Rocky Mountain Power
Exhibit RMP___(DJM-2R)
Docket No. 20000-518-EA-17
Witness: Daniel J. MacNeil

BEFORE THE WYOMING PUBLIC SERVICE COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Daniel J. MacNeil

Rocky Mountain Power's Responses to the Renewable Energy Coalition's Data Request 1.18

December 2017

20000-518-EA-17 / Rocky Mountain Power
September 20, 2017
REC Data Request 1.18

REC Data Request 1.18

Please provide illustrative examples of the avoided cost rates Rocky Mountain Power is proposing to pay 10 and 20 MW solar, wind, geothermal, biomass, and hydro QFs based upon the Company's 2017 IRP. Please provide all supporting work papers.

Response to REC Data Request 1.18

The Company assumes that 10 megawatts (MW) and 20 MW was meant to distinguish between qualifying facilities (QF) eligible for Schedule 37 and those eligible for Schedule 38, but notes that resources with capacity factors under 70 percent are only eligible for Schedule 37 to the extent they have a capacity of up to 1 MW. Solar, wind, and certain seasonal hydro resources with 10 MW of capacity would thus be ineligible for Schedule 37 and would not have a different methodology from a 20 MW resource of that type. The Company is thus providing illustrative examples under the proposed Schedule 37 rates and under the current Schedule 38 avoided cost methodology. Absent a variation in the pattern of their expected output, geothermal, biomass, and hydro units would have the same impact on the Company's system and the same avoided costs. A single "baseload" avoided cost price has been calculated that could be applied to any of the identified generation technologies to the extent their output is relatively constant throughout the year.

For avoided cost pricing applicable to QFs eligible for Schedule 37, please refer to the proposed tariff pages provided as Exhibit 3 accompanying the Company's Application. For a comparison of the proposed Schedule 37 avoided cost rates by resource, please refer to the Direct Testimony of Company witness, Daniel J. MacNeil, specifically Exhibit 1, page 21.

The Company is preparing illustrative examples of avoided cost pricing applicable to QFs eligible for Schedule 38 and will supplement this response when they are complete.

Respondent: Dan MacNeil

Witness: Dan MacNeil

REC Data Request 1.18

Please provide illustrative examples of the avoided cost rates Rocky Mountain Power is proposing to pay 10 and 20 MW solar, wind, geothermal, biomass, and hydro QFs based upon the Company's 2017 IRP. Please provide all supporting work papers.

1st Supplemental Response to REC Data Request 1.18

Further to the Company's response to REC Data Request 1.18 dated September 20, 2017, the Company provides the following supplemental response:

The Company continues to assume that 10 megawatts (MW) and 20 MW was meant to distinguish between qualifying facilities (QF) eligible for Schedule 37 and those eligible for Schedule 38, but notes that resources with capacity factors under 70 percent are only eligible for Schedule 37 to the extent they have a capacity of up to 1 MW. Solar, wind, and certain seasonal hydro resources with 10 MW of capacity would thus be ineligible for Schedule 37 and would not have a different methodology from a 20 MW resource of that type.

Please refer to Attachment REC 1.18-1 1st Supplemental, which provides avoided cost pricing applicable to solar, thermal (baseload), and wind QFs using the Schedule 38 methodology. Please refer to Confidential Attachment REC 1.18-2 1st Supplemental, which provides additional work papers supporting the referenced avoided cost pricing.

Confidential information is provided subject to the terms and conditions of the protective agreement in this proceeding.

Respondent: Dan MacNeil

Witness: Dan MacNeil

WY37 Solar
10.0 MW and 28.2% CF
Illustrative Avoided Cost Prices

Year	Energy Payment ($/MWH)		Total $/MWH at 28.2% CF (1)
	HLH	LLH	
2018	$17.62	$13.87	$16.94
2019	$18.06	$14.58	$17.43
2020	$18.28	$15.00	$17.68
2021	$18.44	$15.26	$17.86
2022	$16.96	$13.96	$16.41
2023	$16.59	$13.71	$16.06
2024	$16.91	$14.40	$16.45
2025	$20.56	$17.97	$20.08
2026	$19.20	$17.10	$18.82
2027	$21.14	$18.97	$20.74
2028	$33.43	$30.59	$32.91
2029	$68.96	$61.60	$67.62
2030	$72.07	$64.08	$70.61
2031	$75.56	$67.19	$74.02
2032	$77.04	$69.00	$75.58
2033	$78.07	$69.95	$76.59
2034	$81.14	$72.94	$79.64
2035	$83.04	$74.52	$81.48
2036	$86.28	$77.75	$84.71
2037	$88.48	$79.74	$86.88
20-Year Nominal Levelized Prices at 6.57% Discount Rate			
$/MWh	$36.19	$31.73	$35.38

(1) Total $/MWh are illustrative. Actual avoided cost prices will be provided in monthly detail by hour class. Actual effective prices will depend on QF generation levels.

WY37 Thermal
10.0 MW and 100.0% CF
Illustrative Avoided Cost Prices

Year	Energy Payment ($/MWH)		Total $/MWH at 100.0% CF (1)
	HLH	LLH	
2018	$17.79	$14.52	$16.35
2019	$18.07	$15.12	$16.77
2020	$18.62	$15.71	$17.34
2021	$18.74	$15.94	$17.51
2022	$15.96	$13.12	$14.71
2023	$16.60	$13.87	$15.40
2024	$16.81	$14.37	$15.74
2025	$18.74	$16.32	$17.68
2026	$19.05	$16.59	$17.97
2027	$20.46	$17.96	$19.37
2028	$33.69	$30.33	$32.21
2029	$53.59	$48.26	$51.25
2030	$56.96	$51.35	$54.50
2031	$60.58	$54.55	$57.93
2032	$62.36	$56.37	$59.73
2033	$62.80	$56.79	$60.16
2034	$65.56	$59.54	$62.90
2035	$67.64	$61.24	$64.83
2036	$69.94	$63.43	$67.08
2037	$71.68	$65.15	$68.81
20-Year Nominal Levelized Prices at 6.57% Discount Rate			
$/MWh	$32.09	$28.33	$30.44

(1) Total $/MWh are illustrative. Actual avoided cost prices will be provided in monthly detail by hour class. Actual effective prices will depend on QF generation levels.

WY37 Wind
10.0 MW and 41.4% CF
Illustrative Avoided Cost Prices

Year	Energy Payment ($/MWH)		Total $/MWH at 41.4% CF (1)
	HLH	LLH	
2018	$13.87	$11.62	$12.96
2019	$14.16	$12.15	$13.33
2020	$15.92	$13.85	$15.06
2021	$15.64	$13.69	$14.82
2022	$8.95	$6.70	$7.99
2023	$9.39	$7.62	$8.65
2024	$9.04	$7.12	$8.24
2025	$9.52	$7.43	$8.66
2026	$10.64	$8.58	$9.78
2027	$11.02	$8.77	$10.08
2028	$29.00	$26.21	$27.82
2029	$33.13	$30.16	$31.93
2030	$36.58	$33.47	$35.29
2031	$64.61	$59.04	$62.33
2032	$65.88	$60.48	$63.62
2033	$67.77	$62.23	$65.40
2034	$69.30	$63.90	$67.04
2035	$70.95	$65.18	$68.62
2036	$72.48	$66.56	$70.02
2037	$74.46	$68.61	$72.04
20-Year Nominal Levelized Prices at 6.57% Discount Rate			
$/MWh	$27.17	$24.19	$25.92

(1) Total $/MWh are illustrative. Actual avoided cost prices will be provided in monthly detail by hour class. Actual effective prices will depend on QF generation levels.