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November 24, 2014

D.C. Zoning Commission
Suite 210
441 4th Street, NW
Washington, DC 20001

RE: Zoning Commission Case No 14-13 and Text Amendments Regarding Rooftop Penthouses
Dated October 27, 2014

Members of the Commission,

I am writing on behalf of the Maryland, DC, and Virginia Solar Energy Industries Association (MDV-SEIA) to comment on the proposed rules for Rooftop Penthouses. MDV-SEIA is a regional trade association representing more than 4,500 jobs. Our members include installers, electricians, equipment manufacturers, distributors, component suppliers and professional service providers.

First, I want to thank the Commission for this opportunity to be a part of the process and provide our comments. We want to express our concerns regarding proposed text amendments contained in the Public Hearing Report for Case Number 14-13, dated October 27, 2014 (the "Report"). Section 5 of the Report, titled "Solar Panels on Top of a Penthouse Roof" and referencing sections 400.7(e), 530.5(e), 630.4(e), 770.6(f), 840.3(d), 930.3(e), and 2906.5, contains a number of restrictions on solar installations that may result in reducing solar deployment across the city and inhibit the District's ability to meet its solar goals and legislative mandates.

During the Zoning Commission's public hearing on November 6th, 2014, several questions arose from the Commission regarding solar (PV and thermal) deployment. We submit this second round of testimony with the aim to address those items, but would like to reiterate that it is our recommendation that any language relating to solar installations be removed from the Text Amendments Regarding Rooftop Penthouses Dated October 27, 2014, until the Office of Planning can convene a series of stakeholder meetings to design a comprehensive path forward that addresses these complex issues.

While we understand that the Commission's goal is to further solar deployment in the District through new zoning language, our concern is that there has not been ample time to meet with the industry and discuss ramifications of these changes. MDV-SEIA and a representative group of solar installer members would be pleased to meet with the Office of Planning to develop a set of comprehensive zoning regulations that meet the Commission's goals while not inadvertently hindering solar deployment.

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ZONING COMMISSION
District of Columbia
CASE NO. 14-13
ZONING COMMISSION
District of Columbia
EXHIBIT NO. 43
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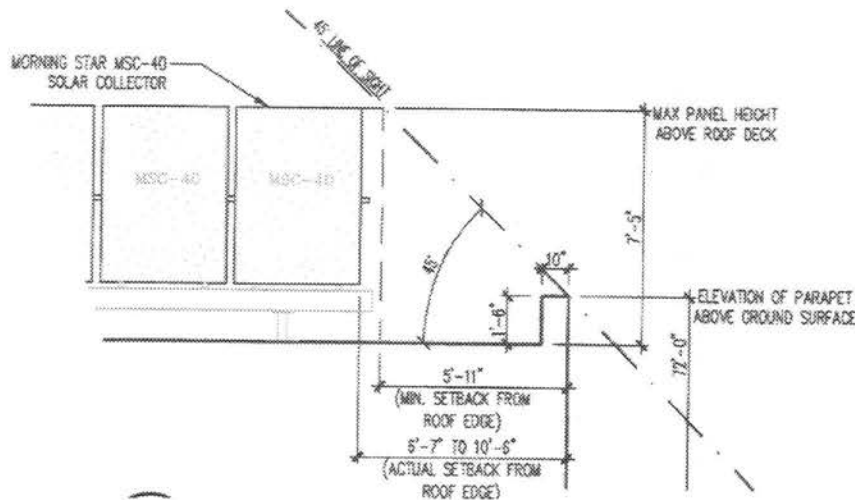


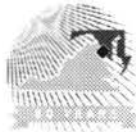
How proposed amendments will negatively impact solar installations:

Height and Setback Requirements

The height and setback restrictions are superfluous and effectively ban solar hot water heaters (thermal), which is a major segment of the District's solar industry. Solar thermal collectors are more energy intensive than solar photovoltaic panels and are typically twice the length and width of photovoltaics, are typically mounted between 30-45 degrees, and intrinsically require large amounts of space between rows to prevent one panel from shading another. For these reasons, among others, we recommend that the Zoning Commission to recognize the complications of solar siting on rooftops. Separating zoning rules for solar thermal collectors from solar photovoltaic modules is akin to separate rules for rooftop mounted antennae from rooftop mounted HVAC equipment. Given the proposed language from Office of Planning, it is clear that solar zoning is an issue worthy of further study for the District government and associated agencies.

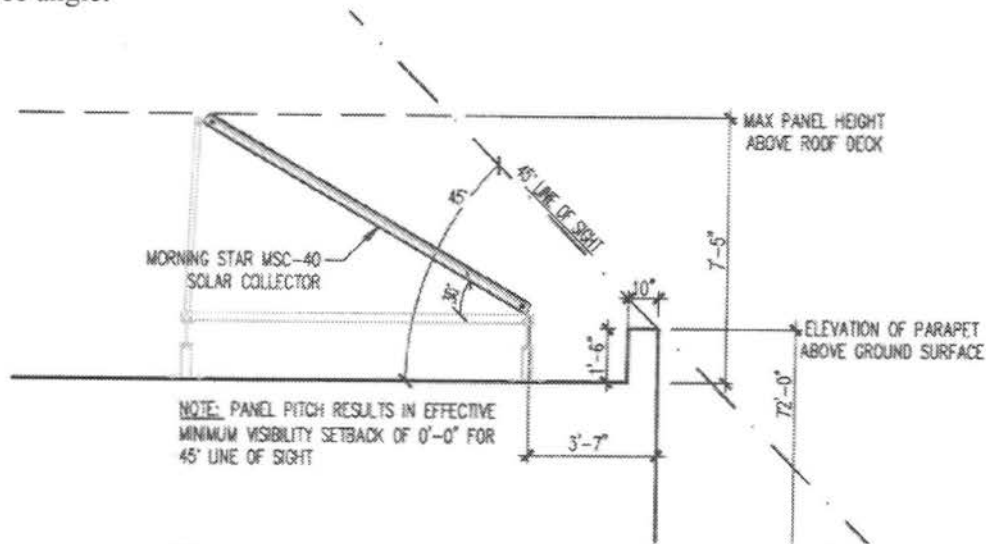
If the Zoning Commission adopts any language regarding solar siting on penthouses, MDV-SEIA recommends removing the references to height and setbacks of "a distance equal to their height" and replace it with "not visible at a 45 degree angle" from the street. This change will ensure that solar collectors (thermal and photovoltaic) are not seen from the street, while also allowing the continued use and installation of solar collectors. It also allows for consideration of visibility advantages afforded by a parapet wall (rare on penthouses). The illustrations below demonstrate how a "45 degree angle" rule is just as aesthetically effective as the Zoning Commission's height rule, yet also ensures the continued use of thermal and photovoltaic solar collectors. This language would meet the intent and spirit of current language and serve as a practical reform.





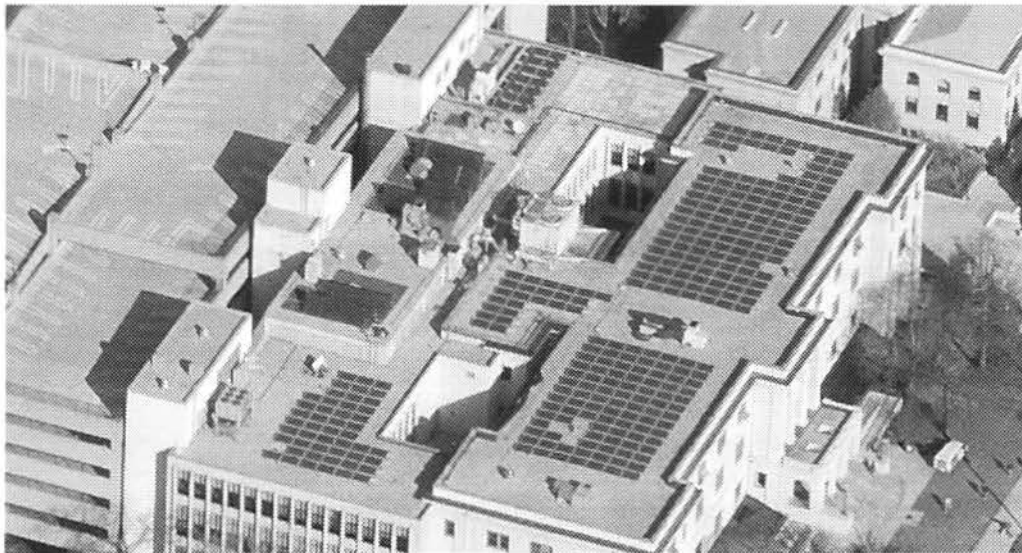
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From the side, a solar collector should be set back from roof edge far enough to not be visible at a 45 degree angle.

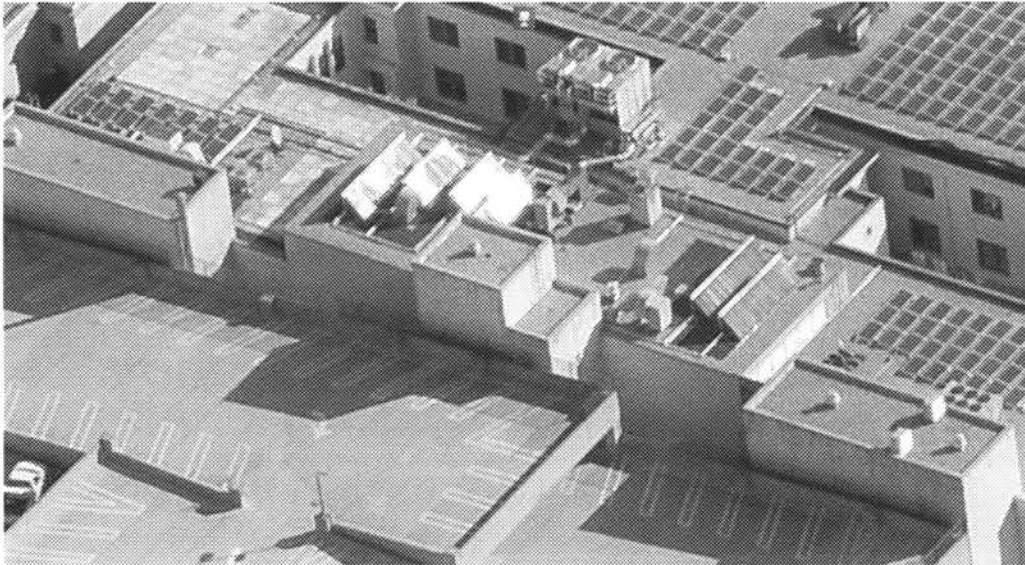


From the front, a solar collector can be significantly closer to the edge of a roof without being visible from typical street-side vantage points.

Below are several images of a system installed on an American University building. As you can see, this includes installation on the penthouse.



American University Gaydon Building, solar hot water (penthouse) and solar photovoltaic system (remaining rooftop space), as seen from the South.



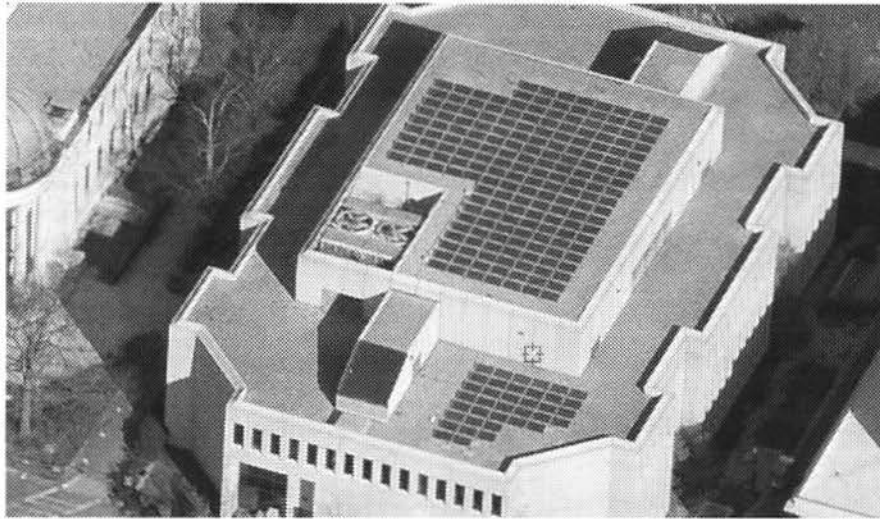
View from the West of the American University Gaydon Building, solar hot water and solar photovoltaic system installation on the penthouse.



Katzen Arts Center - Solar PV on penthouse, bottom right



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Bender Library Building - Solar PV on penthouse, center

The “not visible from the street” rule has been effective in ensuring that solar collector installations do not adversely affect the District’s building line and city-scape while also providing flexibility to building owners and a growing industry. For these reasons, we see no reason for the Zoning Commission to issue quickly assembled rules regarding siting of solar panels.

As was mentioned at the hearing on November 6th, 2014, solar water heating is also an important part of the DCSEU’s low-income portfolio. Both the solar industry and District government have made it a priority to make solar more readily available to low-income families. If you are interested in learning more about this initiative, the The GW Solar Institute and DC SUN released a Background and Options Paper on the benefits of solar power and water heating to low income housing. The report as part of their Roundtable on Expanding Low-Income Solar in Washington, DC. It is available online¹. A key fact to consider is that solar programs have enabled families to reduce their monthly electricity bills by an average of around 80%, savings that will continue for the life of these solar systems (at least 25 years or more). The Federal Government currently spends between \$3 billion and \$4.5 billion dollars per year² on its low-income energy assistance program (LIHEAP). Ensuring that building owners are able to choose to deploy solar on their penthouses will in turn provide savings to the Federal Government and housing occupants.

¹ Full web address:

<http://www.dcsun.org/wp-content/uploads/2013/09/Low-Income-Solar-Roundtable-BACKGROUNDER-4.9.14.pdf> and the follow-up report:

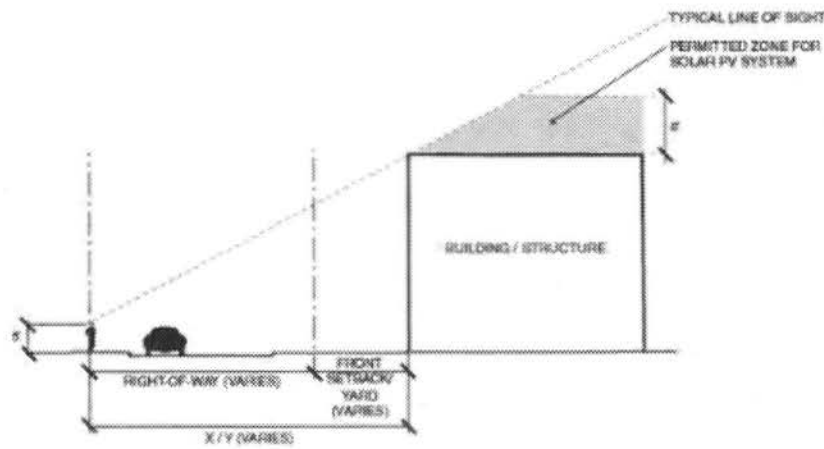
<http://solar.gwu.edu/resources/consensus-recommendations-how-catalyze-low-income-solar-dc>

² Incentive Programs. <http://www.communitypowernetwork.com/node/9486>



Screening

In all placement and screening considerations the effects of requirements on the efficiency of the panels' operation must be considered, and most ordinances provide for flexibility to ensure that property owners can work within site and structural constraints to achieve reasonable solar collection. In many instances, screening is not needed in an urban environment because solar systems are not visible from the average line of sight due to rooftop setbacks. In these instances, imposing screening would negatively impact project economics and no visual benefit.



As in our previous testimony, MDV-SEIA recommends the Zoning Commission support a collaborative process with OP, DDOE, DCRA and the solar industry to craft solar siting rules. Any language relating to solar installations should be removed from the Text Amendments Regarding Rooftop Penthouses dated October 27, 2014, until the Office of Planning can convene a series of stakeholder meetings to address these complex issues.

Again, we would like to thank you for the opportunity to provide comments on the proposed text amendments. We look forward to working with the Commission, the Office of Planning, the District Department of the Environment, and the Department of Consumer and Regulatory Affairs to address regulations regarding solar on rooftops and penthouses.

Sincerely,

Dana Sleeper
Executive Director
MDV-SEIA