July 15, 2020



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Ms. Brinda Westbrook-Sedgwick Commission Secretary Public Service Commission of the District of Columbia 1325 G Street, N.W., Suite 800 Washington DC, 20005

Re: RM40-2020-01-M and FC1050

Dear Secretary Westbrook-Sedgwick:

Enclosed please find the comments of Ipsun Solar, New Columbia Solar, Inc. ("NCS"), SaveSolar, Sol Systems, SRECTrade, Inc., and the Maryland-DC-Delaware-Virginia Solar Energy Industries Association ("MDV-SEIA"), (collectively, "Joint Solar Advocates") in the matter of 15 DCMR Chapter 40 — District of Columbia Small Generator Interconnection Rules ("SGIR"). Please feel free to contact me if you have any further questions.

Sincerely,

Jaihan

David Murray Executive Director MDV-SEIA

Joe Marhamati VP and Co-Founder Ipsun Solar

Karl Unterlechner Chief Executive Officer SaveSolar Corporation

Ally Niphakis Account Manager SRECTrade, Inc. Michael J. Healy Co-founder and Chief Executive Officer New Columbia Solar

Andrew Williams Senior Director, Regulatory Affairs, Energy Infrastructure and Markets Sol Systems

BEFORE THE PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA

IN THE MATTER OF 15 DCMR CHAPTER 40	:	
DISTRICT OF COLUMBIA SMALL GENERATOR	:	RM-40-2020-01
INTERCONNECTION RULES	:	
	:	
and	:	
	:	
IN THE MATTER OF THE INVESTIGATION	:	
OF IMPLEMENTATION OF INTERCONNECTION	:	FORMAL CASE NO. 1050
STANDARDS IN THE DISTRICT OF COLUMBIA	:	

COMMENTS

Pursuant to the Public Service Commission of the District of Columbia's ("PSC" or the "Commission") April 10, 2020 Notice of Proposed Rulemaking ("NOPR") and the May 22, 2020 Public Notice extending the comment period in the above-referenced proceeding, Ipsun Solar, SRECTrade, Inc., Sol Systems, SaveSolar, the Maryland-DC-Delaware-Virginia Solar Energy Industries Association ("MDV-SEIA"), and New Columbia Solar, Inc. ("NCS"), (collectively, "Joint Solar Advocates") respectfully submit the following comments on the Commission's proposed amendments to Chapter 40 (District of Columbia Small Generator Interconnection Rules) of Title 15 (Public Utilities and Cable Television) of the District of Columbia Municipal Regulations ("DCMR"). The Joint Solar Advocates appreciate the opportunity to comment on the NOPR and general issues raised by this proceeding.

I. INTRODUCTION

The Joint Solar Advocates have been engaged in this case at various points in the process of both the review of proposed amendments to the DCMR and the larger discussion regarding the importance of updating this jurisdiction's interconnection standards and procedures. The Joint Solar Advocates have been active participants in the stakeholder-lead RM9 Net Energy Metering ("NEM") Working Group ("RM9 Working Group"). The RM9 Working Group held its first meeting on December 7, 2018 and has met formally at the Commission seven times since. There have also been a number of informal sessions, where participants exchanged ideas and formulated best practices for interconnection processes and Advanced Inverter implementation.

The Joint Solar Advocates strongly support implementation of rules to facilitate the deployment of Advanced Inverters, streamline interconnection processes (particularly for Community Renewable Energy Facilities, "CREFs"), reduce costs to consumers, and increase visibility and transparency in interconnection studies and reviews. Updated interconnection rules that accelerate – rather than delay – integration of distributed energy resources ("DERs") are essential to building a more consumer-centric, affordable, and resilient energy delivery system fueled by renewable energy. The District of Columbia is well-positioned to become *the* national leader in equitable deployment of DERs like solar and battery storage. Prohibitive interconnection costs of larger solar projects, a lack of distribution circuit visibility, and outdated interconnection application timelines are key obstacles that must be addressed to better facilitate the integration of more DERs, build a more resilient energy delivery system, and lower costs for residents in the District.

Priorities of the Joint Solar Advocates:

• VCREF – The solar industry believes that the integration of Virtual Community Renewable Energy Facilities ("VCREF") is the fastest and most efficient method for CREF interconnection. VCREF incorporates a behind-the-meter NEM interconnection method, with a CREF bill crediting scheme, eliminating the need for time and cost intensive "direct" interconnection of a solar array. This process should be consistent in the SGIRs. The Commission recently amended the language in DCMR Section 15-906.1(a) to "eliminate the requirement that a [CREF] be directly connected with the Electric Company's distribution system."¹ This change paved the way for VCREF interconnections. The Joint Solar Advocates support this and thank the Commission for this revision.

- **Timelines** The solar industry supports harmonization of CREF interconnection timelines with those of the SGIRs. Clear, achievable and actionable timelines are imperative. It is more important that deadlines can be met, rather than them being short. A mechanism of incentivizing the Utility to hold timelines, with penalties for missing deadlines, should be established.
- Costs The solar industry focuses on keeping interconnection costs as low as possible to increase the likelihood of future development. High costs not only hurt solar developers, but also D.C. solar customers and ratepayers, ultimately jeopardizing the District's ambitious clean energy goals. Cost transparency allows businesses to plan for future projects and on-the-ground work.
 - Transparency a clear and transparent breakdown of costs ensures accountability, necessity, and prudency of costs for CREF interconnection.
 - Rate-basing Distribution System Upgrades:
 - Back-bone interconnection costs for CREFs the "rate-basing" of backbone costs makes projects more affordable, streamlines interconnection, and directly benefits the grid in underserved Wards (5,7 & 8), as solar development is concentrated in these communities.
 - Distribution System Upgrades (Communications/Telemetry) on Spot/Area
 (LVAC) Networks and Distribution Automation (DA) feeders new

¹ RM9-2020-01, In the Matter of 15 DCMR Chapter 9 – Net Energy Metering – Community Renewable Energy Amendment Act of 2013, Notice of Final Rulemaking (May 1, 2020).

requirements for interconnection on the spot and area networks and DA feeders is shifting undue burden to solar developers and customers. Such upgrades are essentially grid modernization components and should be socialized for the benefit of the grid on a whole.

Lastly, the Joint Solar Advocates would like to applaud the Commission for its leadership and diligence throughout the working group and rulemaking processes. The amount of time and commitment dedicated to ensuring the success of the revision of the SGIRs has been admirable. In addition, the Joint Solar Advocates would like to acknowledge the hard work and thoughtful participation of its fellow stakeholders, the District Department of Energy and Environment ("DOEE"), the Office of the People's Counsel for the District of Columbia ("OPC") and the Electric Distribution Company ("EDC"), the Potomac Electric Power Company ("Pepco" or the "Utility"), among others.

II. COMMENTS

A. 4001.6 – The "Queue"

Transparency and accurate information are vital to the planning, financing, construction and interconnection of solar facilities. The Joint Solar Advocates strongly support the establishment of a single public queue that is sortable by feeder. As much locational information as can be provided, while complying with requirements surrounding customer privacy, should be shared with solar stakeholders. The Joint Solar Advocates recommend that the Commission adopt the proposed language in Section 4001.6 and Attachment 1 to the NOPR.

B. 4001.7 – Creation of an Interconnection Facilities "Cost Matrix"

The Joint Solar Advocates strongly support the establishment of the Interconnection Facilities Cost Matrix that Pepco will post on its website and update once annually. This is an important step in streamlining the interconnection process for relatively small and straightforward overhead and wire-only CREF interconnections. It should be noted that these types of interconnections only represent a portion of CREF interconnections.

C. 4002.7 – Advanced Inverters

As noted in the NOPR, the Advanced Inverter language in Rule 4002.7 closely tracks the rules proposed in Maryland that were published in the Maryland Register on January 17, 2020. The Joint Solar Advocates support the adoption of that language in the Maryland Public Service Commission's Rulemaking 68 (RM68) proceeding.² We recommend that this language be adopted in the District of Columbia, but propose two additions that would modify the regulations more precisely to meet the District's needs:

- 1. A requirement should be added that a draft of the "default EDC required inverter settings profiles for Advanced Inverters" ("profiles") required in 4002.7(c) be presented to an appropriate stakeholder group well in advance of January 1, 2022, and that stakeholder input be invited and considered in the development of the EDC's profiles. Formal comments to the Commission should also be solicited before the profiles are approved.
- 2. An additional objective should be added to Section 4002.7(e) calling for the profiles to address the needs of each type of distribution circuit used in the District (i.e. radial circuits, area networks, and spot networks).

To assure that stakeholder input is fully and formally before the Commission prior to its approval of the profile, the Joint Solar Advocates suggest that the Commission require the EDC

 $^{^{2}}$ NOPR at ¶ 3.

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to submit the profile to the Commission in advance of the January 1, 2022 effective date, and that the Commission solicit formal comments.

To effectuate these recommendations on stakeholder input, the Joint Solar Advocates recommend the following language be added to the 15 DCMR Chapter 40 regulations:

- **4002.7(c)(1)**: "Prior to March 31, 2021 the EDC shall provide draft default EDC required inverter settings profiles for Advanced Inverters to the working group for review and input."
- **4002.7(c)(2)**: "The EDC shall file its default EDC required inverter settings profiles for Advanced Inverters, incorporating stakeholder input received through the working group, on or before September 30, 2021."

Also, to effectuate the recommendation on developing default inverter setting profiles for all grid architectures, the Joint Solar Advocates recommend the following language be added to the regulations:

 4002.7(e)(3): "The tertiary objective is to differentiate requirements between radial circuits, area networks, and spot networks where necessary to maximize DER deployment opportunities and to support achievement of the primary and secondary objectives."

D. 4004.7 – Corrective Action Plan

It is imperative that if targets and deadlines are not being met by the Utility, measures are taken to correct these shortcomings. While the requirement that if Pepco "fails to issue at least ninety percent (90%) of All Authorizations to Operate in the Level 1 interconnection process within the twenty (20) business days as required in Subsection 4004.3(f), it shall be required to develop a corrective action plan" is necessary, this requirement for corrective action plans should

be expanded beyond the ATI timelines for Level 1 applications. This should be a requirement for all interconnection levels and not only for Authorization to Operate, but also for Approval to Install.

E. 4005.2(b) – Interconnection to a Radial Distribution Circuit

While interconnection of both NEM and CREF Small Generator Facilities to the Radial Distribution Circuit are permitted based on power-flow studies by the EDC, Pepco is increasingly imposing onerous requirements for interconnection on these circuits. For example, Pepco has been requiring telemetry and communications equipment to be installed on systems that are larger than 250 kilowatts on Distribution Automation ("DA") feeders. These requirements have not been justified to developers or customers, nor do they seem to be supported by the language in 4005.2(b), and add a tremendous cost to a solar facility. The Joint Solar Advocates call for the Commission to compel Pepco to provide justification for these requirements and convene stakeholders to address alternate solutions to the perceived issues with these types of interconnections.

F. 4005.2(c) – Interconnection to a Spot or Area Network

The requirements for interconnection of Small Generator Facilities on a spot or area network are quite clearly outlined in this section. However, the Joint Solar Advocates recommend that this issue be addressed in a more holistic manner. Interconnection on the spot and area networks has become increasingly challenging and costly. Pepco imposes requirements that are burdensome on developers and customers. The need for telemetry and communications for these systems increase costs further. This increase in costs is slowing the implantation of DERs on the networks. The current regulations don't justify the request by the Utility for additional telemetry and communications beyond what can what is already included in the SGIR-required "inverterbased equipment package". Telemetry and communications requirements should be expressly addressed in this section and should be prohibited, or if required, the costs should not be borne by the developer but rather the Utility.

In addition, the restriction on the export of energy on the networks will have long term impacts on the District's clean energy goals. The Joint Solar Advocates request that, along with the requirements of 4005.2(b), this issue be addressed in a stakeholder process where grid modernization be a top priority, rather than the ad hoc requirements posed under this section. This process can run in parallel with the current RM9 Working Group but should be addressed in a separate rulemaking.

G. 4005.4(a)(1) – Requirements of Application Submissions

Both the EDC and solar developers must have the required information to determine the most effective CREF interconnection. However, this information can change depending on the interconnection. For example, a CREF may not necessarily interconnect via a facility's electrical room. In this case, electrical room drawings are not necessary, and therefore should not be a requirement. The language "will be required" should be amended to read, "may be required."

H. 4005.6 – Modifications to Level 2 Interconnection Review Process

The modifications in this section are substantial and are poised to dramatically change the way CREF interconnection is executed. As previously stated, the Joint Solar Advocates believe that the timelines for both NEMs and CREFs should be harmonized, with the right structure, priority, and resources dedicated to the interconnection design and implementation process, this should be an achievable goal. However, as the review is outlined in this NOPR, we offer the following comments:

1. 4005.6(b)(2) – Cost Estimate Accuracy

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Part of the catalyst for the RM9 Working Group was the inconsistency and inaccuracy of proposed interconnection costs. This section offers a modicum of certainty. It is tremendously helpful to set a cap on increases in interconnection costs from the cost estimate phase to the final interconnection design and cost letter. However, the 50% accuracy threshold should only serve as a cap. If the actual costs are below this 50% amount, these costs should not be borne by the Interconnection Customer. Developers are more worried about runaway costs but would always be happy to pay less if the actual costs fall. Any increase in cost certainty would be encouraged. As such, rather than a 50% accuracy threshold, the Joint Solar Advocates would prefer to see the rules altered to require a 10% or 25% accuracy range, which would help developers more effectively budget for project costs and determine the ability to move forward with projects sooner, saving both the developer's and the Utility's time.

2. 4005.6(b)(6) – Cost Letter, Invoice, and Authorization to Operate Timeline

While the requirement in Section 4005.6(b)(6) of the NOPR would be a marked improvement over the current timeline for issuance of the cost letter, the Joint Solar Advocates request that the sixty (60) day business day issuance requirement be replaced by a thirty (30) day timeline. It is imperative that timelines remain tight at the point in a project's development cycle when developers are working toward ATI. Many times, these estimates can make or break a project and protracted timelines can be extremely disruptive.

Pepco provided their most accurate assessment of their capacity to provide these cost letters, but as their process improves, it would be best to strive for more expedited timelines, if these prove to be impossible to achieve, they can be revised in a future rulemaking. Also, in this section, there should be a timeline for the issuance of an invoice after the Interconnection Customer signs the cost letter. This time should not exceed two (2) business days. After the invoice is paid, there should be a timeline for interconnection and the issuance of Authorization to Operate. This should be twenty (20) business days after the required documentation in section 4005.4(e) is submitted to the EDC.

3. 4005.6(b)(7) – Changes in Interconnection Design

The language in this section is too broad and provides the EDC with too much latitude in "resetting" timelines for interconnection. If small changes are made to interconnection plans, or like-for-like changes are made to equipment or designs, the process should not be restarted. If systems are downsized, a full restart of the technical review should not be required, estimates and cost letters should not be voided, but adjusted. The need for language to ensure that both the customer and the EDC don't make consequential changes to system and interconnection designs is imperative, but as written, this section provides security only for the EDC.

4. 4005.6(c) – Distribution System Upgrades Costs Allocation

As previously stated, in order to facilitate the rapid deployment of DERs, one hundred percent (100%) of Distribution System Upgrades Costs should be allocated to and paid for by the EDC, tracked in a regulatory asset, and recovered in its next base rate case. There should not be an aggregate cap per calendar year of two hundred thousand dollars (\$200,000). All costs should be paid by the EDC. If a cap were to be imposed, we contend that the cap should be on a project-by-project basis. As currently proposed, those proposing interconnections early in the year would be rewarded while others would not be able to benefit. It is not a practical mechanism for equitable distribution of charges.

I. Assignment/Transfer of Ownership of the Small Generator Facility

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In both the CREF Application and Contract there is language barring the assignment and transfer of ownership of Small Generator Facilities.³ As CREF portfolios grow, this consent appears to be a consistent issue with financing counterparties. In order to facilitate the effective assignment of contracts and ownership of Small Generator Facilities, it should be permissible that the CREF Contract be assigned without Pepco's consent. Also, the requirement that the CREF Interconnection Agreement can only be assigned to a party of equal or greater credit rating should be eliminated.

III. IV. CONCLUSION

The Joint Solar Advocates appreciate the opportunity to submit these comments and respectfully request that the Commission modify the proposed regulations in the NOPR consistent with the above recommendations.

Respectfully submitted,

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³ See NOPR at 59-60 (Level 2-4 Standard Agreement for Interconnection of Small Generator Facilities, Section 6.1 (Assignment)).

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