MDV-SEIA

Solar Flare

MD-DC-VA
Solar Energy Industries Association

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In This Issue

Board of Directors

Join us on May 3rd for a Networking Happy Hour

MDV-SEIA and Kenergy Solar invite you to a solar industry networking happy hour on the evening of **May 3rd beginning at 6 p.m** after the board meeting. Join fellow professionals and MDV-SEIA board members to share industry perspectives and updates, swap stories and simply relax.

Kenergy Solar is located at 7059 Blair Rd NW, Suite 300, Washington, DC 20012. The office is one block from the Takoma Metro Station on the Red Line. Parking is available for those who plan to drive (2 parking lots and street parking.)

Congratulations!

Zach Axelrod of Skyline Innovations and Tony Clifford of Standard Solar have been appointed to the national SEIA board. Francis Hodsoll of E&E Frontiers has been appointed as an alternate for State Representative to the SEIA board.

Save the Date!

The 2012 Solar Energy Focus Conference will be held November 13-14, 2012 in DC.

Member Spotlights:

STANDARD SOLAR

SECURE FUTURES
energy environment economy

Join MDV-SEIA on Facebook, Twitter, and LinkedIn for the latest solar news, action alerts, legislative updates, and events in the mid-Atlantic region

Collaboration between MDV-SEIA & SEIA Leads to Success of MD Solar Bill

A Legislative Triumph at the Eleventh Hour

During the 2012 Maryland legislative session, MDV-SEIA partnered with SEIA, as well as other clean energy-oriented organizations, to successfully pass legislation that will provide stability and accelerate jobs and investment.

This legislation— the most significant energy legislation passed during session— will accelerate the achievement of Maryland's 2% solar energy requirement by two years to 2020. Though H.B. 1187 passed both the Economic Matters Committee and the entire House unanimously, there was a tough fight in the Senate Finance Committee for the bill's passing. Initially the bill was voted down in the Senate Finance Committee, and it was on life-support at best. However, a refusal to accept defeat by MDV-SEIA, SEIA and numerous advocates resulted in a reconsideration of the bill - technically the Committee Chair separated the Senate and House versions of the Bill voting on a Senate only version. After a favorable vote in committee, the bill advanced to the Senate at large, where it passed 37-9. MDV-SEIA's Francis Hodsoll deems the legislation a "huge victory" that "shows that Maryland is committed to the benefits of solar: green jobs, local investment, cleaner environment, and new energy technologies."

The Need for a Market Fix in Maryland

MDV-SEIA and SEIA developed and advocated this legislation to address the looming boom-bust cycle. Prior to this bill the statute created a hockey stick demand curve providing for a slowdown and then a significant ramp up. Additionally, several large-scale projects are coming on-line which were contracted by the State. These projects will saturate the supply. The solar industry witnessed this in states like Pennsylvania where aggressive state incentives created the unintended negative externality of a saturated market unappealing to both investors and developers.

MDV-SEIA and several of its members collaborated with solar and energy industry stakeholders to perform an in depth cost-benefit analysis on the proposed legislation.

The benefits included the acceleration of 10,000 jobs across Maryland's economy by 2018, over $3 billion in investment, $140 million in tax revenue to the state, and a total of 1,200 MW of solar energy. All at a minimal average cost of $.19 per month for the residential ratepayer.

A True Team Effort

While numerous solar champions provided significant support to the effort several of MDV-SEIA's Board of Directors deserve special mention: Mike Healy, Kerinia Cusick, Tony Clifford, Colin Murchie, Rick Peters, and Ken Stadlin. These solar advocates spent countless hours meeting and testifying with key legislators to support and lobby the bill. MDV-SEIA interns organized Maryland Solar Social Media Day after the House subcommittee hearing, which attracted member organizations, external organizations, and the attention of national companies and organizations. An all-of-the-above strategy was implemented to make sure the bill gained traction.

The solar industry will begin to see some significant changes in financing and Federal subsidization policies. The sunsetting of the federal tax-credit in 2016 and more recently the expiration of the 1603 Treasury grant program have led some to predict a slowdown in the astronomical growth the industry witnessed for the last four years. Thus, policies like the one introduced in Maryland, which sustain stable, predictable, and profitable markets in the long term will help drive continued investment into a market worth over $240 billion; growing over 500% in just four economically depressed years.

Hodsoll summed up the root of the bill's success well, "This important fix to the Maryland market was possible because the industry as a whole put aside all parochial issues and worked together. This victory in Maryland is a testament to what can be achieved when we take the time to do the very hard work of creating consensus within the industry."

MDV-SEIA and SEIA thank the following partner organizations for their support of the bill:

Chesapeake Climate Action Network
Delaware Solar Energy Coalition
IEC Chesapeake
Maryland Clean Energy Center
Maryland League of Conservation Voters
Maryland Sierra Club
Vote Solar Initiative

MDV-SEIA's lobbyist Bryson Popham debriefs solar advocates and MDV-SEIA members regarding legislative strategy in Annapolis.

Virginia Policy Update

With Late Breaking News

MDV-SEIA tracked about 12 bills addressing various renewable energy initiatives. Mitch King President of Old Mill Power Company, and one of MDV-SEIA's board members, actively pursued nine bills and three were deferred until next year's legislative session.

The legislature successfully passed legislation (SB 382- McEachin) that would require utilities participating in the RPS program to publicly disclose the states where the renewable energy was generated, the decades in which the generation units were put into service, and the type of resource used to generate the renewable energy.

Another bill, SB 627 nullified restrictive covenants on solar installations. Community associations can no longer prohibit an owner to install a solar energy generation system, but can still establish "reasonable restrictions concerning, size, place, and manner of placement of such solar energy collection devices." The law remains slightly ambiguous as to the definition of what is "reasonable", however it is a step in the right direction and can be considered a victory for the industry.

There were several other bills considered "partial successes" for the industry. MDV-SEIA tracked legislation that will allow renewable energy companies and their customers to enter into Power Purchase Agreements (PPAs). This would continue to lower the upfront cost and financial uncertainty of investing in a solar energy system. Other states have successfully used PPAs as a finance mechanism. This bill was deferred to 2013 and stakeholder meetings will occur in the interim.

Del. Cosgrove showed support for the idea of establishing solar thermal credits. SB 492 established thermal credits for biomass Combined Heat

and Power Plants (CHP). The solar thermal credits were not included in the final law signed by the Governor. However, lawmakers are now aware and more accepting of the idea.

Several important conclusions can be drawn from this legislative session. Due to the increasing use of solar "carve-outs" by other states to create specific incentives for solar investment, key Virginia legislators are now more interested in this idea. MDV-SEIA helped to raise awareness of the importance these carve outs have for certain technologies that utilities would otherwise avoid.

Another important take-away would be a piece of legislation attempting to incentivize renewable energy R&D. SB 413 would allow utilities participating in the State's RPS Program to achieve up to 20% of their respective RPS Goals through "certificates evidencing the utilities' expenses in conducting research and development activities in Virginia related to renewable or alternative energy sources." This could prove very useful for renewable energy in Virginia and, within the U. S., represents a unique way to incentivize state-level R&D investment in a post-stimulus world. (Most government-funded renewable and alternative energy R&D is federally financed via general tax revenues whereas SB 413 effectively incentivizes ratepayer financing of such R&D.)

Ultimately, MDV-SEIA faced tough opposition in a fairly conservative state when it comes to many energy policies. While only two of the 12 bills actually made it to the Governor's desk, the importance of solar energy investment is beginning to grab more traction among key lawmakers. MDV-SEIA will continue its activity in Virginia's legislative process and strive to progress the State's solar market.

Late breaking news: On April 10, 2012, Governor McDonnell vetoed SB 627, the bill patroned by Senator Petersen that nullified existing community association covenants placing unreasonable restrictions on solar installations. MDV-SEIA will be lobbying hard to convince a super-majority of the legislators in both chambers of the Virginia General Assembly to override the Governor's veto during the General Assembly's April 18 "veto session", but this is expected to be an uphill battle due to partisan political considerations: The Governor is a Republican, as is the voting majority in both chambers of the General Assembly, plus the bill patron, Senator Petersen (D-Fairfax) recently announced his intention to run for governor in the 2013 election, so many Republicans may be inclined to deny the Democratic Senator a legislative victory.

Washington D.C. Policy Update

MDV-SEIA is working with Washington Gas Energy Services (WGES) on DC tax policy that currently puts an unfair and unnecessary tax burden on third party financed systems. Currently, a *personal property tax* is levied on the solar equipment to the lessor of the third party financing at a rate of 3.40%; this tax burden is not levied on systems that are direct sale projects. This inequitable tax policy is making project economics nearly impossible for third party financing and stunting the growth of the DC market. MDV-SEIA and WGES are working with DC Council to prepare legislation that will fix this misstep in DC tax policy and we are looking forward to a solution by the end of the year.

For information regarding permitting efforts in D.C., please reference the article on page 4.

MDV-SEIA congratulates all D.C. Council members for victorious reelection campaigns, especially CM Yvette Alexander and CM Muriel Bowser for the leadership they have demonstrated on solar issues to date.

SOLSYSTEMS

The Real Top 20 Solar States

kW/sq mi²

1	DC	65.56
2	NJ	61.54
3	DE	10.58
4	CA	6.71
5	CT	4.64
6	MA	3.28
7	MD	3.21
8	PA	2.72
9	HI	2.05
10	OH	0.96
11	FL	0.81
12	VT	0.67
13	AZ	0.56
14	RI	0.39
15	NY	0.36
16	NV	0.33
17	CO	0.30
18	IL	0.19
19	TN	0.15
20	NC	0.13

D.C. Leading Way in Solar Density

Most comparisons of current solar capacity rely on the raw figures for installed solar without taking into account the size of the area in which that wattage is contained. Calculating the density of installed solar, measured in kilowatts per square mile, reveals true solar hotspots around the county. The results may surprise you.

While Washington, D.C. recently received a good deal of attention for its favorable solar renewable energy credit (SREC) market conditions, it isn't typically known as a leader in installed capacity. In most rankings, D.C. falls below the top 20 with only a few megawatts of solar capacity. However, when those numbers are converted into kilowatts per square mile, D.C. comes out on top. While New Jersey is a close second, they both command the rest of the field, each with about six times the installed capacity of the third place state.

(D.C. Leading Way in Solar Density Continued)

Perhaps D.C.'s dominance shouldn't be a surprise, since it has a much smaller area featuring mostly urban development without huge tracts of land to dilute its solar density. Nevertheless, it is a useful exercise to demonstrate the commanding solar presence that has been steadily growing in D.C. over the last few years.

In a surprising twist, solar leader California did not rank as competitively compared to the top states. It places not third but fourth, trailing Delaware with under 7kW of solar per square mile. However, California does boast several counties more concentrated than D.C. But it is density leader New Jersey that claims the most concentrated hot spots, ranking off the charts in Hudson County and beating California in several other areas.

Hudson County, with a whopping 563 kW/mi^2, borders Manhattan yet far outperforms the tiny island, which features only 18 kW/mi^2. In fact, the entire state of New Jersey still outperforms Manhattan. Washington D.C., when compared to all New Jersey counties, ranks just after the Garden state's top three. Among all of the top counties drawn from the highest-ranking solar states, only New Jersey and California contain areas with solar densities that trump the District's.

Even compared to California, the unquestionably dominant state in terms of installed capacity, D.C. matches up surprisingly well. From 2007-2008, the DOE chose 25 U.S. "Solar American Cities" in which to promote solar technologies and remove market barriers to solar development. Six of those were in California. Without similar directed development but with a strong SREC market, D.C. has surged in installed capacity, now sitting in the middle of those six California cities in terms of solar density. Typical comparisons may not mention D.C. and California in the same breath, but in reality the two are quite close.

As long as installed capacity for solar is measured with no relation to area, D.C.'s progress will not register in most state or city comparisons. However, in relation to its size, its growth in recent years has been astonishing. With a strong SREC market and competitive pricing options, it is likely that this trend will continue into the future.

A note on the data: Installed capacity data was taken from the NREL OpenPV Project and from PJM-EIS GATS reporting. The NREL OpenPV Project relies on open-source data and user contributions to form its database. This data is tentative and imperfect, but still proves useful as a ranking mechanism for states and cities. Until accurate 2011 data is compiled and released for further analysis, we look to this comparison as a strong indicator of D.C.'s strength as a solar market compared to the most competitive areas in the county. GATS data, not available for all states, was substituted when it was higher than the NREL data, giving what we believe is a more accurate picture of total installed capacity. The states for which GATS figures for total installed capacity exceeded NREL include: DC, DE, IL, MD, NJ, OH, PA, VA, WV.

Special thanks to Colin Murchie, Director of Government Affairs at SolarCity, for initiating this conversation.

Streamlining Solar Permitting in D.C.

As has been much discussed throughout the national solar community, "soft" costs – including permitting, interconnection and inspections – make up an increasingly large percentage of the installed costs of solar. This is nowhere more apparent than in the District of Columbia, which, despite having solar-friendly policies in many areas, suffers from among the more burdensome, costly and time-consuming permitting processes in the country. Interconnection of PV systems to the local utility often takes months, and the costs of permitting for solar thermal systems can run into the thousands and amount to more than 15% of total cost.

A team from MDV-SEIA has been meeting with staff from the DC Council and the DC Department of Energy to highlight this situation and propose solutions. Among the first steps has been to illustrate the many, sometime arbitrary steps required to secure a permit, and suggest those that might be eliminated as redundant or shortened through improved processes. Among the proposals being considered is a solar "postcard" permitting process, which would eliminate visits to the DCRA and substantially lessen associated costs.

There is precedent around the country for such streamlined approaches. Vermont has instituted a registration-based approach, whereby the local utility has 10 days to object to a PV installation or the system is considered permitted and approved. Colorado enacted legislation that caps residential permit costs at $500, with the city of Denver eliminating certain permits for standard installation types. The District, with its many solar-friendly policies such as the Renewable Portfolio Standard and strong community of supporters, has the potential to be the leading solar community in the country. If we can solve for the onerous permitting issues, this potential has a much stronger chance of being realized.

Please reach out to Matt Carlson at matt@sunnovations.com for more information.

Permitting in Montgomery County

MDV-SEIA members Standard Solar and SolarCity are working collaboratively to obtain improvements to Montgomery County's inspection system for solar permits, aiming to relieve a bottleneck that currently adds significant cost and delay.

Currently, installers with a completed system may call the County for an inspection next day, which seems at first glance to be an admirably quick and efficient solution. However, unlike most other construction jobs, there is not much in the way of "finish work" for a solar installation – cleanup, trim work, etc., that could profitably occupy a crew that is waiting for an inspector. In a residential PV installation, some of the last work to be completed still must be inspected. The result is an additional "truck roll" as a qualified employee must sit inspection at the site – waiting without productive work for what could be a 4 – hour inspection appointment window. At relatively modest volumes this inspection sitting can become a significant portion of one or more employees' time; all of which is ultimately contributing to increased installed cost for solar.

(Permitting in Montgomery County Continued)

Standard Solar and SolarCity are hoping to work collaboratively with the County to find a more productive solution. Alternatives could include:

- Obtaining smaller (perhaps 1 – 2 hour) inspection appointment windows in exchange for losing day-after treatment (for instance, booking an inspector for an entire day to do 5 – 10 installations, at the expense of a weeks' delay.)
- Replacing the requirement for an employee to be onsite at each individual location with a "punch list" of required photographs, together with full site access for the inspector and a fully-staffed "hotline" for any questions.

We have yet to receive any sort of response from the County permitting office. If members have any useful contacts therein, (or any additional ideas on how the process might be streamlined) please reach out to Colin Murchie – cmurchie@solarcity.com

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Member Spotlight: Secure Futures & Standard Solar

EMU and W&L solar projects break new ground to advance solar in Virginia

With some of the lowest electric power rates in the country, no state economic incentives, local machinery and tools taxes on solar equipment owned by businesses, and entrenched opposition to commercially developed renewables from electric utility companies, Virginia remains a famously tough environment to invest in solar. Notwithstanding these many high hurdles, Secure Futures blazed the trail on how to make PV affordable for colleges and universities in the state by developing, owning and operating two of Virginia's largest solar PV projects. In the process the Staunton-based solar developer has demonstrated a collaborative approach to achieving several important milestones and has helped to advance commercial scale solar power in Virginia.

In the fall of 2010, Secure Futures developed the state's first commercial PV system with a capacity of more than 100 kW. Installed on the library roof at Eastern Mennonite University (EMU) in Harrisonburg, Secure Futures provides all the power from the 104 kW system to the university under Virginia's first power purchase agreement (PPA). The project took only four and a half weeks to install, but over nine months to develop, including protracted negotiations with the municipal utility company to adopt a policy for solar net-metering. It took another several months before the Harrisonburg City Council passed a landmark 20 year local tax waiver for solar equipment. EMU's President and Chief Financial Officer joined Secure Futures in these negotiations.

Then, a year later, at the end of 2011, Secure Futures installed two solar arrays at Washington and Lee (W&L) University in Lexington. At 444 kW, the project is currently the largest in Virginia. The City of Lexington unanimously passed another milestone 20 year solar tax waiver, but the utility company, Dominion Power of Virginia, issued not one, but two, cease and desist letters during the construction phase of the project. W&L's Chief Financial Officer and W&L's Director of Facilities Management joined Secure Futures in meetings with the City and with Dominion. Realizing that they had neither the resources nor the time to fight Dominion on just grounds, eventually Secure Futures and W&L agreed to restructure the PPA into a Lease agreement to overcome Dominion's opposition.

The signature element of W&L's solar project consists of a steel structure designed by Secure Futures' structural engineer over the top rampway of the university's parking deck.

Standard Solar installed a 119 kW solar array of 540 Sanyo HIT 220 kW PV panels on the custom-designed steel structure manufactured and installed by a Virginia steel manufacturing company. Secure Futures sought and found an EPC partner in Standard Solar to work closely with Secure Futures' structural engineer to design and install the parking deck solar array. Standard Solar's project team developed a racking system and module configuration that integrated well into the spacing and sizing of steel beams and posts in the canopy structure, thus creating the desired engineering and aesthetic solution.

Southern Energy Management built a second array of 325 kW on the roof of the W&L School of Law with 1,013 SunPower T5 320W panels. While not visible to the public, the second array provides much of the total solar PV power that altogether produces approximately 3% of W&L's total electricity requirements. Publicity from the W&L project continues to generate inquiries from higher education institutions around Virginia interested in exploring ways that Secure Futures' solar development and financing model can make PV affordable on their campuses.

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Contact us at events@mdv-seia.org for more information!

MDV-SEIA

MDV-SEIA is a proud partnering organization of Solar Power International 2012. We hope to see you at SPI this fall in Orlando!

MDV-SEIA

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