

IN THE MATTER OF THE ONE YEAR :

DOCKET NO. QO20020184

REVIEW OF THE ADMINISTRATIVELY

DETERMINED INCENTIVE PROGRAM : December 09, 2022

## WRITTEN COMMENTS BY GREENSKIES CLEAN ENERGY LLC

Greenskies Clean Energy LLC ("Greenskies") submits these comments in response to the Notice of The One Year Review of the Administratively Determined Incentive Program released by the Board, dated November 17, 2022. Greenskies is one of the largest Commercial and Industrial scale solar developers in the United Sataes. Greenskies has developed and operates more than 45MW of C&I solar in New Jersey, the majority being public sector projects benefiting municipalities and Boards of Education across the state. Greenskies appreciates all the efforts the Board and Staff has put into the on-going growth of solar industry in NJ and the opportunity to comment on this Year 1 ADI review. As we are only active in the non-residential space, we will restrict our comments to these areas.

## **Responses to Questions**

- 1. Cadmus proposes to adjust Operational Expenses by annual inflation rates, and to adjust current Capital Expenses by inflation rates and other cost escalators researched from industry data.
- a. Please comment on the proposal to use Bureau of Labor Standards CPI-U data to escalate operational and capital expenses.

Greenskies believes that the CPI-U rates underrepresent the actual price increases we are facing, both in operational costs and capital costs. Supply chain constraints and material



shortages have caused material to increase at a faster rate than the standard CPI-U estimates. For example, module prices have increase by more than 15% from Q1 2021. Balance of system costs (cabling, switchgear, combiner boxes) have also increased by more than 10%. In additional, operational costs (wages, financing, insurance, legal expenses, etc.) are also outpacing the CPI rates. For example, our casualty insurance rates for projects has increased more than 25% in the last two years.

b. Please comment on the proposal to utilize industry data to apply a separate supply chain adjustment, and if so, what data range should be used?

A supply chain adjustment is appropriate using industry benchmarks as the basis. Industry benchmarks would indicate that a 15%-20% adjustment is appropriate for material costs.

c. Are there market segment-specific considerations when making cost adjustments?

One segment that has been hit particularly hard is carports/canopies. Commodity steel costs have increased by more than 50% since late 2020.

d. Are there additional or alternative data sources that should inform cost adjustments?

NREL just released their updated cost benchmarks

(https://www.nrel.gov/docs/fy22osti/83586.pdf). This report shows an increase in costs of

12.8%-13.4% for typical non-residential installations from Q1 2021 to Q1 2022.

2. Interest rates have increased in 2022. In addition to cost and tax credit assumptions, Cadmus can adjust the cost of financing from the previous model runs. The cost of financing had been set at between 5.5% and 6.5%, depending on the project type, in the previous Cadmus Capstone report. Should increased interest rates be accounted for in modeling incentive



requirements using the NREL's System Advisor Model? If so, are there suggested data sources for this adjustment?

Yes, increased interest rates directly affect overall project costs. In addition, higher interest rates also increase investor return expectations further driving overall project costs. We would recommend that 6.5% is the minimum rate to consider and 7%-7.5% would be more in line with current expectations.

- 3. Cadmus proposes to adjust investment tax credits for all market segments according to the Inflation Reduction Act, increasing tax credits to 30%. How should the changes in federal tax incentives from the Inflation Reduction Act be accounted for in modeling incentive requirements using the NREL's System Advisor Model?
  - a. When adjusting tax credits, are there any considerations for specific market segments?

There are still too many uncertainties related to domestic content and low-income adders to really make any definitive recommendations for the Year Two program and we would recommend maintaining the 30% ITC as the rate for all segments.

b. How should the wage and apprenticeship requirements be considered for tax credit adjustments?

While the current SuSi program already requires prevailing wage for construction, the apprenticeship requirements will add some incremental costs. In addition, the IRA requires prevailing wage for on-going O&M services increasing ongoing operational costs. Our estimates are operating costs will be 10%-15% higher.

4. Does potential funding from the Infrastructure Investment Act require adjustment to any inputs in modeling incentive requirements using the NREL's System Advisor Model?

We do not see any direct near-term impacts from the Infrastructure Investment Act.



6. Does the relatively slow uptake in registration submission in the non-residential market segments and the existence of excess capacity in this allocation for Energy Year 2022 support a change in incentive levels from the initial values?

Yes, definitely. The slower uptake in the non-residential sector is a direct indication that the current incentive levels, particularly when coupled with the increased costs, need to be increased. We have had a number of projects be "put of hold" by our customers because the expected savings/returns do not meet their expectations. An incremental increase in the non-residential incentive levels could allow these projects to move forward.

8. Assuming the answer to question 6 is yes and the modeling supports an increase in the non-residential market segment incentive values, how and when should the altered incentive values be implemented?

For rooftop installations our recommendation would be an increase the rates by a minimum of \$20/MWh and believe \$25/MWh-\$30/MWh would be more appropriate. In addition, the complete lack of carport submissions is a clear indication that carport configurations need an additional adder to support this very attractive installation location. Our recommendation is an additional \$30/MWh adder for carport configurations.

These increases should take effect as soon as practical, even before beginning of next year's program, if possible.

9. What other issues should be considered in the One-Year Program Review?

Greenskies also strongly recommends that the public-entity adder be maintained. This adder directly benefits all the citizens in the state and the fact that these projects are always subject to competitive bidding means that these added benefits will flow to the public entities, not developer profits.



Respectfully Submitted

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