

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

STEFANIE A. BRAND Director

September 8, 2020

By Electronic Mail (board.secretary@bpu.nj.gov)

Honorable Aida Camacho-Welch, Secretary NJ Board of Public Utilities 44 South Clinton Avenue, 9<sup>th</sup> Floor P.O. Box 350 Trenton, NJ 08625-0350

Re: In the Matter of Solar Successor Incentive Program Pursuant to P.L.

2018, c. 17 – Successor Program Capstone Report Staff Request for

**Comments** 

BPU Docket No. QO20020184

Dear Secretary Camacho-Welch:

Please accept for filing the attached comments being submitted on behalf of the New Jersey Division of Rate Counsel ("Rate Counsel") in connection with the above-referenced matter. These comments are being submitted electronically in accordance with the Board's August 21, 2020 Updated Notice in this matter. Copies of Rate Counsel's comments are being provided to all parties on the service list by electronic mail only.

Please acknowledge receipt of these comments.

Honorable Aida Camacho-Welch, Secretary September 8, 2020 Page 2

Thank you for our consideration and attention to this matter.

Respectfully submitted,

STEFANIE A. BRAND Director, Division of Rate Counsel

By: /s/ Sarah H. Steindel

Sarah H. Steindel, Esq. Assistant Deputy Rate Counsel

# Enclosure

cc: <u>solar.transitions@bpu.nj.gov</u>

Paul E. Flanagan, BPU Kelly Mooij, BPU Sherri Jones, BPU Scott Hunter, BPU Abe Silverman, BPU Pamela Owen, DAG, ASC

#### **STATE OF NEW JERSEY**

# BEFORE THE BOARD OF PUBLIC UTILITIES

In the Matter of Solar Transition Successor	)	<b>Docket No. QO20020184</b>
Incentive Program Pursuant to <u>L.</u> 2018, <u>c.</u> 17	)	_

# COMMENTS OF THE NEW JERSEY DIVISON OF RATE COUNSEL ON SUCCESSOR PROGRAM CAPSTONE REPORT STAFF REQUEST FOR COMMENTS

September 8, 2020

#### Introduction

The Division of Rate Counsel ("Rate Counsel") thanks the Board of Public Utilities ("Board" or "BPU") for the opportunity to provide comments on the draft Capstone Report for New Jersey's next-generation Solar Successor program. The draft report was developed by Staff consultants Cadmus Group, LLC ("Cadmus") and presents preliminary findings regarding the incentive levels necessary to support continued robust solar development in New Jersey while lowering ratepayer costs.

The Solar Transition proceeding was initiated by the Clean Energy Act (P.L.2018, c.17) ("Act" or "CEA") which directs the Board to transition the solar market away from solar financing methods based on the use of Solar Renewable Energy Certificates ("SRECs") to a new program that will continue the efficient and orderly development of solar energy generation. Specifically, the Act requires the Board to adopt rules and regulations to close the SREC program to new applicants once solar generation reaches 5.1 percent of total retail sales (hereafter the "threshold"), and no later than June 1, 2021. N.J.S.A. 48:3-87(d)(3).

The CEA also directed the BPU to conduct a study on how to replace the SREC program. As outlined in the CEA, the legislature envisioned a modified program that will: (1) continually reduce the cost of achieving solar energy goals; (2) provide an orderly transition from the legacy program to a new or modified program; (3) periodically establish and update market based maximum incentive payment caps; (4) encourage and facilitate market-based cost recovery through long-term contracts and energy market sales; and (5) where cost recovery is needed for any portion of an efficient solar electric power generation facility when costs are not recoverable through wholesale market sales and direct payments from customers, utilize competitive processes such as competitive procurement and long-term contracts where possible to ensure

such recovery, without exceeding the maximum incentive payment cap for that category of facility. N.J.S.A. 48:3-87(d)(3).

The BPU engaged Cadmus to conduct a lengthy, multi-step Solar Transition process that has been informed by extensive stakeholder input in multiple phases. This process has involved closing the SREC program ("Legacy SREC Program") to new entrants, designing and implementing a Solar Transition Incentive program, and developing a successor solar incentive mechanism ("Successor Program). The draft Capstone report with underlying modeling spreadsheets was released on August 11, 2020.<sup>1</sup> In addition, two stakeholder meetings were held. On August 17, 2020 a stakeholder workshop was held to provide a walkthrough and technical discussion of the System Advisor Model ("SAM") used in the development of financial incentives in the Successor Program.<sup>2</sup> A second stakeholder meeting was held on August 20, 2020 which also allowed for public comment on the Capstone report.<sup>3</sup>

Rate Counsel applauds the efforts of Staff and Cadmus. The draft Capstone report represents a thoroughly developed analysis of solar project characteristics that includes customer types, installation types, ownership, size, and Electric Distribution Company ("EDC") territory; and explores how differentiation impacts project economics and minimum incentives. Further, the entire study development process has allowed for continuous engagement and stakeholder participation. As outlined in the draft report, there have been several stakeholder meetings and workshops to acknowledge industry input and to discuss modeling assumptions, incentive design and potential policy pathways.

<sup>&</sup>lt;sup>1</sup> Available at: <a href="https://njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-proceedings">https://njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-proceedings</a>.

<sup>&</sup>lt;sup>2</sup> Public Notice available at:

 $<sup>\</sup>frac{https://www.nj.gov/bpu/pdf/publicnotice/Stakeholder \% 20 Notice \% 20 Successor \% 20 Program \% 20-\% 208-4-20.pdf.}{^{3} Ibid.}$ 

# **Topic 1: Recommended Incentive Structure Design**

Based on stakeholder engagement to date, the draft Capstone Report presents three incentive types that could be used to inform the design of the Successor Program.<sup>4</sup> These incentive types are:

- 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 performancebased 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.<sup>5</sup>

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. However, of these three options presented, Rate Counsel supports a modified version of the "Total Compensation" incentive structure, similar to the one being utilized in the Solar Massachusetts Renewable Target ("SMART") program. Rate Counsel recommends that the Total Compensation model be modified such that the financial incentives provided in the program are limited to environmental attributes only and do not include "all-in" energy, capacity and other attributes. Other revenues streams such as energy and capacity revenues should be determined by the market, with the project developer bearing the risk, not ratepayers. A program of this nature should operate in a fashion similar to the Long Term SREC

<sup>&</sup>lt;sup>4</sup> Draft Capstone Report, pp. 16-25.

<sup>&</sup>lt;sup>5</sup> NJBPU Notice, New Jersey Solar Transition Successor Program Capstone Report Staff Request for Comments, Docket No. QO20020184, August 11, 2020. p. 5.

contracting approach utilized by the Board for several years. However, rather than contracting for SRECs, the "modified" Total Compensation approach should contract for the total dollar amount needed by competing solar projects to make their projects profitable with current market conditions. As discussed in more detail below, while the "all-in approach used in the Massachusetts program may be appropriate in that jurisdiction, it does not make sense in New Jersey given the history and legal and regulatory context of this State's electricity and solar markets.

Rate Counsel notes that the "Total Compensation" approach as described in the Board's Notice and as recommended by Rate Counsel is not a true "contract for differences" model. A contract for differences would allow the incentive to fluctuate over the life of the project. As discussed in more detail below, the amount of the incentive for each project should be based on market conditions at the time the incentive is awarded, and then should remain fixed for the duration of the term of the incentive.

Rate Counsel believes that a Modified Total Compensation model will provide the necessary certainty needed by project developers, while at the same time, reduce costs borne by ratepayers. Such an approach will be performance based, <u>i.e.</u>, based on actual electric generation, and acts as a consistent revenue stream for the generator. This type of structure also allows for flexibility to encourage or discourage project types through project adders and subtractors; or alternatively, the Board could consider separate solicitations to allow certain types of priority projects to only compete with one another for ratepayer financing. For instance, projects paired with battery storage could receive an adder to further incentivize this technology – or, alternatively, the Board could conduct a "solar/battery" only solicitation and choose from the least cost bids provided in this separate solicitation.

An important part of the Total Compensation model, whether it be from the Board's "allin" approach or Rate Counsel's preferred modified "attributes only" approach is that prices will be set through a competitive bidding process. The Total Compensation model is the only incentive structure that will ensure the New Jersey solar program will move forward in a straightforward and transparent manner that produces efficiency gains that can be passed on directly to ratepayers. Rate Counsel continues to advocate for solar incentive programs that aggressively reduce ratepayers' financial burdens through competitive markets. Developing a program that promotes continued solar development at minimal ratepayer costs should be the primary goal of the successor program particularly as the New Jersey economy starts to rebuild in the aftermath of the current pandemic. Now is not the time to over burden households, businesses and industry with investment costs that are excessive and not market tested.

A market-based approach, like that envisioned by the modified total compensation structure, will help to eliminate the long-existing problem of over-compensated solar development in New Jersey. The Board must adopt a program that ends this over-incentivization through the use of competitive solicitations. Rate Counsel believes that this is the only option that can achieve the CEA's objective of replacing the current SREC program with one that will reduce costs to ratepayers.

The second incentive option, "Fixed Incentives" is similar in structure to that used in the current Transition Incentive Program. A fixed price for environmental attributes and other production associated values would be set administratively and paid to developers in addition to market revenues and avoided cost. As the Transition Incentive Program was being developed, Rate Counsel urged Staff to adopt a competitive process rather than an administratively determined fixed incentive structure. Incentive values determined by an administratively

determined fixed price are inefficient, and place far too much cost risk upon ratepayers. There is also the likelihood that such programs will significantly over-compensate solar development since there is no guarantee that the Board will have complete or contemporaneous information in order to set an appropriate incentive value. As evidenced throughout the proceeding in developing the Solar Transition Program, setting an appropriate solar incentive value can be a contentious and drawn out process since the solar industry will have strong incentives to see these compensation levels set as high as possible. Thus, any administratively determined incentive value will likely be incorrect, exposing ratepayers to the risk that incentives will be too high. The inefficiencies inherent in administratively-determined prices are highlighted in the draft Capstone Report:

the primary issue with this type of incentive program is the difficulty regulators face in administratively determining the appropriate price level.

In response to striking an appropriate balance, regulators may need to hold frequent meetings to ensure prices are set at a suitable level, increasing the program's administrative and overall costs. Additionally, given this program type necessitates long-term contracts, the REC price is set for a long time period, hence lacking market-responsiveness.<sup>6</sup>

The third incentive option, "Market-Based RECs" appears to contemplate a structure with tradeable certificates, similar to the legacy SREC program. Rate Counsel cannot support this option because it would simply perpetuate the same problems that have arisen under the former legacy program and that the CEA seeks to address. Repeatedly, the Board or the Legislature has moved to lower Solar Alternative Compliance Payment ("SACP") values in order to moderate SREC prices to better reflect the ongoing cost efficiencies arising from solar installations. However, while SREC prices did decline, they failed to track the declining costs of solar creating

<sup>&</sup>lt;sup>6</sup> Draft Capstone Report, p. 20.

a long trend of over-compensation to solar developers. In short, the legacy program generated considerable margins for the solar industry at New Jersey ratepayers' expense. Rate Counsel cannot support a Successor Program that is designed in any way similar to the Legacy SREC Program.

Further, the use of a tradeable REC- based program is inconsistent with the CEA which directs the Board to establish a successor program that supports solar development in an "efficient" and "orderly" fashion as defined in the CEA.<sup>7</sup> The CEA also directs the Board to control costs by using "competitive processes such as competitive procurement and long-term contracts," with the ultimate objective of "transform[ing] the renewable energy market into one that can move forward without subsidies." N.J.S.A. 48:3-87(d)(3). Neither an administratively determined incentive nor a program based on tradeable RECs is consistent with the very plain and clear intent of the CEA.

# Responses to Board Staff Questions on Report

The remainder of Rate Counsel's comments are in response to the draft Capstone Report's questions outlined below.

- 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?

#### **Response**

Rate Counsel disagrees with the recommendation for a bifurcated incentive structure. As explained above, Rate Counsel does not support administratively set incentives for any projects. Incentive prices for all future solar development should be determined through a competitive

\_

<sup>&</sup>lt;sup>7</sup> N.J.S.A. 48:3-87(d)(3)

procurement process. Setting incentive prices through competitive solicitation is the only way to ensure the most recent changes in cost, performance and efficiency are reflected and the only way to protect ratepayers from risk.

In Massachusetts, the SMART Program is designed to procure solar generating capacity based on long-term, fixed-price contracts. SMART Program participants receive a fixed per kWh compensation that is separate from their electricity bill for a period of 10 or 20 years. A competitive request for proposals is held jointly by the Massachusetts distribution companies for projects between 1 and 5 MW. Each company solicits an amount of capacity proportional to its load share and the results of this competitive solicitation are used to establish a base compensation rate or clearing price for projects between 1 and 5 MW. For projects less than 1 MW, rates are set based on an index or "rate factor" that attempts to reflect the different costs of development for projects of different sizes. Incentives are available for 10 years for projects up to 25 kW; and 20 years for projects from 25 kW to 5 MW.

The SMART Program is made up of eight blocks with each block representing about 200 MW of capacity. As projects respond to the incentive rate offered, the capacity blocks are filled. Going forward, incentive payments decrease by a pre-determined amount for each block so that once a block reaches its maximum capacity within an EDC's service territory, future projects then become eligible for the rates offered in the next lower-priced block. Projects are awarded on a first-come, first-served basis. Most importantly, in the SMART Program the starting point for an incentive price is based on the least-cost, most-competitive projects, for all project sizes, which provides a strong financial signal for early adopters.

However, if the Board does adopt a bifurcated approach it needs to tie part of this approach to competitive market outcomes. For instance, the Board could elect to award projects

based on an as-bid basis and use the lowest offered bid in a competitive solicitation to set a standard offer price for additional projects, with a total installed project capacity cap. This standard offer price would exist for a one-year period or up to a time when newer competitive solicitations are held. If the Board selects this option, then the standard offer price needs to be set at a very aggressive level relative to offered competitive bids, and the total capacities eligible should be strictly limited. Otherwise, solar projects will have incentives to not participate in the competitive bidding process, sit on the fence, and hope for unnecessarily high prices to arise from limited bidding. Afterwards, these "fence-sitters" will be able to take advantage of the artificially high standard offer price. This is simply another form of market manipulation, like the various methods that have arisen over the past decade in the New Jersey SREC market, that will result in outcomes that over-compensate solar development at ratepayers' expense.

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?

#### Response

Rate Counsel does not agree with the recommendation for a bifurcated incentive structure. Please see Rate Counsel's comments to part 1(a) above and part 1(c) below. Rate Counsel recognizes that the CEA identifies some market segmentation of new programs to the extent these programs are needed. An incentive structure similar to that used for the SMART Program in Massachusetts will provide the flexibility to recognize the mandated segmentation in a straightforward and transparent manner. However, Rate Counsel cautions the Board not to overly segment the market and to set reasonable targets for segmentation that are consistent with prior experience. The Board has not been successful in the past in defining market segmentation goals, particularly with the long-term solar contracting program and utility-based programs.

Setting unreasonable segment targets could lead to unnecessarily high prices and shortfalls in reaching the Clean Energy Act's solar energy goals.

Further, as noted earlier, if the Board utilizes a bifurcated structure, then that structure must be based on competitive solicitations. Such a structure would use competitive prices in an initial solicitation and use those competitive prices to set a limited period/limited quantity standard offer. The Board needs to appreciate the difference between having a known standard offer available to projects versus an administratively determined price. A competitively-priced standard offer informed by a market solicitation is not the same as an administratively-set price determined by the regulator. Both provide the certainty needed for project development, yet one, the administratively determined price, is more likely to be set incorrectly and over-compensate solar energy development. Rate Counsel does not support the establishment of a bifurcated approach. However, if the Board is going to do this it must find a way to tie the bifurcated approach to the market to assure ratepayers benefits and to assure consistency with the CEA's mandate to meet the State's solar energy goals while minimizing burdens on ratepayers.

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.

# Response

Rate Counsel does not agree with the recommendation for a bifurcated incentive structure. Please see Rate Counsel's comments to parts 1(a) and 1(b) above and part 1(c) below.

Further, as noted earlier, Rate Counsel does not support high degrees of market segmentation that treats solar projects differently. All solar projects need to be tested against the competitive market to achieve consistency with the express intent of the CEA.

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?

#### Response

Rate Counsel does not agree with the recommendation for a bifurcated incentive structure. Please see Rate Counsel's comments to parts 1(a) and 1(b) above and part 1(c) below. Also, Rate Counsel believes net metering subsidies will continue to have a distorting effect on the Successor Program. The Board recognized this issue in its Solar Transition Order by approving a lower Transition Renewable Energy Certificate ("TREC") factor for some net metered projects. In the Massachusetts SMART Program, the uneven playing field that net metering creates is addressed by subtracting a "value of energy" ("VOE") component from a project's compensation. SMART Program customers who enroll in net metering receive an incentive rate that is calculated as the base compensation rate, plus any applicable adders, minus the VOE. The VOE is established by the Department of Energy Resources and is equal to the three-year average of the basic service rate plus current rates for transmission, distribution, and transition. This rate is calculated for each EDC and rate class.

Thus, Rate Counsel recommends that any future project or solicitation manager that may be hired as a result of the development of this new program take net metering financial support into account in either the evaluation of competitive offers, or any other standard offer that may arise from the competitive bidding process. Again, as Rate Counsel has stated, an important goal of this new program needs to be the elimination of over-compensation for New Jersey solar energy projects, particularly in the current challenging economic environment. Rate Counsel

<sup>8</sup> <u>I/M/O a New Jersey Solar Transition Pursuant to P.L. 2018, c. 17</u>, BPU Docket No. QO19010068, (December 6, 2019).

also notes that if the Board utilizes Rate Counsel's recommended "attributes only" approach, it could reduce overcompensation issues associated with net metering since competition would force developers/projects to bid the lowest needed price in order to receive financial support.

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

#### Response

No, net metering projects do not need an additional financial incentive which runs the risk of over-compensating New Jersey solar development. As Rate Counsel has stated, there is no need for a bifurcated incentive structure. Also, please see Rate Counsel's comments to parts (a), (b), and (b)(ii) above and part (c) below.

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.

# Response

Rate Counsel does not agree with the recommendation for a bifurcated incentive structure. Competitive structures are preferred and are more consistent with the intent of the CEA. The above question, as do others in this set of inquiries, presumes that while larger projects can compete in competitive solicitations it is too difficult for smaller projects to do the same. New Jersey's experience with the long-term SREC contracting program, however, disproves this presumption. Several award-winning bids in the long-term SREC contracting program were smaller than 10 kW. These programs were in existence for several years for Jersey Central Power & Light Company ("JCP&L"), Rockland Electric Company ("RECO"), and Atlantic City Electric Company ("ACE"). There is nothing to suggest, therefore, that smaller projects cannot participate in a competitive bidding process. The Board should exhaust

its options in creating a competitive program, or one based on competitive bidding data, before turning to administratively-determined prices.

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?

#### Response

Rate Counsel does not agree with the recommendation for a bifurcated incentive structure nor does Rate Counsel support overly detailed solar market segmentation. If the Board chooses to segment these particularly types of solar projects as specified in the CEA, then it should either: (a) consider having a separate competitive solicitation for these projects alone; or (b) make slight changes in the scoring evaluation of any broader competitive solicitation in an attempt to balance the playing field for these types of applications.

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.

#### Response

Rate Counsel supports a modified version of the total compensation incentive structure that is similar to the Solar Massachusetts Renewable Target ("SMART") program but limits financial support to environmental attributes only. Rate Counsel believes this is the only incentive option that provides transparency and certainty to both project developers and ratepayers. It is also the only incentive mechanism that will support solar development in an "efficient" and "orderly" fashion as defined in the CEA, by using "competitive processes such as competitive procurement and long-term contracts," with the ultimate objective of "transform[ing] the renewable energy market into one that can move forward without subsidies." N.J.S.A. 48:3-87(d)(3). Rate Counsel does not subscribe to the belief that smaller projects are

somehow prejudiced or do not have the ability to participate in competitive processes. As noted earlier, there is New Jersey-specific experience to show otherwise.

#### 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.

#### Response

Please see Rate Counsel's general comments above. Rate Counsel does not support an administratively set incentive. There is no guarantee that the Board will ever have complete and contemporaneous information that guarantees ratepayers are funding the most competitively priced and efficient projects. Going forward, the most important concept in ensuring that new programs continually reduce the cost of achieving the State's solar energy goals is to incorporate competition. To the extent that new programs are needed, Rate Counsel supports using competitive bidding and other forms of market-based mechanisms for stimulating new solar development.

This specific question highlights the problem with administratively set incentives. "How often should the incentive value be re-evaluated and potentially reset?" If anything has been learned from the Legacy SREC Program, and the contentious proceeding in developing the Solar Transition program, it is that there is no way to guarantee complete and contemporaneous information to administratively set prices. Throughout the Legacy SREC program, the repeated meddling with SACP prices and SREC requirements created confusion and financing difficulties for developers, and placed unacceptable price risk on ratepayers. More importantly, this practice of fine-tuning markets, with little to no market-based information, resulted in the considerable over-compensation of New Jersey solar energy projects at ratepayers' expense.

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.

#### **Response**

No. Incentive values should be set by competitive bidding results. The Board may consider setting up separate types of competitive solicitations, which could result in different market-based incentives, but that type of outcome is entirely different than the administratively determined one premised in the above question. Also see Rate Counsel's response to part 2(a) above.

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?

#### Response

Please see Rate Counsel's general comments, and responses part 1 and 2(a) above. There is no way to continually reduce the cost of solar development to ratepayers through administratively set incentives. Administratively determined incentive values are inefficient, and place far too much price risk upon ratepayers and will more than likely be higher than competitive market-based outcomes.

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.

#### Response

Rate Counsel disagrees with the use of the term "qualification life" since this presumes that a tradeable certificate-based market design is acceptable and consistent with the CEA. Rate

Counsel recommends that term lengths for financial support for all projects should be set for a shorter period of ten years. This reflects the falling cost of solar installations while allowing project owners to recover costs quickly and reduces the time period over which ratepayers are subsidizing solar energy. Other project sizes should have their financial support timed to terms of ten years as well.

#### 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)?

#### Response

Please see Rate Counsel's general comments, and responses to part 1 above. Rate Counsel continues to advocate for solar incentive programs that aggressively reduce ratepayers' financial burdens. Developing a program that promotes continued solar development at minimal ratepayer costs should be the primary goal of the Successor Program. The Board must adopt a program that ends the over-incentivization of New Jersey solar installations. Thus, as detailed below, Rate Counsel strongly supports a program that relies on a competitive solicitation process. Rate Counsel believes that this is the only option that can achieve the CEA's objective of replacing the current SREC program with one that will reduce costs to ratepayers. Project selection should be based exclusively on price.

Rate Counsel has repeatedly advocated for a Successor Program modeled after the SMART Program used in Massachusetts. The SMART Program is designed to procure solar generating capacity based on long-term, fixed-price contracts. Through the SMART Program participants receive a fixed per kWh compensation that is separate from their electricity bill for a period of 10 or 20 years.

While Rate Counsel suggests following a program structure similar to that used in Massachusetts, it also recommends that the Board exercise caution in establishing numerous market segments. While the CEA requires some market segmentation, the Board should not overly segment the market. Setting unreasonable and unnecessary segment targets could lead to higher prices and shortfalls in reaching the CEA's solar energy goals. Additionally, Rate Counsel does not support a size cap for projects participating in this program. The focus of any incentive program going forward should be to encourage the most cost-efficient projects at the lowest unit price (\$/MWh). Establishing a cap on project size could run contrary to this goal. In addition, as explained above, the program structure should recognize and address the distorting effect of continuing net metering subsidies.

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.

#### **Response**

A bundled approach reduces overall project cost recovery risk for developers, which in turn, should increase project "finance-ability." This risk, however, is not eliminated but simply shifted away from solar project developers and onto ratepayers. Rate Counsel supports financial mechanisms that reduce ratepayer risk exposure and costs. Thus, Rate Counsel believes that a competitive solicitation based on environmental attributes alone, would be preferable to an "all-in" or bundled approach.

Rate Counsel recognizes that the Massachusetts SMART program provides solar developers with a bundled price including attribute, energy and capacity. While the Massachusetts model utilizing an "all-in" approach may make sense in that jurisdiction, it does

not make sense for New Jersey given the relative differences in the size and maturity of each state's respective solar market. Massachusetts started the SMART program in 2018 in large part to reverse what was perceived as a perennial problem with lagging total solar capacity installations. New Jersey, on the other hand, has had a robust solar market (for both small and larger scale installations) for over 16 years. New Jersey was one of the earliest and most aggressive in initially establishing a solar set-aside within its RPS back in 2004 which was increased in 2006. In 2007, New Jersey was one of the first states to adopt a relatively comprehensive standardized solar market design. New Jersey adopted its first comprehensive EDC backed solar program, PSE&G's Solar Loan Program, 9 as early as 2008. A long-term solar contracting model, a unique framework for securitizing solar investments, was adopted in 2008. Further, New Jersey has been in the top ten states for solar capacity development for 12 years consecutively and was in the top five states for eight out of the last 12 years. Massachusetts, on the other hand, has never broken into the top five solar installation states on total solar capacity basis (i.e., large and small scale installations). Thus, New Jersey, as a leader in all types of solar energy development does not need to follow the same de-risking route adopted by Massachusetts.

While the New Jersey "OREC" method of funding offshore wind ("OSW") is comparable in many ways to the Massachusetts SMART program, offshore wind and solar are simply not comparable from a development risk perspective. OSW is an emerging renewable energy application; solar energy, particularly in New Jersey, is not. The New Jersey solar industry is

<sup>&</sup>lt;sup>9</sup> <u>I/M/O the Petition of Public Service Electric and Gas Company for Approval of a Solar Energy Program and an Associated Cost Recovery Mechanism</u>, BPU Dkt. No. E007040278 (Apr. 16, 2008).

well developed industry. Large solar applications today are even close to grid parity from a cost perspective, raising the question of whether or not any form of subsidy should exist at all.

Further, the risks associated with the two renewable energy applications are considerably different. Consider that OSW applications are usually very large centrally-located projects, with numerous turbines with capacities that often total into the hundreds of MWs, if not around 1,000 MWs like the most recent announced New Jersey project being developed Orstead. These facilities are typically assembled and installed in hostile to very hostile marine environments. These offshore locations need to be interconnected to onshore transmission facilities. The simple logistics of their development and construction, much less their operations, often necessitates an "all-in" contracting approach. This is simply not the case for solar installations that are often located in close proximity to distribution and transmission lines, are well understood by financial institutions, and are more easily developed. There is no need, therefore, to offer additional "derisking" benefits to solar energy that are, at least currently, being offered to OSW.

The "all-in" approach also is not appropriate for New Jersey's solar market given the relevant legal and regulatory history. As the board is aware, until the enactment of the Electric Discount and Energy Competition Act of 1999, N.J.S.A. 48:3-49 et seq. ("EDECA"), New Jersey's four electric utilities were vertically integrated utilities that provided bundled electric generation and distribution service. In EDECA, the Board was directed to separate the utilities' generation functions from their transmission and distribution functions. The electric utilities retained their regulated monopoly over electricity transmission and distribution, while most of their generation assets were spun off to unregulated entities, and non-utility electric power suppliers were allowed to compete to provide generation. N.J.S.A. 48:3-52, N.J.S.A. 48:3-53, N.J.S.A. 48:3-59.

As the Board recognized in the context of the Stranded Costs and Restructuring filings of one of the utilities, Public Service Electric and Gas Company ("PSE&G"), one of the important benefits of New Jersey's electric industry restructuring for the State's electricity users was the transfer of the risks of electric generation ownership away from ratepayers an onto unregulated entities. In that proceeding, the Board adopted a non-unanimous stipulation, over the objections of Rate Counsel and other parties, in part the divestiture of PSE&G's generation assets to an unregulated affiliate transfer of "any risks or liabilities associated with the electric generation business" from the regulated utility to the unregulated affiliate. PSE&G In re Public Service Electric and Gas Company's Rate Unbundling, Stranded Costs and Restructuring Filings, 1999 N.J. PUC Lexis 11 at \*307-08, par. 27 (1999), aff'd 330 N.J. Super. 112 (App. Div. 2000), aff'd 167 N.J. 377, (2001).

The "all-in" approach would undermine the purposes of EDECA by transferring the risks of owning generation back onto ratepayers. While there are exceptions, these are pursuant to specific legislative authority. PSE&G Solar 4 All program for example was authorized pursuant to New Jersey's Regional Greenhouse Gas Initiative ("RGGI") law, N.J.S.A. 48:3-98.1. An "all-in" approach to solar incentives for a large number of solar projects to be owned by unregulated entities would represent a significant change, to the detriment of New Jersey's electric ratepayers.

Further, as noted above, the New Jersey's solar development goals, as part of the State's Class I renewable goals, must be met within the CEA's cost caps. In order to comply with the

<sup>&</sup>lt;sup>10</sup> I/M/O the Petition of Public Service Electric and Gas Company for Approval of a Solar Generation Investment Program and An Associated Cost Recovery Mechanism, BPU Docket No. EO09020125, Order Approving Stipulation at 1 (Aug. 3, 2009); I/M/O the Petition of Public Service Electric and Gas Company for Approval of an Extension of a Solar Generation Investment Program and Associated Cost Recovery Mechanism, BPU Docket No. EO12080721, Order at 1 (May 29, 2013).

costs caps the Board must minimize the costs of solar development and it must be able to track those costs. An "all-in" approach, in addition to potentially increasing costs, would make tracking, and compliance, difficult or impossible because solar developers would be receiving a bundled price for electricity and solar attributes.

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.

#### Response

Please see Rate Counsel's response to part 3(a) above. A pay-as-bid system will ensure that price is based on the least-cost, most-competitive projects and is an approach that was utilized in the New Jersey SREC contracting program. Thus, Rate Counsel recommends the Board stay with this precedent and utilize a pay-as-bid approach.

As explained above, the Massachusetts SMART program is structured in capacity blocks and as projects respond to the incentive rate offered, the capacity blocks are filled. Going forward, incentive payments decrease by a pre-determined amount for each block so that once a block reaches its maximum capacity within a distribution company's service territory, future projects then become eligible for the rates offered in the next lower-priced block. Projects are awarded on a first-come, first-served basis. This provides a strong financial signal for early adopters and ensures that ratepayers are paying for the most cost-efficient projects.

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

#### Response

No, particularly if this information was made available to the market. Setting publicly disclosed prices and floors could lead to strategic pricing and gamesmanship which will only bid

up prices, over-compensate solar developments, and increase ratepayer costs. As previously stated, Rate Counsel recommends a pay-as-bid system to will ensure that price is based on the least-cost, most-competitive projects.

e. 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?

#### Response

As noted by the draft Capstone Report, one issue with the Massachusetts SMART program was the speed at which a number of service areas capacity caps were reached, in part due to the delay in the program's implementation and large projects holding space capacity in reserve (i.e., queue sitting). The certainty created by this incentive type can lead to many projects seeking to be constructed as early as possible when the policy is finalized. New Jersey can learn from experience of a program that has already been tested and note that this potential issue will need to be monitored.

One potential method in which this type of problem can be avoided is by clearly articulating development goals and targets and sticking to those goals. All too often, there is a tendency by certain stakeholders to modify or fine-tune programs of this nature. While flexibility is important, constant changing and "tinkering" with program targets can lead to the same kinds of uncertainty experienced in New Jersey. Further, Rate Counsel believes that a robust competitive process, like the one it proposes that is based on environmental attributes alone, may help to minimize this type of problem.

f. 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?

#### Response

Please see Rate Counsel's comments above. The Board should consider separate competitive solicitations if it wants to vary incentive levels based on project attributes.

g. 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?

#### Response

See our earlier comments on this topic. Rate Counsel disagrees with the use of the term "qualification life" since this presumes that a tradeable certificate-based market design is acceptable and consistent with the CEA. As discussed above, Rate Counsel recommends a 10-year incentive term for all projects.

h. 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.

#### Response

Rate Counsel recommends that all programs be administered by the Board and that the EDCs' role in this process be minimized. There are a host of legal and regulatory issues that arise by engaging the EDCs in this process. The best program design should be one that attempts to avoid these complications.

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?

#### Response

The Board should consider including some form of market monitoring function as part of this Successor Program. A solar market monitor is something that has been sorely needed in New Jersey's solar markets.

In addition, queue sitting may be addressed through the use of a performance deposit. A performance guarantee deposit would be submitted at the time of bid submittal, or after the initial capacity solicitation, upon program registration.

- 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?

# **Response**

Flexibility to respond to changing market circumstances would automatically be incorporated in a competitively-bid incentive structure like that used in the Massachusetts SMART Program. Similarly, once identified, emerging technologies could easily be encouraged and incentivized through an adder much like the adders for projects coupled with storage technology. Alternatively, the Board could consider separate competitive solicitations to promote a certain type or class of solar projects and let the market determine the additional marginal financial incentive needed to develop these types of emerging technologies or applications.

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

# **Response**

Changes in tax credits or carbon-pricing policies would automatically be incorporated in a competitively-bid incentive structure since projects will be bidding for the environmental attributes, or additional margin, they need for development. The competitive bidding process will assure that solar projects utilizes current tax and other incentives in forming their bids. Any project that fails to take such changes in to consideration will likely not receive funding.

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

# **Response**

Changes in regulatory structures and capacity markets, that in turn, change project economics, will be incorporated in a competitively-bid, incentive structure based on environmental attributes only. An 'all-in" incentive structure, while competitively bid, still places too much risk on ratepayers in the form of energy and capacity revenues.

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?

#### Response

Rate Counsel has no position on out of state incentives at this time but suggests that, where possible, the Board focus its efforts on the development of New Jersey specific solar energy resources. The Board, however, must be cognizant of the Commerce Clause when limiting the participation of out-of-state solar projects.

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?

As noted above, Rate Counsel suggests that the Board attempt to maximize in-state solar energy development, where possible, before turning to the creation of new financial support mechanisms for out-of-state resources. Further, Rate Counsel suggests that ratepayer costs be an important consideration in the promotion of out-of-state solar energy resources. For instance, New Jersey financial support for an out-of-state solar energy application may make the most sense if there is an overwhelmingly significant cost advantage for supporting a specific, most likely very large, application. Again the Board should be cognizant of the Commerce Clause when limiting the participation of out-of-state projects.

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.

In the absence of a more specific proposal for the Solar Successor program, Rate Counsel is not able to provide the requested legal opinion.

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

Rate Counsel is unsure of the intent of this question. Transmission limits, however, are physical limitations on the system and there is an actual, not theoretical limit on imports into New Jersey. Rate Counsel reserves the right to supplement its response depending on further clarification of this question.

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?

Rate Counsel is uncertain about the intent of this question. It is unclear whether the question concerns bilateral contracts, interconnection points or some other delivery mechanism. The legal ramifications of requiring any power generation resource to sell in any wholesale power market requires a different analysis. Past judicial and FERC decisions at the FERC suggest that this concept is potentially challengeable and each option has potential challenges.

#### **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?

#### Response

Please see Rate Counsel's response to part 11, below. Rate Counsel recommends a payas-bid system to ensure that the price is based on the least-cost, most-competitive projects. The pay-as-bid system would not provide differential incentives to direct-owned ("DO") projects and third-party owned ("TPO") projects.

- 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?

#### Response

Rate Counsel cannot comment on the impact of the adoption of the 2018 building codes on residential system size. Rate Counsel notes that Cadmus assumed the system size for out-of-state projects as follows -

For the out-of-state variant, Cadmus reviewed projects registered with PJM GATS, adjusting the data as follows:

- Kept only projects where Primary Fuel Type was "SUN"
- Excluded projects with Nameplate < 5 MW (in AC)
- Kept only projects with PJM Interconnection as Balancing Authority<sup>11</sup>

For the out-of-state variant, Cadmus selected a capacity of 10 MW (DC) for a prototypical out-of-state project by reviewing project sizes by state. However, Cadmus "Excluded projects with Nameplate < 5 MW (in AC)" before conducting its review of projects. This exclusion may have resulted in an upward bias in project size.

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?

#### Response

Please see Rate Counsel's general comments as well as the response to part (1), above. The specific installed cost values assumed by Cadmus reflect Cadmus' analysis of available historical and contemporaneous information. Despite their best efforts, Cadmus' analysis of installed costs is based on incomplete and potentially out-of-date information. Thus, the installed cost assumptions identified by Cadmus will likely be incorrect, exposing ratepayers to the risk that installed costs will be overestimated, and that the resulting incentives will be too high.

\_

<sup>&</sup>lt;sup>11</sup> Draft Capstone Report, p. 33.

In addition, as discussed above, in part 8(a), Rate Counsel is concerned that the assumed out-of-state project size may be biased upwards, which would also cause installed cost (per kw) to be understated. Rate Counsel also notes that the installed cost (per kw) for Community Solar projects may be overstated because Cadmus has failed to account for the potential that Community Solar projects may partner with local government and other entities to obtain preferential access to lower-cost sites, while at the same time accounting for potential cost drivers related to such projects. As stated in the report:

Community Solar projects have certain unique, upfront costs (e.g., acquiring subscribers, setting up utility bill allocations) and ongoing administrative costs (e.g., allocation of credits and managing potential subscriber churn). 12

Cadmus however, fails to recognize the potential cost savings.

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

#### Response

Rate Counsel believes that the interest rates in Tables 19 and 20 may be overstated. Rate Counsel understands that:

Cadmus relied primarily on financial inputs from the Transition Incentive modeling work, including for the debt share of capital, interest rates, debt tenors, and after-tax equity internal rates of return (IRRs). <sup>13</sup>

However, Cadmus's Transition Incentive modeling assumptions were presented in August 2019. Interest rates have declined since then, as a result of the intervening pandemic and associated recession.

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

-

<sup>&</sup>lt;sup>12</sup> Draft Capstone Report, p. 28.

<sup>&</sup>lt;sup>13</sup> Draft Capstone Report, p. 28.

# Response

Solar projects are diverse in nature in terms of not only size, but type, installation location, and several other factors. It is difficult to exactly know how these demand charge reductions will arise. A generalization is likely the best means of estimating these impacts.

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

#### Response

See response to (d) above.

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)?

# Response

Rate Counsel has no opinion on this issue at the current 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?

#### Response

Cadmus' derivation of wholesale and energy prices contains a number of errors. Cadmus relies on wholesale energy price projections from 2018, when an updated, 2020 price projection could be developed from the same sources:

Cadmus adopted wholesale energy and capacity prices derived in the May 1, 2019, update of the *Energy Efficiency Cost-Benefit Analysis Avoided Cost Assumptions*, *Technical Memo*, produced each year by the Rutgers Center for Green Building for the NJCEP.<sup>14</sup>

In the May 2019 update of the Energy Efficiency Memo, New Jersey wholesale electric prices were derived as follows:

\_

<sup>&</sup>lt;sup>14</sup> Draft Capstone Report, p. 63.

Historic 2017 New Jersey wholesale electric prices from PJM were escalated based on the annual percent change in the EIA 2018 Annual Energy Outlook using the Reliability First Corporation/East Electricity Generation Prices. The annual percent change was, on average, about 2.37%. The seasonal peak and off-peak factors were derived using historic 2017 PJM LMP data. 15

These figures are out-of-date. Wholesale energy prices have fallen, so that in 2019, wholesale electric prices in PJM were lower than in 2017, and 2020 prices are expected to be even lower as a result of the economic recession caused by the pandemic. For example, Atlantic City Electric Company's ("ACE's") real-time load-weighted average LMP fell from \$33.70/Mwh to \$25.07/Mwh in 2019 and, during the first six months of 2020 average ACE prices were 33% lower than the year-ago period. 16

In addition, Cadmus adds \$1.06/Mwh to energy prices to reflect revenue earned from the sale of ancillary services, because:

The memo also recommends adding an amount to energy prices an amount to reflect ancillary services (e.g., regulation, scheduling, dispatch and system control, reactive power, synchronized reserves). Cadmus accessed the most recent, annual version of that value from the report referenced in the memo. 17

However, as explained in the 2019 PJM State of the Market Report, solar generation does not provide certain ancillary services, including scheduling, dispatch and system control and synchronized reserves. 18 Cadmus should change the assumed ancillary services adder to \$0.44/Mwh so that it only accounts for reactive power, the one ancillary service solar generation provides.

<sup>15</sup> https://www.njcleanenergy.com/files/file/BPU/Avoided%20Cost%20Memo.pdf, p. 2.

<sup>&</sup>lt;sup>16</sup> See https://www.monitoringanalytics.com/reports/PJM State of the Market/2018/2018-som-pjm-sec3.pdf, p. 183, https://www.monitoringanalytics.com/reports/PJM\_State\_of\_the\_Market/2019/2019-som-pjm-sec3.pdf, p. 162, and https://www.monitoringanalytics.com/reports/PJM\_State\_of\_the\_Market/2020/2020q2-som-pjm-sec3.pdf, p. 170..

<sup>&</sup>lt;sup>17</sup> Draft Capstone Report, p. 63.

<sup>18</sup> https://www.monitoringanalytics.com/reports/PJM\_State\_of\_the\_Market/2019/2019-som-pjm-sec10.pdf

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?

# **Response**

Rate Counsel recommends the use of a Top-Down forecasting method in which the MW targets for the Successor Program are set at the level required to meet the State's solar capacity targets. As discussed in its general comments and response to part (1), above, Rate Counsel strongly supports a program that relies on a competitive solicitation process. Rate Counsel believes that this is the only option that can achieve the CEA's objective of replacing the current SREC program with one that will reduce costs to ratepayers and allow the State to meet its solar capacity targets and maintaining compliance with the legislative cost caps.

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

#### Response

Rate Counsel opposes providing DO and TPO projects with differentiated incentives. To the extent DO and TPO projects have differing financing, installed costs or required return, under a bid-based competitive system the force of competition will naturally drive the market to increase the provision of whichever ownership structure is lowest cost. Providing differentiated incentives would effectively force ratepayers to incentive the use of an inefficient ownership structure.

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?

#### **Response**

Rate Counsel reiterates its objection to any type of administratively determined incentive structure. The transparency and replicability of Cadmus' modeling could be improved by relying on PJM and Department Of Energy ("DOE") sources for inputs whenever available, so that the derivation and updating of model inputs would be transparent. For example, as noted above, wholesale energy and capacity prices could be taken from the latest 2020 version of the relevant DOE Annual Energy Outlook Table, "Electric Power Projections by Electricity Market Module Region," whereas Cadmus' modeling currently relies on the 2018 version of the relevant AEO Table, which appears in the May 2019 technical memo Cadmus relies upon.

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

Rate Counsel does not have any additional comments at this time.