.2
7/31/2012	852.6	756.2	1,608.8
8/31/2012	876.1	806.9	1,683.0
9/30/2012	900.8	740.0	1,640.8
10/31/2012	918.2	738.9	1,657.1
11/30/2012	950.0	750.3	1,700.3

Preliminary values for 11/30/12

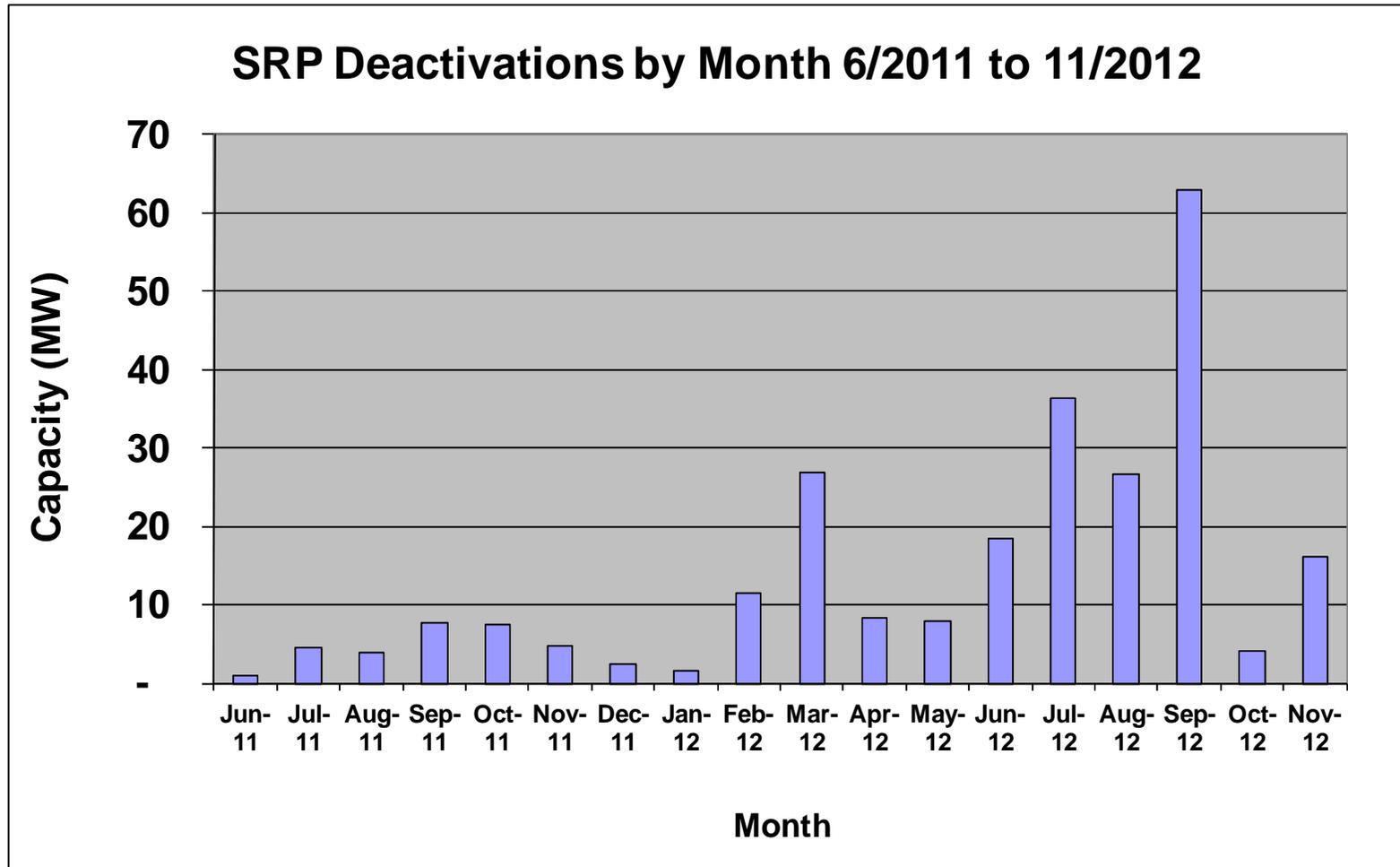


# SRP Deactivations by Month

SRP Deactivations by Month			
Year	Month End	Project Qty	Capacity (kW)
2011	Aug-11	29	3,941
2011	Sep-11	77	7,604
2011	Oct-11	120	7,485
2011	Nov-11	46	4,689
2011	Dec-11	80	2,444
2012	Jan-12	40	1,496
2012	Feb-12	86	11,552
2012	Mar-12	150	26,976
2012	Apr-12	116	8,323
2012	May-12	133	7,928
2012	Jun-12	122	18,540
2012	Jul-12	228	36,383
2012	Aug-12	147	26,684
2012	Sep-12	346	62,985
2012	Oct-12	35	4,126
2012	Nov-12	360	16,066



# SRP Deactivations by Month





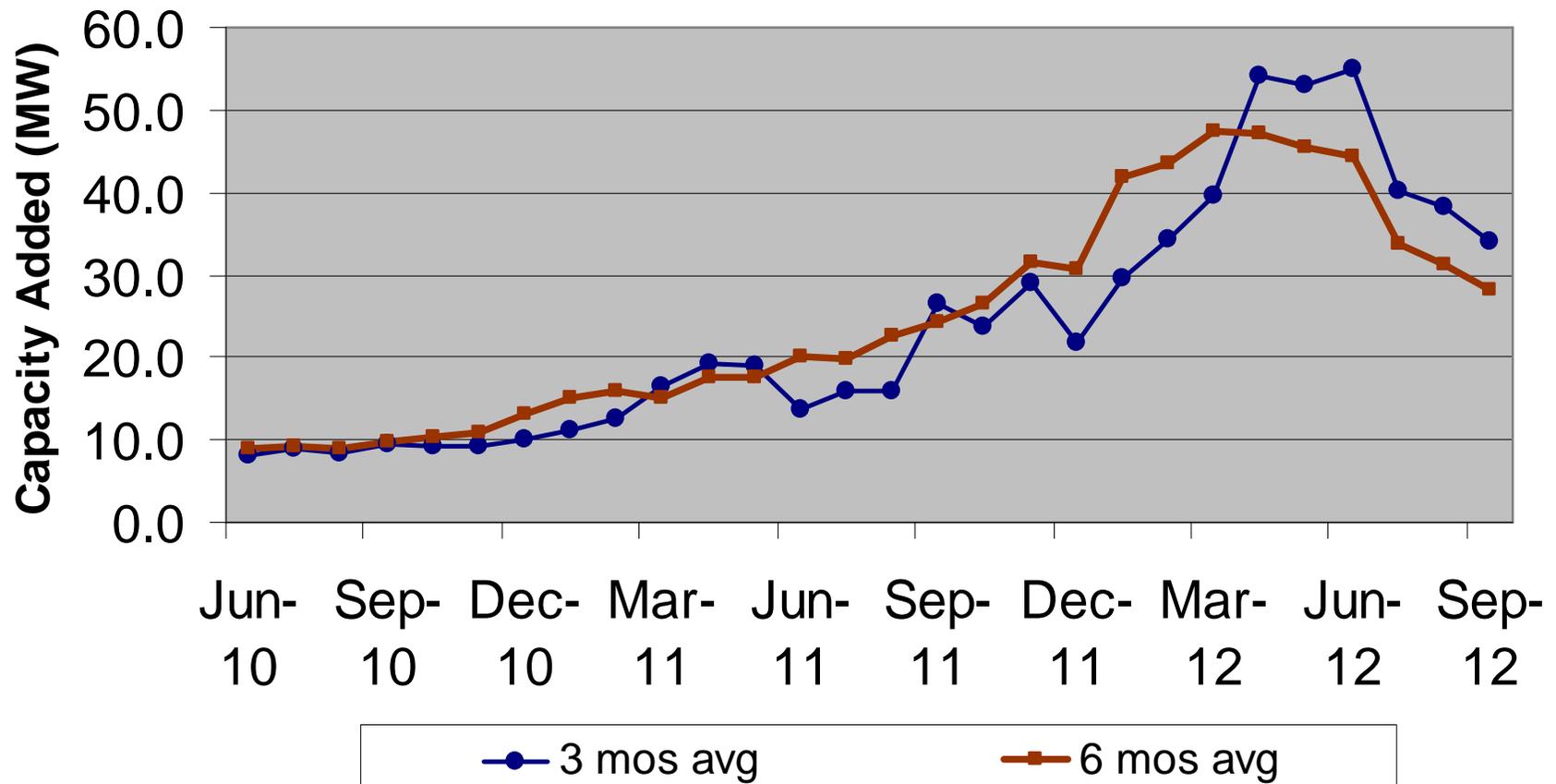
# Solar Capacity By Interconnection Type

<b>Installed Solar Projects as of 10/31/12</b>				
Interconnection Type	Qty	System Size (kW)	Percent	Avg System Size (kW)
Behind the meter	18,401	724,914.8	78.9%	39.4
Direct Grid Supply	92	193,292.1	21.1%	2,101.0
<b>Totals</b>	<b>18,493</b>	<b>918,206.8</b>	<b>100.0%</b>	<b>49.7</b>
<b>Solar Project Pipeline as of 10/31/12</b>				
Interconnection Type	Qty	System Size (kW)	Percent	Avg System Size (kW)
Behind the meter	4,825	270,113.2	36.6%	56.0
Direct Grid Supply	50	468,840.6	63.4%	9,376.8
<b>Totals</b>	<b>4,875</b>	<b>738,953.8</b>	<b>100.0%</b>	<b>151.6</b>
<b>Totals For All Projects</b>	<b>23,368</b>	<b>1,657,160.7</b>		<b>70.9</b>



# NJCEP Moving Average of Solar Capacity Added

## 3 & 6 Month Moving Average of Capacity Added





# NJCEP Solar Generation Forecast

*This data is provided for informational purposes only. Past levels of installed capacity rates are not predictive of future values, and any persons considering investment in the solar market should perform their independent due diligence.*



# NJCEP Solar Installed Capacity Forecast - As of 10/31/12

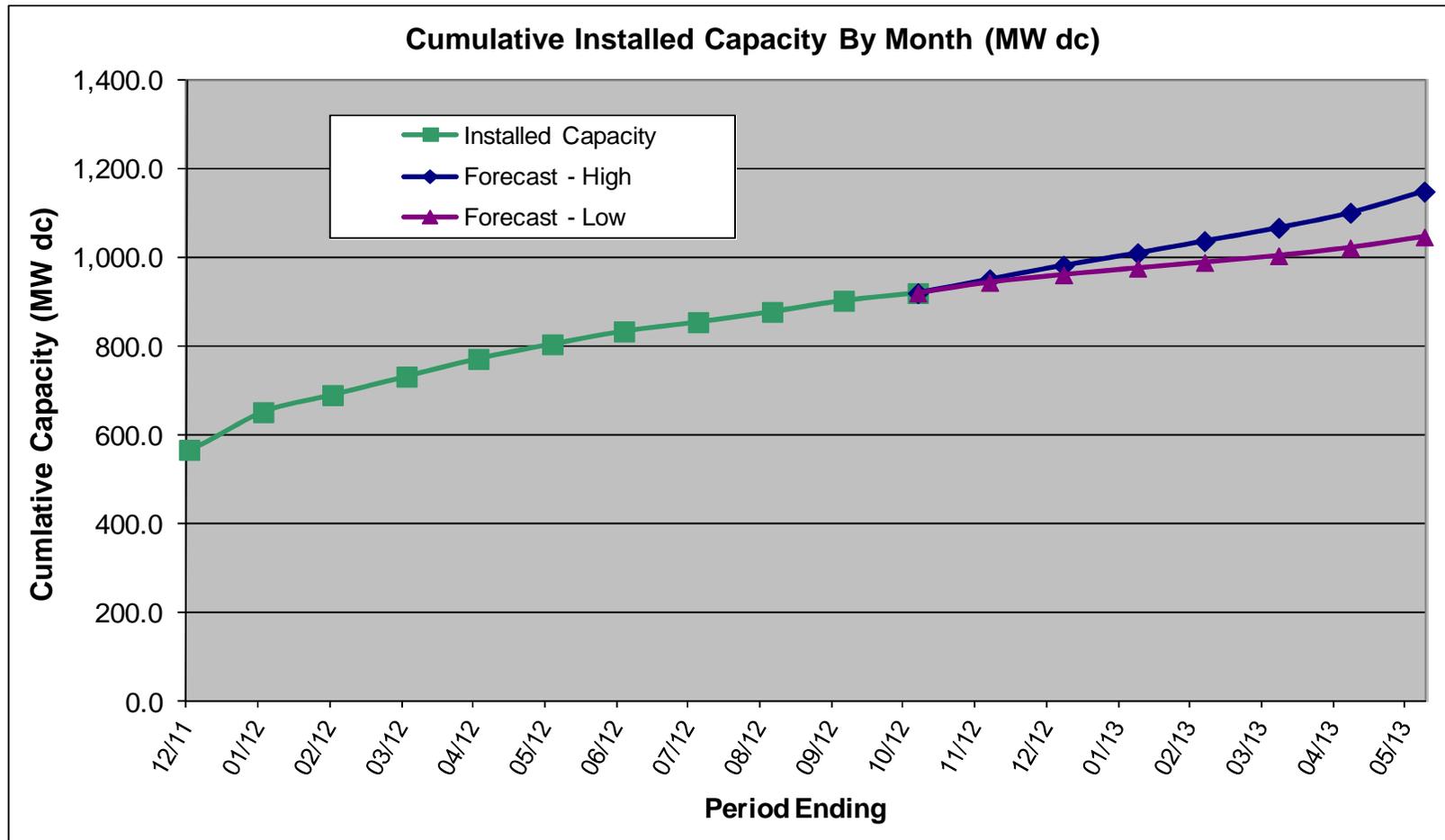
Cumulative Installed Capacity (MW dc)										
End Date	08/31/12	09/30/12	10/31/12	11/30/12	12/31/12	01/31/13	02/28/13	03/31/13	04/30/13	05/31/13
Low Forecast	876.1	900.9	918.2	942.2	959.2	974.2	987.2	1,002.2	1,020.2	1,044.6
High Forecast	876.1	900.9	918.2	949.2	980.2	1,008.2	1,035.2	1,065.2	1,099.2	1,147.3

The 918.2 MW of solar capacity installed as of 10/31/12 and the additionally forecast installed solar capacity for the remainder of Energy Year 2013 is estimated to be capable of producing approximately 1,104,800 to 1,131,600 SRECs during Energy Year 2013.

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# NJCEP Solar Installed Capacity Forecast - As of 10/31/12





# NJCEP Solar Generation Forecast

## RPS Requirement By Energy Year

Energy Yr	RPS Req	Status
2012	442,000	Actual
2013	596,000	Actual
2014	1,660,500	Estimated
2015	1,984,500	Estimated
2016	2,227,500	Estimated

Energy Yr	Retail Sales Est (MWh)	RPS %	Est RPS Req (MWh)
2014	81,000,000	2.05%	1,660,500
2015	81,000,000	2.45%	1,984,500
2016	81,000,000	2.75%	2,227,500

Note: The Retail Sales estimates shown above were used to estimate RPS MWh requirement for EY 2014-2016



# NJCEP Solar Generation Forecast

## Forecasted MW Capacity Added By Energy Year - As of 10/31/12

Energy Yr	Low	Med	High
2012	442.0	442.0	442.0
2013	250.2	279.2	329.2
2014	292.7	443.6	576.6
2015	216.0	270.0	337.5
2016	182.3	202.5	253.1

## Assumptions used in forecast of annual capacity added for each EY expressed as a percent of RPS requirement

Energy Yr	Low	Med	High
2012	390%	390%	390%
2013	195%	217%	256%
2014	33%	50%	65%
2015	80%	100%	125%
2016	90%	100%	125%



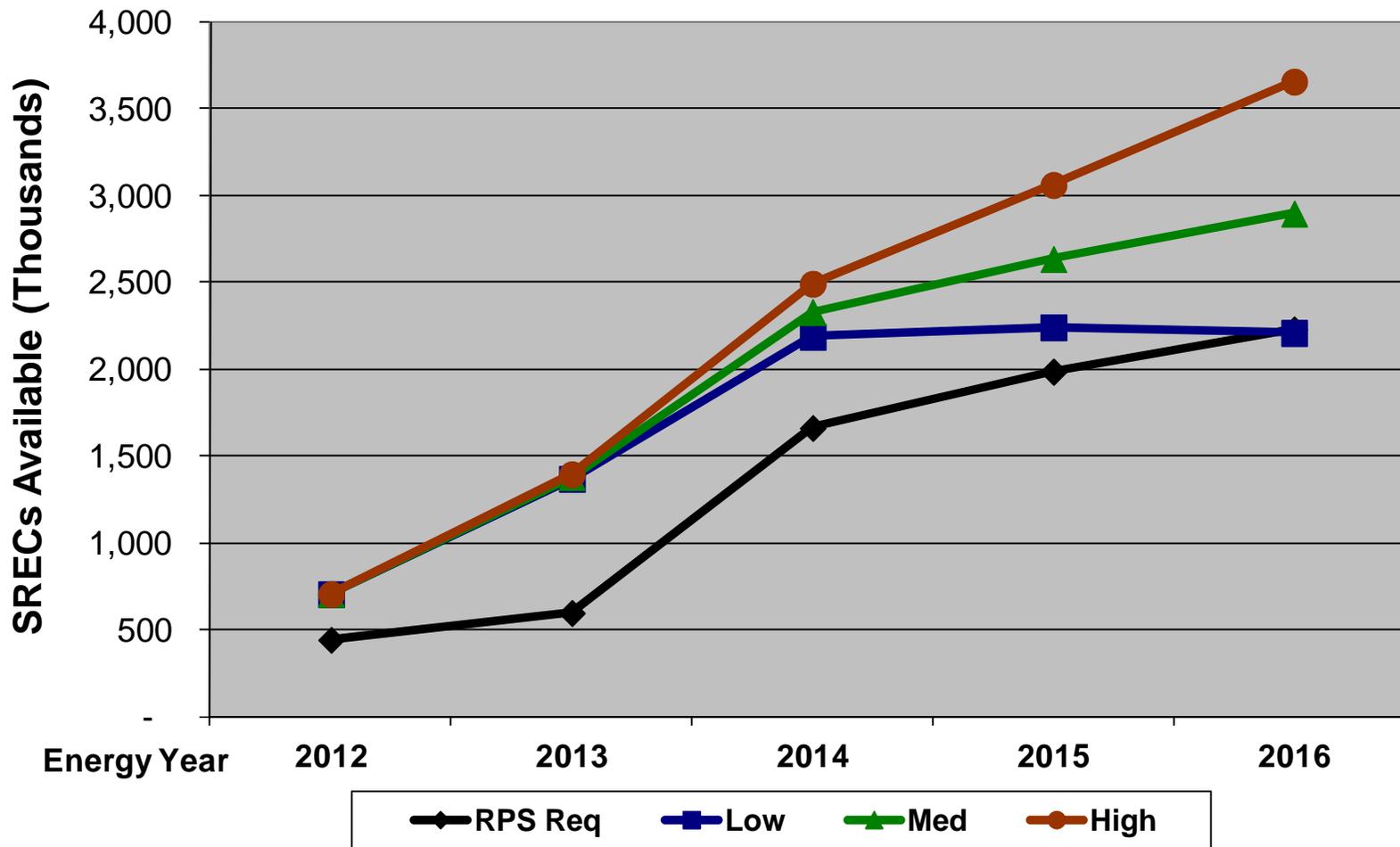
# NJCEP Solar Generation Forecast Summary By Energy Year - As of 10/31/12

Energy Yr (RPS Req)	Item	Low	Med	High
<b>EY2012 (442 GWh)</b>	Est Avail (MWh)	704,688	704,688	704,688
	% of RPS Requirement	<b>159.4%</b>	<b>159.4%</b>	<b>159.4%</b>
	MW Difference	218.9	218.9	218.9
<b>EY2013 (596 GWh)</b>	Est Avail (MWh)	1,367,488	1,377,688	1,394,288
	% of RPS Requirement	<b>229.4%</b>	<b>231.2%</b>	<b>233.9%</b>
	MW Difference	642.9	651.4	665.2
<b>EY2014 (1660.5 GWh)</b>	Est Avail (MWh)	2,184,788	2,327,188	2,489,788
	% of RPS Requirement	<b>131.6%</b>	<b>140.1%</b>	<b>149.9%</b>
	MW Difference	436.9	555.6	691.1
<b>EY2015 (1984.5 GWh)</b>	Est Avail (MWh)	2,239,388	2,632,388	3,058,288
	% of RPS Requirement	<b>112.8%</b>	<b>132.6%</b>	<b>154.1%</b>
	MW Difference	212.4	539.9	894.8
<b>EY2016 (2227.5 GWh)</b>	Est Avail (MWh)	2,207,388	2,893,988	3,653,288
	% of RPS Requirement	<b>99.1%</b>	<b>129.9%</b>	<b>164.0%</b>
	MW Difference	(16.8)	555.4	1,188.2



# NJCEP Solar Generation Forecast

## Forecasted SRECs Available By Energy Year



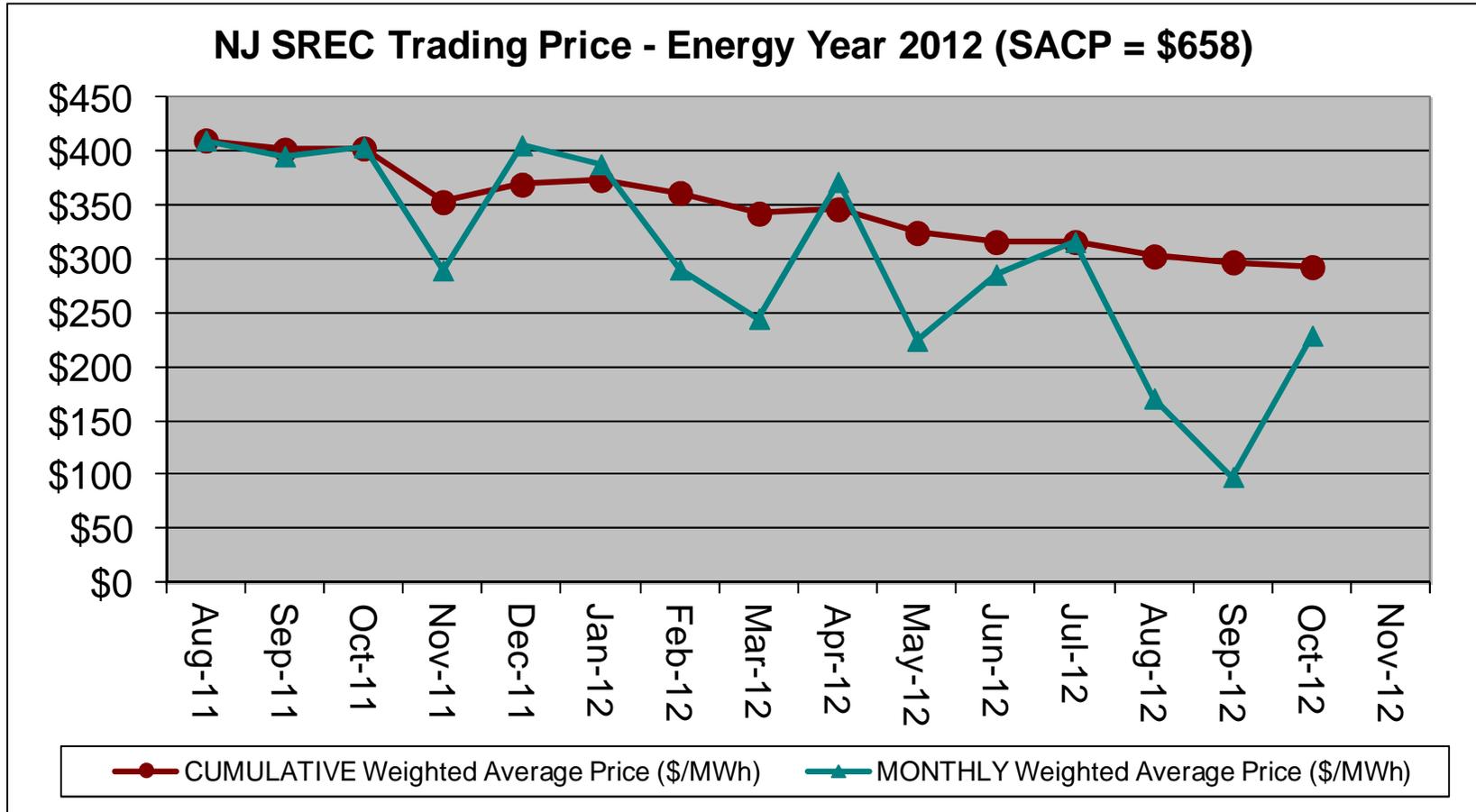


# Current SREC Trading Statistics Energy Year 2012

EY 2012 SACP= \$658			SREC Quantity		Monthly		Cumulative	
Month	Year	Active kW DC	Issued in Month	Traded in Month	High (\$/MWh)	Low (\$/MWh)	# of SRECs Traded	Weighted Avg Price (\$/MWh)
Oct	2012	866,850	3,079	68,533	\$ 658	\$ 48	1,030,191	\$292.86
Sept	2012	850,743	3,247	25,439	\$ 500	\$ 50	961,658	\$297.39
Aug	2012	835,937	9,677	86,222	\$ 613	\$ 50	936,219	\$302.81
Jul	2012	814,527	18,311	292,185	\$ 640	\$ 50	849,997	\$316.18
Jun	2012	784,166	113,299	121,355	\$ 635	\$ 85	557,812	\$316.19
May	2012	740,637	102,942	78,459	\$ 635	\$ 50	436,457	\$324.60
Apr	2012	690,760	69,223	48,617	\$ 640	\$ 75	357,998	\$346.55
Mar	2012	668,785	60,685	50,701	\$ 635	\$ 100	309,381	\$342.56
Feb	2012	629,663	43,636	37,581	\$ 650	\$ 112	258,680	\$361.67
Jan	2012	522,067	42,745	50,186	\$ 669	\$ 115	221,099	\$373.75
Dec	2011	488,422	40,592	52,716	\$ 658	\$ 115	170,913	\$369.46
Nov	2011	443,719	36,897	52,024	\$ 650	\$ 100	118,197	\$353.21
Oct	2011	425,861	34,467	34,724	\$ 658	\$ 120	66,173	\$403.07
Sept	2011	413,944	45,941	18,412	\$ 675	\$ 50	31,449	\$401.90
Aug	2011	395,975	48,535	12,252	\$ 665	\$ 100	13,037	\$410.48
Jul	2011	363,102	37,738	785	Due to low trade volume, the July trades are reported with the pricing data for August.			
	<b>Total</b>		<b>711,014</b>	<b>1,030,191</b>				



# Current SREC Trading Statistics Energy Year 2012





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NJ SREC Trading Statistics for each Energy Year

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