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To: Members of the House Committee on Consumer Affairs

From: Astrum Solar, Inc.

Re: HB 1580 – SUPPORT

Date: November 15, 2011

Astrum Solar is the largest installer of residential solar systems in Pennsylvania, and one of the largest in the eastern United States. Serving homeowners and small businesses in Pennsylvania since 2009, Astrum Solar employs approximately 50 Pennsylvania residents, providing high-skilled, high-paying local jobs. We are one of approximately 350 solar installers serving the residential solar market in Pennsylvania. Astrum respectfully requests a favorable report on HB 1580, which will help to preserve Pennsylvania jobs in the solar industry.

- According the 2011 National Solar Jobs Census, Pennsylvania ranks # 4 in the nation in number of solar Jobs, with 4,703 jobs. We are one of approximately 350 Residential solar installers in the state.
   There are also Commercial installers, Utility scale installers, Manufacturers, and supporting service companies.
- If there is no change to the solar carve-out in Pennsylvania's Alternative Energy Portfolio Standard
  ("AEPS"), no new solar will need to be built in Pennsylvania for the next four years. As of the end of
  October 2011, 146.4 MW of solar capacity was registered and eligible for compliance. This amount of
  solar already meets the compliance needs through 2014-2015.
- Without an adjustment to the AEPS, the Pennsylvania solar industry effectively will be shuttered. We
  and others in the solar industry will be forced to reallocate resources and severely scale back our
  business activities in Pennsylvania unless the market can be stabilized.
- There is no longer a backup for the solar industry. The PA Sunshine solar grant program that had been
  an alternative mechanism for incentivizing solar expired in August 2011, with new applications being put
  on a waitlist in case of cancellations.
- Shuttering the solar industry now and ramping back up in three years is expensive, inefficient, and
  results in lost jobs today. Even without passage of House Bill 1580, Pennsylvania utilities will be
  required to meet a solar requirement of 0.5% of sales in 2021 and beyond. Passage of House Bill 1580
  creates a smooth ramp up to this requirement.

House Bill 1580 will not increase the overall solar requirement in Pennsylvania, but instead shifts the requirement forward so that the solar energy industry can be sustained and continue to grow. Passage of this important bill will ensure the continued development of the solar industry in Pennsylvania and will preserve thousands of highly-skilled, high-paying jobs.

Pennsylvania AEPS Solar Carve-Out Regulrements, 2011 - 2015, Comparison to Other States

Energy Year	PA RPS Solar Requirement	Maryland	New Jersey*	Ohio	Massachusetts*
2012	0.033%	0.10%	0.52%	0.060%	0.163%
2013	0.051%	0.20%	0.69%	0.090%	0.278%
2014	0.084%	0.30%	0.88%	0.120%	0.425%
2015	0.144%	0.40%	1.08%	0.150%	0.611%

<sup>\*</sup>Estimates based on conversion from requirements expressed in GWH, not in percentages



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### Other Bill Highlights

# **Closing the State's SREC Borders**

 Without passage of House Bill 1580, Pennsylvania ratepayers will be paying for solar development in other states. House Bill 1580 closes Pennsylvania's borders – just as neighboring states have done – ensuring that solar dollars and solar jobs will remain in the state.

### **Utility Concerns Addressed**

- House Bill 1580 and amendments proposed by Rep. Ross address several concerns raised by the utilities:
  - Establishment of a solar alternative compliance payment ("ACP") allows utility companies to plan, and increases customer confidence.
  - o Utilities can get SRECs from out-of-state if there are not enough in-state to meet compliance.
- Grandfathers out-of-state solar systems already registered under the AEPS.



#### APPENDIX

1. Solar Capacity and Pennsylvania's AEPS: Table 1 below shows the current solar AEPS. As of the end of October 2011, 146.4 MW of solar capacity was registered and eligible for compliance.

Table 1: Pennsylvania AEPS Solar Carve-Out Requirements, 2011 - 2015

Energy Year	RPS Solar Requirement	Projected SRECs Required (MWh)	Projected Capacity Required (MW)
2012	0.0325%	48,431	40.4
2013	0.0510%	77,139	64.3
2014	0.0840%	128,958	107.5
2015	0.1440%	224,388	187.0

Source: SRECTrade.com

2. Alteration to the Solar RPS: House Bill 1580's adjustment to the solar carve-out is presented in Table 2, below. The figures in bold represent the small adjustment proposed under the bill.

Table 2: Proposed Solar Carve-Out Adjustment under HB 1580

Compliance Year	Current Requirement	Proposed Requirement	Compliance Year	Current Requirement	Proposed Requirement
2012	0.0325%	0.0325%	2017	0.2933%	0.2933%
2013	0.0510%	0.1500%	2018	0.3400%	0.3400%
2014	0.0840%	0.1700%	2019	0.3900%	0.3900%
2015	0.1440%	0.2041%	2020	0.4433%	0.4433%
2016	0.2500%	0.2500%	2021	0.5000%	0.5000%

# 3. Economic Benefits of Solar Photovoltaic (PV) Development:

- The development of solar grows the energy workforce of the state more than any other energy source. As shown in Figure 1, for the same amount of energy produced, Solar PV creates twice as many jobs as any other source of energy, and nearly nine times as many jobs as coal or natural gas.
- Solar also produces more jobs per dollar invested than any other form of energy. A 2001 study by the Renewable Energy Policy Project found that over a ten-year period, an investment in solar PV created nearly 150% more jobs than the same investment in coal-fired generation. This conclusion is supported by other studies, including studies conducted by the Sandia National Laboratory and others.
- Increased solar energy production has other broad economic benefits: reduction of peak demand, saving ratepayers money by offsetting highly expensive power; avoiding the construction of new, expensive upgrades to the electricity grid and displacing harmful emissions of NOx, SOx and other chemicals.

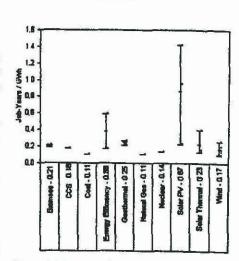


Figure 1: Direct employment resulting from the production of 1 GWh of selected types of energy. Source: UC Berkeley