

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

IN THE MATTER OF NorthWestern Energy's
Application for Interim and Final Approval of
Revised Tariff No. QF-1, Qualifying Facility
Power Purchase

REGULATORY DIVISION

Docket No. D2016.5.39

**VOTE SOLAR AND MONTANA ENVIRONMENTAL INFORMATION CENTER'S
OBJECTIONS TO NORTHWESTERN ENERGY'S POST-HEARING PROVIDES**

Vote Solar and Montana Environmental Information Center submit this objection to NorthWestern Energy's Post-Hearing Provide Nos. 1 and 2 and respectfully request that they be excluded from the evidentiary record. As an initial matter, neither the intervenors nor the Commission has had the opportunity to submit data requests or cross-examine NorthWestern's witnesses to clarify the methodology, understand the assumptions, or verify the accuracy of the exhibits. Accordingly, the Commission should not rely on either exhibit in resolving the issues presented in this docket.

Furthermore, there appear to be errors and omissions in Post-Hearing Provide No. 1 that negate its relevance and evidentiary value in this proceeding. Commissioner Kavulla requested that NorthWestern provide a late-filed exhibit "showing updated QF-1 avoided costs of the same adjustments that the Commission made in Crazy Mountain." Hrg. Tr. Vol. I, at 71:1-6.

NorthWestern has not done so. Instead, NorthWestern modified only its proposed avoided energy costs, without adjustments to capacity costs, and has not justified its changes to energy costs.

The two significant adjustments this Commission made with respect to NorthWestern's avoided energy costs in the Crazy Mountain Wind proceeding were the onset date of carbon

pricing and avoided energy costs in the Long-2 condition. See Order No. 7505b, ¶¶ 61, 84; Hrg. Tr. Vol. I, at 72:17-24. While NorthWestern made adjustments to both of these assumptions, they appear either inappropriate or unjustified, or both. With respect to the carbon pricing adjustment, NorthWestern appears to have applied a carbon adder of \$8.72, which is lower than the carbon adder adopted in the Crazy Mountain Wind proceeding of \$9.65. Id. ¶ 109. NorthWestern has failed to justify this divergence from Order No. 7505b.

With respect to avoided energy costs in the Long-2 condition, NorthWestern also made adjustments, but it is unclear whether those adjustments were appropriate. Notably, in response to data request PSC-013, which is in the evidentiary record in this proceeding, NorthWestern recalculated avoided energy costs based on corrected Long-2 pricing. NorthWestern's corrected avoided costs for solar were \$35.10/MWh (no carbon) and \$45.02/MWh (with carbon). By contrast, NorthWestern's solar avoided costs in Post-hearing Provide No. 1 are significantly lower: \$28.44/MWh (no carbon) and \$37.16/MWh (with carbon). It is unclear whether this significant difference is the result of inappropriate pricing in the Long-2 condition, or some other change not specified in Commissioner Kavulla's request (e.g., to Long-1 condition pricing or Mid-C to MT transmission costs). See Hrg. Tr. Vol. I, at 72:17-24. Because NorthWestern's assumptions are unknown and at this point in the proceeding unverifiable, NorthWestern's adjusted avoided energy cost calculations should be disregarded.

Further, contrary to Commissioner Kavulla's request for "updated QF-1 avoided costs," Hrg. Tr. Vol. I, at 71:1-6, NorthWestern failed to provide updated avoided capacity costs in a manner consistent with the Crazy Mountain Wind order, specifically with respect to the capacity value of QF resources. In the Crazy Mountain Wind docket, as in this QF-1 proceeding, NorthWestern proposed to calculate the QF's capacity value based on "the output level Crazy

Mountain exceeds 85% of the time during the highest 10 percent of heavy load hours.” Order No. 7505b, ¶ 91. The Commission rejected this approach, finding that “NorthWestern has not sufficiently established the reasonableness of specific exceedance parameters.” Id. ¶ 99. In place of NorthWestern’s proposed exceedance methodology, the Commission found it appropriate to adopt a capacity value of wind consistent with the capacity value it previously deemed appropriate in the Greycliff proceeding. Id. ¶ 100. Supporting this finding, the Commission relied on the “associated system capacity contribution” for regional wind resources identified in the Northwest Power and Conservation Council’s Seventh Northwest Conservation and Electric Power Plan (“Seventh Power Plan”). Id. (citing Ch., pp. 23-25).¹

Consistent with this Commission’s Crazy Mountain Wind order, NorthWestern should apply a capacity value for solar consistent with the Seventh Power Plan’s analysis. The Seventh Power Plan assigns an annual average capacity value for Solar PV of 57.5%. Exh. VS-6 (Seventh Power Plan, Ch. 11), at 25, Table 11-8. The weighted average capacity value based on three winter months and two summer months—reflective of NorthWestern’s on-peak period—is 48%. Id.

Making this appropriate adjustment to NorthWestern’s assumed solar capacity value yields significantly higher avoided costs than NorthWestern has proposed. Table 7b below, which modifies Table 7 from the Pre-filed Testimony of R. Thomas Beach (page 28), shows avoided costs when appropriate solar capacity costs are added to NorthWestern’s corrected avoided energy costs provided in response to Data Request PSC-013.

¹ The Commission appears to have relied on an approximate weighted average of 0.03 for three winter months (Q1) and 0.11 for two summer months (Q3). Order No. 7505b, ¶ 100.

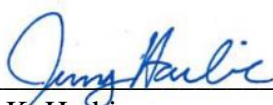
Table 7b: Current and Proposed QF-1(a) Rates using the Peaker Method and NWE's Avoided Energy Costs in Response to PSC-013

25-year levelized prices	Current QF-1(a) Tariff	Crazy Mountain (PSC-013)		NWE Proposed QF-1(a) Tariff	
		No	Yes	No	Yes
Carbon included?	No	No	Yes	No	Yes
On-peak price (\$/kWh)	0.09273	0.03510	0.04502	0.03027	0.03988
Off-peak price (\$/kWh)	0.05314	0.03510	0.04502	0.03027	0.03988
Avoided capacity cost (\$ per kW-year)	n/a	\$119.06		\$141.18	
Solar capacity value (%)	n/a	48%		9.6%	
Capacity price (\$ per kW-yr)	n/a	\$57.14		\$13.55	
Solar average price (\$/kWh)	0.06609	0.05914	0.06906	0.03597	0.04558
Change from Current QF-1(a)		-11%	+4%	-46%	-31%

As shown, when avoided energy costs properly reflect a correction to Long-2 pricing and avoided capacity costs reflect the more realistic capacity value for solar QFs as calculated by NWPCC, solar avoided costs are similar to those set in the current QF-1 tariff, as well as those proposed by Vote Solar and MEIC.

Accordingly, both with respect to avoided energy costs and avoided capacity costs, NorthWestern's Post-Hearing Provide No. 1 does not reflect an avoided cost for solar QF resources that is consistent with the Commission's order in the Crazy Mountain Wind Proceeding. Vote Solar and Montana Environmental Information Center therefore request that the late-filed exhibit be excluded from the evidentiary record.

Respectfully submitted on this 9th day of February, 2017,



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*On behalf of Intervenors Vote Solar and
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CERTIFICATE OF SERVICE

I hereby certify that on the 9th day of February, 2017, I served the foregoing by first-class mail, postage prepaid, and electronic mail on the following:

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