

Rocky Mountain Power  
Exhibit RMP\_\_(RTL-3)  
Docket No. 20000-\_\_-EA-17  
Witness: Rick T. Link

BEFORE THE WYOMING PUBLIC SERVICE  
COMMISSION

ROCKY MOUNTAIN POWER

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Exhibit Accompanying Direct Testimony of Rick T. Link

SO Model Annual Results (\$ million)

June 2017

**SO Model Annual Results (\$ million)**

**Low Natural Gas, Zero CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$107)	\$1	\$3	\$2	(\$9)	(\$11)	(\$11)	(\$12)	(\$12)	(\$13)	(\$13)	(\$14)	(\$17)	(\$18)	\$8	(\$3)	(\$25)	(\$24)	(\$24)	(\$22)	(\$21)
Change in Emissions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in DSM	(\$12)	\$0	(\$0)	(\$1)	(\$1)	(\$1)	(\$1)	(\$2)	(\$2)	(\$2)	(\$2)	(\$2)	(\$3)	(\$1)	(\$1)	(\$1)	\$0	\$0	\$0	\$0	\$0
Change in System Fixed Cost	\$17	\$0	(\$0)	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	\$0	\$4	\$4	(\$35)	\$15	\$28	\$20	\$12	\$3	\$1
Net (Benefit)/Cost	\$33	\$12	\$13	\$12	\$1	(\$1)	(\$1)	(\$2)	(\$2)	(\$3)	(\$3)	(\$3)	(\$2)	(\$2)	(\$14)	\$25	\$17	\$6	\$3	(\$3)	(\$4)

**Low Natural Gas, Medium CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$230)	\$1	\$2	\$1	(\$11)	(\$13)	(\$14)	(\$14)	(\$15)	(\$15)	(\$16)	(\$14)	(\$18)	(\$42)	(\$52)	(\$50)	(\$53)	(\$59)	(\$61)	(\$64)	(\$67)
Change in Emissions	\$14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1)	(\$0)	(\$1)	(\$0)	(\$1)	\$5	\$5	\$6	\$7	\$7	\$9	\$9
Change in DSM	\$11	\$0	\$1	\$1	\$1	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$1	\$1	\$1	\$0	\$0	(\$0)	(\$2)	(\$2)
Change in System Fixed Cost	\$71	\$0	(\$0)	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$3)	\$37	\$37	\$19	\$16	\$25	\$25	\$25	\$27
Net (Benefit)/Cost	(\$0)	\$12	\$13	\$13	\$1	(\$1)	(\$1)	(\$1)	(\$1)	(\$2)	(\$3)	\$0	(\$7)	\$9	(\$4)	(\$12)	(\$16)	(\$12)	(\$14)	(\$17)	(\$18)

**Low Natural Gas, High CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$126)	\$1	\$3	\$2	(\$11)	(\$13)	(\$13)	(\$13)	(\$13)	(\$15)	(\$15)	(\$17)	(\$17)	(\$19)	(\$19)	(\$20)	(\$19)	(\$20)	(\$22)	(\$23)	(\$24)
Change in Emissions	(\$26)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	(\$1)	(\$4)	(\$5)	(\$7)	(\$6)	(\$7)	(\$8)	(\$8)	(\$8)	(\$8)	(\$7)
Change in DSM	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)
Change in System Fixed Cost	(\$0)	\$0	(\$0)	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	(\$0)
Net (Benefit)/Cost	(\$18)	\$12	\$13	\$12	\$0	(\$1)	(\$1)	(\$2)	(\$1)	(\$3)	(\$4)	(\$6)	(\$9)	(\$10)	(\$11)	(\$12)	(\$14)	(\$14)	(\$15)	(\$15)	(\$15)

**OFPC Natural Gas, Zero CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$186)	\$2	\$3	\$2	(\$10)	(\$13)	(\$14)	(\$15)	(\$16)	(\$17)	(\$17)	(\$17)	(\$19)	(\$35)	(\$20)	(\$24)	(\$60)	(\$28)	(\$29)	(\$30)	(\$32)
Change in Emissions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in DSM	(\$2)	\$0	(\$0)	(\$0)	\$0	\$0	\$0	\$0	\$0	(\$0)	(\$1)	(\$1)	(\$1)	(\$2)	(\$1)	(\$5)	(\$9)	(\$10)	(\$2)	(\$1)	(\$0)
Change in System Fixed Cost	\$21	\$0	(\$0)	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	(\$60)	(\$32)	(\$23)	(\$19)	\$63	\$1	\$1
Net (Benefit)/Cost	(\$33)	\$12	\$13	\$12	\$1	(\$1)	(\$2)	(\$3)	(\$4)	(\$5)	(\$5)	(\$5)	\$13	(\$54)	(\$29)	(\$29)	\$18	(\$13)	(\$14)	(\$15)	(\$16)

**Medium Natural Gas, Medium CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$293)	\$1	\$3	\$1	(\$12)	(\$15)	(\$19)	(\$21)	(\$23)	(\$24)	(\$25)	(\$26)	(\$30)	(\$31)	(\$48)	(\$82)	(\$109)	(\$66)	(\$70)	(\$72)	(\$99)
Change in Emissions	(\$15)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1)	(\$1)	(\$1)	(\$2)	(\$1)	(\$5)	(\$9)	(\$10)	(\$2)	(\$1)	(\$0)	(\$4)
Change in DSM	\$63	\$0	\$1	\$2	\$2	\$2	\$3	\$5	\$5	\$7	\$7	\$8	\$8	\$11	\$12	\$13	\$13	\$13	\$13	\$13	\$13
Change in System Fixed Cost	\$89	\$0	(\$0)	(\$0)	\$0	\$4	\$4	\$4	\$4	\$4	\$4	\$4	(\$15)	(\$16)	\$8	\$56	\$90	\$31	\$31	(\$23)	\$60
Net (Benefit)/Cost	(\$22)	\$12	\$14	\$13	\$1	(\$2)	(\$1)	(\$1)	(\$1)	(\$3)	(\$2)	(\$3)	(\$25)	(\$24)	(\$19)	(\$58)	(\$2)	(\$9)	(\$11)	(\$17)	(\$14)

**Medium Natural Gas, High CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$151)	\$1	\$3	\$2	(\$11)	(\$14)	(\$15)	(\$16)	(\$17)	(\$18)	(\$17)	(\$18)	(\$21)	(\$21)	(\$22)	(\$23)	(\$24)	(\$25)	(\$27)	(\$28)	(\$30)
Change in Emissions	(\$24)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1)	(\$3)	(\$4)	(\$4)	(\$5)	(\$6)	(\$6)	(\$7)	(\$7)	(\$7)	(\$8)	(\$7)
Change in DSM	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)
Change in System Fixed Cost	(\$0)	\$0	(\$0)	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	(\$0)
Net (Benefit)/Cost	(\$41)	\$12	\$13	\$12	(\$0)	(\$3)	(\$3)	(\$4)	(\$5)	(\$6)	(\$7)	(\$9)	(\$12)	(\$13)	(\$14)	(\$15)	(\$16)	(\$18)	(\$19)	(\$21)	(\$22)

**High Natural Gas, Zero CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$277)	\$2	\$4	\$2	(\$14)	(\$19)	(\$21)	(\$22)	(\$24)	(\$25)	(\$25)	(\$26)	(\$29)	(\$29)	(\$31)	(\$18)	(\$33)	(\$89)	(\$82)	(\$133)	(\$81)
Change in Emissions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Change in DSM	\$31	\$0	(\$0)	(\$0)	\$1	\$2	\$2	\$2	\$3	\$3	\$3	\$3	\$4	\$5	\$6	\$6	\$6	\$8	\$9	\$10	\$10
Change in System Fixed Cost	\$36	\$0	(\$0)	(\$0)	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	(\$1)	(\$5)	(\$6)	(\$19)	(\$7)	\$9	(\$4)	\$71	\$99
Net (Benefit)/Cost	(\$75)	\$12	\$14	\$13	(\$4)	(\$7)	(\$7)	(\$8)	(\$9)	(\$10)	(\$10)	(\$10)	(\$13)	(\$16)	(\$18)	(\$18)	(\$19)	(\$57)	(\$62)	(\$37)	\$44

**High Natural Gas, Medium CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$179)	\$2	\$4	\$3	(\$14)	(\$17)	(\$17)	(\$18)	(\$19)	(\$19)	(\$20)	(\$20)	(\$24)	(\$28)	(\$30)	(\$32)	(\$55)	(\$7)	(\$10)	(\$73)	\$8
Change in Emissions	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	(\$0)	(\$1)	(\$1)	(\$1)	(\$1)	(\$0)	(\$1)	\$4	\$5	\$5	\$8
Change in DSM	(\$70)	\$0	\$0	(\$1)	(\$2)	(\$3)	(\$4)	(\$4)	(\$5)	(\$6)	(\$6)	(\$7)	(\$9)	(\$9)	(\$12)	(\$14)	(\$15)	(\$17)	(\$18)	(\$19)	(\$22)
Change in System Fixed Cost	\$46	\$0	(\$0)	(\$0)	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	\$0	\$14	\$7	\$10	\$12	\$40	\$10	\$15	\$38	(\$87)
Net (Benefit)/Cost	(\$64)	\$12	\$14	\$12	(\$5)	(\$9)	(\$9)	(\$10)	(\$12)	(\$14)	(\$14)	(\$15)	(\$16)	(\$17)	(\$19)	(\$20)	(\$16)	\$6	\$6	(\$35)	(\$13)

**High Natural Gas, High CO2 Price-Policy Scenario**

(Benefit)/Cost	PVRR(d)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cost of Project	\$134	\$10	\$10	\$10	\$11	\$11	\$12	\$12	\$12	\$12	\$13	\$13	\$13	\$13	\$14	\$14	\$14	\$15	\$15	\$15	\$16
Change in NPC	(\$199)	\$2	\$4	\$2	(\$15)	(\$19)	(\$20)	(\$21)	(\$23)	(\$24)	(\$24)	(\$25)	(\$13)	(\$30)	(\$36)	(\$38)	(\$30)	(\$38)	(\$40)	(\$41)	(\$12)
Change in Emissions	(\$18)	\$0	\$0	\$0	\$0	\$0															

