Mid-Atlantic Solar & Storage Industries Association
Rutgers Eco-Complex, Suite 208-8
1200 Florence-Columbus Road, Bordentown, NJ 08505 | info@mseia.net

September, 2020

Ms. Aida Camacho-Welch
Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, NJ 08625

Via email to:
board.secretary@bgu.nj.gov
with copy to:
communitysolar@bpu.nj.gov

Re: Docket No. QO20020184
New Jersey Solar Transition
Successor Program Capstone Report Staff Request for Comments

Dear Ms. Camacho-Welch and Community Solar team:

The Mid-Atlantic Solar & Storage Industries Association (MSSIA) is pleased to present these comments in regard to the above-referenced notice.

In these comments, MSSIA will present its preliminary analysis positions, suggestions, and comments in regard to the Successor Program. The Successor Program, as we understand it, will define the state's efforts to achieve the requirements of the Clean Energy Act and the goals of the Energy Master Plan for many years to come, culminating in the achievement of 50% renewable energy in 2030. We believe it is vital, then, that both the underlying structure of the incentive program and its details and incentive levels be designed as well as possible. In other words, although it is important to conclude the design process quickly, we've got to get it right.

MSSIA is committed to the large amounts of analysis, data gathering, and consensus building that are necessary to ensure that the Successor Program accelerates solar development to the 900 MW per year rate envisioned in the Integrated Energy Plan, while keeping costs as low as possible and accomplishing other societal goals. Accordingly, at this point MSSIA has not yet established positions on some of the questions posed by staff, and indicates below when that is the case.

SUMMARY OF KEY POINTS

- If the pace of solar development is to accelerate as described in the IEP, the incentives must provide a driver that is stronger than that needed to maintain development at the current rate. An example of the kind of parameter we believe should be considered in order to facilitate that

acceleration is to base incentives on a higher percentile in the distribution of project costs, so that a larger number of potential projects can be viable.

- MSSIA believes that the Fixed Incentive Program that CADMUS uses for its base-case analysis is the best approach.

- The approach taken by BPU and CADMUS to make the modeling transparent, using a U.S. government model with an accessible list of inputs, constitutes an important step forward in facilitating a full and thorough review of the process, and enabling effective industry input.

- Several inputs for the SAM model as presented in the CADMUS Capstone report need review and modification. They at odds with solar industry experience with solar projects in New Jersey. They are also at odds with data being gathered by New Jersey solar industry participants, and with the results of U.S. government studies, in particular the most recent version of Lawrence Berkeley Laboratories' Tracking the Sun.

  Cumulatively, these variances in the inputs result in modeled incentive levels that would not produce viable projects in most situations. Chief among the inputs we believe require review and modification are the total cost of acquisition of projects, the performance of systems, and the discount on electric power required to attract net metering hosts.

- Lawrence Berkeley National Laboratory's most recent Tracking the Sun report includes median installed prices for New Jersey solar systems for 2018 and the first half of 2019, along with 20th percentile and 80th percentile figures. The New Jersey *median* installed price was $3.60 per watt for residential, $2.90 per watt for small non-residential, and $2.30. The 80th percentile cost was $4.10 for residential, $3.40 for small commercial, and $2.70 for large commercial.

  It is important, also, to consider the total acquisition price of systems, not just the installed price.

- MSSIA has conducted extensive, but so far preliminary, modeling of a large number of cases using the SAM model. MSSIA has modeled with what it believes are realistic inputs.

  MSSIA modeled cases based on several project size categories. MSSIA also modeled different project types (residential; nonresidential roof and ground-mount, including net-metered as well as grid supply; community solar located on roofs and landfills/brownfields, and special projects including grid supply landfills/brownfields, floating photovoltaics, and agricultural photovoltaics. We also modeled the foregoing combinations by utility territory.

  MSSIA has preliminary results of SAM modeling and comparisons with solar industry models, but is not ready to publish before further checking and verification can be done. One thing that is clear is that the differences in the results are very distinct for different utility territories.

- MSSIA urges that the target of CADMUS' modeling be modified to reflect the way most financers, owners, and developers assess and compare projects, by using unlevered IRR instead of levered IRR as the target for modeling. Unlevered IRR is a more basic measure of project viability at a given project acquisition price, or at a given PPA offer in competitive bidding. It is also a way different projects can be compared on an apples-to-apples basis, and different models can be expected to return similar results. Unlevered IRR levels of 7% to 8.5%, according to project size and type, are used in MSSIA's analysis.

- In New Jersey's original rebate program, in the SREC program, and in the TREC program, incentive levels were not differentiated by direct ownership vs. third-party ownership. MSSIA believes that this approach is still appropriate, with the possible exception of residential solar. Over time, it does not seem to have noticeably skewed development in one direction or the other.

MSSIA's detailed responses are shown below in blue font after each of the staff questions.

Topic 1: Recommended Incentive Structure Design

Based on stakeholder engagement to date, Cadmus presents three incentive "types" in the draft Capstone Report that could be used to inform the design of the Successor Program (see section 3.3, p. 16 – 25):

- Total Compensation: similar to a contract-for-differences model, a total compensation incentive structure calculates all the revenue streams generated by a representative project to arrive at a complementary performance-based incentive amount that may change over time as revenues change to achieve an administratively determined investment target. The incentive value is added onto these revenues to reach a total fixed compensation value.

- Fixed Incentive: a fixed incentive structure is one in which the value of the performance-based incentive is fixed over time, similar to the current Transition Incentive Program.

- Market-Based RECs with Floor: a market-based REC is an incentive that varies over time above a pre-defined floor price, based on the supply of RECs produced by eligible solar projects, and the demand set by the RPS.

1) The draft Capstone Report recommends the implementation of a bifurcated incentive structure, with a competitive solicitation for utility-scale projects and fixed, administratively-set incentives for smaller projects.

    a. Do you agree with this recommendation? Why or why not?

MSSIA agrees with this recommendation. The Total Compensation Model as implemented in the Massachusetts SMART Program has a number of desirable features, and MSSIA has recommended that approach in the past, with some modifications. However, the fixed incentive approach is simpler and has already been implemented in New Jersey in the form of the TREC program. A new fixed incentive program would therefore be faster to implement in the Successor Program.

    b. If you agree with this recommendation, how should NJBPU divide market segments between those projects eligible for the competitive solicitation and those projects eligible to receive the administratively set incentives?

        i. Do you view project size as the appropriate means of differentiating between competitive solicitations and administratively-set incentives? If so, please identify what NJBPU should consider to be the size limit between a utility-scale and small scale project.

MSSIA views project size as the primary determinant of whether a project should competitively bid or receive and administratively-set incentive. We believe that 10 MW should be the size limit for administratively-set incentives.

ii. If project size is used to differentiate incentive-types, how should NJBPU develop a competitive solicitation for utility scale projects that takes into account the different revenues that net metered projects earn compared to those that sell at wholesale?

MSSIA is still considering whether net metering projects over 10 MW should receive administratively-set incentives or be competitively procured. One factor being considered is whether net metered projects over 10 MW would have an unfair competitive advantage over grid supply projects in competitive solicitations. In any case, we expect that net metered projects over 10 MW would be very rare.

If such projects are included with grid supply projects in a competitive solicitation, then it may be that the total compensation (energy revenue plus incentive) should serve as the bid price. It may be, also, that the overall value that the power generated by bidder should be evaluated in the solicitation.

iii. Alternatively, should all net metered projects rely on administratively-set incentives instead?

See MSSIA's answer to b.ii. above.

iv. If you recommend a different option for establishing criteria to distinguish projects that qualify for competitive solicitations versus fixed incentives, please elaborate on your recommendation.

We do not recommend a different option.

v. How should projects that meet the requirements of the Solar Act subsection (t) (i.e., grid-supply projects located on landfills and brownfields) be treated?

MSSIA believes that landfills and brownfields, and other projects of special value such as floating photovoltaics and agricultural photovoltaics should be fixed incentive projects, except for agricultural projects over 10 MW.

c. If you disagree with the concept of a bifurcated competitive solicitation and fixed, administratively-set incentive approach, what would you suggest as an alternative incentive structure? Please be as specific as possible.

We do not disagree with the bifurcated approach.

2) If NJBPU were to implement administratively-set incentives:

a. How often should the incentive value be re-evaluated and potentially reset? Please comment on the mechanism by which NJBPU should consider modeling and analysis to inform future deliberations regarding incentive values.

MSSIA believes that the incentive values should be re-evaluated yearly, including re-modeling the values with stakeholder input.

In addition, we believe that any substantial and material change in circumstances should trigger a review and re-evaluation if the BPU deems it necessary. One example of such a material change in circumstances would be a national change in administration due to the outcome of November's presidential election. It is widely expected in the solar industry that a change in the administration would result in a change in the federal investment tax credit, including potentially holding or even increasing the current tax credit, and potentially adding a reimbursable or direct pay alternative. Such changes would substantially alter the required Successor Program incentive.

b. Should NJBPU differentiate the incentive value (similar to the TREC factors)? If so, on what basis? Please discuss whether NJBPU should differentiate based on the following: (i) customer classes; (ii) installation type / project location; (iii) EDC service territory; (iv) project size; or (v) other.

MSSIA believes that NJBPU should differentiate the incentive value based on the following categories, designed to represent categories with significantly different economic characteristics:

1. **Project Size**
   a. <25 KW (Residential)
   b. 0-500 KW (small non-resi.)
   c. 500-1,000 KW (medium non-resi)

d. 1,000-3,000 KW (large non-resi.)
e. 3,000-10,000 KW (very large non-resi.)

2. Project types:

a. Residential
b. Non-Residential
   i. Roof
   ii. Ground
c. Community Solar
   i. Roof
   ii. Landfill/Brownfield
d. Special Types/Under-utilized Locations
   i. Landfill/Brownfield (subsection t)
   ii. Floating Photovoltaics
   iii. Agricultural Photovoltaics

3. Energy Revenue (by Utility Territory and Grid)

a. PSE&G
b. JCP&L
c. ACE
d. RECO
e. PJM / wholesale grid

c. How is an administratively-set incentive consistent with NJBPU's goal for continually reducing the cost of solar development for ratepayers, in line with the reductions in the cost of solar development?

As discussed in 2.a., administratively-set incentives can be, and usually are, modified at regular intervals by the administrating agency to drive down costs steadily, and can react pro-actively to changed circumstances.

In addition, NJBPU could establish a declining schedule of incentive reduction goals and expectations based on forecast changes in costs and other factors.

Studies in the U.S. and worldwide have found that administratively set incentives can be successful in producing strong growth along with cost-effective incentive levels, and reducing those levels over time. In fact, some studies concluded that administratively-set incentives were more effective than market-based mechanisms in that regard.

d. In the draft Capstone Report, Cadmus used a 15-year Qualification Life (i.e., incentive term) as the base case, with the exception of residential net metered direct-owned projects, for which the incentive term was set at 10 years based on project payback period. Please comment on these respective proposals regarding length of qualification life, including what changes you would suggest, if any, and why.

MSSIA believes that a 15-year qualification life is appropriate. Longer terms, such as a 20-year qualification life, are worthy of consideration as well. Limited modeling of a 20-year life, along with stakeholder input regarding the effect it might have on cost of capital (IRR expectations), and with discounted cash flow analysis comparing the two options.

MSSIA does not support the 10 year incentive term for residential direct ownership, especially not with the same incentive level as residential third-party ownership. As presented in the Capstone Report, it constitutes a severe, further cut in an already severely stressed market segment.

The market for residential direct ownership is the primary market segment that supports local New Jersey companies, who are the strongest job creators. Direct ownership also brings an important segment of the New Jersey population into the position of having a direct stake in the program – the sense that the NJ Clean Energy Program is a part of their lives.

The residential direct ownership segment has been growing in recent years, and NJBPU should be encouraging that growth for its contribution to the EMP and IEP goals. MSSIA's members who are local residential installers report that they are struggling to survive right now, even though in the rest of the country the residential direct ownership market is booming, according to recent surveys by the nationwide Amicus Solar Cooperative. A further substantial cut targeting that segment, as presented in the Capstone report, would be unbearable for our industry's local small business community.

3) If NJBPU were to implement incentives based on a competitive solicitation:

    a. How should the competitive solicitation be designed? What evaluation criteria should NJBPU implement in administering the solicitation? Should project selection be based exclusively on price (i.e., value of the incentive), or should it include consideration of other criteria (and if so, which ones)?

MSSIA believes that for projects over 10 MW, an annual or semi-annual solicitation would be appropriate. We believe that selection should be based upon the following factors:

1. Price
2. Value of the power to the grid
3. Special considerations for the fulfillment of policy goals
4. Ability to execute and degree of project maturity

The topic of the value of a project's solar power to the grid is too complex to cover in detail here, but an example of a project that might have greater value could be one located in an area of grid congestion, particularly if that congestion is well time-matched to the project's output. Another example would be a project featuring solar plus storage.

Regarding storage, MSSIA believes that 15% of each solicitation should be reserved for solar+storage projects, in order to advance compliance with the 2,000 MW of storage by 2030 requirement in the Clean Energy Act.

Examples of special considerations for the fulfillment of policy goals could include projects sited in underutilized locations such as solar on landfills & brownfields or floating PV; or projects accomplishing special non-renewable energy goals, such as agricultural photovoltaic co-developed projects.

b. Cadmus studied incentive structures for the environmental attributes of a given project (i.e., unbundled the environmental attribute, with projects remaining merchant on energy and capacity values). Please discuss project finance-ability of this incentive structure, as opposed to a bundled incentive structure, addressing the implications to price and risk to ratepayers.

MSSIA believes that a bundled incentive structure is a better route. A bundled structure will attract lower cost capital sources, since the revenue risk is lower. Most jurisdictions of which we are aware have taken this approach, with success.

While it is true that the bundled approach creates down-side risk that ratepayers could pay higher incentives if wholesale power rates decline (or escalate less than expected), there is equally up-side opportunity that ratepayers will pay lower incentives if wholesale power rates rise (or escalate more than expected). Through careful design of the solicitations, it should be possible to create confidence that the odds favor the ratepayer, while reaping the benefits of lower cost of capital.

c. How would NJBPU set the incentive value using a competitive solicitation? In particular, please discuss the pros and cons of a pay-as-bid system or a single-clearing price system.

d.

MSSIA recommends setting the incentive (or bundled) value on a pay-as-bid basis. We see no adequate reason the state should pay a successful bidder more than the amount they bid. We know of no evidence that in a solar solicitation of this type, a clearing price solicitation has produced lower overall costs.

e. Should NJBPU implement a minimum and/or maximum bid value in order to prevent overly aggressive or overly high bids?

NJBPU should implement a maximum bid value, after stakeholder input and modeling.

f. How often should NJBPU hold solicitations? How can NJBPU mitigate the risk of "stop and start" development cycles due to the nature of punctual solicitations? For example, should NJBPU consider implementing an "always on" incentive program in the context of a competitive solicitation? How would such an incentive be implemented?

MSSIA recommends annual or semi-annual solicitations, but is interested in how an "always on" program could work. MSSIA has ideas to contribute regarding ways to design a hybrid program, should there be a stakeholder to consider these matters.

g. Should NJBPU account for differences in project cost for different project types (e.g., project type or site, in-state vs. out-of-state)? If so, how?

MSSIA believes that out-of-state projects should not be eligible for state incentives other than Class 1 RECs. If NJBPU decides to make them eligible, there should be a limit to the percentage of any solicitation that out-of-state projects can be awarded, since otherwise out-of-state projects will almost certainly eclipse all in-state projects.

h. In the draft Capstone Report, Cadmus used a 15-year Qualification Life (i.e., incentive term) as the base case. Is this the appropriate term for incentives determined via a competitive solicitation?

MSSIA believes that for utility-scale projects, the term of the award should be 20 years, in line with the expectations of the typical utility-scale developers and financers, and in line with what we believe has been the norm in other states.

i. New Jersey's solar incentive programs have historically been delivered via a program established by NJBPU. Should NJBPU consider instead delivering the incentives through project-specific contracts with the EDCs? Would this approach reduce financing costs for developers? Please discuss the pros and cons of both approaches, including the potential benefits of a contract filed with the Federal Energy Regulatory Commission and imputed debt considerations.

Project-specific contracts with EDCs would be preferable from the point of view of developers and project financers. MSSIA is, however, sensitive to the utilities' concerns about imputed debt arising from such contracts. It may be worthwhile to consider using the OREC program as a model. It appears as if the OREC program was able to attract low-cost capital for very large projects, and satisfy a diverse set of stakeholders. The substantial work that was done on that program could provide a head start for a utility-scale solar program.

4) How can NJBPU prevent queue siting or speculative project bids? In other words, what maturity requirements should NJBPU implement? Please consider, for example, minimum bidding requirements, escrow payments, etc. Should NJBPU require different maturity requirements for projects entering the competitive solicitation process versus the administratively-set incentive levels?

Maturity requirements will be vital to the success of a utility-scale solicitation program. Some attention needs to be paid to balancing the need for high project maturity against the need for developers to keep the magnitude of expenditures in advance of approval to a reasonable level. MSSIA believes that an escrow payment should be part of the process, as was done for the subsection q program, etc.

Project maturity requirements should include site control, site environmental investigation, and completion of PJM interconnect studies.

Other maturity factors beyond the minimum could be included in the scoring for bidders in the solicitations, with factors such as a signed ISA or town planning board approval conferring a scoring advantage.

5) The draft Capstone Report recommends that NJBPU maintain flexibility in program design, in order to respond to changing market circumstances and enable the integration of emerging technologies and new solar business models.

a. Generally, how can this flexibility be incorporated into the design of the Successor Program?

See MSSIA's answer to question 2.a.

b. How should changes in the federal Investment Tax Credit or carbon-pricing policies be incorporated into future incentive level resets?

As stated in our answer to question 2.a., changes to the FITC levels as well as the creation of refundable or direct-pay alternatives, or carbon-pricing policies, should trigger a special review in advance of any upcoming regularly-scheduled reviews, if the BPU believes that such changes substantially and materially alter the economics of solar projects.

c. How should NJBPU account for potential changes to the PJM and FERC regulatory structures and capacity markets?

As with question 5.b., any substantial and material change should trigger a special review.

6) The draft Capstone Report includes a SAM case for out-of-state utility-scale solar. Should NJBPU provide incentives to out-of-state utility solar through the Successor Program? If so, how, and under what conditions?

MSSIA believes that out-of-state utility-scale, as well as non-utility-scale projects, should not be eligible for state incentives.

a. The Energy Master Plan found that out-of-state utility scale resources deliverable to New Jersey are part of the least-cost path to reaching 100% clean energy. Do you agree or disagree that such projects should be eligible to participate in New Jersey's solar program?

b. Please address any commerce clause or other legal issues associated with restricting the ability of out-of-state utility-scale projects to compete in the competitive solicitation.

For twenty years, New Jersey's solar energy incentive programs have been limited to projects connected to New Jersey's distribution system, effectively limiting them to in-state projects. To our knowledge, there have been no issues of note or challenges to any of those programs, including the most recent TREC program.

According to MSSIA's Counsel, who researched the matter for MSSIA, in other jurisdictions where similar state incentives for a number of different purposes have been limited to in-state participants, and those policies have been challenged, the courts have consistently upheld the states' position. This includes the U.S. Supreme Court.

c. Should NJBPU require that such projects respect transmission limits into New Jersey? If so, how should such a requirement be designed?

MSSIA is looking into this issue.

d. Should NJBPU require that such projects sell their energy into New Jersey (i.e., deliver into a New Jersey EDC service territory)? If so, how should such a requirement be designed?

MSSIA is looking into this issue.

Topic 2: Modeling

The modeling conducted by Cadmus and described in the draft Capstone Report was largely informed by the assumptions used in the Transition Incentive program modeling, updated cost data from projects in the SRP, and subsequent stakeholder engagement such as the March 2020 Successor Program cost survey. Staff is interested in stakeholder feedback on Cadmus' assumptions and modeling choices. Staff has identified a number of specific questions below, but encourages stakeholders to share their assessment of the model and modeling assumptions beyond the focus of these questions.

7) Is Cadmus' breakdown of SAM cases, as identified in Table 12 (p. 32), appropriate? Why or why not?

The breakdown of cases in the Capstone Report should be expanded in certain ways as stated previously, including the addition of one more size option for non-residential, including roof and ground-mount for each size option, and including a grid-supply case for each non-resi size category (except community solar, of course). Cases should also include landfills & borwnfields (subsection t), as well as special cases for floating PV and agricultural PV.

Our analysis shows clearly that cases need to be modeled by utility territory, since

our modeling revealed large difference in incentives for different utilities – one of the largest factors, if not *the* largest, in determining the required incentive rates.

On the other hand, MSSIA does not believe that it is necessary to separately model direct ownership vs. third party ownership, as discussed below.

8) Please provide feedback on Cadmus' SAM model inputs, as identified in the draft Capstone Report and the supplemental modeling spreadsheet. In particular, please provide feedback on the following assumptions:

    a. Modeled system size (Table 13, p. 34). For example, how could the adoption of the 2018 building codes and subsequent changes to residential systems setback requirements impact system size?

As shown in MSSIA's answer to question 2.b., MSSIA recommends further differentiation by size, and stretching the non-resi size categories to reflect the continued growth in system sizes (a good thing for meeting the EMP 2030 goals).

MSSIA expects that residential system sizes will decrease in response to the new fire code, but it is too early to tell whether the change will necessitate an alteration to the modeling.

    b. Installed costs (Table 17, p. 39). What are factors that could impact installed costs moving forward? Has Cadmus correctly identified installed cost assumptions for the out-of-state solar and community solar SAM cases?

MSSIA believes that the modeled cost assumptions are generally low, by a substantial margin. One factor seems to be that the modeled costs are installed cost, not total acquisition cost. It appears that soft costs were not sufficiently included in the modeling. These are real costs that effect the viability of projects, and therefore need to be included in the modeling in order to find the right incentive levels. Attention should be paid to the Lawrence Berkeley Laboratory Tracking the Sun report, as cited previously. A new edition of the Tracking the Sun report is due to be published in October.

    c. Financial parameters, including interest rates and loan terms (Tables 19 and 20, p. 43).

Of greatest concern to MSSIA is CADMUS' use of a levered IRR target for modeling. As stated previously, the standard target when assessing projects, refining prices for competitive bids, comparing projects with other projects, and comparing different acquisition offers, unlevered IRR is the parameter normally used.

Furthermore, industry modeling of the CADMUS target approach has indicated that the chosen unlevered IRR produces non-financeable projects.

    d. Revenue assumptions. In particular, please comment on the ability to quantify projects' demand charge reduction (see Cadmus' modeling note on p. 45).

Even for the solar industry when facing real projects, it is very difficult to quantify

demand charge reduction. As a result, it usually isn't done, and isn't relied upon in financing or selling projects. It is possible, though, in certain circumstances. MSSIA would welcome engaging CADMUS, BPU, and other stakeholders on this topic.

e. Specific energy production and energy degradation rate (see Cadmus' modeling note on p. 61).

MSSIA finds CADMUS' energy production rates to be unrealistically high. Correspondingly, several performance modeling assumptions used in SAM were found to be missing, understated, or exaggerated. Moreover, actual performance over the past five years, as recorded by high-quality data acquisition systems monitored by the industry, and as published by PJM GATS, indicated that real world performance is even lower than solar industry models would suggest.

f. Investment Tax Credit ("ITC"). Should NJBPU assume that non-residential projects are able to safe harbor under the 2020 ITC at 26% (similar to the approach adopted in 2019 for the Transition Incentive Program)?

MSSIA believes that relatively few developers and project financer/owners will safe-harbor equipment for 2021, for the following reasons:
1. Many entities safe harboring for 2020 found that they "lost money on the bet"; the cost of buying at a high cost, then storing and double-shipping the modules was greater than the gain
2. Even if entities do safe harbor equipment, the cost of doing so would have to be taken into account in the modeling.
3. There is risk of getting stuck with equipment that ends up not being needed.
4. Many developers and financer/owner simply will not be financially able to afford to hold equipment for a long period of time.

9) Do you agree with Cadmus' derivation of wholesale and energy prices, as presented in Table 21 (p. 46)? If not, how would you recommend modifying Cadmus' approach?

CADMUS' resulting estimate of wholesale energy prices is significantly higher than current rates and forward-looking expectations, especially in view of the effects of the MOPR. A more realistic assumption would be a total of about 3.5 cents per KWH.

10) Cadmus provided different approaches to modeling the MW targets (see section 4.3, p. 50 - 56). How should NJBPU set the MW targets, while maintaining compliance with the legislative cost caps?

MSSIA is still studying CADMUS' modeling of the MW targets, especially assumptions and allocations for different market segments. MSSIA plans to comment during subsequent stakeholder proceedings.

11) Cadmus recommends that NJBPU consider whether to differentiate treatment between direct-owned ("DO") projects and third-party owned ("TPO") projects. Please comment.

MSSIA recommends that BPU not differentiate between direct ownership and third-party ownership projects. Such differentiation was not done in the TREC program, or before that in the SREC program, or, to our recollection, in the CORE rebate program before that. The 20-year history of those programs indicates that not differentiating between the two did not seem to unduly favor one or the other, with both types growing but not overwhelming the other. We take that as evidence that incentive levels in the past were about equally effective for both types.

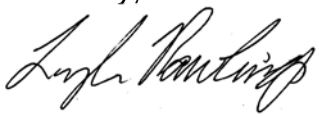
12) Please comment on the transparency and replicability of Cadmus' incentive modeling: if NJBPU were to implement an administratively determined incentive, could this model serve as the basis for setting the incentive value going forward? If not, what changes would need to be made to make it suitable?

The BPU's move to provide a transparent, publicly available, and accessible modeling platform and input assumptions was an important step forward, and one MSSIA appreciates greatly. MSSIA has put in a large amount of time and effort modeling incentives with SAM, comparing results for a variety of cases, and vetting results by comparing those results with the results using an industry model using the same assumptions and inputs, to the extent possible. Much work remains to be done. There are behaviors of the SAM model we do not yet understand, and some results are at odds with industry models. MSSIA looks forward to BPU holding technical workshops. We believe the workshops will play a vital role in refining the incentives, ensuring that they are sufficient but not super-sufficient for all market segments.

13) Please provide general feedback on Cadmus's modeling inputs, methodology, and assumptions not already addressed in a previous question.

MSSIA thanks staff for the opportunity to provide input on this matter.

Sincerely,



Lyle K. Rawlings, P.E.
President