STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7533

Investigation Re: Establishment of a Standard Offer)
Program for Qualifying Sustainably Priced Energy)
Enterprise Development ("SPEED") Resources)

Order entered: 12/29/2011

ORDER RE MOTION TO RECONSIDER AC CAPACITY OF SOLAR STANDARD-OFFER PROJECTS

I. INTRODUCTION

On October 24, 2011, Renewable Energy Vermont ("REV") filed a letter requesting the Public Service Board reconsider its October 11, 2011, Order that established a methodology for determining the AC nameplate capacity for solar standard-offer projects.

In this Order, we deny REV's request for reconsideration.

II. BACKGROUND

On September 30, 2009, the Public Service Board ("Board") issued an Order establishing a standard-offer program for qualifying sustainably priced energy enterprise development ("SPEED") resources pursuant to the Vermont Energy Act of 2009 ("Act 45").[1]

Under 30 V.S.A. § 8002(13), plant capacity is defined as "the rated electrical nameplate for a plant."[2] In an October 16, 2009, Order implementing the standard-offer program, the Board concluded that the statute clearly intends for plant capacity to be defined as the maximum output of the generating equipment, as rated by the manufacturer and defined by the nameplate rating,

1. Public Act No. 45 (2009 Vt., Bien. Sess.).

2. The Energy Information Agency defines generation nameplate capacity as: " The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator." See http://www.eia.gov/tools/glossary/index.cfm?id=G#gen_nameplate.

and not to include adjustments for losses from ancillary equipment or transformation from DC to AC.[3]

In 2011, the Vermont legislature passed Act 47, which defines, under 30 V.S.A § 8002(17) and (19), "kW" and "MW" as meaning kilowatt (AC) and megawatt (AC), respectively.

In an October 11, 2011, Order, the Board established a methodology for determining an AC nameplate capacity for solar standard-offer projects.[4]

On October 24, 2011, REV filed a letter requesting the Board reconsider its methodology for determining AC nameplate capacity for solar standard-offer projects.

On October 27, 2011, the Board issued a memorandum seeking comment on REV's reconsideration request.

On November 10, 2011, comments in response to the October 27 memorandum were filed by Central Vermont Public Service Corporation ("CVPS").

III. MOTION TO RECONSIDER

REV requests that the Board reconsider its October 11 Order, "so that Vermont's AC rating methodology is brought into alignment with national and industry standards, and is also meshed with current utility review practices."[5] In support of its request, REV asserts the following: (1) the Board's chosen derate factor of 0.95 is not supported by data, including plant performance data; (2) REV's suggested derate factor of 0.85 did not rely on shading and aging factors as suggested by the Board's October 11 Order; (3) the Board should choose a derate factor that is within the range of expert consensus; and (4) in the alternative to selecting a generic DC derate factor, the Board should use the nameplate rating of the inverter(s) as the maximum AC output for solar projects.

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3. *First Order Re Implementation Issues*, Docket 7533, Order of 10/16/09 at 16.

4. Solar is the only technology eligible for the standard-offer program that produces electricity as DC, and converts to AC through the use of an inverter.

5. Letter from Renewable Energy Vermont to Susan Hudson, Clerk of the Board, dated October 24, 2011.

IV. PARTICIPANT COMMENTS

CVPS recommends using the inverter AC nameplate rating to address both the array sizing concerns shared by developers and standardizing the basis upon which the electric utilities perform interconnection studies. CVPS further recommends that, whatever method the Board establishes for determining AC nameplate capacity, this method not strictly apply to utilities as they consider the interconnection issues associated with proposed projects because utilities should use the best available, project specific, information in order to assure that interconnection is safe, reliable and stable. Therefore, CVPS asks that the Board make clear that its choice of methodology for calculating the AC nameplate capacity only applies to the determination of eligibility for participation by a solar project in the SPEED standard-offer program, and does not apply to the utilities' analysis of interconnection issues.

V. DISCUSSION AND CONCLUSION

The purpose of a motion for reconsideration is for the Board to reconsider "issues previously before it," and to "examine the correctness of the judgment itself."[6] Reconsideration is not intended to allow a party to present evidence or issues that it failed to present earlier.[7]

REV asserts that the calculated AC capacity of standard-offer solar projects should reflect the operational production of the project, including derate factors for mismatch, diodes and connections, wiring, and soiling. This is contrary to the intent of the statute, which directs us to consider only a plant's maximum generating capacity and not its operational capacity. Under 30 V.S.A. § 8002(13), plant capacity is defined as "the rated electrical nameplate for a plant." In our October 16 Order implementing the standard-offer program, we concluded that the statute clearly intends for plant capacity to be defined as the maximum output of the generating equipment, as rated by the manufacturer and defined by the nameplate rating, and not to include adjustments for losses from ancillary equipment or transformation from DC to AC. Given the changes to Sections 8002(17) and (19), our October 11 Order provided for the calculation of

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6. *In re Robinson/Keir Partnership*, 154 Vt. 50, 54 (1990); *see also* Docket No. 6651, *In re Verizon Wireless*, Order of 10/6/06 at 2.

7. *Rubin v. Sterling Enterprises*, 164 Vt. 582, 589 (1996).

nameplate capacity to be measured in AC. This calculation necessitated the inclusion of inverter losses; however, it does not follow that we should also include operational derate factors in making this conversion.

Similarly, the changes to 8002(17) and (19) do not authorize us to consider the inverter nameplate capacity. The definition of plant capacity under 30 V.S.A. § 8002(13) has not changed, only the requirement that its output must be measured in AC. As discussed above, while this necessitates assessing conversion losses, it does not expand the scope of derate factors to include operational losses.

Contrary to REV's assertions, our choice of the 0.95 generic derate factor is both supported by data and within the range of expert consensus. In REV's own comments on this docket, REV cites the National Renewable Energy Laboratory's modeling program, PVWatts, which lists an acceptable inverter derate factor range of 0.9 to 0.975.[8] In summary, the difference between our adopted factor and REV's suggested factor is due solely to the inclusion of operational losses, which, as discussed above, were not intended to be considered in determining AC nameplate capacity.

In conclusion, we find the arguments in REV's request unpersuasive and we deny REV's request for reconsideration.

Finally, in response to CVPS's comments, the Board further clarifies that the methodology for determining AC nameplate capacity described in our October 11 Order only applies to the calculation of project capacity for the purposes of determining participation in the SPEED standard-offer program, and does not apply to utilities as they address interconnection issues with a proposed project.

SO ORDERED.

8. Letter from Renewable Energy Vermont to Susan Hudson, Clerk of the Board, dated August 22, 2011; http://www.nrel.gov/rredc/pvwatts/changing_parameters.html.

Dated at Montpelier, Vermont, this 29th day of December, 2011.

s/ James Volz	)	
	)	PUBLIC SERVICE
	)	
s/ David C. Coen	)	BOARD
	)	
	)	OF VERMONT
s/ John D. Burke	)	

OFFICE OF THE CLERK

FILED: December 29, 2011

ATTEST: s/ Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.