# MSSIA Conference In-State vs. Out-of-State Renewables in NJ

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### In-State vs. Out-of-State Solar – Key Issues

- Consistency in evaluation
- Valuation of price volatility/hedge value
- Additionality
- Rate Impacts/"Affordability"



### Consistency in the Evaluation of Resources is Critical

### State of play in New Jersey in the evaluation of resources:

- Key economic factors:
  - net benefit
  - rate impacts
- Other non-economic factors:
  - achievability/feasibility
  - timing
  - reliability
  - economic justice/equity
  - workforce development
  - others



### What Benefits are Considered by BPU in Economic Benefits Analysis?

Net Benefit Evaluation	osw	In-State Solar	Out-of-State Solar	EE
Benefits				
Wholesale Energy Benefits	Yes	Yes		Yes
PJM RPM Capacity Benefits	Yes	Yes		Yes
Avoided REC Purchase Costs	Yes	Yes		Yes
Energy Merit Order Benefits	Yes	Yes		Yes
Capacity Merit Order Benefits	Yes	Yes		Yes
Volatility Hedge Benefits	No	No		Yes
Economic Value Added to GDP	Yes	No	NOT	Yes
Direct	Yes	No	CONDUCTED	Yes
Indirect	Yes	No		Yes
Induced	Yes	No		Yes
CO <sub>2</sub> Emissions Impact	Yes	No		Yes
SO <sub>2</sub> Emissions Impact	Yes	No		Yes
NO <sub>x</sub> Emissions Impact	Yes	No		Yes
PM <sub>2.5</sub> Emissions Impact	Yes	No		Yes
Costs				
REC/Incentive Payments	Yes	Yes	Yes	Yes
Net Benefits				

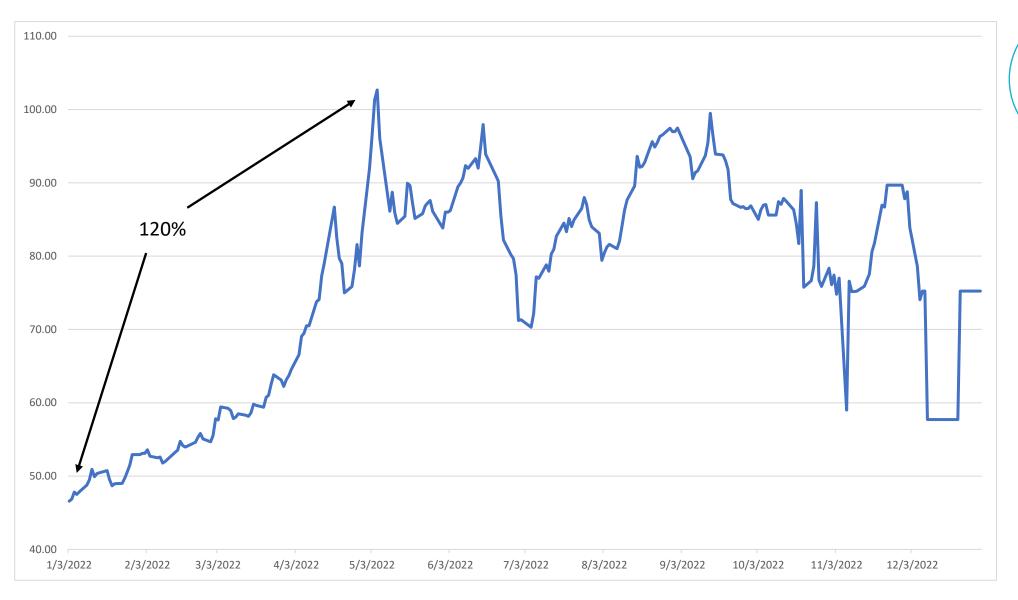


All factors should be considered for all resources (valuation will, of course, vary)

### Addressing Price Volatility is a Key Overlooked Factor

- Price volatility has a cost
- Price hedges from solar and other renewables confer benefits

### Movement of PJM 2023 ATC Forwards During 2022





## Additionality

- Additionality is increasingly considered in regulatory, legislative, business, and institutional settings (offset market; corporate green purchases, etc.)
- Would the project or growth happen without the incentive or action?
- Key cost implications important to consider
- Example: Texas wind RECs: current REC price is approximately \$3.00





# Affordability / Rate Impacts

### In-state solar cost trends

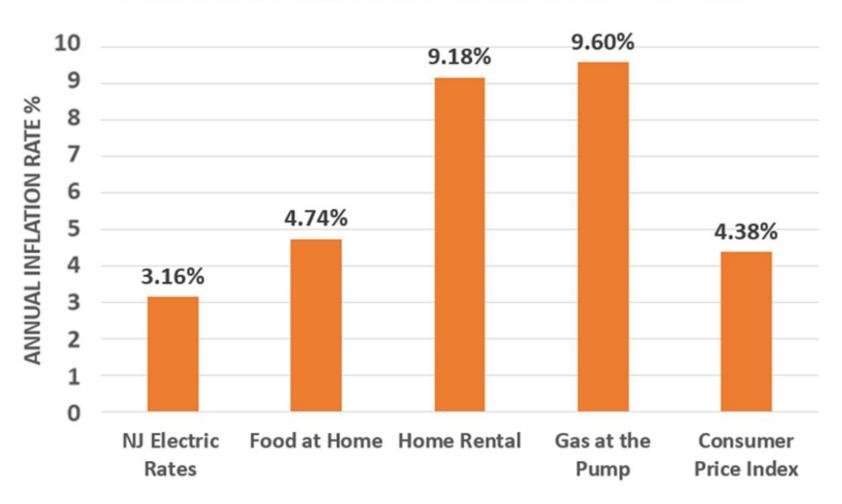
- Legacy SREC life ends for 3,335 MW by 2033
- After that, Legacy projects continue to produce and provide benefits
- SREC-II prices substantially lower then SRECs
- Declining total cost
- Under the statutory cost cap
- On-site and community solar deliver benefits to participating customers
- Affordability must include benefits and <u>requires context</u>

### Estimated Savings to Participating On-Site Customers (\$Million/Yr)

Energy Year	BTM Solar Retail Savings
2022	145.53
2023	176.28
2024	204.85
2025	236.34
2026	269.54
2027	306.83
2028	347.99
2029	392.32
2030	437.26



#### Annual % Inflation Rates 2018 - 2022





#### Electric Rate Annual % Increase 2018 - 2022

