



May 27, 2021

Ms. Aida Camacho-Welch, Secretary  
New Jersey Board of Public Utilities  
Post Office Box 350  
Trenton, New Jersey 08625

***Re: New Jersey 2019/2020 Solar Transition Solar Successor Program: Staff Straw Proposal  
Docket No. QO20020184***

Ms. Camacho-Welch:

NJR Clean Energy Ventures Corporation (CEV) appreciates the opportunity to offer comments in response to the request for stakeholder input on the Staff's Solar Successor Program Straw Proposal.

CEV is one of the largest owners and operators of solar projects in New Jersey, with over \$1 billion invested in 365 megawatts (MW) of projects across all market segments. Our growth and success this past decade have followed the supportive policies enacted by the State of New Jersey and the Board of Public Utilities. These policies and associated programs have positioned New Jersey as a national solar leader, with over 3.6 gigawatts (GW) installed and an estimated \$13.5 billion in private capital invested, all while supporting a thriving industry with over 5,000 jobs. This level of investment has driven declining costs enabling incentive reductions of over 85 percent as well as stable electric rates.

CEV intends to invest an additional \$850 million in solar projects between fiscal years 2021 and 2024, with a strategic preference to focus that capital in the New Jersey market.

As an active participant in the State's solar market, we appreciate the efforts that went into the development of this proposal, particularly the opportunities for stakeholder input. We support the commitment to long-term solar growth and the role it will play in achieving New Jersey's clean energy goals.

**We agree with the strategic direction Staff has proposed in the successor program including the following:**

- Sustaining the single-family residential market while diversifying with community solar to reach low- to moderate-income (LMI) consumers.
- Revitalizing large-scale solar development opportunities in New Jersey to reverse the decline in this important market segment, which we expect to contribute only 5 MW in Energy Year (EY) 2021.

- Targeting 750 MW per year, consistent with the 2030 goals of the Energy Master Plan (EMP).
- Providing transparency into future reductions in incentive costs, enabling the industry to prepare and adapt to changes, along with administrative processes to adjust incentives in response to any material changes in market conditions or policy.
- Providing incentives for battery storage paired with solar.

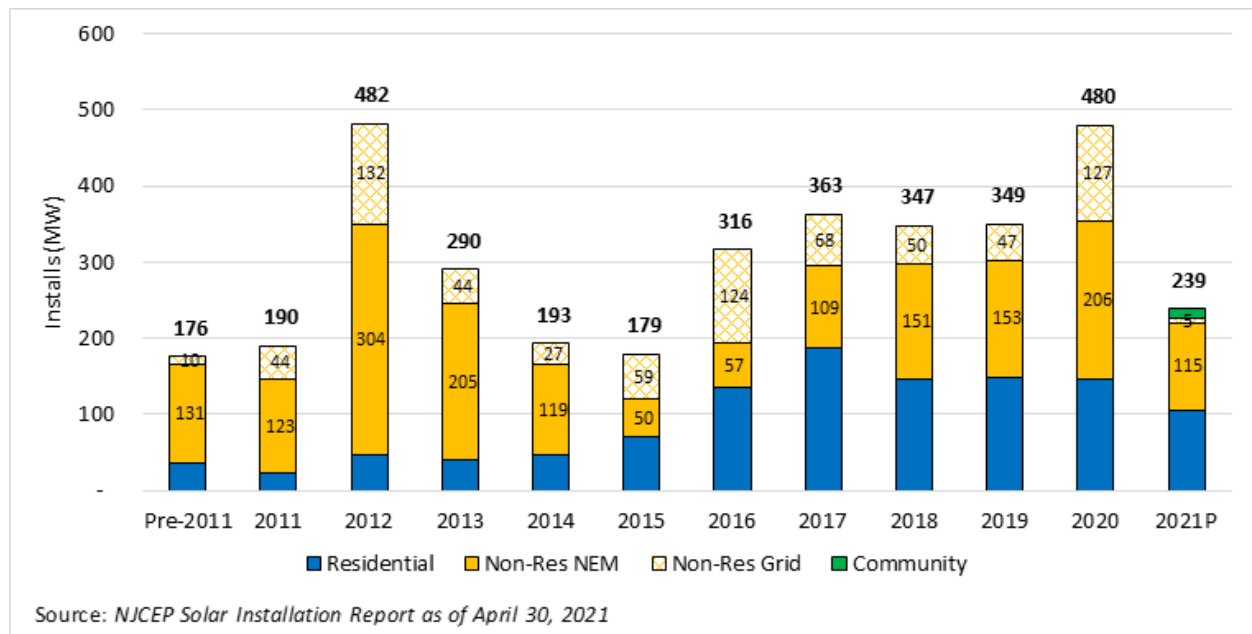
**We see some significant risks to the overall commercial market, specifically:**

- **The administrative incentives proposed are too low to support net metered investment.**
- **We foresee delays in launching the new competitive solicitation program**, which would stall large scale project development in New Jersey for the next several years. Developers need certainty of market structure to deploy capital—and will target other states to sustain business continuity if a bridge to the new program is not in place.

The commercial (non-residential) market segment, including large scale grid projects, comprises about two-thirds of the New Jersey solar market, with 2.5GW’s of total installations.

In EY 2021, we expect this market will decline significantly; with only 125 MW in installations, down a staggering 62 percent from EY 2020 levels, and 33 percent reduction from the 200 MW a year average between EY 2017 and EY 2019. Reductions in the commercial sector will drag down the entire New Jersey solar market, with estimated total installations below 250 MW this year, the lowest since EY 2015.

**Figure 1: Historic NJ Installs by Market Segment (by Energy Year)**



New Jersey's decline contrasts with robust solar growth nationwide. According to the Solar Energy Industries Association's 2020 Solar Market Insight Report, despite the pandemic, in calendar year 2020 (with two quarters of overlap with New Jersey's 2021 energy year), the US installed a record 19.2 GW or a 43 percent year over year increase including residential and non-residential markets.

Based on our assessment of the Straw proposal, we estimate the overall New Jersey solar market will support a 300 to 350 MW run rate for the next several years, well below the 750 MW goal necessary to achieve the Energy Master Plan (EMP) goals, with continued challenges in the commercial sector limiting total growth.

Our outlook is based on the following assumptions:

- The market will be supported primarily by residential and community solar, with downside risks to Staff's forecast of 150 MW in each sector:
  - The residential single-family market, on pace to install an estimated 115 MW in EY 2021, should recover from the pandemic next year. However, reduced incentives coupled with recent increases in material costs may have adverse impacts on customer pricing, or margins for the small businesses who sell and install systems. Interconnection challenges, particularly with Atlantic City Electric, and lack of electric distribution company specific incentive factors to accommodate for relatively low energy rates in Jersey Central Power & Light territory will continue to constrain market growth.
  - Notwithstanding the significant application volume in community solar, year-to-date there are only 10 MW of actual installations from the 50 MW of approvals. Community solar is a new program, and in our view will require the adoption of consolidated billing and streamlined interconnection processes, and some ongoing refinements to incentives to support the diversity of projects which will be needed to meet annual program targets.
- Our concerns in the commercial solar market are as follows:
  - In the net-metered market, Staff's proposed incentives in the \$75 to \$85 per megawatt hour (MWh) range, represents a stunning 45 to 55 percent decline from Transition Renewable Energy Certificate (TREC) levels in most commercial segments. This decline cannot be rationalized based on the 26 percent federal Investment Tax Credit (ITC) extension, which the Staff consultant Cadmus has estimated should only reduce incentive needs by about 10 percent.
  - Significantly, solar costs have been increasing by 15.4 percent this year, with raw material prices for aluminum, glass and polysilicon increasing, according to

Bloomberg's "*Solar Power's Decade of Falling Costs Is Thrown Into Reverse*" from May 23, 2021.

- Third-party owned (TPO) projects, which have traditionally represented about 60 percent of market share and close to 100 MW of installs per year, will simply not be able to secure financing at the proposed incentive levels, reducing the market to direct owned projects only--which has averaged only 50 MW per year based on NJCEP solar reports. The loss of the TPO segment will preclude solar participation for public entities – including schools and municipalities – that must rely on third-party owners for capital and tax capacity, as well as private entities who want solar but have alternative needs for capital. (While direct owned projects are not a business focus of CEV, we model internal rates of return and paybacks well below Staff targets and therefore believe there will be financing challenges for these projects at proposed incentives.)
- While we remain open-minded and optimistic about the long-term opportunity for large-scale solar development in the State, there will likely be a multi-year lag before this potential is realized through the competitive solicitation program. The facts that cause concern are:
  - There are normal cycle times, delays and learning curves associated with the design and launch of any new program. The community solar program is a recent example, and the competitive solicitation program will be no exception. Staff's sense of urgency around first solicitation by fall 2021/winter 2022 is laudable but may not be achievable.
  - The stakeholder process has revealed a number of potential impediments regarding the fit and scalability of the solicitation model to landfills, and large customer-sited projects with long development times and need for incentive certainty. While a policy priority, landfill/brownfield projects are without question more expensive and time consuming to develop, and developers require surety on incentives before taking on the challenges and risks. Including landfill/brownfields in a solicitation process will discourage development at these locations, and perhaps encourage developers to target farmland instead.
  - Staff's expectations for incentive needs from landfills, large commercial net-metered projects and grid-connected ground mounts are also at 45 to 55 percent discounts from the current TREC program, and 35 to 55 percent below the most recent incentive needs estimated by Cadmus. Reconciling these differences will add time to the program design effort, and require

ongoing trial and error with rounds of program modifications to reach a productive, steady state program.

- Though under review, there are no imminent changes to interconnect procedures, costs or State land use policy that provide a reason to anticipate sustainable development at the 300 MW per year pace anticipated by Staff. We recognize there may be promising development activities underway for specific projects, but in our view sustainable progress will require more streamlined, cost effective processes to secure land permits and interconnection.
- In its latest stakeholder meeting, Staff has indicated it is not inclined to change its policy to allow extensions for landfill projects in the TREC program. This may limit EY 20202 installations of any of these projects in the approved TREC pipeline or pending DEP approval. If forced to participate in an undefined solicitation process many of these projects will simply suspend development activities.

**To achieve EMP goals, increase the potential for market growth, and improve the outlook on the New Jersey solar market, we offer the following recommendations:**

- 1) **Offer differentiated incentives for Direct-Owned and TPO projects—and adopt all the TPO incentives levels that resulted from the most recent modeling estimates from Staff’s consultant Cadmus:**

**Figure 2: Successor Incentive Comparison – Administrative Program**

Staff Market Segment	Cadmus Market Segment	Staff Straw	TREC Program	Cadmus Sensitivity	Straw Variance		Cadmus vs. TREC
					TREC	Cadmus	
Administratively Set							
Net Metered <1MW							
Roof	C&I Roof Med.	\$85	\$152	\$130 [a]	-44%	-35%	-14%
Carport	Carport	\$85	\$152	\$170 [a]	-44%	-50%	12%
Ground	C&I Ground Med.	\$85	\$91	\$135 [a]	-7%	-37%	48%
Net Metered >1MW							
Roof	C&I Roof Lrg.	\$70 [b]	\$152	\$100 [c]	-54%	-30%	-34%
Carport	Carport	\$85	\$152	\$170 [a]	-44%	-50%	12%
Net Metered Ground (1-5MW)	C&I Ground Lrg. [b]	\$75 [b]	\$91	\$95 [c]	-18%	-21%	4%

[a] From Revised Staff Straw Proposal, May 5, 2021 Appendix A

[b] From Staff’s memo May 7, 2021, page 2 for incentives for large net metered projects from 2-5MW (does not match 1MW low end of range)

[c] From Staff’s memo May 12, 2021 "Project SAM simulations"

The proposed incentives highlighted in green represent a 20 percent average reduction from TREC levels for overcompensated rooftop market segments, while bolstering the underperforming ground-mount segment and new markets like carports. At Cadmus modeled incentive levels, we believe the commercial net-metered market can sustain install

rates of 150 MW per year in line with Staff's estimates, versus decline to an estimated 50 MW per year at Staff proposed incentives which may only be adequate for direct owned projects.

- 2) **To address the immediate issues with large scale project development and the potential for delays in launching the competitive solicitation program, we recommend that until the solicitation program is launched that administrative incentives be established for all projects eligible for the solicitation.**

The incentives we believe are necessary to attract investment are also commensurate with the most recent Cadmus incentive estimates as indicated in the table below:

**Figure 3: Successor Incentive Comparison – Competitive Solicitation**

Staff Market Segment	Cadmus Market Segment	Staff Straw	TREC Program	Cadmus Sensitivity	Straw Variance		Cadmus vs. TREC
					TREC	Cadmus	
Competitive Solicitation							
Grid							
Roof	Grid Roof	\$80	\$152	\$135 [a]	-47%	-41%	-11%
Ground	Grid Ground	\$40	\$91	\$120 [a]	-56%	-67%	32%
Landfill	Landfill/Brownfield	\$80	\$152	\$135 [a]	-47%	-41%	-11%
Net Metered >5MW							
Roof	C&I Roof Lrg. [b]	\$70 [b]	\$152	\$100 [c]	-54%	-30%	-34%
Ground	C&I Ground Lrg. [b]	\$75 [b]	\$91	\$95 [c]	-18%	-21%	4%

[a] From Revised Staff Straw Proposal, May 5, 2021 Appendix A

[b] From Staff's memo May 7, 2021, page 2 for incentives for large net metered projects from 2-5MW (does not match 1MW low end of range)

[c] From Staff's memo May 12, 2021 "Project SAM simulations"

Staff has indicated its willingness to provide a three-month period for landfill projects to retain administrative incentives. This period and limited scope may not be sufficient to bridge the gap until the solicitation program is launched.

Given the lack of new large-scale project development, we also urge Staff to expand the Section R program for large-scale, grid-connected solar projects, and offer administratively determined incentives to grid-connected rooftop projects by lifting the restriction on these projects from TREC eligibility.

**Staff should offset costs with benefits in evaluating financial impact to ratepayers.**

The stakeholder proceeding has highlighted challenges in reconciling incentives necessary to attract investment to meet EMP goals with concerns over ratepayer affordability, particularly considering the economic impacts from COVID-19.

The consideration of incentives as a subsidy transfer between ratepayers is not aligned with the policy support for solar and clean energy in NJ. The environmental, health and local economic benefits of solar are not valued in energy markets today; however, the need to consider these benefits to support public investments is perhaps the most basic element of good public policy-making. New Jersey currently considers these benefits in other energy-

related proceedings including energy-efficiency and nuclear and they should be applied consistently to solar.

This proceeding has stimulated creative thought and discussion to surface best practices on measuring and valuing carbon, nitrogen oxides, sulfur oxides and particulate matter reductions, as well as avoided energy and capacity costs from renewables. In Appendix 1, we offer specific recommendations on what data sources and methodologies should be included in the cost cap calculations.

We would also like to emphasize our general agreement with the assumptions and values Staff has modeled for legacy Solar Renewable Energy Certificate (SREC) prices in the cost cap calculations. This is a material improvement from the similar modeling exercise in the TREC program design, which forecast SREC prices going to \$0 in the mid-2020s due to oversupply. Staff's approach in this proceeding is consistent with the BPU's commitment to a stable and balanced SREC market and provides a foundation to build upon when developing rules that govern ongoing BPU actions to maintain a balanced market (i.e., a Market Balancing Mechanism).

The attached Appendix 1 also responds to selected questions Staff has posited in the Straw proposal.

We appreciate the opportunity to comment and engage with stakeholders in the development of a Solar Successor Program that supports the State's clean energy goals.

Sincerely,

DocuSigned by:  
  
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Larry Barth

Director of Corporate Strategy

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Katie Feery, Manager of Corporate Strategy  
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## **APPENDIX: RESPONSE TO STAFF QUESTIONS**

### **I. QUESTIONS FOR STAKEHOLDER FEEDBACK**

Staff requests feedback on any and all elements of this Successor Straw, including program design, administrative processes, financial proposals, and megawatt targets. Staff is particularly interested in responses to the questions below and additionally welcomes further feedback not covered by the prompts.

#### Section III: Staff Recommendations: Successor Program Incentive Design

Overall program design: Staff proposes to establish a bifurcated Solar Successor Incentive Program in which residential projects, community solar projects, and non-residential net metered projects 2 MW or smaller are offered an administratively set \$/MWh incentive. All other projects would participate in the competitive solicitation.

1. Please comment on the benefits and consequences of this suggested division. Does this program design provide a pathway to maximizing solar development while minimizing ratepayer costs and supporting the industry? Please explain and include alternative suggestions if you believe there is a better approach that Staff should consider.

CEV does not necessarily have concerns over the dual use of administratively set incentives for smaller projects and competitive solicitations for larger projects. As discussed above, commercial net-metered incentives (detailed in the “admin” program) will not support a pathway to growth. Also, while not binding on the realized incentives in the program, the expectations used in cost cap modeling for the competitive solicitation projects will also be too low to stimulate growth in the Successor Program.

#### Administratively determined incentive for small net metered and all community solar projects

2. Please comment on the proposed breakdown of market segments in the administratively set program (e.g., net metered residential, net metered non-residential rooftop and canopy, net metered non-residential ground mount, community solar, and LMI community solar). Would you suggest any changes, and if so, why?

CEV has no issues with the breakdown of segments proposed; however, further bifurcation may be necessary depending on the new incentive recommendations Staff is working on and have not yet been released. Should these new incentive levels remain based on Direct-Owned (DO) requirements (as dictated by the initial analysis from Cadmus), CEV would recommend that the administratively-set incentives for net-metered segments be further bifurcated to include distinct incentives for direct-owned and third-party owned project types. TPO has historically been 60 percent of total capacity and supports 85 percent of all public projects.

3. As currently proposed, all net metered projects in the administratively set program would



qualify for an incentive of \$85/MWh for the first three-year period (EY 2022-2024); community solar projects would qualify for an incentive of \$70/MWh, and community solar LMI projects would receive an incentive of \$90/MWh. Please comment on these proposed incentive levels and if you disagree, please reference specific concerns with the modeling or historic performance assumptions used to develop the proposed levels.

The \$70 to \$85/MWh proposed by Staff is too low to support investment in net-metered commercial and industrial projects. The incentives proposed in the Staff Straw Proposal reflect decreases of 40 to 60 percent versus those realized in the TREC market. Since its establishment only 12 months ago, no substantial changes in the market have occurred that would justify these dramatic decreases. Even increasing the ITC, per the Cadmus analysis, only equates to \$5- to \$10 for most project types.

4. The Straw proposes that selected projects would receive a 15-year qualifying life, consistent with the TI Program. Staff seeks comments on whether this is the appropriate term due to the nature of heavily discounting outer-year incentives, as well for consistency with the proposed competitive solicitation program. Please comment on this proposal and explain any alternative suggestions.

CEV has always preferred long-term incentives with 25- to 30-year financial life; however, we do not object to the 15-year incentives found in SREC/TREC.

5. Staff proposes to establish annual capacity allocations for each market segment on an annual basis, as discussed in the Cost Cap section. The annual program capacity allocation would be divided (by four) into a quarterly allocation. Developers would then be able to reserve a spot within each quarter's capacity allocation.
  - a. Staff proposes to allow projects to reserve capacity against the quarterly capacity allocation on a first-come, first-served basis. Please provide any comments on this proposal.
  - b. Staff anticipates that there may be situations in which a quarter's allocation becomes over-subscribed. How should the Board handle over-subscription?
  - c. What different or additional measures could the Board take to ensure that there is sufficient opportunity to participate in the incentive program throughout the year?

Quarterly allocations are too restrictive. Solar policy should provide market indicators to support the goal of reaching 750 MW of capacity installations per year. CEV believes allocations should be flexible, to align with progress or performance of certain segments and goals.

6. Concern of "ghost projects" or "queue sitting" threatens the productive functioning of the incentive program. Please comment generally on the slate of project maturity requirements as proposed on page 13 of the Successor Straw or suggest alternative bidding requirements, including minimum criteria to demonstrate project maturity, site control, or escrow amounts to discourage speculation.
7. Staff proposes that projects awarded within a quarterly window pay a fee to the program

administrator to cover the costs of administering the program. The fee would vary based on project size (under 25 kW, between 25 kW and 500 kW, and over 2 MW). Please comment on what fee should be required for the three project sizes.

8. Staff proposes that developers seeking an extension beyond the initial 12-month deadline must submit a deposit, refundable upon project completion, equal to 10% of the project cost and not to exceed a value determined with stakeholders. Please comment on how Staff should determine the deposit fee for a deadline extension request.

**RE: 6-8 –CEV supports Staff's proposed maturity requirements.** Staff proposes to set incentives every three years to provide market certainty. However, using an administratively set incentive risks the potential for market under or over performance in any particular sub-market. What measures could be used to stop an overheated market and prevent inefficient use of incentive funds? Should the Board consider implementing measures such as a declining block structure, downward adjustments on the quarterly capacity allocation for the market segment, or others? How should the Board consider and assess market underperformance?

**CEV believes the restrictions in the Staff proposal, which limit Staff's ability to intervene in adjusting incentives until a "market-wide event" occurs, is counter-intuitive to the ideal of fair price setting. Furthermore, committing to a 10 percent cut to incentives – should a market-wide tax or tariff-event not occur – is a recipe for failure. As stated in the narrative above, Bloomberg and PVInsight show that solar panel costs are increasing for the first time since 2013. Staff should intervene on a routine basis, based on the preferred performance of market segments (which should be reviewed annually), informed by real metrics and cost indexes.**

9. What are the benefits and consequences of allowing or prohibiting behind-the-meter projects in non-EDC territories to register in the Successor Program?

#### Competitive solicitation model for all grid supply projects and large net metered projects

10. Staff proposes to divide the competitive solicitation into four tranches to allow like projects to compete against like projects. The four tranches are designed to enable the Board to set policy preferences through the design and project requirements of the tranches, thereby enabling cost to be the single deciding factor in awarding bids in each tranche.
  - a. Please comment on the overall approach of using a cost-based bid determination within the four described tranches, rather than a single solicitation with a Staff-led scoring process, such as is currently used for the Community Solar Energy Pilot Program. What eligibility or other solicitation criteria could be established to enable competitive bids from a diversity of project types and market segments with divergent cost structures?
  - b. Please comment on the four proposed tranches: basic (i.e., open space) grid supply; desired land use (e.g., contaminated land, built environment); solar + storage; and net metered projects greater than 2 MW. Is this the optimal configuration for the competitive solicitation? Would you suggest any changes?

Desired land-use grid-connected projects (i.e., landfill, brownfields, and customer-sited projects) need to be encouraged. We question, however, their fit in the competitive solicitation. These project types have especially long development cycles, increased costs to develop and interconnect, etc.; therefore, they struggle to continue without certainty on incentive revenues such as price.

11. Staff proposes to hold an annual competitive solicitation. Please comment on this proposed schedule. Specifically:
  - a. Would you advise running the solicitations more or less often, and if so, why?
  - b. Can all four tranches be administered on the same schedule, or should one or more be run more or less often than the others?
  - c. Should the program vary the solicitation frequency schedule based on liquidity in any given tranche? For example, if a given tranche fails to attract sufficient bids in one period, should the program provide extra time before holding the next procurement in that market segment?
  - d. Staff is particularly interested in determining if the net metered tranche should run more often than the grid supply tranches, and if so, why.
12. In the interest of procuring the maximum amount of solar energy and the lowest possible price, Staff requests feedback on whether projects awarded within the competitive solicitation should be paid-as-bid or receive a single clearing price.
13. Staff proposes that selected projects would receive a contract for REC off-take in a term of 15 years, due to the nature of heavily discounting outer-year incentives, as well for consistency with the administratively determined program. Please comment on this proposal and explain any alternative suggestions.
14. Staff proposes that projects applying to the competitive solicitation must post a deposit equal to \$40/kW of DC nameplate capacity of the solar facility in an escrow account. Projects proposed with energy storage would be required to place an additional deposit of \$40/kW of nameplate capacity of energy storage offered. The escrow amount would be reimbursed to the applicant in full upon either (i) the project not being awarded a contract through the competitive solicitation, or (ii) upon attainment of PTO for the solar electric power generation facility. If a project is selected, the escrow will be forfeited to the State on a pro rata basis for any kW capacity that remains unbuilt after 2 years, plus any applicable extensions.
  - a. Please comment on the proposed deposit fee(s) as they relate to the solar facility, whether it should be lower or higher, and why.
  - b. Please comment on the proposed deposit fee(s) as they relate to the storage facility, whether it should be lower or higher, and why.
  - c. The Straw Proposal seeks to ensure both strict project maturity requirements as well as general program accessibility. Please comment on whether the deposit should be required upon initial application or upon acceptance of a bid. In the alternative, should the Board require a lower deposit for initial application, followed by the balance

due upon award?

15. The Straw proposes to include a tranche restricted to hybrid systems (solar and energy storage) in the competitive solicitation. Staff seeks commentary on the following:
- a. The Straw proposes establishing a \$/MWh incentive for hybrid systems would be administratively simpler than establishing separate contracts for the storage and solar components. Please comment on this approach.
  - b. How should the competitive solicitation account for battery degradation? For example, should applicants be required to commit to minimum performance metrics in order to qualify for the solicitation? Should applicants be required to commit to maintaining their stated capabilities until the end of the term? What criteria and documentation should the program administrator require as evidence?
  - c. Please address how the competitive solicitation should normalize bids associated with different MW and MWh capabilities. Should the Board require pricing based on specific battery sizes to enable clear bid comparisons, or should the Board allow flexibility?
  - d. Please comment on the potential for allowing distributed storage developers to place offers that aggregate a pool of distributed resources into a single "virtual power plant" bid that can participate in the grid supply paired with an energy storage tranche. Please address whether this is technically feasible for implementation in the first round of auctions or whether it should be deferred for possible consideration in future development cycles.

CEV will defer specific responses on the competitive solicitation program until the program's more robust stakeholder process.

#### New programs and technologies

16. For solar projects proposed on farmland that allow for continued farming on the same parcel, known as "agrivoltaics" or "dual-use programs," is it likely that there is a market for dual-use projects smaller than 2 MW, or should Staff presume that all dual-use projects would be larger and enter the competitive solicitation?
17. If dual-use projects are permitted into the competitive solicitation in future years, should they be permitted as a fifth tranche or into the basic grid supply tranche with an adder? If with an adder, how should the Board determine the adder?
18. Should additional siting restrictions be established for dual-use projects, for example, by limiting dual-use projects only to farms that meet certain soil characteristics or that are used for a certain type of herding, grazing, or crop type?
19. What rules and regulations should be established to ensure either no loss, or a reasonable loss, of agricultural productivity for dual-use projects? What should be considered a "reasonable loss" of agricultural productivity?

20. Are there additional solar technologies or use cases for which this Successor Straw has not yet considered that may be considered for the Successor Program, either now or in the future? Please explain.

Floating solar, solar canopies, and other new technologies should be encouraged and adequately incentivized to stimulate growth in those market segments. To do that, Staff should consider new capacity categories, which require higher incentives in the near term, with low capacity allocations, which can drive down incentives faster than more mature segments. We have also testified throughout this stakeholder process that solar canopies/carports should be considered for an electric vehicle charging adder - in addition to current net metering - to support the viability of this solar market segment and drive toward the State's EV goals.

#### Solar Siting

21. Please comment on Staff's proposed methodology for (a) limiting solar development on the areas specified on page 20 and (b) establishing a path forward for projects seeking to be developed on desired land uses that fall within otherwise prohibited siting areas.
22. Has Staff overlooked any siting categories for which solar development should be either expressly prohibited or otherwise limited as described in the Successor Straw and noted in the question above?
23. Has Staff overlooked any siting categories for which solar development should be considered a desired land use?
24. How should Staff consider relatively new land uses for solar development, such as floating solar, former mines, and quarries? Others?
25. Please comment on a proposed methodology for qualifying "contaminated lands." Please cite objective federal or state standards.

#### Section IV: Megawatt Targets

26. Should the annual capacity targets for the administratively set program be set broadly for the whole program, or should the administratively set program be further sub-divided into market segments with individual cost caps? In other words, should the Board set cost caps for the residential sector, net metered commercial rooftop, net metered commercial ground-mount, etc., or simply allocate a certain amount of money to the whole net metered program? Staff notes that the community solar segment will have its own cost cap.
27. Should the annual capacity targets for the competitive solicitation tranches be set with flexible parameters, such that the Board may accept more or fewer projects into any particular tranche based on viable project applications and pricing, as long as the total projects accepted into the competitive solicitation don't exceed the overall annual budget cap?

28. Please comment on Staff's proposed megawatt targets for the first year (EY 2022) (see page 22).

RE: 27-29 – Should the intent of the question pertain to cost caps in a “budget” sense, the NJ solar goals and related capacity allocations should be done on a MW basis, not on a dollar-based budget. These allocations should also be flexible enough to shift resources between market segments based on segment performance.

As far as the targets themselves, the residential solar and community solar allocations seem reasonable considering historical trends and current pipeline status. When it comes to larger projects, the commercial net-metered targets are far too low, while the predominantly landfill grid-connected allocation is far too high. Historically, and with properly set incentives, adding upwards of 100 MW+ to the commercial net metered targets would be justified, removing all of that from the preferred-use grid segment. Also, basic grid (former Subsection R) remains to be seen as a viable market segment, despite receiving 130 MW of allocated capacity in Staff's proposal. These figures should be altered to reflect actual project volumes and support the customer-savings and jobs provided by commercial net-metered solar.

#### Section V: Cost Cap Calculation

29. Staff proposes to include the total amount of expenditures by electricity customers on annual retail bills and the costs associated with all net metered and other solar projects – whether host-owned or third-party owned – when calculating the denominator of the cost cap, as to accurately reflect the total amount of money paid by New Jersey customers for electricity (see details beginning on page 24 for details).

- a. Do you agree with Staff's proposed categories for inclusion? Should any category be omitted? Has Staff overlooked a category that should be included?

The social cost of carbon, economic benefits, and health benefits of solar should all be key pieces of the formula for calculating solar costs. While adding back in the costs of net-metered solar to host-owners and crediting the DRIPE benefits that solar has at the PJM-level are certainly helpful, the BPU's active support of solar development is premised on the health, environmental and economic benefits it provides to all ratepayers in NJ.

- b. Please comment on the sources of information, calculations, and assumptions underlying the categories.

CEV agrees with the Gabel Associates' analysis on cost cap calculations and benefits, as well as their use of Aurora for dispatch modeling to accurately capture these benefits. Staff should also be including the future expected costs of ORECs and ZECs, as well as future expected incentive payments to solar. Staff should rely upon the EPA's social cost of carbon it references in the Straw to determine the value of carbon emissions reductions, and which has been included in the most recent version of Senate bill S-2605.

30. Please consider the benefits and consequences of using the moving three-year average of annual electricity demand versus annual amounts in calculating and forecasting the annual cost cap percentage.

31. For the purposes of forecasting future electric costs to estimate the cost cap in later years, Staff proposes using a 0.5% growth factor based on consumption patterns, presumptive expenditures for future and continued clean energy incentives, such as energy efficiency programs, ORECs, and ZECs, as well as increased demand due to vehicle electrification in particular, and cost declines due to increasing energy efficiency. Please comment on Staff's assumptions.
32. Staff proposes to include the following elements in calculating the numerator of the cost cap to reflect the cost of incentives paid by ratepayers: the annual costs of SRECs, TRECs, and Class I RECs, minus the DRIPE benefits of solar (see section beginning on page 29 for details).
- Do you agree with Staff's proposed categories for inclusion? Should any category be omitted? Has Staff overlooked a category that should be included?
  - Please comment on the calculations and assumptions underlying each of the components of the cost cap.
  - How should the Board consider the assumed annual value of SRECs, which is not fixed?

The growth rate should reflect changes in both price and volume. Based on historical data from the U.S. Energy Information Administration, NJR CEV recommends a growth assumption of 2.5 percent to energy rates.

CEV believes Staff has accurately modeled Class 1 and Legacy SREC prices in its cost cap modeling. Consistent with the treatment of OREC's and ZEC's, costs for the TREC and successor program which will be recovered in EDC rate charges must be explicitly added to the total paid for electricity.

#### Section VI: Implementing the Successor Program and Transitioning from the Transition Incentive Program

33. Please comment on the Staff proposal that, following the close of this stakeholder process, the Board will issue an Order directing Staff to close the Transition Incentive Program within 30 days. After that 30-day period, the administratively set program will open immediately. The competitive solicitation is targeted to commence in the second half of 2021. Staff notes that there will be a seamless transition for residential, community solar, and net metered projects at 2 MW or less, but there will likely be a gap between the end of the TI Program and the start of the competitive solicitation that will affect large net metered and grid supply projects.

As indicated in the narrative, we foresee delays in launching the new competitive solicitation program, which runs the risk of stalling large-scale project development in New Jersey for the next several years. There are normal cycle times, delays and learning curves associated with the design and launch of any new program. The community solar program is a recent example, and the competitive solicitation program will be no exception. Staff's desire for first solicitation by fall/winter 2021 is laudable but may not be achievable.

As a result, we recommend that administratively set incentives be established for all projects eligible for the solicitation, or that the TREC program remain open for these projects to avoid a development

shutdown. We appreciate that this consideration was made for former-Subsection T projects; however, all projects going into the solicitation (and thereby experiencing the same delayed implementation) should be eligible for an interim administratively-set incentive.

#### Ensuring State Policy Priorities

34. Should “adders” or “subtractors” be used to further differentiate incentives by project attributes in both the administratively set incentive program and the competitive solicitation, only one program, or neither? Explain why.
35. Would adders make the administratively set incentive program too complex when coupled with the anticipated differentiation envisioned for residential, non-residential roof, non-residential ground, community solar LMI, and community solar non-LMI? How could they be used most effectively?
36. Should the administratively set incentive program include an adder for projects that benefit environmental justice communities? For the competitive solicitation? If so, should there be criteria to select the projects with the highest benefits? How can “benefits” for these communities be quantified?
37. How else could the Board consider designing the program to encourage broader participation among traditionally underrepresented groups?

#### Section VII: Community Solar Permanent Program

38. Please comment generally on whether the Board should consider maintaining the competitive solicitation for community solar projects in the Permanent Program, or if it should adopt strict qualifications and otherwise establish a first-come, first-served model (detailed as Option 1 and Option 2 on pages 40-41).
39. Please comment on the Pilot Program rules (detailed beginning on page 41) and discuss which, if any, the Board should consider modifying for the Permanent Program, and why.
40. Currently, community solar projects must be sited in a single location and are not permitted to include aggregated rooftops.
  - a. Should the Board consider revising this policy to allow aggregation of rooftop projects, up to the 5 MW capacity limit? Please comment on this general policy, and if you agree, what kind of limitations should the Board set with respect to the proximity of the rooftops, site control or ownership, etc.
  - b. What should the Board consider with respect to the competing value of rooftop space, particularly on multi-unit residential and small commercial buildings, in locating HVAC or other equipment necessary for future energy efficiency and building decarbonization measures?



Bonus Question

41. Staff is seeking feedback on its proposal to call the Successor Renewable Energy Certificate a “UREC” to differentiate it from the Solar Renewable Energy Certificate (SREC) and the Transition Renewable Energy Certificate (TREC). In the alternative, please provide additional acronyms or program names for consideration.