BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Solar Projects : 

INITIAL COMMENTS OF
CONSTELLATION ENERGY PROJECTS & SERVICES GROUP, INC.,
CONSTELLATION NEWENERGY, INC. AND
CONSTELLATION ENERGY COMMODITIES GROUP, INC.

I. INTRODUCTION


In the event that the Commission or its Staff prepares a service list for this proceeding or otherwise requires additional information regarding the positions presented herein, Constellation identifies the following individuals:

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Constellation wholly supports the Commission’s stated purpose through the Proposed Solar Policy Statement to:
provide the longer term revenue stability that is likely needed to support both small scale and large scale solar development, and to address other barriers that could prevent new solar projects from coming to fruition in Pennsylvania.¹

The Commission is correct that solar alternative energy credit (“Solar AEC”) price uncertainty is of primary concern to solar developers and investors, and that a process to provide greater clarity with respect to such price uncertainty, if properly structured, will “promote funding of future solar projects that will benefit electric consumers in this Commonwealth.”²

Constellation applauds the Commission for taking the lead in establishing new policies to promote solar development in the Commonwealth, and appreciates the opportunity to work with all interested parties – including electric distribution companies (“EDCs”), solar developers and investors, competitive market participants and others – to advance these goals through effective and appropriate structures. By taking into account the positions discussed herein, the Commission will encourage a wide array of stakeholders to invest resources promoting new solar development in the Pennsylvania market. These Initial Comments are based upon Constellation’s extensive experience regarding both the establishment of rules and policies for renewable development and actual development of new solar projects.

**II. BACKGROUND ON CONSTELLATION**

CEPS, CNE and CCG are wholly owned subsidiaries of Constellation Energy Group, Inc. (“CEG”), a Fortune 500 North American energy company with several other subsidiaries, including electric generation suppliers, merchant generation subsidiaries and a regulated utility subsidiary, Baltimore Gas and Electric Company. CEG recently announced that it will support

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¹  Nov. 2009 Order at p.5.
²  Nov. 2009 Order at p.1.
the development of commercial photovoltaic power systems with a $90 million solar capital commitment for customer-sited solar installations of 500 kilowatts (“kW”) or larger.

CEPS is an energy product services business that provides customized energy solutions exclusively to commercial, institutional and industrial customers nationwide. CEPS delivers technical expertise to develop large scale energy projects, such as solar, biomass and geothermal projects, and on- or off-site power generation systems. CEPS currently has approximately 25 megawatts (“MW”) of solar power systems installed or under way in the U.S., ranging from 200-kW, customer-sited rooftop installations, to a 17.1-MW large-scale project in Emmitsburg, Md., that will be among the largest in the United States. CEPS finances, designs, constructs and owns these solar installations and supplies power generated on-site to the customer over a period of 15 to 20 years, providing an attractive and affordable model that requires no upfront capital from customers, and reduces customers' use of power from the electrical grid and carbon emissions associated with such power. CEPS has developed more than 4,000 energy projects throughout the U.S. designed to help customers generate and use energy more efficiently and in a sustainable, environmentally responsible way.

CNE is a licensed electric generation supplier (“EGS”) in the Commonwealth, and provides electricity and energy-related services to commercial and industrial customers in Pennsylvania, 13 other states and the District of Columbia. CCG is a power marketer focusing on serving wholesale power needs of utilities, co-ops and municipalities that competitively source their load requirements.

Constellation has been an active participant in many of the Commission’s proceedings to establish and improve the Commonwealth’s energy markets, and continues to be active in participating in the same markets to serve Pennsylvania’s customers.
III. CONSTELLATION COMMENTS

A. The Commission Should Look to Neighboring States’ Processes Utilized to Overcome Alternative Energy Credit Price Uncertainty in Order to Promote Solar Development.

Constellation commends the Commission for recognizing that “those interested in developing solar projects in Pennsylvania are impeded in their economic analysis of such projects due to [Solar AEC] price uncertainty,“ and for seeking to establish policies that will overcome such uncertainties. Constellation comments, however, that the Commission need only look to its neighbors’ experiences in promoting long-term price signals to encourage new solar resource development, in order to develop the Commonwealth’s own policies.

For instance, Maryland, New Jersey and Ohio each have developed and implemented some form of long-term solar alternative compliance payment (“SACP”) schedule which helps to establish a long-term market price for Solar AECs. More specifically, the SACP schedules in these states are as follows:

- **Maryland:** Maryland implemented a 15-year (and beyond) SACP schedule in which the SACP is 45¢/kWh in 2008, 40¢/kWh in 2009, and declines by 5¢ bi-annually thereafter until the SACP reaches 5¢/kWh in 2023. Note that the Maryland General Assembly currently is considering legislation that would increase the Solar AECs requirements under its renewable portfolio standard, and substantially increase these SACP levels, setting the SACP at 40¢/kWh from 2009-2014, 35¢/kWh in 2015 and 2016, 30¢/kWh in 2017 and 2018, 25¢/kWh in 2019 and 2020, 20¢/kWh in 2021 and

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3 Nov. 2009 Order at p.5.
2022, 15¢/kWh in 2023 and 2024, 10¢/kWh in 2025 and 2026, and 5¢/kWh in 2027 and beyond.4

- **New Jersey:** New Jersey previously implemented an eight (8)-year, rolling SACP schedule in which the SACP is $711/MWh in Energy Year (“EY”) 2009, $693/MWh in EY 2010, $675/MWh in EY 2011, $658/MWh in EY 2012, $641/MWh in EY 2013, $625/MWh in EY 2014, $609/MWh in EY 2015, and $594/MWh in EY 2016. Note that the New Jersey Legislature in December 2009 passed a new law that increases the Solar AECs requirements under New Jersey’s renewable portfolio standard, and requires the New Jersey Board of Public Utilities to extend the rolling SACP schedule out to 15 years.5

- **Ohio:** Ohio implemented a 15-year (and beyond) SACP schedule in which the SACP is $450/MWh in 2009, $400/MWh in 2010 and 2011, and declines by $50 every two (2) years thereafter until the SACP reaches $50/MWh in 2024.

On the other hand, the process outlined specifically in 73 P.S. § 1648.3(f)(4) (“Statutory Calculation Process”) for determining a SACP in Pennsylvania, if used only on a year-by-year basis without providing a long-term SACP schedule, provides little short- or long-term certainty to solar developers and market participants which could encourage new solar development in the Commonwealth.

Setting and maintaining/refreshing a long-term SACP schedule – as is the case in Maryland, New Jersey and Ohio – sends appropriate regulatory signals to the marketplace that each of these states is committed to its solar policies and markets, and provides solar developers and investors with appropriate long-term benchmarks through which they may determine the

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4 See 2009 New Jersey Legislature A3520/S2441 (as signed into law on Jan. 18, 2010).
long-term value of Solar AECs from new solar projects. Developers and investors are then able to more appropriately negotiate power purchase agreements (“PPAs”) with project host-customers, which PPAs serve as the most efficient means of deploying new solar and bringing their benefits to customers.

Therefore, given the activities in neighboring states such as Maryland, New Jersey and Ohio, in conjunction with the solar procurement policies outlined in the Proposed Solar Policy Statement, the Commission should establish a long-term SACP schedule with a forward term of at least 10 years, under the parameters of the Commonwealth’s laws, in order to provide to potential developers and other market participants appropriate signals of regulatory and investment certainty. In a competitive marketplace, where investors and market participants can allocate their limited resources to one or more of the many states trying to promote the use of solar technologies, Pennsylvania should do as much as possible to catch and maintain such parties’ interest in the Commonwealth’s market, first and foremost. Constellation understands that the Statutory Calculation Process under current laws requires that:

The [Solar ACP] shall be 200% of the average market value of [Solar AECs] sold during the reporting period within the service region of the regional transmission organization, including, where applicable, the levelized up-front rebates received by sellers of [Solar AECs] in other jurisdictions in the PJM Interconnection, L.L.C. transmission organization (PJM) or its successor.\(^6\)

Under these parameters, the Commission could establish the first year (“Year 1 SACP”) of a long-term rolling SACP schedule as 200% of the average market value of Solar AECs, as outlined specifically in the Statutory Calculation Process. Each year thereafter within the SACP schedule could be some percentage – e.g., 2.5% – less than the previous year’s SACP. For

\(^5\) See 2010 Maryland General Assembly Senate Bill 277 and House Bill 471.
\(^6\) 73 P.S. § 1648.3(f)(4).
instance, if the Commission establishes a 10-year rolling SACP schedule ("PA SACP Schedule"), and the Year 1 SACP is determined in accordance with the Statutory Calculation Process to be $700/MWh, the PA SACP Schedule with a 2.5% adjustment factor would be as follows:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SACP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$700/MWh</td>
</tr>
<tr>
<td>Year 2</td>
<td>$683/MWh</td>
</tr>
<tr>
<td>Year 3</td>
<td>$666/MWh</td>
</tr>
<tr>
<td>Year 4</td>
<td>$649/MWh</td>
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<tr>
<td>Year 5</td>
<td>$633/MWh</td>
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<td>Year 6</td>
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<td>Year 8</td>
<td>$587/MWh</td>
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<tr>
<td>Year 9</td>
<td>$572/MWh</td>
</tr>
<tr>
<td>Year 10</td>
<td>$558/MWh</td>
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</tbody>
</table>

The Commission each year could re-evaluate that year’s SACP using the Statutory Calculation Process. In the event that a year’s particular year’s SACP on the PA SACP Schedule is less than the number that the Commission determines through the Statutory Calculation Process, the Commission can use the higher number as that year’s SACP, and issue a new 10-year forward PA SACP Schedule based on such new higher SACP. A long-term PA SACP Schedule, established in this way, could work with any additional solar procurement polices under the Proposed Solar Policy Statement to most effectively encourage new solar resource development within the Commonwealth.

Note that, if the Commission believes that it cannot develop a long-term PA SACP Schedule under the structures established by current Commonwealth law, Constellation encourages the Commission to report to the General Assembly, per its authority under 73 P.S. § 1648.3(f)(5), that the approach taken by neighboring states to set a long-term SACP schedule may be the most efficient means of promoting new solar development in the Commonwealth, and that the Statutes should be revised to appropriately allow for the establishment of a long-term PA SACP Schedule.

With respect to the procurement policies outlined in the Proposed Solar Policy Statement, Constellation asks that the Commission clarify and make improvements regarding certain provisions related to EDCs’ use of Solar Aggregators and EDCs’ bilateral purchases of Solar AECs from Small-Scale Solar Projects, respectively.


First, with respect to the Proposed Solar Policy Statement’s provisions for EDCs’ use of Solar Aggregators, Constellation recommends that the Commission:

- Clarify that “the prevailing SREC market price at a particular point in time,” as referenced in Proposed Solar Policy Statement § 69.2904(b), is established based on the price paid for Solar AECs by the EDC to the Solar Aggregator. This will ensure that the “market price” determined based on purchases from Solar Aggregators will be established in the same way that “SREC market price” is defined based on the prices of “all accepted winning bids in response to an EDC [RFP] for large-scale solar project [Solar AECs],” as outlined in the Proposed Solar Policy Statement § 69.2902;

- Require that EDCs that desire to execute a master agreement with and make purchases from a Solar Aggregator be required to: (a) use a competitive request for proposals (“RFP”) process to identify the lowest cost Solar Aggregators; and (b) contract with no less than the two (2) lowest cost Solar Aggregators as determined through such RFP process. This will ensure that EDCs and, in turn, their consumers are receiving competitive rates for Solar AEC purchases, and that “the prevailing SREC market price at a particular point in time” (Proposed Solar Policy Statement § 69.2904(b)) is determined using at least two (2) market references.
• Establish, among other prerequisites, that any Solar Aggregator contracting with an EDC must show proof – prior to making sales to the EDC – that the Solar Aggregator has sold at least 500 Solar AECs in the preceding 12 months. This will ensure that Solar Aggregators procuring AECs on behalf of EDCs and, in turn, their consumers are credible and well-experienced.

• Confirm that Solar Aggregators will be subject to penalties equal to those in the PA SACP Schedule, as described above. This will ensure that Solar Aggregators are subject to the same types of penalties and market-price disciplines that are placed upon all other market participants in the Commonwealth, including, but not limited to, EGSs and EDCs’ wholesale Default Service suppliers that may have to meet certain Solar AEC requirements. If the Commission elects not to implement a long-term PA SACP Schedule, the Commission should nevertheless confirm that Solar Aggregators will be subject to the penalties equal to SACP that are placed on other market participants, in the event that a Solar Aggregator fails to deliver to an EDC its contracted-for Solar AECs.

2. The Commission should clarify (a) when bilateral contracts may be used for purchasing Solar AECs, and (b) whether each EDC must procure a fixed amount of Solar AECs from Small-Scale Solar Projects if bilateral purchases are employed.

Finally, with respect to the Proposed Solar Policy Statement’s provisions for EDCs’ procurement of Solar AECs from Small-Scale Solar Projects, Constellation recommends that the Commission:

• Clarify in Proposed Solar Policy Statement § 69.2903(b)(2)(v) that the “bilateral contract approach should only be used to support the development of small-scale solar projects located in Pennsylvania.” The addition of the term “only” will make
clear that bilateral contracts may be used, but are not required to be used, for the purchase of Solar AECs from Small-Scale Solar Projects, and that bilateral contracts are allowed to be used only for Small-Scale and not for Large-Scale Solar Projects.

- Clarify (1) whether the Commission’s intent in Proposed Solar Policy Statement § 69.2903(b)(2)(iii) is to imply that each EDC must procure a certain minimum amount of Solar AECs from Small-Scale Solar Projects where the EDC chooses to use bilateral contracts and, if so, (2) how many Solar AECs must be procured from Small-Scale Solar Projects by each EDC in each year if the EDC utilizes bilateral contracts. This paragraph states that the “amount of small-scale solar project [Solar AECs] yet to be procured by the EDC . . . should be listed on the Commission’s AEPS Credit Administrator’s website,” (emph. added) which may imply that there is a minimum number of Solar AECs which must be procured by the EDC from Small-Scale Solar Projects; it is unclear, however, whether it was the Commission’s intent to include such a minimum requirement.

IV. CONCLUSION

Constellation appreciates this opportunity to submit its Initial Comments to the Commission and looks forward to continued discussions on these and any new issues raised in the context of solar development in Pennsylvania’s competitive markets. Constellation is confident that its recommendations – including, in particular, establishment of a long-term PA SACP Schedule – will promote a more robust deployment of solar technologies as well as continued development of the Commonwealth’s competitive markets, for the ultimate benefit of Pennsylvania’s consumers.
Respectfully submitted,

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On Behalf of  
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