

January 17, 2014

Via Electronic Filing and USPS

Public Utility Commission Attn: Filing Center 3930 Fairview Industrial Drive SE PO Box 1088 Salem, OR 97308

Re: Docket No. LC 57 Supplemental Comments Regarding the WY FIP for Regional Haze of Sierra Club

Please find enclosed the original and five (5) copies of Sierra Club's Supplemental Comments Regarding the Wyoming Federal Implementation Plan for Regional Haze in the above-referenced docket.

Please let me know if you have any questions. Thank you.

Respectfully submitted,

/s/ Derek Nelson

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cc: Service List

Sierra Club's Supplemental Comments Regarding the Wyoming Federal Implementation Plan for Regional Haze (Oregon Docket LC-57)

January 17, 2014

On January 10, 2014, EPA released a final Federal Implementation Plan (FIP) in Wyoming for Regional Haze. Sierra Club sought leave to file supplemental comments in this docket to allow parties to address any FIP-related issues. In accordance with the December 20, 2013 ruling issued by the Commission, Sierra Club submits these comments addressing the final FIP in Wyoming.

Of the 15 coal-fired units in Wyoming, 13 are subject to the Best Available Retrofit Technology (BART) provisions of the Regional Haze Rule. PacifiCorp owns and operates 11 of those BART-eligible units. In the final FIP, EPA set a NOx emissions limit of 0.07 lbs/MMBtu (on a 30-day rolling average basis) for eight of the BART-eligible units in Wyoming, which will require PacifiCorp to install selective catalytic reduction (SCR) on six of its coal units.* For the remaining five units (Dave Johnston 1, 2, & 4, and Naughton 1 & 2), EPA accepted Wyoming's proposed BART limitations.

The final plan once again demonstrated that the ultimate outcome of EPA's review of state implementation plans for environmental compliance is subject to significant revision. The final EPA FIP for Wyoming is in many respects very different than the Regional Haze plan originally submitted by Wyoming. The FIP also differs from PacifiCorp's assumed regional haze plan. The table below illustrates these differences.

| Coal Unit | State | PacifiCorp Base Regional Haze | | PacifiCorp Stringent Regional Haze | | EPA Proposed FIP | | EPA Final FIP | |
|--------------|-------|----------------------------------|------|---------------------------------------|-----------|------------------|-----------|-----------------------|---------------------|
| | | Technology | Year | Technology | Year | Technology | Year | Technology | Year |
| DJ 1 | WY | | | LNB | 2016 | LNB w/OFA | 7-31-2018 | | |
| DJ 2 | WY | | | LNB | 2018 | LNB w/OFA | 7-31-2018 | | |
| DJ 3* | WY | | | SNCR | 2017 | SCR | 2019 | SCR* (Alt. retire) | 1-10-2019 (2027) |
| DJ 4 | WY | | | | | SNCR | 2019 | LNB | Installed |
| J. Bridger 1 | WY | SCR | 2022 | SCR | 2017 | SCR | 2019 | SCR | 12-31-2022 |
| J. Bridger 2 | WY | SCR | 2021 | SCR | 2017 | SCR | 2019 | SCR | 12-31-2021 |
| J. Bridger 3 | WY | SCR | 2015 | SCR | 2015 | SCR | 2019 | SCR | 12-31-2015 |
| J. Bridger 4 | WY | SCR | 2016 | SCR | 2016 | SCR | 2019 | SCR | 12-31-2016 |
| Naughton 1 | WY. | | | | | SCR | 2019 | LNB | Installed |
| Naughton 2 | WY | | | | | SCR | 2019 | LNB | Installed |
| Wyodak | WY | | | SNCR/SCR | 2017/2025 | SNCR | 2019 | SCR | 1-10-2019 |

*For DJ 3, EPA approved two scenarios: (1) install SCR within 5 years, or (2) retire by 2027 in lieu of SCR.

The various iterations of state proposals, EPA proposals and the final rule clearly show that the final outcome of environmental regulations is often uncertain. Planning for regulatory uncertainty is therefore critical, and utilities must continuously review and update near-term action plans to ensure that they can best meet future regulatory compliance obligations.

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The most substantial change brought about in the final FIP, relative to Company assumptions and even the proposed FIP, is the requirement to install SCR at Wyodak within five years – i.e. January 2019. The Company has not produced a model examining the cost effectiveness of installing SCR at Wyodak relative to retiring or repowering this unit, and thus the only current points of information available to this Commission are the outcomes of the Company's core cases, and the use of an updated version of the 2011 Screening model, in which the costs of an SCR are advanced to 2019. The core IRP model indicates that, as with most of PacifiCorp's coal units, the economic integrity of Wyodak is vulnerable to the implementation of a carbon price. Under the high carbon/low gas scenario, the unit retires in 2020 (see Sierra Club's preliminary comments).

The updated 2011 Screening Model¹ indicates that Wyodak has a net present value of zero by the time it reaches the end of its depreciable life, currently contemplated for 2039. According to the model, Wyodak becomes more expensive than market alternatives in 2021 (i.e. an annual net loss), and more expensive than a new gas unit in 2022. Indeed, the model predicts that by 2016, Wyodak effectively makes no margin. So while the unit is not *a priori* non-economic today, it sits close to the margin, and should be examined carefully. Wyodak has another important feature: it sits to the east of the proposed Gateway West project, which is promoted as a mechanism of drawing power from eastern Wyoming resources to PacifiCorp's load centers. This means that the retirement of Wyodak could eliminate the need to spend capital on Gateway West. In evaluating the cost effectiveness of Wyodak, PacifiCorp and this Commission should ensure that avoidable transmission investments are appropriately contemplated and accounted for when comparing alternatives. Sierra Club looks forward to participating in this evaluation.

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¹ As in Sierra Club's preliminary comments, we updated the Screening Model to a March 2013 official forward price curve and supplemented it with the cost of an SCR at Wyodak in 2019.

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of January, 2014, I caused to be served the foregoing

SUPPLEMENTAL COMMENTS RE WY FIP FOR REGIONAL HAZE OF SIERRA CLUB upon all

party representatives on the official service list for this proceeding via electronic mail.

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Dated this 17th day of January, 2014 at San Francisco, CA.

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