

CADMUS

NEW JERSEY SOLAR TRANSITION

Successor Program Candidate Policy Pathways

STAKEHOLDER WORKSHOP #3

THE CADMUS GROUP LLC

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Disclaimer

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Agenda

Time	Agenda Item
9:30 – 9:45 AM	Opening Remarks Review of the Day's Agenda
9:45 AM – 10:30 AM	Presentation and Q&A 1.Objectives for the Successor Program 2.Policy Options for Designing the Successor Program
10:30 AM – 12:05 PM	Breakout Groups: Discussion of Potential Policy Options and Design of Successor Program
12:05 – 12:15 PM	Breakout Session Report Back
12:15 – 12:30 PM	Wrap Up, Next Steps & Meeting Closed

Consulting Team Supporting Stakeholder Engagement

Facilitator Roster



Chad Laurent



Emily Chessin



Courtney Ferraro



Steve Tobey



Egan Waggoner

BPU Staff will co-facilitate workshop breakouts



Development of Successor Program Design Criteria

Consistency with Core Principles

Translate Original Solar Transition Principles into SP Design Criteria

Solar Transition Principle		Successor Plan Design Criteria
1. Provide maximum benefit to ratepayers at the lowest cost	▶	Maximize ratepayer benefit and/or minimize ratepayer cost
2. Support the continued growth of the solar industry	▶	Support solar industry growth, with an emphasis on community solar, rooftop, and landfill resources, while minimizing use of productive agricultural or forested lands
3. Ensure that prior investments retain value	▶	N/A
4. Meet the Governor's commitment of 50% Class I Renewable Energy Certificates ("RECs") by 2030 and 100% clean energy by 2050	▶	Meet IEP targets of ~12.2 GW of solar by 2030, with the goal of 100% of New Jersey's hourly load served by renewables by 2050

Consistency with Core Principles

Translate Original Solar Transition Principles into SP Design Criteria

Solar Transition Principle

5. Provide insight and information to stakeholders through a transparent process for developing the Solar Transition and Successor Program

6. Comply fully with the statute, including the implications of the cost cap

7. Provide disclosure and notification to developers that certain projects may not be guaranteed participation in the current SREC program, and continue updates on market conditions via the New Jersey Clean Energy Program (“NJCEP”) SREC Registration Program (“SRP”) Solar Activity Reports

Successor Plan Design Criteria

▶ N/A - accomplished through meetings and other stakeholder outreach

▶ Binding constraint: comply with Cost Cap and maintain flexibility to incorporate findings of Cost Cap proceeding

▶ N/A - BPU provided notice to SRP applicants

Incorporate Stakeholder Objectives

Translate Higher Priority Stakeholder Objectives into *Primary* Design Criteria

Stakeholder Objective

Fairness to those who have made past commitments and to those who will make future ones

Transparency

Minimize market disruption

Support steady industry growth

Successor Plan Design Criteria

▶ Seek fairness for those who will make future commitments

▶ Provide clarity and transparency regarding pricing and project eligibility

▶ Provide timely guidance on program details

▶ Support steady industry growth

Incorporate Stakeholder Objectives

Translate Higher Priority Stakeholder Objectives into *Primary* Design Criteria

Stakeholder Objective

Favor support to open or rolling market incentives vs. scheduled procurements

Minimize complexity

Focus on feasible implementation



Successor Plan Design Criteria

Maximize certainty of incentive access

Minimize complexity

Ensure feasibility

Incorporate Stakeholder Objectives

Translate Other Priority Stakeholder Objectives into *Secondary* Design Criteria

Stakeholder Objective

Ensure cost effectiveness

Minimize ratepayer impact

Transition to sustainable market by reducing incentive over time

Balance solar development between the built environment and green space

Encourage installation type diversity

Minimize financing risk

Successor Plan Design Criteria

▶ Maximize cost-effectiveness (MW/ratepayer \$)

▶ Minimize ratepayer impact and/or maximizes ratepayer net benefit (including environmental considerations)

▶ Reflect current and forecast market pricing, which should decline over time

▶ Maximize solar development on disturbed land/minimizes reliance on green space

▶ Encourage installation type diversity

▶ Minimize financing risk

Incorporate Stakeholder Objectives

Translate Other Priority Stakeholder Objectives into *Secondary* Design Criteria

Stakeholder Objective

Encourage participant diversity

Create and keep permanent in-state jobs

Prioritize competitive market structures

Accelerate implementation, timeliness of Transition

Support PV location where most needed



Successor Plan Design Criteria

Encourage participant diversity

Maximize near- and long-term jobs in NJ

Maximize use of competitive market mechanisms and compatibility with competitive wholesale and retail markets

Allow timely implementation

Support PV location where most needed



Successor Program Policy Path Development

Policy Path Choices



Choose Broad Incentive Type

Market Mechanism

- Solar Carve-out creates demand obligation
- Price is market-based but generally within bounds
- Levers include SACP, SREC life, qualification life, bankability, etc.
- Prior SREC program

Performance Based Incentives (PBIs)

- Direct payments for production
- Compensation for environmental attribute, energy, capacity, and/or other element
- Transition Incentive

Choose Payment Structure

Contract

- Energy, capacity and/or SREC to EDC

Tariff

- EDC tariff approved by regulator

Premium PBI

- Payments for environmental attribute

Choose Price Setting Mechanism

Standard Offer

- Cap based on MW or \$ amount
- Price set as cost-/value-based or derivative of competitive process

Competitive Solicitation

- RFP, auction, other to set pricing

Separate SREC Market Based

- Supply from generation, banked SRECs
- Demand as required of obligors

Choose Price Adjusting Mechanism

Administrative

- Objective independent analysis of required incentive rate(s)

Blocks

- Preset, typically stepping down in MW or time increments

Separate SREC Market-Based

- Price a function of demand & supply

Choose Compensation Structure

Premium

- In addition to energy/capacity revenues, primarily reflecting environmental attributes

Fixed Price

- Meant to compensate for all primary revenue streams

Fixed Compensation

- Set total compensation but PBI fills gap beyond conventional market value streams

Other Incentive Choices and Finer Tuning

Market Mechanism	Performance Based Incentive	Both
<ul style="list-style-type: none">• Obligor entities EDCs or TPS/BGS companies• Setting carve-out %• Bankability• Qualification Life• Lever adjustments over time• Floor characteristics	<ul style="list-style-type: none">• What is purchased (hedged)• Access• Block makeup, adjustability• Portability among blocks	<ul style="list-style-type: none">• Differentiate by type of projects, offtakers, etc.• Incentive duration• Project eligibility• Interoperability with other incentives• Price setting• Predictability of annual market scale

Example: Massachusetts SMART Program

General Incentive Type	Performance Based Incentive
Payment Structure	Tariff
Price-Setting Mechanism	<ul style="list-style-type: none">• Competitive procurement for larger projects (>1 MW) for each EDC• Administratively set for smaller projects as derivative
Price-Adjusting Mechanism	Capacity blocks with declining base compensation rates
Compensation Structure	Fixed compensation with payment mechanism contingent on type of underlying billing/tariff
Advantages	<ul style="list-style-type: none">• Differentiation by project type, innovative adders and subtractors• Long-term tariff provides certainty of incentive level• Clear incentive blocks create incentive level certainty• Program review every 400MW
Drawbacks	<ul style="list-style-type: none">• Complex calculations and adders create confusion• BTM/FTM differentiation created confusion and perverse incentives• Uneven block reservations across utility service territories• Program delays caused rapid block filling• Utility tariff creates delays for program update to take effect

Example: Connecticut ZRECs

General Incentive Type	Performance Based Incentive
Payment Structure	<ul style="list-style-type: none">• Large and Medium projects: 15-year contracts with EDC• Small projects: Tariff
Price-Setting Mechanism	<ul style="list-style-type: none">• Large and Medium projects: Competitive auction, receive bid price• Smaller projects: Weighted average of medium ZRECs + 10% adder
Price-Adjusting Mechanism	<ul style="list-style-type: none">• Price cap (2019: \$126/REC)
Compensation Structure	<ul style="list-style-type: none">• Fixed Premium (payments for environmental attribute)
Advantages	<ul style="list-style-type: none">• Annual budget limit, price cap published pre-bid• Receive bid price
Drawbacks	<ul style="list-style-type: none">• Lottery based system – don't win the lottery, no access to the financial incentive• Can be a race to the bottom - force project developers to bid below a financeable threshold in order to win

Example: Massachusetts SREC II

General Incentive Type	Market Mechanism
Payment Structure	SREC market, auction with floor price
Price-Setting Mechanism	Market-based function of supply/demand generally within SACP (ceiling) and Clearinghouse (floor)
Price-Adjusting Mechanism	MW cap
Compensation Structure	Premium
Advantages	<ul style="list-style-type: none">• Factorized SRECs provided adders and subtractors• Clearinghouse last-resort auction “floor” reduces downside risk
Drawbacks	<ul style="list-style-type: none">• Interactions with net metering caps in different EDC territories• Auction floor mechanism, DOER forces it to clear• Complicated

Example: NY-Sun C&I MW Block

General Incentive Type	Performance Based Incentive
Payment Structure	Standard offer, first-come, first-served
Price-Setting Mechanism	Administratively set based on historic demand, market potential, installed costs and equity
Price-Adjusting Mechanism	Declining blocks, but NYSERDA monitors for adjustments
Compensation Structure	Premium PBI
Advantages	<ul style="list-style-type: none">• Differentiation by region accounts for market/cost disparities• Locational multipliers incentivize strategic development• Redesign: adders, streamlined structure
Drawbacks	<ul style="list-style-type: none">• Complexity of block design (→ redesign)• Initial incentive levels based on old RNM rules• Related interconnection costs and queue backlogs• Pressure on C&I projects to pencil out economics (→ redesign)

Example: Rhode Island REG

General Incentive Type	Performance Based Incentive
Payment Structure	Tariff for 15 or 20 years
Price-Setting Mechanism	Standard Offer based on size: <ul style="list-style-type: none">• Larger: competitively bid up to a cost-based ceiling price• Small (<25kW): Levelized, cost-based prices administratively set
Price-Adjusting Mechanism	Analyzed each year to determine ceiling prices
Compensation Structure	Fixed compensation: full payment for on-bill credit for energy + PBI
Advantages	<ul style="list-style-type: none">• Bid requires completed interconnection, lowers cancelations• Good diversity of project types
Drawbacks	<ul style="list-style-type: none">• Oversubscriptions can push projects to NM, especially large ones• C&I harder but may be aided by Commercial PACE• Could use more carve-outs, e.g., LMI

Breakout Session

10:30 AM – 12:05 PM

- Listening session on policy pathway design choices
- Go to your assigned letter
- Spend 5 min. going through the worksheet
- Facilitators will lead discussion on design choices
- Share constructive thoughts on pros, cons, preferences, and experiences
- Prioritize preferred design choices
- Wrap up
- Breakout Session Debrief

Meeting Close

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Thank You

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