

Thank you for the opportunity to provide input on the NJ Successor Program. As a leading worldwide floating solar company, we at Ciel et Terre, USA look forward to growing the relatively new "solar on fresh water" category in NJ to help the State meet its aggressive renewable energy goals.

Our replies to your questions are in **BLUE**

Please consider our suggestions under Question 15:

1. Continuation and expansion of remote net metering
2. Using a feed-in tariff to maximize solar growth in NJ

Again, thank you for the opportunity to provide feedback.

Questions: 1. Please describe the advantages and disadvantages of the three incentive program types identified [BELOW].

i) Tariff-Based Incentive: eligible projects would receive a total compensation based on the MWh produced, in which the incentive would fill the gap between other value streams and the total compensation.

**Advantages:**

- Provides very high visibility for project financing which attracts a larger pool of lenders and maximizes chance of project completion.
- Strong driver for project development especially if tariff eligibility can be linked with project criteria to favor brownfield or dual use projects, community solar etc.... (non impacting project on natural or agricultural land)
- Stability that provides best conditions for all parties involved and industry stability.
- Fairness as based on actual production which is driving developer for greater system performance.

ii) Market-Based RECs: eligible projects would create RECs, the value of which would be determined via competitive supply and demand, similar to the Legacy SREC program.

iii) Performance-Based Incentive: eligible projects would receive a fixed incentive value based on the MWh produced, with the value of the incentive set to reflect specific environmental attributes.

2. How would you expect the incentive value (and the cost to ratepayers) to change based on the incentive program type?

FIT for eligible solar system with specific adder depending on type of system. Adder to be charged to customers directly for 100% renewables energy sources program subscription (similar to CCAs offer).

3. Should the Board establish a differentiated incentive (i.e. different incentives for different project types), as was done for the Transition Incentive program? If yes, what should these different project types be?

Yes , brownfield projects , dual use of land , community solar,  
if creation of added benefits /revenues for public entity or community.

**In MA SMART Floating Solar [Photovoltaics] (FPV) is highly incentivized category**

Likely due to:

- i) Avoids using valuable land
- ii) water source is still used for its primary purpose,
- iii) often minimizes tree removal and
- iv) has neutral-to-positive environmental impact ie. less pond evaporation and less algae.

4. How should the Board set the value of the incentive: via administrative modeling, a competitive solicitation, or an on-going market? What are the advantages and disadvantages of these three mechanisms?

We'd like to see a model that provides the most visibility, doesn't drive the price down to crazy bidding wars and avoids scenario that often ends with a very small number of actual projects being converted to real installations.

5. How should the Board establish and periodically revise the maximum incentive payment caps described in the Clean Energy Act?

With achievement of installation targets yearly quota... Again whatever provides visibility for developers to engage.

6. What is the preferred incentive qualification life (10 vs. 15 years) based on typical project financing?

- 15 years is already short for RE system typical financing so the longer the better.

7. The Clean Energy Act requires that the Board “encourage and facilitate market-based cost recovery through long-term contracts and energy market sales.” Please provide your assessment of various market-based cost recovery mechanisms, and their applicability to each of the three incentive program types developed by Cadmus. Topic 2: MW targets / Program Capacity As stated above, the Clean Energy Act of 2018 requires, including other things, that the Board: - develop megawatt targets for grid connected and distribution systems, including residential and small commercial rooftop systems, community solar systems, and large scale behind the meter systems, as a share of the overall solar energy requirement, which targets the board may modify periodically based on the cost, feasibility, or social impacts of different types of projects; - establish and update market-based maximum incentive payment caps periodically for each of the above categories of solar electric power generation facilities

Questions:

8. What MW target project categories should be established?

- Residential
- Commercial (up to Medium voltage grid injection capacity) from 500 KWp to ~ 8 MWp
- Utility scale - HV grid connection. over 10 MWp

9. How should the Board set the capacity for each MW target, in compliance with the incentive cap and cost cap requirements? Please consider: 1) how the Board should set the overall capacity to be made available on an annual basis for the Solar Successor Program; and 2) the relative breakdown of the total annual capacity between MW target project categories. For reference, the breakdown of installed capacity by solar installation type as of January 2020 is as follows: Residential 30% Non-Residential < = 100 kW 4% Non-Residential > 100 to < 1000 kW 24% Non-Residential > = 1000 kW 21% Grid Supply 21%

Source: <https://www.njcleanenergy.com/renewable-energy/project-activity-reports/projectactivity-reports>

10. Should the historical breakdown of actual MW installations serve as the basis for future targets?

No targets should be independent unless there was restrictions discovered from historical installations.

The historical installed capacity is low so the target should be higher for significant development deployment.

11. How should the Board administer these MW targets? Should projects be allowed to participate on a first-come, first-served basis?

- Yes or potential fast track/easier allocation if they meet specific criteria. (local content, dual use, added value...)

12. What measure should the Board implement to prevent “queue sitting”? Please include in your response a discussion of a) maturity requirements, b) filing fees, and c) alternative suggestions.

Project due diligence & milestones conformance to handle the queue.

Priority to developer that undertake the process seriously and meet the deadlines.

13. Should excess annual capacity be reallocated if not used (e.g. if a project drops out of the pipeline)?

Yes , absolutely.

14. Should projects located in municipal utilities that do not pay into the RPS be eligible to receive Successor Program incentives?

Yes.

15. How can the State most efficiently progress towards the goals set in the Energy Master Plan, while balancing ratepayer costs for solar development in- and out-of-state? Topic 3: Grid Supply

Solar In the Legacy SREC program, grid supply project could be eligible for SRECs if they met the requirements defined at N.J.A.C. 14:8-2.4. These projects are known as subsection (t) and subsection (r) projects. Questions:

Beyond incentives, we'd like to see a published feed-in tariff, such as implemented in the MA SMART Program, added into the Successor Program. SMART offers both Community Solar (CS) and feed-in tariff offerings and incentives. A published feed-in tariff will support and increase solar development of .5 -8MWp projects.

For floating solar development specifically, owners of most bodies of water do not have the co-located electrical usage to be the offtaker to justify a multi MW solar project. Hence a perfectly viable pond could go under-or-unutilized for its renewable energy potential if remote net metering is the only option. Instead, with a feed-in tariff, non-CS developers can rent any viable waterbody surfaces with the sole purpose of feeding the grid at a predetermined kWh feed-in price set by the NJBPU. Hence, many land owners such as farmers and cranberry growers, would greatly benefit from passive rental income – rent generated by the underutilized surface of any pond. And the new legal entity created has a simple and predictable model to sell the energy to the grid. The result, more MW-sized solar installations and more green energy available to the grid.

Another suggestion is to keep and expand remote net metering to any commercial entity that can utilize it. For example, as NJ has recognized, large ponds or available lands are not always co-located with the main facility using the most electricity. Remote net metering will result in MW-sized projects that otherwise could not be built.

The above two programs are mutually exclusive and are in addition to CS. A feed-in tariff will open up more opportunities in the .5-8MWp markets, beyond remote net metering and CS, promote more land-lease competition (better for the landowners) and greatly assist the proliferation of floating solar installations.

16. Should the Board maintain the current subsection (t) and subsection (r) processes for determining incentive eligibility for grid supply projects? o If yes, what conditions should be maintained? o If no, how should the Board treat grid supply projects?

17. Should the Board set a dedicated incentive value for grid supply projects? If yes, how can the Board best determine the appropriate incentive value (i.e. incentive gap modeling vs. bid process)?

**Incentive gap modeling ?**

18. Should the Board establish a maximum system size to be eligible for a Successor Incentive? If not, how should economies of scale and the lower incentive gap be accounted for solar electric generation facilities over 20 MW?

19. What is the best means to motivate investment in rooftop grid supply solar facilities where insufficient electricity loads preclude net metering and the wholesale value of electricity

generated increases the incentive gap relative to rooftop net metered projects? Topic 4: Solar Siting The 2019 Energy Master Plan states that, “in order to enhance smart siting of solar, the state should better define areas that are considered marginalized, such that they have constrained economic or social value.” This includes a commitment that “NJDEP and NJBPU will coordinate land use policy for solar siting with the New Jersey Department of Agriculture to identify sites that could be used to expand New Jersey’s commitment to renewable energy while still protecting the state’s farmland and open spaces.” (EMP Goal 2.1.8) Questions:

20. How should the Successor Program incentive structure be designed to address the state policy preference for solar located on rooftops, landfills and brownfields versus open space and farmland?

Incentives should be only available for projects on brownfields & dual use (including a new category for floating solar)

21. What land use restrictions and limitations should apply to the Successor program incentive to reflect the siting of solar projects in New Jersey? Please include a specific discussion of solar on farmland and open space, consistent with all applicable New Jersey statutes and regulations.

Vast tree removal or heavy/extensive civil work required.

22. Aside from the various types of net metered projects and grandfathering a defined set of projects on farmland, the Solar Act of 2012 limited eligibility for SRECs to solar electric generation facilities which demonstrated no adverse impact on open space or those located on properly closed sanitary landfills and brownfields as defined in the Spill Compensation and Control Act. Should the criteria for Successor Program incentives retain these limitations as contained in the statute or be refined to broaden eligibility beyond the footprint of a landfill cap or limits of the brownfield site? \_\_\_\_\_

Yes. #

**Thank you for considering our suggestions.**

**We look forward to helping NJ meet its renewable energy goals.**

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**George WISSING**

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