November 15, 2019

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Aida Camacho-Welch, Secretary of the Board Board of Public Utilities 44 South Clinton Avenue, 9th Floor Post Office Box 350 Trenton, New Jersey 08625-0350

Re: Integrated Energy Plan Comments of Dakota Power Partners

Dear Secretary Camacho-Welch:

Please accept the following comments of Dakota Power Partners, LLC ("Dakota") in response to the November 1, 2019 Integrated Energy Plan webinar and associated materials.

I. Overview of Dakota Power Partners

Dakota is one of the most experienced developers of large-scale renewable energy projects in the United States. Dakota Power Partners and its investors have been direct participants in developing and funding over 10,000 MW of large-scale solar and wind projects now in operation nationwide. Dakota is currently developing one thousand megawatts of utility-scale solar and solar + storage systems in New Jersey. Dakota expects to achieve commercial operations on its first projects in New Jersey by 2021.

II. Comments on Integrated Energy Plan

Dakota supports New Jersey's goals of achieving 100% clean energy and 80% greenhouse gas emissions reductions by 2050, as well as the development of the Integrated Energy Plan ("IEP") to identify the least-cost pathway for achieving the state's clean energy goals.

Dakota was very encouraged that the IEP identified a prominent role for New Jersey solar in its least-cost pathway. Specifically, the IEP forecast that 34% of New Jersey's electricity will come from New Jersey-sited solar by 2050 and that New Jersey should add at least 400 MW per year of New Jersey-sited solar through 2030. The IEP also identified that it is more cost effective to add in-state renewable resources than to expand transmission capacity in order to import more out-of-state renewables. Dakota strongly agrees that New Jersey solar resources will contribute significantly to the least-cost pathway for meeting the state's clean energy goals.

However, the IEP did not make distinctions between different types of solar resources, which vary dramatically in cost. The least-cost pathway must include a significant contribution from utility-scale solar. According to Lazard's 2019 Levelized Cost of Energy Analysis, utility-scale solar has a levelized cost of energy between 32 - 42 per MWh as compared to 75 - 154 per MWh for

commercial & industrial rooftop solar and 151 - 242 per MWh for residential rooftop solar.¹ In other words, when looking at the middle of these cost estimate ranges, utility-scale solar is roughly 65% cheaper than commercial & industrial rooftop solar and roughly 80% cheaper than residential rooftop solar. Given the dramatic cost savings that utility-scale solar projects provide, the least-cost pathway must, by definition, include significant contributions from utility-scale solar resources.

The IEP results are remarkably consistent with Dakota's independent analysis of the least-cost resources and the market potential for solar in New Jersey. Dakota's analysis found that utility-scale solar is the lowest cost resource in New Jersey and the Mid-Atlantic region. It further found that there is a market potential to develop over 3,000 MW of utility-scale solar in New Jersey by 2030, which would require that the state adds 400 MW per year of utility-scale solar beginning in the next few years.

New Jersey, however, cannot embark on the least-cost pathway identified by the IEP without critical regulatory reforms because Board regulations currently prohibit utility-scale solar and outof-state solar from contributing to the state's renewable portfolio standard. Indeed, while New Jersey law, N.J.S.A. 48:3-51, defines "Class I renewable energy" to include, without condition, electric energy produced from solar technologies and photovoltaic technologies, the Board's regulations have limited solar energy's qualification as renewable energy to solar resources that are "connected to the distribution system in New Jersey." Specifically, under N.J.A.C. 14:8-2.5(b), the only type of solar energy that qualifies as Class I renewable energy for compliance with the state's renewable portfolio standard is solar electric generation in the form of solar renewable energy certificates ("SRECs") or solar generation that was certified to receive SRECs after the facility's qualification life for SRECs has ended. Under N.J.A.C. 14:8-2.2, "SREC" is defined as "a certificate issued by the Board or its designee, which represents one megawatt-hour (MWh) of solar energy that is generated by a facility connected to the distribution system in New Jersey, and has value based upon, and driven by, the energy market." (Emphasis added). Under N.J.A.C. 14:8-1.2, any solar electric power generation facility connected above 69 kilovolts shall not be considered connected to the distribution system. The effect of the Board's regulations is to prohibit utility-scale solar-i.e., solar resources above 10 MWac-and out-of-state solar from qualifying as Class I renewable energy, and thus, contributing to the state's renewable portfolio standard because neither is connected to the distribution system in New Jersey. Accordingly, before New Jersey can embark on the least-cost pathway identified by the IEP, the Board must revise its regulations to allow utility-scale solar and out-of-state solar to qualify as class I renewable energy.

III. Proposal to Encourage Utility-Scale Solar in New Jersey

Utility-scale solar is not only the least-cost renewable resource available, it is also a proven resource, with thousands of megawatts commissioned each year across the country. Utility-scale solar can be developed and built rapidly, yet the state has no program to encourage investment in these resources in New Jersey.

Dakota estimates that the market potential exists for approximately 3,000 MW of in-state utilityscale solar by 2030 and that, with the near-term adoption of a properly designed competitive long-

¹ <u>https://www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2019/</u>

term contracting program, this resource could be procured with a REC incentive of less than \$15 per MWh, resulting in significant cost savings to New Jersey ratepayers. The adoption of such a program would also create thousands of in-state construction jobs and drive billions of dollars in investment in communities throughout New Jersey that would not occur under current programs. Meanwhile, 3,000 MW of in-state utility-scale solar would encumber less than 1% of all of the agricultural acres in New Jersey.

With the impending phase out of the federal solar investment tax credit ("ITC"), it is imperative that New Jersey launch such a program no later than 2020 in order to encourage investment in instate utility-scale solar in time to allow New Jersey ratepayers to fully benefit from the solar 30% ITC, which will not be available to solar projects that cannot achieve commercial operations by 2023, and to keep on track for achieving the 2030 and 2050 goals.

Based on the results of the IEP, Dakota makes the following recommendations:

- 1. The Final EMP should recognize utility-scale solar located both in New Jersey and in other PJM states as a resource that qualifies for Class-I RECs.
- 2. The Final EMP should recognize utility-scale solar as the least-cost source of renewable energy in New Jersey today, and in the future, and should prioritize incenting utility-scale solar in order to meet the state's ambitious renewable energy goals in a cost-effective manner.
- 3. More specifically, the Final EMP should establish a goal of achieving 3,000 MW of utilityscale solar in New Jersey by 2030. This would represent approximately 14% of the state's 2030 renewable portfolio standard and would offset the need to purchase Class-I RECs from out-ofstate (non-solar) renewable resources.
- 4. To achieve this 3,000 MW target, the state should explore incentives to encourage the development of utility-scale solar in New Jersey, including the use of long-term contracts and regularly scheduled competitive procurements. The long-term contracting program should utilize aspects of the offshore-wind long-term contracting program, but should establish a cap on pricing that is equivalent to the Board's forecast of the market price of energy, capacity, and Class-I RECs over the period of the long-term contract to ensure that the new program will have no negative impact on ratepayers.

Dakota appreciates the opportunity to provide these comments in response to the November 1, 2019 IEP webinar and associated materials. We look forward to working with the Board and Staff to help New Jersey embark on the least-cost path to achieving its clean energy goals.

Very truly yours,

/S/

Timothy Daniels Principal and Co-founder Dakota Power Partners tdaniels@dakotapp.com