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## NOTICE<sup>1</sup>

### New Jersey Solar Transition

### Successor Program Capstone Report Staff Request for Comments

### Docket No. QO20020184

### **\*UPDATE: Stakeholder Process – Comment Period Extension**

Pursuant to the “Open Public Meetings Act”, N.J.S.A. 10:4-6 et seq., the New Jersey Board of Public Utilities (“NJBPU”) hereby provides further information and notice regarding two Public Meetings to discuss the New Jersey Solar Transition Draft Capstone Report: Successor Program Review (“Capstone Report”). These meetings represent the next step in NJBPU’s goal of implementing a durable solar Successor Program that meets the targets set forth by the Clean Energy Act of 2018 (“CEA” or “Act”) and the Governor’s Energy Master Plan.

This Request for Comments supplements the [Solar Successor Program Stakeholder Notice](#) issued on August 4, 2020.

### **Background**

The Clean Energy Act of 2018 directed NJBPU to close the Solar Renewable Energy Certificate (“SREC”) Registration Program (“SRP”) to new registrations upon the State’s attainment of 5.1% of kilowatt hours sold in the state sourced from solar electric generation facilities (the “5.1% Milestone”). This Milestone was attained on April 30, 2020. The Act also requires that NJBPU complete a study that evaluates how to replace or modify the SRP to encourage the continued efficient and orderly development of solar renewable energy generating resources throughout the state. NJBPU has conducted the “Solar Transition” in two phases: 1) a Transition Incentive (“TI”) Program was established by NJBPU in December 2019 following significant stakeholder engagement to serve as a bridge between the Legacy SREC program and a successor incentive

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<sup>1</sup>Not a Paid Legal Advertisement

program; and 2) the development of a Successor Program including completion of the research required by the Act, which is the subject of this Request for Comments. Further details regarding the Solar Transition process are available on the Clean Energy Program website: <https://njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-proceedings>.

### **Successor Program Capstone Report and Modeling**

NJBPU engaged Cadmus Group, LLC (“Cadmus” or the “Solar Consultant”) to conduct modeling, analysis, and stakeholder engagement on the Solar Transition, and present their findings in a Capstone Report. Cadmus’s work on the Capstone Report builds upon prior stakeholder engagement and modeling conducted for the Transition Incentive Program, as well as prior stakeholder engagement on the Successor Program, including December 17, 2019 and March 3, 2020 stakeholder meetings and a cost survey issued in March 2020.

In order to gather further stakeholder input, Staff is now releasing:

1. Cadmus’s [New Jersey Solar Transition Draft Capstone Report: Successor Program Review](#);
2. [A modeling inputs Excel spreadsheet](#) developed by Cadmus to inform the Capstone Report; and
3. [A SAM inputs file](#), along with [instructions](#) on how to download and use this file in SAM.

This iteration of the Capstone Report is a draft that is being published along with the underlying modeling spreadsheet for stakeholder review and feedback. Comments and discussions with stakeholders will inform any further modeling and modifications prior to the publication of a final Capstone Report in Fall 2020. The modeling and recommendations presented in this draft Capstone Report are Cadmus’s work product, however both the draft Capstone Report and stakeholder feedback will inform the development of a Staff Straw Proposal, anticipated to be released in September – October 2020, per the preliminary schedule described below.

### **Stakeholder Process**

As announced in the [Solar Successor Program Stakeholder Notice](#) issued on August 4, 2020, Staff plans to convene further opportunities for stakeholder input on the Successor Program in the coming months. The Successor Program stakeholder process will continue to build upon comments and input received to date, including during the development of the Transition Incentive Program and the closure of the SRP.

Specifically, Staff will be conducting two additional phases of stakeholder engagement:

#### **Discussion of Modeling and Capstone Report:**

- August 11, 2020: Publication of draft Capstone Report and modeling assumptions;
- August 17, 2020: Stakeholder workshop: System Advisor Model (“SAM”) walkthrough and technical modeling discussion (***see details below***);

- August 20, 2020: Stakeholder meeting and opportunity for public comment on the draft Capstone Report (*see details below*);
- **September 8, 2020**: Public comment period on draft Capstone Report and modeling assumptions closes (*see details below*);
- Fall 2020: Publication of final Capstone Report.

**Straw Proposal on Design of Successor Program:**

- September – October 2020: NJBPU Staff releases Successor Program Straw Proposal, followed by a series of topic-specific stakeholder workshops;
- Fall 2020: Board Order on Successor Program presented to the Board; and
- Winter 2020 – 2021: Rule Proposal on Successor Program presented to the Board, open to public comment.

This proposed schedule is subject to modification based on the ongoing process.

**Meeting Details**

**Meeting #1: Monday, August 17, 2020**

In order to support the ongoing stakeholder input on the Successor Program modeling, Cadmus will conduct a walkthrough and discussion on the modeling. This meeting will be structured in two parts:

- Part 1: Introduction to the model utilized, including an instructional modeling walkthrough by Cadmus to allow stakeholders to gain familiarity with the financial model used in the development of indicative incentive recommendations for a Successor Program; and
- Part 2: Discussion of the modeling and the assumptions used to enable stakeholders to ask modeling questions to Cadmus and provide feedback on various project configurations.

In the interest of public health and safety, this meeting will be conducted via webinar on:

**Date:** Monday, August 17, 2020

**Time:** 2:00 p.m. – 5:00 p.m.

To ensure available space and the security of the process, please register for the meeting no later than **5:00 p.m. on Friday, August 14, 2020** via the following link:

<https://attendee.gotowebinar.com/register/2968467398811716110>.

After registering, you will receive a confirmation email containing information about joining the webinar and system requirements. We encourage all webinar attendees to check their systems in advance of the meeting to ensure a smooth connection on the day of the meeting. *Please note that this is the same registration link that was listed in the [Solar Successor Program Stakeholder Notice](#) issued on August 4, 2020; if you already registered for this stakeholder meeting, you do not need to register again.*

## **Meeting #2: Thursday, August 20, 2020**

Following the publication of the draft Capstone Report in early August 2020, Staff and Cadmus will hold a stakeholder meeting to discuss the report's findings and recommendations.

In the interest of public health and safety, this meeting will be conducted via a webinar on:

**Date:** Thursday, August 20, 2020

**Time:** 10:00 a.m. – 3:00 p.m.

To ensure available space and the security of the process, please register for the meeting no later than **5:00 p.m. on Wednesday, August 19, 2020** via the following link: <https://attendee.gotowebinar.com/register/8326862550258162447>.

After registering, you will receive a confirmation email containing information about joining the webinar and system requirements. We encourage all webinar attendees to check their systems in advance of the meeting to ensure a smooth connection on the day of the meeting.

## **Comments**

Members of the public may file comments with the Secretary of the Board via email in PDF or Word format to [board.secretary@bpu.nj.gov](mailto:board.secretary@bpu.nj.gov). Please use the subject line "Successor Program Capstone Report Docket No. QO20020184" when submitting. Commenters may also electronically file comments through the NJBPU's External Access Portal after obtaining a MyNewJersey Portal ID. Once you establish a MyNewJersey account, you will need an authorization code, which you can request by emailing NJBPU's IT Helpdesk at [ITHELPDESK@bpu.nj.gov](mailto:ITHELPDESK@bpu.nj.gov). More detailed instructions for e-Filing can be found [here](#).

Please note that these comments may be considered "public documents" for purposes of the State's Open Public Records Act. Stakeholders may identify information that they wish to keep confidential by submitting them in accordance with the confidentiality procedures set forth in [N.J.A.C. 14:1-12.3](#).

**\*In light of stakeholder feedback received at the August 20, 2020 stakeholder meeting, the deadline for written comments is extended by 8 days. All written comments must be now received on or before 5:00 p.m. ET on Tuesday, September 8, 2020.**

**Additionally, in order to provide further clarifications and information, stakeholders may submit informational questions regarding the modeling and model assumptions. Questions should be limited only to those necessary for stakeholders' technical understanding of the Draft Capstone Report, and must be submitted to [solar.transitions@bpu.nj.gov](mailto:solar.transitions@bpu.nj.gov) no later than 5:00 p.m. ET on**

Wednesday, August 26, 2020 to ensure timely response. Cadmus and NJBPU Staff will endeavor to respond to relevant questions before the close of the written comment period.

Please direct all questions to [solar.transitions@bpu.nj.gov](mailto:solar.transitions@bpu.nj.gov). Staff looks forward to receiving and reviewing stakeholder comments.

### **Request for Comments**

Cadmus has put forth a number of program design suggestions, policy considerations, and overall recommendations. Staff has identified a number of specific questions below but encourages stakeholders to additionally share their assessment of these program and policy recommendations beyond the focus of these 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?
  - 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.

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

- 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. Should NJBPU implement a minimum and/or maximum bid value in order to prevent overly aggressive or overly high bids?
  - 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?
  - 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?
  - 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?
  - 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.
- 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?
- 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?
  - b. How should changes in the federal Investment Tax Credit or carbon-pricing policies be incorporated into future incentive level resets?
  - c. How should NJBPU account for potential changes to the PJM and FERC regulatory structures and capacity markets?

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


## **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?
- 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?
  - 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?
  - c. Financial parameters, including interest rates and loan terms (Tables 19 and 20, p. 43).
  - d. Revenue assumptions. In particular, please comment on the ability to quantify projects' demand charge reduction (see Cadmus' modeling note on p. 45).



- e. Specific energy production and energy degradation rate (see Cadmus' modeling note on p. 61).
  - 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)?
- 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?
- 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?
- 11) Cadmus recommends that NJBPU consider whether to differentiate treatment between direct-owned ("DO") projects and third-party owned ("TPO") projects. Please comment.
- 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?
- 13) Please provide general feedback on Cadmus's modeling inputs, methodology, and assumptions not already addressed in a previous question.



Aida Camacho-Welch  
Board Secretary

Dated: August 21, 2020