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Attorney for the State of Wyoming, Department of Environmental Quality

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL STATE OF WYOMING

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)	Docket No. 10-2801
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AFFIDAVIT OF COLE ANDERSON IN RESPONSE TO PACIFICORP'S MOTION FOR PARTIAL SUMMARY JUDGMENT

STATE OF WYOMING)
) ss.
County of Laramie)

- I, Cole Anderson, being first duly sworn, deposes and says as follows:
- 1. I am over the age of 21 and am competent to make this affidavit.
- 2. The facts and matters stated herein are within my personal knowledge, and are true and correct.
- 3. I have a Bachelor of Science degree in Chemical Engineering from the University of Wyoming, issued in May of 2001.

- 4. I have worked as a New Source Review permit engineer for the Wyoming Department of Environmental Quality since August of 2001 and currently serve in this capacity. I have participated in the technical review of three Prevention of Significant Deterioration reviews for power plants and numerous minor source permitting actions.
- 5. My current job responsibilities include: organizing, directing, and reviewing air quality permit applications under the New Source Review (NSR) program, negotiating technical requirements necessary to protect air quality and to assure compliance with rules and regulations of the DEQ, serving as lead permit engineer on projects, including Best Available Retrofit Technology (BART); enhancing and maintaining the DEQ's databases; and improve NSR work practices.
- 6. I reviewed the BART application (AP-6040) for PacifiCorp's Jim Bridger power plant; wrote all portions of the Jim Bridger BART analysis except the visibility analysis (Step 5); reviewed comments on the DEQ/AQD's proposed BART determinations for Jim Bridger; provided input on the DEQ/AQD's decision documents and responses to comments related to the Jim Bridger BART determinations.
- 7. References I consulted in drafting the BART analysis and determine BART were Appendix Y to Part 51, as published Wednesday, July 6, 2005, in the Federal Register, pages 39104-39172; EPA's RACT/BACT/LAER Clearinghouse; BART applications for PacifiCorp's Naughton, Dave Johnston and Wyodak power plants, and Basin Electric's application for Laramie River Station; Title V Operating Permit for Jim Bridger (3-1-120); NSR permit application AP-5157, and permit MD-1552 for the Jim

Bridger power plant; correspondence in the Jim Bridger Air Quality compliance file (low
NO _x burner and wet scrubber installation dates); State of Oregon's DEQ BART Report
for the Boardman Power Plant (December 19, 2008 version); A letter from the EPA
asserting that selective catalytic reduction should be BART for NO _x for Jim Bridger;
Basin Electric Power Cooperative's NSR permit application for the Dry Fork Station AP-
3546;
; Wyoming Air Quality Standards and Regulations Chapter 6,
Sections 2 and 9, and Chapter 14, Sections 1, 2, 3, and 5; and comments received during
the public comment period.
8. The DEQ/AQD met with PacifiCorp in the summer and fall of 2008, and
participated in conference calls with PacifiCorp held on May 18, 2009, and June 29,
2009, to discuss the BART applications, including SCR.
9. During the meetings, PacifiCorp expressed concern that installing SCR on
several units within the BART timeframe, five years after SIP approval, could not be
done.
. A true and correct
copy of PacifiCorp's schedule is attached as Ex. 18.

- 10. After reviewing the information provided by PacifiCorp, the DEQ/AQD initially considered BART to be the installation of low NO_x burners with overfire air and SCR on all four units at Jim Bridger. This conclusion was based on considering (1) the costs of compliance; (2) the energy and non-air quality environmental impacts of compliance; (3) any pollution equipment in use or in existence at the source; (4) the remaining useful life of the source; and (5) the degree of improvement in visibility all five statutory factors in their entirety. It was noted that both the cost effectiveness and incremental cost effectiveness for installing SCR were reasonable and, in the absence of EPA prescribed visibility improvement standards, the modeled visibility improvements from installing SCR were the most significant. A true and correct copy of DEQ/AQD charts reflecting the DEQ/AQD's initial impression is attached hereto as Ex. 17.
- 11. Condition 18, requiring the installation of SCR on Jim Bridger Units 3 and 4 "under the Long-Term Strategy of the Wyoming § 308 Regional Haze State Implementation Plan" was based in part on PacifiCorp's own language and representations in a letter dated September 16, 2009 from PacifiCorp to the DEQ/AQD. A true and correct copy of the letter is attached hereto as Ex. 16.
- 12. Other conditions in Permit MD-6040, such as the installation of additional add-on NO_x controls, were based in part upon considerations raised by PacifiCorp that the DEQ/AQD "give consideration to how PacifiCorp's entire system is impacted and how the required BART reductions can be achieved in a reasonable manner over time." *Id.*

13. In reviewing the plain language of the four prescribed factors used in selecting the Reasonable Progress Goals (RPG), for which the Long term Strategy (LTS) is designed to achieve, and contrasting them to the five statutory factors used to evaluate control technologies under BART, it is clear they are almost identical. There is one additional RPG factor mentioned: "the time necessary for compliance", which is indirectly addressed in a BART review since the EPA made the determination that BART controls must be installed within five years of SIP approval. There are two additional factors included in a BART analysis: (1) "any pollution control equipment in use at the source" and (2) "the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology". A source-specific visibility analysis addressing visibility improvement from the application of emission control(s) is not a statutory factor in a four factor RPG analysis. However, since the applicant and the DEQ/AQD conducted visibility analyses showing improvement from control installation, as part of BART, the DEQ/AQD can clearly demonstrate that installation of these controls, including SCR, will help Wyoming attain the established Reasonable Progress Goals, which is the purpose of LTS. Cost of compliance is a common factor for RPG and BART, and the DEQ/AQD has already determined that installing SCR is reasonable (DEQ/AQD's BART Application Analysis AP-6040, page 15) and the DEQ/AQD's supporting conclusions for BART did not say installing SCR is unreasonable (Id., pages 49-50). Therefore, when evaluating SCR under BART, the DEQ/AQD also addressed the four statutory factors of a LTS analysis and by incorporating the findings into a federally enforceable permit, the application of SCR can be relied upon in the LTS.

14. It is my understanding that PacifiCorp agreed with the NOx control strategy presented in the DEQ/AQD's BART analysis, including the LTS portion with installation dates for additional add-on control and SCR. This understanding is based primarily on the negotiations pertaining to installing SCR on multiple units and based on the various installation schedules proposed by PacifiCorp, which culminated in the final, mutually agreed upon, schedule.

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15. After the DEQ/AQD NSR group drafted the permit conditions pertaining to BART and to LTS and included them in the analysis that was published for public comment, the conditions were forwarded to our SIP development team for inclusion in the § 308 Regional Haze SIP.

DATED this 27 day of July, 2010.

Lett Ahillian	
Cole Anderson	
NSR Engineer – DEO/AOD	

State of Wyoming)
) ss
County of Laramie)

Subscribed and sworn before me by Cole Anderson on this May of July, 2010.

Witness my hand and official seal.



Notary Public

My commission expires on: 15, 2012