

April 20, 2016

Mr. Will Rosquist
Administrator, Regulatory Division
Montana Public Service Commission
1701 Prospect Ave.
P. O. Box 202601
Helena MT 59620-2601

RE: Docket D2015.8.64 – Greycliff Petition
Response to (REVISED) GWP-012 Data Request

Dear Mr. Rosquist:

Enclosed for filing is NorthWestern Energy's Response to Data Request (REVISED) GWP-012.

It will be hand delivered to the Montana Public Service Commission and the Montana Consumer Counsel this day. It will also be e-filed with the PSC, emailed to counsel of record and mailed to the service list.

If you have any questions, please call Joe Schwartzberger at (406) 497-3362.

Sincerely,

Tracy Lowney Killoy
Administrative Assistant
Regulatory Affairs

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of NorthWestern Energy's response to Data Request (REVISED) GWP-012 in Docket No. D2015.8.64 has been hand delivered to the Montana Public Service Commission and the Montana Consumer Counsel this date. It has also been e-filed on the PSC website, emailed to counsel of record, and mailed to the remainder of the service list as follows:

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MT Public Service Commission
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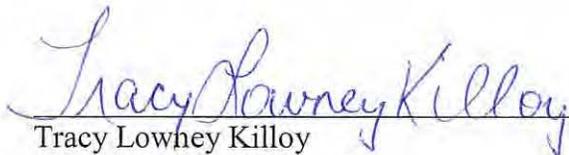
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Date: April 20, 2016


Tracy Lowhey Killoy
Administrative Assistant
Regulatory Affairs

NorthWestern Energy
Docket No. D2015.8.64
Greycliff's Petition to Set Terms and Conditions

Greycliff Wind Prime, LLC
Set 2 (012)

Data Requests received April 8, 2016

(REVISED) GWP-012 RE: Witness: Bleau J. LaFave
Page BLJ-3 & BJJ-4
Subject: Calendar Date for Price Forecast

In your testimony, you discuss that NWE changed the date upon which it based its market price forecast from July 6, 2015, to January 15, 2016. You state that the isolated impact of this change is to reduce NWE's estimate of Greycliff avoided cost by \$3.80/MWh.

- a. Please make the following three changes in your analysis, and provide NWE's avoided cost estimate reflecting those three changes:
- Replace the January 15, 2016 market price forecast with the original July 6, 2015 market price forecast
 - Replace the gas price forecast used by NWE in its analysis, with the Mid- Range natural gas price forecast developed by the Northwest Power and Conservation Council in its Seventh Power Plan. The specific natural gas prices to use are listed below in Table 1.
 - Remove the \$5.02/MWh deduction to avoided cost associated with NWE's proposed treatment of Interconnection Network Upgrade costs.

Please provide a forecast of avoided cost for Greycliff for the 2018-2042 period, reflecting those three changes in combination, and making no other changes to NWE's methodology.

Table 1 – NPCC Medium Natural Gas Price Forecast

Year	NPCC Medium Natural Gas Price Forecast - Nominal\$/mmBtu
2016	\$2.75
2017	\$3.05
2018	\$3.36
2019	\$3.68
2020	\$4.02
2021	\$4.20
2022	\$4.39
2023	\$4.59
2024	\$4.80
2025	\$5.07
2026	\$5.36
2027	\$5.66
2028	\$5.97

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2029	\$6.29
2030	\$6.62
2031	\$7.02
2032	\$7.44
2033	\$7.86
2034	\$8.30
2035	\$8.76
2036	\$9.20
2037	\$9.66
2038	\$10.14
2039	\$10.65
2040	\$11.18
2041	\$11.74
2042	\$12.33

RESPONSE:

- a. As stated in my Prefiled Supplemental Response Testimony and my Prefiled Revised Supplemental Testimony, the interconnection network upgrade charges and the January 15, 2016 date are the necessary and appropriate basis for the calculation of the avoided cost for the Greycliff project.

The utilization of the natural gas forecast proposed by Greycliff and stated to be from the Northwest Power and Conservation Council ("NWPPCC") is also inappropriate. The natural gas forecast is used in this case to price NorthWestern's natural gas generation. Higher natural gas forecasts will increase the economic dispatch price of internal units increasing the number of megawatt hours purchased from the market.

Following a request from NorthWestern, the NWPPCC provided NorthWestern with its actual forecast for natural gas with the appropriate starting and escalated prices. Greycliff's price forecast, which is much higher, does not match the price forecast provided by the NWPPCC. For a copy of this information, see the Energy Forecast Comparisons tab in the Excel spreadsheet labeled Exhibit__(BJL-1)_rev_2 provided on March 31, 2016 as part of the Updated Response to Data Request PSC-012a.

Noting the issues above, the avoided costs, as requested by Greycliff in this question with the requested changes to the market price forecast, gas price forecast, and removal of interconnection upgrade costs, are listed in the table below:

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GWP-012 cont'd

Avoided Cost

Without Carbon Forecast

Firm Energy & Capacity Value	\$ 38.69
DA Firm vs. RT price	\$ (1.99)
Interconnection Network Upgrades	
Transmission Network Upgrades	\$ -
Capacity Value	\$1.98
<i>Wind Generation Integration</i>	
Regulation - 25 Year Levelized	\$ (0.52)
Spinning Reserve Service (BA Tariff)	\$ (0.61)
Supplemental Reserves Service (non-spin; BA Tariff)	\$ (1.09)
Avoided Cost	\$ 36.47

Avoided Cost

With Carbon Forecast

Firm Energy & Capacity Value	\$ 49.83
DA Firm vs. RT price	\$ (1.99)
Interconnection Network Upgrades	\$ -
Transmission Network Upgrades	\$ -
Capacity Value	\$ 1.98
<i>Wind Generation Integration</i>	
Regulation - 25 Year Levelized	\$ (0.52)
Spinning Reserve Service (BA Tariff)	\$ (0.61)
Supplemental Reserves Service (non-spin; BA Tariff)	\$ (1.09)
Avoided Cost with Carbon Forecast	\$ 47.60